Prices as Social Facts: A Sociological Approach to Price Setting

Abstract

This article examines the issue of prices from a sociological standpoint. We show that, contrary to popular belief, price setting is always the result of social practices. We identify two main perspectives in the relevant literature. The first deals with the central notion of quality: price setting is a matter of judgement, arbitration and equipment. The second focuses on measurement practices, such as valuation and pricing, which occur before or during the transaction. These two complementary perspectives reveal a variety of processes that both determine prices and can be used to construct a typology based on two criteria: the moment of price setting, and the level of competition. Four different types of pricing mechanisms are distinguished: self-regulated, administered, composed, and bargained. We use examples to describe these different pricing types, and to show how such an approach contributes to our understanding of the economy.

Keywords: Pricing; Valuation; Competition; Market; Economic Sociology.

Introduction

THIS ARTICLE examines the issue of price setting from a sociological perspective. The notion of price has been the preoccupation of a body of research in sociology. At the beginning of the 20th century, the French school of sociology considered prices as social facts. Durkheim [(1895) 1982], for instance, explained that the prices of products such as wine or pork depended on religious beliefs, and also that the prices of cloth, precious stones or furniture varied according to aesthetic values and tastes. From the

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same perspective, Simiand studied the formation of coal price fluctuations [1925], and Halbwachs examined trends in land prices in Paris [1909]. These authors shared a broad conception of prices, considering them as both economic value indicators and elements of opinion and representation. They argued that the understanding of price and value necessarily requires empirical studies. The attempt by economists to build a universal theory of price formation is considered irrelevant. Unlike economists, they defended the idea that the "law of supply and demand" is not a real law, but primarily a "maxim of action" [Durkheim, (1895) 1982].

For more than a century now, sociologists working on price have been positioning themselves in relation to economists. Price is a key concept of economics. The idea that market coordination takes place through prices emerged at the end of the 19th century. Since the 1970s, microeconomics theorizes prices through novel perspectives, bringing informational asymmetries and the conditions of competition between economic agents to the foreground. Economists examine the effects of different market structures: perfect or imperfect competition, oligopoly, monopoly, etc. What remains, despite market imperfections, is that prices are conceived as dependent variables that are signals that guide the decisions of actors and outcomes. Normatively economics proceeds from the two fundamental assumptions of market efficiency and profit maximization. These two assumptions shape economists' judgement on what is an appropriate price. Despite theoretical differences with neoclassical economics, the Austrian school represented by Hayek shares the liberal conception of the way the economy should work, and agrees with the conception of coordination by market prices. Both approaches maintain that if a market is properly organized, i.e. if competition prevails, it allows for a fair allocation of resources for all parties involved based on the price mechanism.

While many economists assume that free markets, perfect competition and the price mechanism ensure efficient equilibria and maximize social welfare, sociologists see this framework as too narrow. Sociologists observe that there are other ways of setting prices but markets. They also consider it unrealistic to see prices and pricing as independent of conceptions of economic fairness that prevail in a given society. From the perspective of sociology, understanding prices needs to pay attention to culture, politics, social interaction and, importantly, to power and the relations of domination between actors involved in economic exchanges.

More than a century after Durkheim's critique, the perspective that prices are social facts continues to inspire economic sociology [Beckert 2011; Eloire and Finez 2021]. Two articles from the 1980s have been especially groundbreaking. The first investigated option price volatility

in a US stock market [Baker 1984] and showed that, even in a financial market, microeconomic theory does not explain price fluctuation because it does not pay attention to the network structures of competition. The author of the other article studied the creation of an auction market for strawberries in France [Garcia (1986) 2007] and highlighted the importance of the institutional work of agents in creating the formal conditions (atomicity, homogeneity, free entry and exit, transparency) for a neoclassical price-setting market.

Many recent sociological studies on price formation have followed these avenues of research. A primary insight from these studies is that neoclassical price theory is often not a relevant explanatory model [Callon 1998]. Instead, price setting is based on multiple processes which depend on prevailing social, institutional and economic conditions. Another common feature of these studies is their emphasis on the structure of competition and the temporality of price setting. Despite these common points, there is little dialogue between these research fields, and only a handful of syntheses [Beckert 2011] has been produced to point out the cumulative evidence provided by numerous case studies. Bringing together the insights from the different sociological studies on price formation is urgently needed to bring forward the sociology of price. In this article we aim not at finding another "law" of price formation but, relying on the existing literature, at building a typology which maps the different processes involved.

