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**Where Do Prices Come From?**

Sociological Approaches to Price Formation

Jens Beckert



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**Abstract**

The article provides an overview of the state of the art of sociological research on price formation. The dominant trait of the sociological approach to prices is to understand price formation not as the outcome of individual preferences but as the result of the social and political forces operating within the market field. The article proceeds from the concept of market fields and is organized around the three dominant approaches in economic sociology: the network approach, the institutional approach, and the cultural approach.

**Zusammenfassung**

Der Artikel gibt einen Überblick über den Forschungsstand zum Thema Preisbildung in der Soziologie. Ausgangspunkt der Betrachtung von Preisen aus soziologischer Perspektive ist, diese nicht als das Resultat individueller Präferenzen zu verstehen, sondern als Ausdruck der sozialen und politischen Kräfte in Märkten. Der Artikel orientiert sich an dem Konzept der Marktfelder und ist anhand der drei Hauptrichtungen der Wirtschaftssoziologie strukturiert: des Netzwerkansatzes, des institutionellen Ansatzes und des kulturellen Ansatzes.

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## Where Do Prices Come From? Sociological Approaches to Price Formation

### 1 Introduction

In market economies, prices are the result of supply and demand. But are they really? In this article I challenge this basic premise of economic price theory and argue instead that prices result from the embeddedness of market transactions in institutions, social networks, and culturally anchored frames of meaning. This does not deny that supply and demand play a role in price changes, but proposes that supply and demand are shaped by the social and political forces operating in market fields as well as the social and cultural contexts forming the preferences of actors. Price changes can only be explained independently from the embeddedness of economic transactions if the underlying shifts in supply and demand occur while this embeddedness remains constant.

My starting point is the price theory developed by Emile Durkheim. In several of his works (Durkheim 1947, 1992) Durkheim deals with the issue of prices by asserting that prices are social facts. By this he means two things: first, that price is an external feature confronting market actors from the outside. Market participants are in this sense price takers. Very much in line with the economic reasoning of his contemporary Léon Walras, Durkheim considers prices to be outside the reach of economic actors, something the individual demander or supplier on markets cannot influence (Steiner 1992). Second, and here Durkheim diverges from economic price theory, he considers prices under “normal” circumstances as reflecting public opinion on the value of a good; prices correspond to the normative principles of society for a just allocation of goods.<sup>1</sup> Durkheim deviates from economic reasoning by seeing the objectivity of prices as emerging not from an aggregation of individual preferences but from social norms, thus following his dictum to explain social facts by social facts.

I do not follow Durkheim in his assertion that prices can be understood as reflecting what society deems just (Beckert 2001, 2002). But I do follow him in his claim that prices can only be understood with reference to social institutions, networks, and frameworks of meaning that structure the market field and individual decisions – and thereby influence prices. This vantage point for the explanation of prices turns the economic narrative upside down:<sup>2</sup> prices are not the outcome of individual preferences, but of the

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1 Durkheim’s price theory is normative, drawing on theories of just price that are as old as thinking about prices itself. Aristotle was already contemplating the question of just prices (Kellermann 2008: 323).

2 This does not preclude fruitful connections between sociological approaches to prices and ex-

social and political forces of the market field (DiMaggio/Powell 1991; Bourdieu 2005; Fligstein 2001a: 67ff.).<sup>3</sup>

The notion of field breaks with the abstract logic of the automatic, mechanical, and instantaneous determination of prices in markets in which unfettered competition prevails: it is the structure of the field, that is to say, the structure of relations of force (or power relations) among firms that determines the conditions in which agents come to decide (or negotiate) purchase prices (of materials, labor, etc.) and selling prices. ... The structure of the relations of force among firms, which do not just interact indirectly, by way of prices, contributes, in most essential respects, to determining prices by determining, through the position occupied within this structure, the differential chances of influencing price-formation – for example, through the economy-of-scale effect ... It is not prices that determine everything, but everything that determines prices. (Bourdieu 2005: 77)

Prices provide crucial points of orientation for actors in market exchange that make heterogeneous objects and services commensurable (Aspers/Beckert 2008; Fourcade 2004; Luhmann 1988f.). The significance of prices, however, goes beyond this coordination function. From the perspective of market participants, market prices are the costs to be paid or the revenue gained from a good or service and are thereby directly linked to the distribution of wealth. If prices, as it is claimed here, are anchored in institutional regulation, in the social structure of markets, and in meaning, the distribution of wealth does not simply reflect differences in economic efficiency of actors, but is the result of the forces structuring market exchange.

Understanding prices as the outcome of struggles between market actors taking place within market fields is the sociological vantage point from which to analyze price formation. Moreover, the formation of preferences – which is an important component of price formation because preferences constitute the value of goods – is explained based on the cognitive and normative orientations of market actors which shape what they conceive to be valuable.

The idea of understanding prices from the forces constituting market fields has a long tradition within sociology. Max Weber, like Durkheim, rejects the view that prices can

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planations of prices in economics that proceed from imperfect markets (oligopolies, monopolies, cartels, etc.). These situations, however, are not seen as exceptional cases that deviate from a general model that provides the norm, but rather as part of the ontology of all markets.

- 3 Fields are social arenas where “actors gather and frame their actions vis-à-vis one another” (Fligstein 2001b: 108). Market fields are populated by producers (firms), consumers, the state, and intermediating actors, all of whose actions are patterned by their respective positions in the network structure, the set of institutional rules that bind them, and the cognitive frameworks through which they perceive the structure of the market and the qualities of goods. Through the “invisible set of forces” (Fourcade 2007: 1022) of network relations, institutional rules, and cognitive frames, an order emerges in which actors and products are positioned relative to each other. Actors develop mutual expectations for each others’ behavior based on the perceived topology of social differences between them. Firms adapt their strategies and organizational structures in response to the social space they occupy.

be understood as the aggregate outcome of individual preferences and the market mechanism. For him “[m]oney prices are the product of conflicts of interest and of compromises; they thus result from power constellations” (Weber 1978: 108). In contemporary economic sociology, however, the key role of prices for understanding the economy has been remarked upon only by some (Swedberg 2003: 129; Uzzi/Lancaster 2004: 338), and the investigation of prices has gained only scant attention. An indication for this negligence in investigating the topic of prices is that the index of the authoritative “Handbook of Economic Sociology” (Smelser/Swedberg 2005) does not include a single entry for “price.” In many studies on markets coming out of economic sociology, prices are not mentioned at all. This is a profound shortcoming. For economic sociology, “the discussion of prices is a litmus test for its ability to demonstrate the importance of distinctively social dimensions in the most conventional economic practices” (Yakubovich/Granovetter/McGuire 2005: 579). In a similar vein Christine Musselin and Catherine Paradeise (Musselin/Paradeise 2002: 260) call for a more acute investigation of price formation.

Though attention to prices is sparse in economic sociology, some studies on prices have been conducted. They mostly investigate the influence of social macrostructures in explaining either the constitution of prices and price differences in specific markets or the pricing strategies of firms. What the studies share is the assumption that prices do not “mysteriously emerge from ‘the market’” but result from “the established rules of the game that producers tacitly obey” (Velthuis 2005: 10). In this article, I present the findings of studies on price formation and organize the discussion around the three dominant approaches in economic sociology, i.e., social networks, institutions, and cultural meaning.

## 2 Prices from networks

Many studies investigating prices from a sociological perspective bring social network structures front and center.<sup>4</sup> This is not surprising since network analysis is the most common analytical tool used in the new economic sociology. The starting point is to view economic action as “embedded in ongoing networks of personal relationships rather than being carried out by atomized actors” (Granovetter/Swedberg 1992: 9). From this perspective, price “depends on the structure of relationships in the market” (Zbaracki 2004: 1).

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4 Some economists have also made social ties the starting point or the explanation of price differences on markets. See especially the work by Alan Kirman (Kirman/Moulet/Schulz 2008; Kirman/Vignes 1991).

To a certain extent, the role of networks for price formation is prominently recognized in economic theory. Cartels and other forms of collusion of market actors as well as monopolies and economies of scale can be described as specific morphological structures of market fields that influence prices by manipulating “the market situation in such a way as actually to abolish the market freedom of others” (Weber 1978: 83). Monopolies and cartels create barriers to entry that undermine price competition. Especially the field of industrial economics has investigated market structures and their impact on competition and prices (Carlton/Perloff 2005). Somewhat surprisingly one finds no more than a few discussions in economic sociology relating to this strand of economic literature (Swedberg 2003).

This does not mean that power relations in market fields play no role in discussions of price formation from the network perspective, but they stand separate from economic debates on the issue. Besides power, network studies on price formation investigate trust and status differentiation as mechanisms through which networks become relevant for market prices.

### Power and price

One study in which power relations are highlighted investigates the decision-making process within the American electricity industry at the end of the nineteenth century regarding the choice of a pricing system (Yakubovich/Granovetter/McGuire 2005). This is less a study on the role of power stemming from the market position of firms in determining market prices than one on the role of networks in determining pricing strategies within an industry. Yakubovich, Granovetter and McGuire (2005) argue that the decision for the “Wright system” – one of the systems in question – cannot be explained based on pressures towards increased economic efficiency. Instead its adaptation resulted “from complex manipulations and exercises of power by leading industry actors, who mobilized support through their personal networks and domination of industry trade associations” (Yakubovich/Granovetter/McGuire 2005: 581f.).

The possibility of deviating from economically efficient solutions, however, resulted also because the industry actors lacked an understanding of the economic implications of the two pricing systems. In this situation of uncertainty with regard to the economically efficient strategy, “actors gain freedom to mobilize resources around preferred solutions, and political, organizational, and institutional factors take on particular significance” (Yakubovich/Granovetter/McGuire 2005: 583). One group of electricity industry executives “could institutionalize its preferred pricing system through its dominant position in the industry power structure” (ibid.: 585). Network structures were not only relevant on the side of suppliers, however, but also on the demand side. Early on, suppliers’ notions of introducing price discrimination between customers based on their actual use of electricity instead of on uniform rates were jeopardized because they violated the



sense of fairness among customers. The strategy faltered because of network effects: suppliers were not able to keep price discrimination secret due to the dense network ties between customers, which led to the rapid exchange of information (ibid 587f.). This shows the role of the network diffusion of information and its consequences for firms' opportunities to advance favored price strategies.

The diffusion of information through networks can also be used as a mechanism of social control and can thereby influence prices. This has been argued by Mark Granovetter and Richard Swedberg (1992) in their discussion of Karl Polanyi's claim that in pre-industrial societies prices were primarily determined by tradition or command. Granovetter and Swedberg reinterpret this observation in network terms by arguing that prices are sticky in traditional societies because economic relations "are embedded in networks that restrain the pure economic forces" (Granovetter/Swedberg 1992: 9). If market actors operate within a network in which competitive pricing is negatively sanctioned, as it is the case for exchange relations regulated by tradition, prices will not fluctuate even if this would be profitable for individual suppliers and consumers. The close social ties between firms make deviant pricing strategies public, leading to the sanctioning of the violator of the collectively guarded price.

While these are two studies in the new economic sociology focusing on regulatory power and the sanctioning of deviant behavior as two mechanisms operating through social networks, it holds true that power is not widely discussed in network studies on prices. Instead, the two mechanisms that stand out are trust and status differentiation.

### Trust and price

With regard to the role of trust, Ronald Dore (1992) observes that, in customer-supplier relationships, the lowering of the price by another supplier does not automatically lead the customer to switch to the supplier offering the lower price. Instead, a process of negotiation within the established relationship ensues. The customer will address the supplier "and say: 'Look how X has got his price down. We hope you can do the same because we really would have to reconsider our position if the price difference goes on for months. If you need bank finance to get the new type of vat we can probably help by guaranteeing the loan'" (Dore 1992: 163). This example indicates that the ties between producers and suppliers at least reduce the impact of price competition on actual prices. The interest in maintaining a lasting relationship and the trust put in the supplier reduces short-term price pressures on suppliers stemming from changing market prices.

In another study demonstrating the facilitation of trust due to close network ties, Brian Uzzi (1999) investigates the connection between the social ties companies have with banks and the price these companies pay for credit. Based on finance and organization theories, one would assume that "firms with expansive networks of arm's-length ties to

banks optimize their bargaining power and provide access to a large pool of price and loan possibilities” (Uzzi 1999: 491), thereby increasing their chances for getting credit and securing a low price for it. While Uzzi finds this assumption partially confirmed, he demonstrates that a second mechanism is at work as well. Ties embedded in social attachments also contribute to lowering the firm’s cost of financing because the “high level of trust in the relationship enables firms and banks to negotiate contingent loan agreements” (ibid.: 489). The trust a bank has in a company, based on its close relationship with it, allows the bank to give the company the benefit of doubt when interpreting its actual performance data and to provide credit at conditions that would not be offered by banks without such close ties to the company. Hence, the price for corporate financing depends on two types of networks: the information on market prices that a firm gains through its arm’s-length ties to many banks and its embedded ties that allow for contingent contracts with a strong element of trust. “While embedded ties promote collaboration, a network composed only of embedded ties could induce overattentiveness to local resources and historical conventions, limiting a firm’s access to market information and new ideas” (ibid.: 491).

In a later study on price formation in the field of corporate law, Brian Uzzi and Ryon Lancaster (2004) take up the question of how social relations between consumers and producers “affect the prices that producers charge their clients” (Uzzi/Lancaster 2004: 320). Their starting point is that social embeddedness may influence prices when not all information is publicly available and actors cannot govern their conduct through formal means. Under such conditions “embeddedness can help differentiate products in price-enhancing ways or reduce transaction costs to the mutual benefits of the transactors by facilitating the transfer of private information and by creating informal governance arrangements” (ibid.: 322).

Uzzi and Lancaster distinguish three forms of embeddedness in the corporate law market – embedded ties, board membership, and status. Each of these forms of embeddedness influences prices based on different mechanisms. Trust between the law firms and their clients emerging from repeated interactions between them plays a role in the price paid by the client, because the embedded ties allow for the reduction of production costs for the legal services provided. Clients feel less in need to protect themselves from the risks of getting exploited in the transaction. Ongoing relationships based on trust require fewer written agreements and less documentation, which reduces costs, the savings being shared between the law firm and the client (Uzzi/Lancaster 2004: 325).

### Status and price

Besides trust, investigations have focused on status differences between firms in markets as a further mechanism through which network structures influence prices. Status differences refer to the social stratification among producers, based on different assess-

ments of the quality of their product. Much of the theoretical groundwork on the relationship between a firm's status and product prices has been developed by Joel Podolny (1993, 2005). Status in a market is defined as "the perceived quality of that producer's products in relation to the perceived quality of that producer's competitors' products" (Podolny 1993: 830). Podolny (1993) investigates the prices investment banks charge their clients when underwriting corporate securities. Potential clients of the investment banks perceive quality differences between them, which leads to a status order in the market. The empirical observation is that investment banks with high status are able to underbid lower-status banks and thereby secure much of the business in an extremely price-sensitive market. They can do so because "the costs for producing a given quality product are negatively associated with status" (Podolny 1993: 853). High status firms have "advantages in advertising, transaction costs, and financial cost" (ibid.: 839). These advantages "all derive solely from the view of status as a signal that reduces the reluctance of market participants to enter into an exchange relationship with a particular producer" (ibid.: 839). Podolny refers to signaling theory (Spence 1973) and interprets status as a signal from which customers infer quality: "If an actor is uncertain of the actual quality of the goods that confront her in the market, or if she is unwilling or unable to bear the search costs of investigating all the different products in the market, then the regard that other market participants have for a given producer is a fairly strong indicator of the quality of that producer's output" (Podolny 1993: 831). Contrary to economic signaling theory, however, Podolny asserts an only "loose linkage between actual quality and perceptions of individual producers" (Podolny 1993: 837). Hence, the rewards for a firm with perceived higher status are not necessarily the outcome of actual quality differences. In this sense the social structure of the market has an independent effect on prices. This relationship has also been found on other markets studied by Podolny, for instance the wine market (Benjamin/Podolny 1999).

Uzzi and Lancaster (2004), who are similarly critical of the economic assumption that status differences reflect actual quality differences, build upon Podolny's theoretical insights. Based on their investigation of the market for corporate law, they see the relevance of status not in lower production costs, but rather in the symbolic value it offers the customer. They argue that customers derive "the 'emotional part' of a purchase" from the perception of a law firm as having high status (Uzzi/Lancaster 2004: 328). The influence of status on the price charged by the law firm is based on two mechanisms: the desire of the client firm to improve its own image by associating itself with a high-status law firm, and a logic of appropriateness. Hiring a high-status law firm protects the inside counsels responsible for the decision "from potential criticism and raises their worth in the eyes of others" (ibid.: 328). This additional value deriving from status allows high-status firms to charge higher prices for their legal services.