We follow Durkheim's insight that prices are social facts. They can be conceived sociologically as the monetary counterpart of the right to acquire or use a good, service or labor power. Prices derive from economic exchanges that take place in social arenas. This definition does not imply that prices are the result of exchange between atomized and rational actors optimizing under constraints. Instead, prices emerge from institutional processes which are partly based on non-economic values or public monopolies [Fligstein 2001]. The approach pursued here also includes different types of labour income such as wages, bonuses, fees, rates, etc. This enables us to look beyond the opposition between administered prices and market based price systems. We consider that price is multifaceted and hybrid, and that behind its numeric uniformity there are different pricing methods that sociological studies are able to describe in detail.

We organize this article by first discussing two main sociological approaches that can be identified in the literature: one is the study of qualification practices, i.e. judgement, arbitration, and equipment, based on the central notion of quality (I). The other is the study of measurement practices, i.e. assessment (to determine the value), valorisation

(to increase the value), and price formulation which occur before and during the transaction (II). This distinction is analytical; in reality both aspects intermingle. Indeed, a qualification of the object is always necessary to measure something and to set a price. And, conversely, the price itself acts also as a signal of quality. This is followed by a section on the problem of how to categorize prices (III). The answer is provided in a typology based on a distinction between the moment of pricing and the level of competition. Four different types of prices are distinguished: self-regulated, administered, composed, and bargained (IV).

Qualification Practices: Judgement, Arbitration and Equipment

Economic sociologists initially paid little attention to prices [Swedberg 2003]. They sometimes deliberately set this aspect aside, preferring instead to examine the issue of quality. Focusing on quality implies that price is an insufficient signal to guide consumers in situations where they face uncertainty about quality [Karpik 2010] and leads to problems of contingent assessments which occur in the markets from meaning model [Beckert 2020]. More generally, economic sociology shows that quality is at the centre of where supply and demand meet. This meeting point is not spontaneous and requires mechanisms of intermediation between goods and consumers. Prices are thus not seen as autonomous, but as dependent on other elements.

The price-quality ratio

Jorion [2010] adopts an ethnographic approach to discuss the relevance of the economic law of supply and demand. In a fish market in Brittany (France), he asks fishermen to explain how prices are set. Their explanations are contradictory. Sometimes they consider that the law of supply and demand applies and that they cannot influence prices: they are *price takers*. Sometimes, they consider that, depending on the context and the circumstances, it is possible to circumvent this law through tricks and individual skills: they are thus *price makers*. Jorion considers that the contradiction is only apparent because explanations based on the law of supply and demand and on individual efficiency are mainly based on belief. He argues that neither volume nor competition explains price variations. Rather, quality and especially fish size and other factors, such as holidays, the weather, or the time of the month are key variables.

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Structural analysis focuses on interdependencies between firms on markets and on their networks of relations. A pioneer in this literature, White [1981] proposes a mathematical model for the analysis of production markets where firms maximize their profit, but only within the limits allowed by their position in the market structure. A study of the frozen pizza market [Leifer and White 1987] showed how prices are used by firms to position themselves on the market. There is not just one but various market prices, because each firm seeks the best price-quality ratio depending on its volume and production costs. Prices thus play a benchmark role for consumers and competitors.

White interprets the price-quality ratio as a quality niche and he defines it as a combination of production quality and volume. Decisions by all firms create a market structure where they are both interdependent and hierarchized with respect to each other. The model is static when it describes the market structure and the quality ranking based on prices, but it is also dynamic when firms observe each other and navigate in the market interface. This approach underlines the constraints that weigh on pricing due to both the profit strategies adopted by firms and the product quality perceived by consumers.

Prices and status

White's model distinguishes various market areas where producers arbitrate differently depending on their quality and volume choices. Their positions within the market structure may explain why they adopt different strategies, including some that may seem irrational. This is the case, for example, for firms that choose to pay voluntarily higher amounts to their suppliers and employees; they seek to make profits by improving the quality of products and services. A study of restaurants [Eloire 2010] indicates that areas with large numbers of gastronomic restaurants attracting affluent customers are barely more profitable, despite higher prices, than areas of lower-end restaurants, whose customers are less wealthy. However, quality production is a legitimate goal for some restaurant owners, who are willing to lower their margins to obtain symbolic recognition from gastronomic opinion-makers and peers [Lane 2014]. Their quality niche obliges them to charge higher prices to cover their costs, but they have to keep their profit margins low to ensure their survival.