The market for lawyers has also been the subject of a study by Lucien Karpik (2010, 1999), who investigates price setting strategies of lawyers in France. According to Karpik, prices reflect the position of a law firm within the professional hierarchy. Setting an hourly fee is connected with substantial uncertainty for the firm because it needs to

assess its position in the hierarchy. This it can induce partly from public social judgment of its performance. However, the most important source of information is the practitioner network. Law firms observe the prices charged by their colleagues, which enables them to make realistic comparisons of their prices (Karpik 2010: 213). In addition, they rely on informal rules prevailing in the field when setting their prices.

While the studies by Karpik (1999), Podolny (1993), Uzzi (1999), and Uzzi/Lancaster (2004) draw substantially on economics by proceeding from information problems and the influence of information asymmetries on market price, the mechanisms they identify differ from economic assessments. The focus is on the structure of social relations within the market field and how network position influences costs, provides private information used for product differentiation, and creates the basis for “legitimate choices” by reducing the risks that organization members encounter when making decisions.

Two further insights derived from studies on the impact of network structures on market prices should be mentioned. One refers to the influence of network size on prices – or, more precisely, on price volatility. In an early sociological network study on price formation, Wayne Baker (1984) investigates the volatility of stock options and demonstrates that price volatility depends on the size of networks in which traders operate. In the open outcry market he investigates, Baker analyzes the option volatility of a stock with lower volatility and one with higher volatility. The stock with lower volatility attracted a smaller crowd of traders than the one with higher volatility because fewer profit opportunities existed. Baker demonstrates that the size of the commodity trader networks (i.e., the number of traders trading in a particular stock) affected the setting of market prices. Price volatility in the options market is higher in the market with a larger trading crowd, even when the higher volatility of the underlying stock is taken into account. The explanation for this is the changing communication opportunities among traders in the larger network. “Growth affects the pervasiveness of communication similarly; as a market grows, actors are increasingly unable to communicate with one another. The decline in the pervasiveness of communication, induced by large size and growth, causes market makers’ bid-ask spreads to widen and diverge, resulting in an increase in option price volatility” (Baker 1984: 786). This finding runs counter to the economic assumption that markets with larger numbers of buyers and sellers will show less price volatility.

The second insight is that the social structure of the market stands front and center in the explanation of price differences in Harrison White’s (1981) conceptualization of markets as reproducible role structures. Also influenced by Spence’s signaling approach, White develops a theory of market differentiation that assumes that firms make decisions on prices and the production volume based on the observation of the price and volume decisions of the other firms in the market. Firms seek out a niche, which is a unique position in the market with reference to price and production volume. The niche in which a firm positions itself depends on the positioning of the other firms in the market, which limits options reciprocally. Given the positioning of the other firms,

competitors decide on a price and volume that allow them to maximize revenue. Hence, it is the given market structure that determines firms' pricing strategies. Emerging from this is what White calls the "market schedule," that is, a social topography of the market field in which each producer is differentiated by a different price and production volume.

An application of this theory is offered by Uzzi and Lancaster (2004), who observe in their study on pricing strategies of law firms that such firms often sit on the board of companies. One crucial payoff that law firms receive from this membership is access to private information on the prices that other law firms charge their clients, what clients value about legal work, and where future business opportunities are emerging (Uzzi/Lancaster 2004: 327). This allows law firms "to locate their place in the market schedule by identifying peer and non-peer firms that provide a basis for strategic differentiation into areas where their product encounters the lowest level of competition or highest degree of demand" (ibid.: 340). The additional information makes it possible for the law firm to position their product in price-enhancing niches.

Network studies on price formation set out to explain prices based on the morphology of market fields. The studies discussed here show that network relations can lower transaction costs by introducing trust; that they can be a mechanism for effective sanctioning and thereby for compliance with established prices; that they provide power resources used to influence institutional rules; and that they stratify markets into a status order among firms which influences market prices and the pricing strategies of firms.

### 3 Prices from institutions

Institutional approaches to the explanation of price formation are certainly much older than network approaches, and they are hardly limited to the field of economic sociology. Institutional economics and political economists have studied the influence of institutional regulation on economic outcomes, including prices. Indeed, there is an extensive literature on price formation in institutional economics, mostly from the first part of the twentieth century (Hamilton 1938).

In economic sociology, the institutional influence on market prices was primarily an issue discussed by the founders of the field, but it has drawn only limited attention in contemporary economic sociology. Karl Polanyi (1992) argued that the system of fluctuating prices characteristic for the modern market economy could only develop based on institutional regulations. Polanyi's interest, however, was not to understand the connection between specific institutional rules and their impact on prices, but rather to demonstrate that the flexible price mechanism itself has institutional underpinnings and does not emerge spontaneously: "Acts of exchange on the personal level produce

prices only if they occur under a system of price-making markets, an institutional setup which is nowhere created by mere random acts of exchange” (Polanyi 1992: 36).

Discussions focusing on the patterning of prices by institutional regulation are more prominent in the works of Emile Durkheim and Max Weber. Durkheim (1992) viewed the institution of contract as influencing the price level of goods by forcing actors to agree upon prices that are considered to be just by society. It is, according to Durkheim, only under this condition that contracts have moral legitimation and will be enforced (see also Beckert 2001). Max Weber discussed the regulation of markets, which he defines as the “substantive restriction ... on the marketability of certain potential objects of exchange” (Weber 1978: 82). The regulation of markets is part of the price struggle among market actors who attempt to influence “the market situation of objects of exchange,” which in turn is determined either by tradition, convention, law, or voluntary action arising from the interests of actors in the field.

To the extent the relationship between regulatory institutions and prices is discussed in *contemporary* economic sociology, it is done primarily in historical studies and with organizational development (not prices!) as the dependent variable. An example for this is William Roy’s “Socializing Capital” (Roy 1997), in which he investigates the emergence of the oligopolistic manufacturing firm as the dominant organizational structure of American industry in the twentieth century. Roy’s argument refers to the possibilities big firms have to set prices. He points out that the initial enforcement of antitrust law in the United States in 1897 had an unanticipated effect on the balance of power between small and large firms. Antitrust law aimed to prevent the concentration of economic power by stopping collusion among firms. Thereby it gave big firms an advantage over small enterprises because a group of small firms could no longer set prices together. But if they merged, the resulting large firm could set a single price. As a consequence, large firms bought smaller competitors or else threatened their existence by initiating price wars (see Dobbin 2005: 30f.). Indirectly this assessment confirms Max Weber’s suggestion that price policies of firms are an instrument of domination in market struggles. Prices are set not at the equilibrium level but are rather determined by firm strategies to secure or establish a position of dominance in the market field. At the same time, the ability to set prices depends on the institutional set-up of the market field.

It is not quite clear why the new economic sociology pays relatively little attention to the influence of institutional regulation on prices. One contributing aspect might be that institutional approaches play a secondary role in the new economic sociology in general, while networks and cultural explanations prevail. Even in studies that are informed by institutionalism, the concept of institution that is being used leans toward the new sociological institutionalism (DiMaggio/Powell 1991; Scott 2008) and focuses on questions of legitimacy and diffusion of institutional models. Institutions are primarily understood as cultural scripts providing orientation for actors under conditions of uncertainty. The alternative concept of institutions, conceived as state-devised formal rules that regulate and constrain the behavior of economic actors (Streeck/Thelen 2005: 10),

forms the conceptual background of historical institutionalism and comparative political economy but finds limited attention in the new economic sociology.<sup>5</sup>

Despite this lacuna in the new economic sociology's scholarship on the influence of formal market regulation on prices, I will allude to five mechanisms and instruments through which institutional rules impact prices.<sup>6</sup> They deserve much more intensive study by economic sociologists. Their investigation would also provide an entry point for economic sociology to devote more attention to the state and its role in shaping economic outcomes through institutional design.

1. *Institutional influences on competition.* The first mechanism through which institutional rules affect market prices is to influence competition by either directly altering the supply on markets or influencing product costs. The supply on markets can be influenced by confining the mobility of goods and production factors. *Restrictions* on immigration are as much an example of this as are import tariffs or subsidies. These institutional regulations reduce competition for some producers and thereby shield them from price competition stemming from additional supply in the market.

Market prices are not only institutionally influenced through the alteration of supply but also through the direct regulation of competition. Antitrust law is intended to prevent firms from undermining price competition by forming cartels. Quality standards influence market competition institutionally by excluding certain producers from the market because of non-compliance. Minimum wages set a minimum price for labor and thereby interfere with the price mechanism. The regulation of the rights of unions to organize labor determines the strength of labor in industrial conflict and thereby influences the price for labor. Intellectual property rights provide (temporal) monopolies to firms on the use of these rights, thus shielding them from market competition and thereby influencing product prices (Troy/Werle 2008).<sup>7</sup> The protection of appellations of origin limits supply in markets where quality differences are largely symbolically constructed (Karpik 2010). The dramatic rise of executive compensation during the last thirty years can be explained by the introduction of institutional rules like the compensation of executives with stock options (Godechot 2007; Murphy 2002), implying that

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5 The consequences deriving from institutional regulations on prices play a significant role, at least indirectly, in the work of Neil Fligstein (2001a, 2008). Fligstein sees an important precondition for the stable reproduction of markets in the ability of firms to reduce price competition and thereby to maintain stable profit opportunities.

6 A sixth mechanism, the direct setting of prices by the state, is not discussed since I am focusing on the role of institutional rules within the context of market economies.

7 The influence of intellectual property rights can be seen *ex negativo* in illegal markets which sell the same (or very similar) products under violation of intellectual property rights. Music recordings can be purchased for a fraction of what the indistinguishable original costs; clothing with a fake brand label can be purchased for much less than the original. The high prices for these products in the legal market do not, of course, only reflect monopoly profits in highly differentiated markets, but serve to recover the production costs, including marketing costs to position the product on the market. The imitators free ride on these costs.

a “market price” emerges not so much from market forces as from institutional structures. In academic labor markets, competition is often regulated through institutional rules that limit or even exclude negotiations on the salaries of professors (Musselin 2005: 223ff.). Salaries are determined by payment schemes or benchmarks applied to all candidates. These factors are weaker in the case of senior faculty at American universities in which supply and demand have larger influence (ibid.).

All these forms of regulating competition through institutional rules affect distributional outcomes in markets and are therefore contested between market participants. Hence, the institutional regulation of markets is subject to a power-laden “market struggle” (Max Weber) between competitors and between the supply side and the demand side in the market. This struggle aims at influencing prices for production factors or finished goods through the alteration of institutional rules.

2. *Regulations on the externalization of costs.* A second way in which institutional regulations influence market prices is by limiting opportunities for producers to externalize costs. Rules requiring firms to comply with environmental standards or labor safety laws in production force them to bear costs they would otherwise avoid because they do not contribute to the market value of the product. This influences production costs and market prices of products. A current example is the regulation making firms pay for their carbon emissions. Polluting the environment becomes commodified through the political introduction of a market for emission permits (Engels 2006).

3. *Reducing market uncertainty.* A third way in which institutional regulation influences market prices is by means of protecting potential customers from defection that arises from asymmetrically distributed information between suppliers and customers. George Akerlof (1970) has shown that, under conditions of asymmetrically distributed information, the fundamental assumption of economic price theory, i.e., that flexible prices lead to market-clearing equilibria, cannot be maintained because the only achievable market equilibrium under such conditions is no trade at all. Hence, price information alone does not provide adequate information for markets to function efficiently. Since Akerlof, information economics has focused on the ways information asymmetries among market actors can be reduced through market institutions. Regulatory institutions influence prices by reducing uncertainty with regard to product quality. This is done through warranties and other forms of consumer protection policies (Trumbull 2006).

4. *Taxation and accounting.* A fourth institutional influence on the regulation of prices is taxation and accounting rules. Taxes on corporate profits, social security, value-added taxes, and consumption taxes, such as gasoline taxes or alcohol taxes, as well as the accounting rules by which they are calculated influence product prices institutionally. The selective taxation of products is used by political actors as an instrument to provide incentives or disincentives for the production or purchase of specific goods.



5. *The price for money.* A fifth instrument of institutional regulation of prices is the monetary policy of the Federal Reserve. The interest rate set for banks to borrow money from the Federal Reserve regulates the price for money and influences product prices through the price of credit. One of the causes of the steep increase in housing prices in the United States and some European countries during the 2000s – which led subsequently to the financial crisis of 2007 – can be found in the policy of the Federal Reserve to keep interest rates low.

This brief discussion on institutional influences on prices does not challenge an economic price theory that proceeds from the notion of perfect markets assuming perfect information of market actors and full rationality. However, such a theory of price formation is empirically pointless given the dense institutional regulation of markets, making institutional rules (and other social macrostructures) the actual explanatory factor in price formation. The mechanism of supply and demand stands at the very end of a long chain of price-determining factors that are largely shaped through political influences, market structures, and cultural frames constituting the perception of the value of goods. Since institutions have distributive effects, they are contested between market actors. An economic sociology of price must pay close attention to the market struggles surrounding institutional regulations. The institutional influences on prices also provide evidence that market fields are political and social entities, not self-referential subsystems of the economy detached from other social realms (Beckert/Streeck 2008).

#### **4 Prices from meaning**

Network approaches and institutional approaches focus on the social and political influences on market competition. Cultural approaches to the explanation of prices in economic sociology partly take up the concern of institutional approaches with the regulation of competition by showing how competition between firms is shaped by “conceptions of control” (see also Bandelj 2008; Fligstein 2001a, 2008), i.e., the structuring of competition by actors’ dominant understanding of how competition in the field operates. Cultural approaches to pricing address four main questions. First, they deal with the development of the calculative tools that market actors use to evaluate goods to be exchanged. Second, they deal with the formation of expectations regarding events in the future. Third, they deal with the normative preconditions necessary for goods or services to become legitimate objects for market exchange and thereby to have prices attached to them. Fourth, they deal with the social constitution of preferences for certain goods.

## Pricing technologies

One of the preconditions for prices to emerge is that actors must be able to assess the value of the products offered. Markets depend on social technologies that make it possible to assess and to compare objects in terms of their monetary value. The investigation of calculative tools and their relevance for the pricing of goods has become an important topic in economic sociology in recent years (Callon 1998; MacKenzie/Muniesa/Siu 2007; Karpik 2010; Preda 2006). In this article, pricing technologies are subsumed under the notion of meaning because they are part of the cognitive formatting through which actors interpret the situation they confront.

In one study Donald MacKenzie and Yuval Millo (2003) argue that the market for financial derivatives was strictly limited until the early 1970s, partly because of the lack of knowledge on how to price the derivatives traded on future markets. Only advances in options pricing theory, especially the development of the Black-Scholes model, and the emerging computer technologies that allowed traders to make the theoretical insights from finance theory operational in their trading practices, provided an intersubjectively shared understanding of the “correct” calculation of prices. The developments of finance theory allowed for the constitution of the market and “performed” it at the same time. The more the model was used by traders in the market, the closer the actual option prices moved to the prices predicted by the model. “Increasing use of models seems to have begun to have direct effects on prices” (MacKenzie/Millo 2003: 126). Hence, prices on this market can be understood as the outcome of a specific cognitive frame of market participants that became diffused over time and thereby set shared standards on how to calculate the “right” price for the derivative.

In another study, Fabian Muniesa (2007) investigates how calculative devices were designed and introduced by the Paris stock exchange to determine the closing price for stocks. The closing price in a continuous trading session is the price set for the last trade at closure. Since this price is also widely used as a reference for other calculations, market actors are interested in manipulating this price in ways favorable to them. If the closing price is simply the last price set, it is quite easy to manipulate it, which brings up the issue of how representative this price really is. The Paris Bourse resolved this problem by introducing an algorithm called “closure call auction,” which prevents price manipulations and generates a closing price considered far more representative. This is yet another example of how the algorithms of calculating devices and the associated cognitive frames enter into the pricing of commodities. In more general terms, this implies that technologies are an important element in price formation.

## Expectations and pricing

Another particularly interesting aspect of the social formation of prices is investigated by Caliskan (2007) in a study of price formation on the Cotton Trading Pit of the Izmir Mercantile Exchange. Caliskan shows in detailed ethnographic work a sequence of three different prices emerging in the course of a trading day from the encounters between traders on the cotton exchange. These encounters are pit trading, post-pit trading, and the subsequent setting of a closing price by a committee which establishes the daily market price of Turkish cotton traded in Izmir. In the course of events, the previously established price becomes the reference point for the next encounter between traders: the price emerging from the pit trading is taken as a reference point for justifying prices in post-pit trading, while the committee, setting the daily market price, takes into account prices generated in pit trading and post-pit trading. Quite accurately, Caliskan refers to pit trading – in which only about 10 percent of the cotton is traded – as the “rehearsal price” (Caliskan 2007: 248).