White's model has been applied to various fields and has inspired studies examining the link between the status of firms and their pricing strategies [Podolny 1993], in which status is viewed in terms of its relational dimension, i.e. the way a firm is perceived by its customers

and competitors. This perceived status may explain cases of apparent mismatch: a firm's reputation is based on the perception of its past activities which may be different from its present activities, so that status and quality do not always coincide. A firm whose production quality has fallen can continue to enjoy high status, and vice versa. One study on wineries [Benjamin and Podolny 1999] clearly illustrates this point: for wines of equivalent quality, domains with higher status can set higher prices than their less well-perceived competitors. The idea that status is a central criterion of price setting is also found in the work of Bourdieu [2005]. He argues that the economic field is a social space of imperfect competition where economic agents can either benefit or suffer from prices and price setting.

These studies show how the notions of firms' quality and status are key concepts for analyzing economic phenomena. Numerous market exchanges concern goods and services for which information given by price is not sufficient for consumers to make a choice without the help of a third party. Moreover, prices are not necessarily reliable, because they are also the signal of firms' strategies and their position in the market structure.

From calculation to judgement

Quality is characterized by uncertainty, and consumer choices involve making judgements on the basis of information available on products. However, as Zuckerman [1999] points out, White's quality approach does not address the question of how judgements on quality emerge. He analyzes a "mediated market," in which third parties act as influencers and shape market patterns through product recommendations. He underlines that critical reviews confer a specific kind of legitimacy, and that the greater the pertinence of the review, the stronger the perceived legitimacy of the product. He shows that, in some case, an inappropriate or non-specific review can lead to illegitimacy costs and the product concerned will command a lower price. His perspective suggests that sociological models of markets and marketing models of consumer decision-making should be connected.

To examine the effect on prices of "illegitimacy costs," Zuckerman studies the financial performance of American firms in a stock market characterized by considerable valuation uncertainty. Zuckerman stresses the significance of the criteria used by investors to interpret the quality of firms, and the central role of well-established securities analysts who evaluate specialized products and markets. These actors appear to be a

strong source of influence on price setting. In this process, the analysts' status is decisive for generating trust in their recommendations. Thus, a range of phenomena, such as the opinion of a prominent analyst or disagreement between analysts, can significantly influence the price of financial assets and contradict the "efficient-markets" theory.

Karpik [2010], on the other hand, places quality coordination rather than price coordination at the centre of his analysis. He is particularly interested in judgement devices (classifications, guides, appellations, brands, labels, etc.) that help consumers to gauge product quality. He studies the market of French lawyers who are prohibited from advertising or displaying their fees. This legal rule influences both supply and demand: customers cannot compare the different services proposed, and lawyers cannot really observe each other, as in White's model. Under these conditions, fee setting is based on various parameters such as costs, productivity, volume, type of business, or lawyer category (junior, established or business). Setting a "fair" price is thus a real problem for lawyers. Discussion between them leads to the establishment of professional norms such as fee schedules, and minimum and maximum price ranges.

The services provided by lawyers belong to what Karpik calls "singularities," which are characterized by their incommensurability. This category includes artistic and cultural goods. More precisely, Karpik's approach is based on a distinction between two types of goods: *calculable goods* (standardized and differentiated) for which prices are explained by product characteristics, costs and a rational calculation, and *singular goods* whose prices are also set on the basis of judgement. This typology contrasts two forms of coordination: by calculation and by judgement. Callon [2021] nuances this contrast, considering that where there is a price, there is always measurement and judgement. Beckert [2020] stresses that value depends on quality, but that quality is based on judgement. He points out two reasons why quality is uncertain: either because there is no objective standard, or because it can only be known in the future. Finally, Cochoy [2019] considers that calculation and judgement are inseparable and, as a result, he created the neologisms "qualculation" and "calqulation".

Measurement Practices: Assessment, Valorisation, and Price Formulation

Economic sociology not only explores the link between price and quality, but also the link between price and value. Beckert and Aspers

[2011] point out that this question has existed since Aristotle. They explain that consumers must be able to compare and value the products that are sold in markets. Sociologically speaking, value is multidimensional (moral, aesthetic, economic, etc.) and each dimension has its own valuation scale and criteria. However, they note that economic value and price are two separate notions: markets themselves are social structures, shaped by different institutions, rules, and networks, all with different outcomes. Thus, prices are signals and information, but a price must be related to other product qualities used in buyers' valuation processes. One way of addressing the price-value nexus is to examine the processes of constructing narratives around commodities, and of creating and describing formulas and collective calculation devices that allow measurement and take place before and during the transaction.