Caliskan highlights a fourth institutional structure influencing cotton prices which adds an important general insight to price formation. Cotton is a futures market where price depends crucially on the *expectations* market actors have concerning the future supply, which depends itself on the harvest. Since the amount and quality of cotton available can only be known after the harvest, traders must base their decisions on assessments of future supply. How are these expectations shaped? In a political process! The supply of the coming cotton season is “established” by a permanent working group composed of bureaucrats from the ministry of agriculture, traders, economists, agricultural engineers, and representatives of landowners and farm cooperatives (Caliskan 2007: 253). The figure published on the expected supply of cotton is negotiated in this group and, as Caliskan shows, is ultimately the result of power struggles between the different interest groups. Of course, expectations on future events do not need to be determined by committees, but they can be. The general point Caliskan alludes to is that, in markets in which the justification of current value depends on unknown future events, prices are based on contingent expectations that are shaped politically.

## Legitimacy and pricing

The influences of cultural scripts on prices are also demonstrated in sociological studies that investigate the cultural preconditions underlying the legitimation of evaluating objects in terms of prices. MacKenzie and Millo (2003) touch upon this subject in their study regarding the Black-Scholes model. By calculating the prices for derivatives “rationally,” the Black-Scholes model made it possible to categorize futures trading as a transaction based on rational decision making rather than as a form of gambling, which was how it was widely viewed until then. The “scientific” calculation of prices gave legitimacy to the market in a social context in which gambling was strongly objected to

and legally prohibited. This can be expressed in more general terms: for prices to be legitimate, they must conform to social norms that are not the product of the economic system, but instead put constraints on it.

The cultural preconditions for the pricing of objects have been especially the focus of the work of Viviana Zelizer (1979, 1981). While the approval of prices seems morally unproblematic for most exchanges, there is a class of “objects” modern societies consider to be highly problematic with regard to their assessment in monetary terms. “Objects” associated with human life and, of course, human life itself embody sacred human values and are to remain strictly separate from the profane sphere of exchange by not attaching a price to them. There is social disapproval of treating them as marketable, a point made already by Max Weber (1978: 83).

Zelizer studies the cultural tensions between money and human values in several historical studies on the development of insurance markets. In a study on the development of life insurance in nineteenth-century America (Zelizer 1979), she shows how this insurance first failed because potential purchasers and potential beneficiaries saw it as a blasphemous gamble with God’s will. Moreover, to benefit from the death of a loved one was seen as morally objectionable because it would mix the priceless value of human life with the profane sphere of monetary valuation. The consequence was an initial blockage of the market. Only by repositioning the product in ways that framed it in terms of loving and caretaking – i.e., made it compatible with the moral convictions of customers regarding the sacredness of life – could the industry become successful.

In her study on children’s insurance during the late nineteenth and early twentieth centuries, Zelizer (1981) shows a reverse process. This insurance was initially justified by the compensation it would provide to parents for the economic loss they suffered with the death of a child. It was perfectly legitimate to put a price on children in terms of their economic contribution to family welfare. However, this economic valuation of children increasingly gave way to their “sacralization,” in which they were seen as an emotional asset and thereby removed from the sphere of the market and the language of prices. The industry reacted to this cultural development by reframing the rationale for the insurance. It sold children’s insurance now primarily as burial insurance for poor children and later as savings plans, where the endowment, once matured, could be used to pay for the child’s education. The sacralization of children, i.e., their removal from the economic sphere, forced the industry to hide the monetary valuation of a child’s life that was originally essential to the product it offered. “Christianity sacralized and absolutized human existence, setting life above financial considerations” (Zelizer 1981: 1037).

Marion Fourcade-Gourinchas (2004) has scrutinized this topic further and argued that the activity of pricing things is not at all natural but emanates from a certain identifiable set of institutional conditions and cultural assumptions about the world. In particular, pricing emerges in cultural environments where calculability, money, and economics are highly legitimated. Fourcade-Gourinchas’ empirical case comprises the damage

compensation lawsuits connected to the oil spills of the Exxon Valdez in Alaska and the Amoco Cadiz in Brittany. On the one hand, she shows how the method of contingent valuation that assesses “non-use damages” was established in the legal system as a valuation technology for pricing damages to the natural environment. The invention of this pricing technology was a precondition for the attachment of monetary value to the environmental damages. Like the Black-Scholes model, contingent valuation is a technology that makes the assessment of an “object” in terms of its monetary value possible.

On the other hand, the comparison between an American case and a French case allows Fourcade-Gourinchas to go beyond the reconstruction of the development of this calculative device and point also to the cultural and institutional preconditions for the development and use of this technology. In the two cases investigated, the compensation paid for the damage done to the environment in America was much higher than that paid for the damage to the French coastline. Fourcade-Gourinchas argues that this can be explained by the fact that, compared to the Americans, the French are much more reluctant to value their environment in terms of prices:

Cultural assumptions about the legitimacy of monetary exchange and institutional legacies about the prerogatives of economists and economic technologies in the legal process help understand why dramatically different values were ultimately attributed to ‘nature’ in the two incidents. (Fourcade 2004: 25)

Hence, prices do not only have a cognitive precondition in the development of economic theories, “but depend on cultural representations and social institutions that *allow* the discipline and its instruments to perform the market economy” (Fourcade 2004: 36).<sup>8</sup>

## Prices and preferences

A fourth realm in which studies in economic sociology have made the connection between prices and cultural meaning is the explanation of actors’ preferences. In sociological reasoning, preferences are not considered to be the expression of individual tastes, but are rather seen as reflecting culturally infused meanings that products have for actors in the concrete historical space in which the exchange takes place. In this sense, products are intersubjectively framed (Beunza/Garud 2005; Fiss/Kennedy 2007), and it is from these frames and their changes that actors establish “what is valuable” (Stark 2009). To trace preferences to social macrostructures instead of viewing them as random individual tastes does not contradict economic price theory *per se*, because it does

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8 An additional critical point is made by Fourcade-Gourinchas when she describes a self-fulfilling logic emerging from the practice of pricing the “priceless”: measuring the environment economically actually helps to commodify it “by creating an implicit, virtual market for it” (Fourcade 2004: 33).

not question the mechanism of supply and demand for the determination of prices. It helps explain *why* certain products are in demand and how demand changes.

Studies that investigate the social preconditions for product demand focus rather on the concept of value than on the notion of price. While the value of a product can be assessed independently from its price (and indeed, the two can stand in contradiction to each other), value is a precondition for prices, because the desire to purchase a product – i.e., the willingness to pay a price for it – is rooted in the value associated with it.

One way in which preferences are socially shaped is through social norms. This became evident above in the discussion of the cultural preconditions for the pricing of goods, but it is a much more general phenomenon that also refers to the relative value of products whose legitimacy, in terms of monetary exchange, is not in question. The most obvious example for the normative influencing of demand is the case of products for which customers are willing to pay a higher price because their production and distribution conforms to ethical standards of fair trade, environmental sustainability, or higher labor standards. These markets have gained much attention in recent years (Aspers 2006; Zick-Varul 2009). The additional value customers assign to these products is not based on material qualities relevant to the use of the product, but on the way it was produced, which is evaluated under ethical criteria (Gourevitch 2011 [forthcoming]).

However, studies in economic sociology on the social character of the valuation of products go much beyond the recognition of social norms. Most of them actually focus on the role of cognitive categorizations that have a taken-for-granted status in the market field. A crucial type of market is one in which prices for products are based on quality differences that are hardly definable or discernible in an objective sense, but emerge as social constructions of contingent assessments of quality. Two examples for such markets are the wine market and the market for contemporary art (Beckert/Rössel 2004; Diaz-Bone 2005; Velthuis 2005), where qualities are judged based on aesthetic criteria. While the wine market is characterized by its complexity resulting from the thousands of different wines being sold and the limited ability of consumers to rank wines according to differences in the sensory qualities of the product, the market for contemporary art is even more radical in the sense that quality assessments have no objective basis at all.

In these markets – and this can be generalized to all markets where quality differentiation is symbolically constructed (Beckert 2010b) – quality assessment relevant for the formation of price differences takes place along classification schemes which distinguish products according to certain characteristics of the product and its production that are interpreted in the field as constituting quality differences. Products are classified in relation to these “judgment devices” (Karpik 2010). In wine markets there are several institutionally sanctioned systems to measure quality differences (in the French wine market, for instance, the distinction between *vins de table*, *vins de pays*, and AOC wines) and informal classification systems that are interpreted by consumers as signals

for quality differences. The region of origin of a wine, its age, and the *domaine* where it is bottled are pieces of information that can be read from the bottle label and are interpreted as indicators for the quality of the wine (Chiffolleau/Laporte 2006). *Domaines* and regions each have a specific reputation in the market and define the status of a wine. By corresponding to characteristics ranked high in the status order of these quality markers, the wine becomes “legitimized” (Garcia-Parpet 2007) and its price increases.

A further social influence on the valuation of products whose qualities are primarily aesthetic is exercised through the assessments of experts who act as intermediaries in the market (Beunza/Garud 2005; Podolny 2005). This has been observed in both the wine market and the art market. The uncertainty of wine consumers is reduced by the judgments of wine critics and especially their classification of wines. By classifying wines along a unidimensional ranking system, wine critics, those people highly regarded for their ability to judge quality differences in this market, serve to reassure wine consumers. The role of experts is even more pronounced in the art market, where not only critics but also galleries, museum curators, and collectors play important roles in the valuation of an artist (Becker 1982; Beckert/Rössel 2004; Velthuis 2005). A museum’s decision to purchase a work of art by a specific artist or a gallery’s decision to represent her are interpreted by other market actors as signals for the quality of an artist and thereby establish a status order in the field. In addition, a higher price can itself be interpreted as a quality signal for the artist (Velthuis 2005: 158ff.). The same holds true for the wine market, where tests show that the same wine is judged as being of higher quality if the subject knows that it has a high Parker score (Siegrist/Cousin 2009). It is important to note that the reputation an artist or a wine receives by being singled out by intermediaries depends on the reputation that the expert himself has in the field. An exhibition in an internationally renowned museum has quite different reputational effects than an exhibition in a local bar.

Expert opinions provide a mark of orientation for quality assessment. Their significance is not limited to consumer markets but extends to all markets characterized by high uncertainty with regard to the value of their products, because valuation in such markets is “necessarily an interpretative exercise” (Zuckerman 1999: 1431). An important aspect of the role of experts in the explanation of market prices is offered by Ezra Zuckerman (1999), who uses a study of the stock market performance of firms to investigate the consequences that *ambivalent categorization* has for stock prices. As Zuckerman discovers, firms that combined different product categories present an incoherent economic categorization to stock market analysts, leading to less coverage by analysts and discounted stock market prices.

What we learn from the sociological investigation of the cultural frames relevant for product prices is that the conventions for establishing the value of a product in markets do not follow universal laws, but depend on local cultures and collective behaviors in the market fields (Smith 1989; Zuckerman 1999:1432). This is also the subject of studies drawing on convention theory (Boltanski/Thévenot 2006; Diaz-Bone 2008), which

asserts that the valuation of products takes place on the basis of different conventions that provide socially shared interpretative schemata to market actors. The social construction of value influences prices by increasing demand for some products and making others less desirable. This is compatible with economic price theory in the sense that price depends on supply and demand. Economic sociologists, however, make the attempt to understand how preferences emerge and change in the social context of the market field, instead of treating preferences either as fixed or random.

While most approaches to prices in economic sociology that take cultural frames into account investigate them in terms of the resolution of coordination problems in market exchange, the French sociologist Pierre Bourdieu (1984) has introduced a perspective that goes beyond this by connecting preferences to social stratification. Prevalent interpretative schemes differ, depending on the social position of the agents and the associated habitus. According to Bourdieu, agents' "preferences and tastes are the product of their positioning and movements within social space, and hence of collective and individual history" (Bourdieu 2005: 84).

## 5 Pricing in firms

A further field of empirical research in which economic sociologists have highlighted the role of institutional and political structures for the determination of prices is that involving the pricing decisions of business firms. While market prices emerge in "price struggles" (Weber) in the exchange process, companies must also decide the prices they will ask for their products on the market. But how do companies make these decisions? How do they calculate their offering prices? Viewed from the perspective of economic price theory, the firm would set prices at the point where marginal revenue equals marginal costs. This, however, bears little resemblance to the pricing decisions that have been observed empirically.

Pricing decisions of firms have been studied empirically by economists and sociologists. In an influential paper, Hall and Hitch (1939) found that, rather than using marginal utility theory, firms would set prices at full costs plus a markup to account for profits. Studies in economic sociology on the issue (Velthuis 2005; Zbaracki 2004) focus on the influence of micropolitics in the firm on pricing and the impact of "pricing scripts."<sup>9</sup>

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9 I do not discuss the very interesting study by Eccles and White (1988) on pricing conventions in multidivisional firms for setting transfer prices that help to organize the exchanges between profit centers. The study shows how pricing strategies are shaped by being market relations and authority relations at the same time. I will not discuss the study in detail because it does not address price formation on markets or pricing strategies of firms for determining offering prices on markets but looks at pricing within firms for the purpose of setting prices for transactions *within* the firm itself.



In a study on price-setting practices at an industrial firm manufacturing parts used to maintain machinery, Mark Zbaracki (2004) finds that price-setting practices are highly contested processes within the firm. Pricing strategies are the outcome of negotiations between different groups within the firm, each attributing different meanings to prices and pricing strategies. Hence, price setting is based on the social dynamics of organizational practices.

The firm investigated by Zbaracki manufactures seven thousand different parts and sets prices for these once a year in sessions held during a so-called “pricing season.” What are contested between the groups involved in pricing decisions are not the goals to be reached – growth and profitability – but the strategies to reach these goals. The uncertainty regarding optimal strategies makes pricing a process of negotiation in which the social order in the organization is “constructed in the ongoing interactions” (Zbaracki 2004: 3). In this process the rationale of economic price theory plays a very important role. But rather than determining pricing practices, it exercises its influence by being used by some actors as a reference point for legitimating certain decisions. “Price theory may serve as a rational myth” (Zbaracki 2004: 17) used by actors to make sense of a situation. The interpretative logic of economic reasoning, however, conflicts with organizational logics where social relations and meanings derived from the experiences of the practitioners count, leading to the negotiation of order (Zbaracki 2004: 17). Prices are shaped by interpretative processes within the organization through which actors make sense of market signals.

In his study on prices for contemporary art, Olav Velthuis (2005: 116ff.) introduces the notion of “pricing scripts” to conceptualize the pricing decisions of art galleries. By this notion Velthuis refers to “a set of routines which function as a cognitive manual for the variety of pricing decisions that a dealer needs to make at different stages of an artist’s career” (Velthuis 2005: 117). The market for contemporary art is theoretically interesting because prices stand in no correlation to the production costs of the product. The uncertainty emerging from this apparent randomness of prices is reduced by art dealers taking recourse to rules that are constituted and recognized in the market field and shared by the actors. While such scripts have changed fundamentally throughout history, at any given time there is a tacit understanding in the field as to how works of art should be priced. One of the rules Velthuis identifies is that galleries price works of art by the same artist strictly according to size, irrespective of quality differences between the pieces offered. Another script frowns on galleries marking down the price for an artist even if the works do not sell. Prices for a new artist are set according to rules of thumb with reference to the prices charged for the works of other young artists who produce work with similar materials and styles. All these decisions are anchored as mental models in the cognitive frames of the actors in the field and allow for mutually accepted practices. It is through scripts and the constitution of reciprocal expectations that uncertainty in the market is reduced and prices are “understood” by the competent members of the field. It is through understanding the social and cultural context of the market field that prices become intelligible.

In a study on the calculation of prices by big supermarkets in France, Sandrine Barrey (2006) pays special attention to the role of legal regulations on pricing that exist in France. In order to protect small stores, price calculations must follow specific legal rules, which, for instance, forbid supermarkets to sell at a loss and which regulate price reductions. This points to the role of institutional factors in pricing, as discussed in the second part of the article. Barrey introduces the notion of “spaces of calculation” to allude to the multiple forces that influence pricing decisions in a network of social actors and information. These include the purchasing price, marketing data, price lists assembled by the headquarters, and the competition situation of the specific supermarket for which prices are determined.