Setting the price outside the transaction

According to Vatin [2013], assessment and valorisation are two distinct processes. Assessment is a static operation consisting of assigning a value. On the contrary, valorisation is a dynamic process consisting of increasing a preexisting value. This approach refers back to the very foundations of economic theory. Through the notion of "surplus value," Marx speaks of valorisation while, through his conception of general equilibrium, Walras underlines the importance of assessment via the interaction between supply and demand.

From a sociological viewpoint, assessment and valorisation processes show that the price-setting enigma cannot be resolved by simply studying the moment when supply and demand interact in a market, because this interaction is one single moment within the entire price history. As pointed out by Simiand in his *Positive Method in Economic Science* [(1908) 1987], prices do not come from nowhere. He explains that "sellers and buyers of a good come to the market with an estimation of this good". This assumes that a provisional price exists prior to any exchange, so an assessment operation has taken place beforehand. In the same way, the valorisation process is not limited to the single moment of the transaction. It also assumes that other practices exist (innovation, marketing) which take place outside the transaction.

A description of price setting practices in a large Midwestern manufacturing firm illustrates this point [Dutta, Zbaracki and Bergen 2003]. First, the authors postulate that to capture potential rents, firms must "set the right prices" for what they sell, but also that setting the

right prices is a capability they have to develop and that can vary across firms. Managers thus need to invest in resources and routines because price setting is based on strategic decisions which can create a competitive advantage in markets. However, these decisions also reflect organizational processes within the firms which involve different social groups and experts whose strategies are mutually contested and negotiated. Another aspect of price valuation practices is the cost of price setting [Zbaracki et al. 2004; Zbaracki 2007]. According to the cost-of-price-adjustment theory, prices cannot be changed easily or freely because of different kinds of costs: physical costs (or menu costs), but also managerial costs (in information gathering, decision-making, and communication) and customer costs (in communication and negotiation), the latter being the most expensive.

Moreover, the question of price setting concerns not only market prices, but also the prices of goods and services exchanged between the different parts of a same organization, i.e. transfer prices. A study of several companies across different industrial sectors underlines that a company's strategy and administrative policy [Eccles 1985] are two determinants of transfer prices. Strategy depends on the type of vertical integration and on the status of the selling profit centre. Administrative policy depends on criteria such as the types of managers involved, the available information, the frequency of price changes, and the management of conflicts. Three kinds of transfer price policies can be defined: first, a policy for selling profit centres; second, a policy for buying profit centres; third a policy for products [Eccles and White 1988]. They correspond to different ways of assessing and valorising these kinds of prices.

Assessment and valorisation questions are raised by a study of how private equity firms decide on a fair price for a business [Benquet 2019]. It highlights three dimensions of the price-setting process. The first is the "price rationale" (legitimacy). To determine the price of a business, financiers record a large volume of numerical data on a spreadsheet (income, balance sheet, cash flow, resources, etc.), which forms the basis of a preliminary assessment. The second aspect is the setting of a "theoretical price level". Financiers fix a maximum price beyond which the firm's return would be lower than the valorisation (profit rate) expected by buyers. Finally, the third dimension relates to the "effectiveness of price". The assessment and valorisation processes incorporate all the stakeholders' profit expectations, which the final selling price will necessarily take into account. This case study is in line with Vatin's idea [2013] that the distinction between assessment and

valorisation is above all analytical. Indeed, the two are successive and autonomous steps of the same process because valorisation activities are included in those of assessment, and both are taken into account in price setting.

Constructing a narrative around goods

Boltanski and Esquerre [2020] propose an original contribution to the study of valorisation processes in contemporary capitalist society. They consider that an *enrichment economy* is developing, based not on the standardization of things or innovation practices, but on the valorisation of what is *already there* and by the commercial exploitation of the past. The main sectors where this kind of economy is growing are cultural activities, contemporary or historical art, luxury, fashion, design, heritage, high-end tourism, gastronomy, fine wines, etc. The material dimension of these sectors is coupled with a *narrative* dimension that relies on marketing and pricing techniques.