## 6 Conclusion

This paper provides an overview of sociological studies on prices. My starting point was Emile Durkheim’s assertion that prices are social facts. I did not interpret this in Durkheim’s sense that prices are determined by moral considerations of social solidarity. Instead, prices are shaped in a much more general way by the social macrostructures operational in market fields. The sociological studies reviewed show how social networks, institutions, and cultural frames shape actors’ positions in market fields, the instruments of calculation, expectations, and perceptions of what is valuable. Social macrostructures influence prices through their impact either on market competition or on the preferences of actors. To explain price formation based on the forces prevailing in the market field can be seen as the core of the sociology of prices.

The sociological insights on price formation can be connected to economic studies if these go beyond the standard assumption that prices are determined by supply and demand under conditions of perfect markets. Economics deviated from orthodox price theory especially in the fields of industrial economics (Carlton/Perloff 2005) and information economics (Akerlof 1970; Stiglitz 2000). That the idealized images of markets survive is rather “because the idea of self-regulating economic structures holds political appeal” (Zbaracki 2004: 1) than because of their salience in economic research.

While questions of valuation and qualification of products have recently become an important topic in economic sociology (Beckert/Aspers 2011; Callon 1998; Fourcade 2011; Karpik 2010; Stark 2009), the explanation of prices still plays only a limited role (Swedberg 2003; Uzzi/Lancaster 2004; Yakubovich/Granovetter/McGuire 2005). Especially the influence of regulatory institutions on prices, a very obvious field to study from the sociological perspective, has not received sufficient attention in economic sociology. This may have to do with a general reluctance of the new economic sociology – with the exception of historical studies in the field – to study the role of state influence on regulating the economy.

But it is not just empirical comprehensiveness that is missing from the sociological investigation of price formation. Theoretical synthesis is also lacking. A sociological theory of prices should account for “how market and organizational conditions influence prices” (Uzzi/Lancaster 2004: 342). Far from such a theoretical synthesis, the studies reviewed here bear witness to an overly empiricist approach in economic sociology and to theoretical limitations. Studies typically demonstrate how social networks, specific institutional regulations, or cultural frames are relevant for price formation in a specific market, but do not aim to take into consideration the simultaneous influences and the interaction of different social macrostructures (Beckert 2010a) in the patterning of prices.

## References

- Akerlof, Georg A., 1970: The Market for “Lemons”: Quality Uncertainty and the Market Mechanisms. In: *Quarterly Journal of Economics* 84, 488–500.
- Aspers, Patrik, 2006: Ethics in Global Garment Market Chains. In: Nico Stehr/Christoph Henning/Bernd Weiler (eds.), *The Moralization of Markets*. New Brunswick, NJ: Transaction Publishers, 287–307.
- Aspers, Patrik/Jens Beckert, 2008: Märkte. In: Andrea Maurer (ed.), *Handbuch der Wirtschaftssoziologie*. Wiesbaden: VS-Verlag, 225–246.
- Baker, Wayne, 1984: The Social Structure of a National Securities Market. In: *American Journal of Sociology* 89, 775–811.
- Bandelj, Nina, 2008: Economic Objects as Cultural Objects: Discourse on Foreign Investment in Postsocialist Europe. In: *Socio-Economic Review* 6, 671–702.
- Barrey, Sandrine, 2006: Formation et Calcul des Prix: le Travail de Tarification dans la Grande Distribution. In: *Sociologie du travail* 48, 142–158.
- Becker, Howard S., 1982: *Art Worlds, Berkeley and Los Angeles*. Berkeley, CA: University of California Press.
- Beckert, Jens, 2001: Contract and Social Justice: Emile Durkheim’s Theory of Integration of Modern Societies. In: W. S. F. Pickering (ed.), *Emile Durkheim: Critical Assessments of Leading Sociologists*. Vol. 3. London: Routledge, 290–311.
- , 2002: *Beyond the Market: The Social Foundations of Economic Efficiency*. Princeton: Princeton University Press.
- , 2010a: How Do Fields Change? The Interrelations of Institutions, Networks, and Cognition in the Dynamics of Markets. In: *Organization Studies* 31, 605–627.
- , 2010b: *The Transcending Power of Goods: Imaginative Value in the Economy*. MPIfG Discussion Paper 10/4. Cologne: Max Planck Institute for the Study of Societies.
- Beckert, Jens/Patrik Aspers, 2011: *The Worth of Goods: Valuation and Pricing in the Economy*. Oxford: Oxford University Press, forthcoming.
- Beckert, Jens/Jörg Rössel, 2004: Kunst und Preise: Reputation als Mechanismus der Reduktion von Ungewissheit am Kunstmarkt. In: *Kölner Zeitschrift für Soziologie und Sozialpsychologie* 56, 32–50.
- Beckert, Jens/Wolfgang Streeck, 2008: *Economic Sociology and Political Economy: A Programmatic Perspective*. MPIfG Working Paper 08/4. Cologne: Max Planck Institute for the Study of Societies.
- Benjamin, Beth A./Joel M. Podolny, 1999: Status, Quality, and Social Order in the California Wine Industry. In: *Administrative Science Quarterly* 44, 563–589.
- Beunza, Daniel Ibáñez/Raghu Garud, 2005: *Security Analysts as Frame-Makers*. Economics Working Papers 733. Barcelona: Universitat Pompeu Fabra, Department of Economics and Business.

- Boltanski, Luc/Laurent Thévenot, 2006: *On Justification*. Princeton: Princeton University Press.
- Bourdieu, Pierre, 1984: *Distinction: A Social Critique of the Judgement of Taste*. Cambridge, MA: Harvard University Press.
- , 2005: Principles of an Economic Anthropology. In: Neil J. Smelser/Richard Swedberg (eds.), *The Handbook of Economic Sociology*. Princeton: Princeton University Press, 75–89.
- Caliskan, Koray, 2007: Price as a Market Device: Cotton Trading in Izmir Mercantile Exchange. In: Michel Callon/Yuval Millo/Fabian Muniesa (eds.), *Market Devices*. Oxford: Blackwell Publishing, 241–260.
- Callon, Michel, 1998: Introduction: The Embeddedness of Economic Markets in Economics. In: Michel Callon (ed.), *The Laws of the Market*. Oxford: Blackwell Publishers, 1–57.
- Carlton, Dennis/Jeffrey Perloff, 2005: *Modern Industrial Organization*. 4th edition. Pearson: Addison Wesley.
- Chiffolleau, Yuna/Cathrine Laporte, 2006: Price Formation: The Case of the Burgundy Wine Market. In: *Revue française de sociologie* 47, Supplement, 157–182.
- Diaz-Bone, Rainer, 2005: Strukturen der Weinwelt und der Weinerfahrung. In: *Sociologia Internationalis* 43, 25–57.
- , 2008: *Économie des conventions – ein transdisziplinäres Fundament für die neue empirische Wirtschaftssoziologie*. Conference paper. Jahrestagung der Sektion Wirtschaftssoziologie der Deutschen Gesellschaft für Soziologie, Berlin, February 18–19, 2008.
- DiMaggio, Paul/Walter Powell, 1991: Introduction. In: Paul DiMaggio/Walter Powell (eds.), *The New Institutionalism in Organizational Analysis*. Chicago: University of Chicago Press, 1–38.
- Dobbin, Frank, 2005: Comparative and Historical Approaches to Economic Sociology. In: Neil Smelser/Richard Swedberg (eds.), *The Handbook of Economic Sociology*. Princeton: Princeton University Press, 26–48.
- Dore, Ronald, 1992: Goodwill and the Spirit of Market Capitalism. In: Mark Granovetter/Richard Swedberg (eds.), *The Sociology of Economic Life*. Boulder, CO: Westview Press, 159–181.
- Durkheim, Emile, [1893]1947: *On the Division of Labor in Society*. New York: The Free Press.
- , [1957]1992: *Professional Ethics and Civic Morals*. New York: Routledge.
- Eccles, Robert G./Harrison C. White, 1988: Price and Authority in Inter-Profit Center Transactions. In: *American Journal of Sociology* 94, S17–S51.
- Engels, Anita, 2006: Market Creation and Transnational Rule Making: The Case of CO2 Emissions Trading. In: Marie-Laure Djelic/Kerstin Sahlin-Andersson (eds.), *Transnational Governance: Institutional Dynamics of Regulation*. Cambridge: Cambridge University Press, 329–348.
- Fiss, Peer C./Mark T. Kennedy, 2007: *Framing Markets*. Technology, Innovation and Institutions Working Paper TII–13. Alberta: University of Alberta, Alberta School of Business.
- Fligstein, Neil, 2001a: *The Architecture of Markets*. Princeton: Princeton University Press.
- , 2001b: Social Skill and the Theory of Fields. In: *Sociological Theory* 19, 105–125.
- , 2008: *Theory and Methods for the Study of Strategic Action Fields*. Conference paper. Conference on “Institutional Development and Change,” sponsored by the Max Planck Institute for the Study of Societies and Northwestern University, July 16–19, 2008, Chicago.
- Fourcade, Marion, 2004: *Price and Prejudice: On the Practical Culture of Economic Theory*. Unpublished manuscript. Berkeley, CA: University of California Berkeley.
- , 2007: Theories of Markets and Theories of Society. In: *American Behavioral Scientist* 50, 1015–1034.
- Garcia-Parpet, Marie-France, 2007: The Social Construction of a Perfect Market. In: Donald MacKenzie/Fabian Muniesa/Lucia Siu (eds.), *Do Economists Make Markets? On the Performativity of Economics*. Princeton: Princeton University Press, 21–53.
- Godechot, Olivier, 2007: Der Finanzsektor als Feld des Kampfes um die Aneignung von Gewinnen. In: Jens Beckert/Rainer Diaz-Bone/Heiner Ganßmann (eds.), *Märkte als soziale Strukturen*. Frankfurt a.M.: Campus, 267–279.
- Gourevitch, Peter, 2011 (forthcoming): The Value of Ethics: Monitoring Normative Compliance in Ethical Consumption Markets. In: Jens Beckert/Patrik Aspers (eds.), *The Worth of Goods*. Oxford: Oxford University Press.

- Granovetter, Mark/Richard Swedberg (eds.), 1992: *The Sociology of Economic Life*. Boulder, CO: Westview Press.
- Hall, Robert L./Charles J. Hitch, 1939: Price Theory and Business Behaviour. In: *Oxford Economics Papers* 2, 12–45.
- Hamilton, Walton, 1938: *Price and Price Policies*. New York: McGraw-Hill.
- Karpik, Lucien, 1999: *French Lawyers: A Study in Collective Action 1274–1994*. Oxford: Oxford University Press.
- , 2010: *Valuing the Unique: The Economics of Singularities*. Princeton, NJ: Princeton University Press.
- Kellermann, Paul, 2008: Soziologie des Geldes. In: Andrea Maurer (ed.), *Handbuch der Wirtschaftssoziologie*. Wiesbaden: VS Verlag für Sozialwissenschaften, 320–340.
- Kirman, Alain/Sonia Moulet/Rainer Schulz, 2008: *Price Discrimination and Customer Behaviour: Empirical Evidence From Marseille*. Marseille: Ecole des Hautes Etudes en Sciences Sociales, Universités d’Aix-Marseille II et III.
- Kirman, Alain/A. Vignes, 1991: Price Dispersion: Theoretical Considerations and Empirical Evidence from the Marseilles Fish Market. In: Kenneth J. Arrow (ed.), *Issues in Contemporary Economics: Proceedings of the Ninth World Congress of the International Economic Association, Athens, Greece*. New York: New York University Press, 160–185.
- Luhmann, Niklas, 1988: *Die Wirtschaft der Gesellschaft*. Frankfurt a.M.: Suhrkamp.
- MacKenzie, Donald/Yuval Millo, 2003: Constructing a Market, Performing Theory: The Historical Sociology of a Financial Derivatives Exchange. In: *American Journal of Sociology* 109, 107–145.
- MacKenzie, Donald/Fabian Muniesa/Lucia Siu (eds.), 2007: *Do Economists Make Markets? On the Performativity of Economics*. Princeton: Princeton University Press.
- Muniesa, Fabian, 2007: Market Technologies and the Pragmatics of Prices. In: *Economy and Society* 36, 377–395.
- Murphy, Kevin J., 2002: Explaining Executive Compensation: Managerial Power versus the Perceived Cost of Stock Options. In: *The University of Chicago Law Review* 69, 847–869.
- Musselin, Christine, 2005: *Le marché des universitaires: France, Allemagne, Etats-Unis*. Paris: Les Presses de Sciences Po.
- Musselin, Christine/Catherine Paradeise, 2002: Le Concept de Qualité: OÙ en Sommes-Nous? In: *Sociologie du travail* 44, 256–260.
- Podolny, Joel, 1993: A Status-based Model of Market Competition. In: *American Journal of Sociology* 98, 829–872.
- , 2005: *Status Signals: A Sociological Study of Market Competition*. Princeton: Princeton University Press.
- Polanyi, Karl, 1992: The Economy as Instituted Process. In: Mark Granovetter/Richard Swedberg (eds.), *The Sociology of Economic Life*. Boulder, CO: Westview Press.
- Preda, Alexandru, 2006: Socio-technical Agency in Financial Markets: The Case of the Stock Ticker. In: *Social Studies of Science* 36, 753–782.
- Roy, William, 1997: *Socializing Capital*. Princeton: Princeton University Press.
- Scott, Richard W., 2008: *Institutions and Organizations: Ideas and Interests*. 3rd edition. London: Sage.
- Siegrist, Michael/Marie-Eve Cousin, 2009: Expectations Influence Sensory Experience in a Wine Tasting. In: *Appetite* 52, 762–765.
- Smelser, Neil/Richard Swedberg (eds.), 2005: *The Handbook of Economic Sociology*. New York/Princeton: Russell Sage Foundation and Princeton University Press.
- Smith, Charles W., 1989: *The Social Construction of Value*. Berkeley: University of California Press.
- Spence, Michael, 1973: Job Market Signaling. In: *Quarterly Journal of Economics* 87, 355–374.
- Stark, David, 2009: *The Sense of Dissonance: Accounts of Worth in Economic Life*. Princeton: Princeton University Press.
- Steiner, Philippe, 1992: Le fait social économique chez Durkheim. In: *Revue française de sociologie* 33, 641–661.
- Stiglitz, Joseph E., 2000: The Contributions of the Economics of Information to Twentieth Century Economics. In: *Quarterly Journal of Economics* 115, 1441–1478.

- Streeck, Wolfgang/Kathleen Thelen, 2005: Introduction. In: Wolfgang Streeck/Kathleen Thelen (eds.), *Beyond Continuity*. Oxford: Oxford University Press, 1–39.
- Swedberg, Richard, 2003: Economic and Sociological Approaches to Markets. In: Richard Swedberg (ed.), *Principles of Economic Sociology*. Princeton: Princeton University Press, 104–130.
- Troy, Irene/Raymund Werle, 2008: *Uncertainty and the Market for Patents*. MPIfG Working Paper 08/2. Cologne: Max Planck Institute for the Study of Societies.
- Uzzi, Brian, 1999: Embeddedness in the Making of Financial Capital: How Social Relations and Networks Benefit Firms Seeking Finance. In: *American Sociological Review* 64, 481–505.
- Uzzi, Brian/Ryon Lancaster, 2004: Embeddedness and Price Formation in the Corporate Law Market. In: *American Sociological Review* 69, 319–344.
- Velthuis, Olav, 2005: *Talking Prices*. Princeton: Princeton University Press.
- Weber, Max, [1922] 1978: *Economy and Society*. Berkeley: University of California Press.
- White, Harrison, 1981: Where Do Markets Come From? In: *American Journal of Sociology* 87, 517–547.
- Yakubovich, Valery/Mark Granovetter/Patrick McGuire, 2005: Electric Charges: The Social Construction of Rate Systems. In: *Theory and Society* 34, 579–612.
- Zbaracki, Mark J., 2004: *Pricing Structure and Structuring Price*. Philadelphia: University of Pennsylvania.
- Zelizer, Viviana, 1979: *Morals and Markets: The Development of Life Insurance in the United States*. New York: Columbia University Press.
- , 1981: The Price and Value of Children: The Case of Children’s Insurance. In: *American Journal of Sociology* 86, 1036–1056.
- Zick-Varul, Matthias, 2009: Ethical Consumption: The Case of Fair Trade. In: Jens Beckert/Christoph Deutschmann (eds.), *Wirtschaftssoziologie. Sonderheft 49 der Kölner Zeitschrift für Soziologie und Sozialpsychologie*. Wiesbaden: Verlag für Sozialwissenschaften, 366–385.
- Zuckerman, Ezra W., 1999: The Categorical Imperative: Securities Analysts and the Illegitimacy Discount. In: *American Journal of Sociology* 104, 1398–1438.

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