Through the prism of *enrichment*, Boltanski and Esquerre reverse the common conception of value. Instead of using value to understand prices, they consider price as the result of the process to which a commodity is submitted when it changes hands. Conversely, value is conceived as a price justification device, based on advertising for instance. Everyday goods represent the standard type. Their price does not need to be constantly justified, except in times of crisis, such as the subprime mortgage crisis [Rona-Tass and Hiss 2011], or of contestation, such as protest movements against "high living costs" [Samuel 2017]. Some other goods (antique, retro, design, rare, etc.) represent the collection type, whose value depends on storytelling. Another particularity of price with respect to value is the existence of *metaprices* which are different from real prices, for instance estimate or reserve prices. Caliskan [2009] also highlights this dimension of price through his notion of prosthetic price, which can serve as a prop for economic actors to estimate the value of the goods they want.

Prices are seen as an essential part of contemporary societies because they allow market transactions to take place and commodities to change hands. They are also a benchmark for coordinating and matching goods. However, sociologists also focus on moments where price trends become distorted, threatening the entire trading system and the equilibrium of society as a whole, as in periods of hyperinflation or of industrial revolution when new sources of wealth emerge.

A formula for each price

Many studies in economic sociology show that pricing is a coproduction which includes various actors, including some who are outside the market exchange area. They may be engineers, bankers, consumers, unions, professional associations or certification institutions, and may act, directly or indirectly, by developing measurement devices. Callon [2021] defines these heterogeneous groups and devices through the concept of *market organization* which proposes a new way of looking at price mechanisms. Price is not only the measure of the value of a good, it is also a quality of this good in itself.

Callon proposes the notion of price formulas to study this process. He argues that price is necessarily the result of applying mathematical formulas of varying complexity. This idea is not a new one. For instance, Hall and Hitch [1939] cast doubt on the conventional analysis of price policy as a function of marginal cost by highlighting the existence of a procedure for firms to set prices known as the "full cost" principle. This formula consists in calculating all possible costs per unit and adding ten percent, conventionally, as profit. Yakubovich, Granovetter and Mac-Guire [2005] show that, at the beginning of the 20th century, two competing formulas, the Wright and Barstow systems, were used for electricity pricing. They conclude that the choice of the Wright system is based less on economic rationality and efficiency than on institutional, political and personal network criteria. In the financial sector, Doganova [2014] underlines the importance of the discounted cash flow (DCF) formula, which first emerged first in Germany in the 19th century. It was used to calculate the value of forests and was popularized in the US in the early 20th century. It became a widespread valuation methodology for firms, used by financial managers having to arbitrate between different investment projects. The DCF formula is future-oriented: it is used not to set prices for the present but to estimate capital value from future revenues.

Price formulas are dependent on technical and computational possibilities, and on their designers' representations. They are what the actors achieve when they use and blend heterogeneous variables, both quantitative and qualitative [Cochoy 2019]. There are various kinds of formulas: some are sophisticated, such as yield management devices [Finez 2014] or those based on mathematical models [MacKenzie and Millo 2003], while others are simpler, such as the monetary valuations produced during bargaining [Geertz 1979] or the discussions for setting tariffs of public utilities like electricity [Poupeau, 2007].

Sociological approaches allow us to re-specify the notion of "price" as a research object. Despite their diversity, prices have common features. First, they consist of numerical values, which exclude all the situations where the word "price" is used in a metaphorical manner, as in the common expressions "at any cost," "price of success" or "pay the price" [Stark 2011]. Second, they are a way of carrying out monetary transactions, so that price and money are intrinsically linked through a combination of calculation and judgement. Third, prices are a way to obtain property or usage rights, and involve an exchange between at least two participants. However, prices differ from each other, in one essential aspect: that of the setting process.

The two analytical approaches of prices—through qualification and measurement—encourage sociologists to grasp the environment and the material and cognitive devices that enable actors to produce and use prices as economic and political instruments. They also lead us to identify and categorize different types of prices.

How to Categorize Prices?

Mainstream economists stress the importance of one main and legitimate type of price—the market price—and consider the other types, those embedded in concrete social contexts and power relations, as deviations from this reference model. Sociologists by contrast insist that, behind their numeric uniformity, prices are multifaceted and hybrid, and refer to a variety of categories that can be studied from both a descriptive and comparative perspective. This section first introduces Durkheim's "normative price theory" and explains how Halbwachs developed an approach in terms of price perception. It then outlines Beckert's more contemporary typology, which classifies approaches to price in economic sociology. Finally, it illustrates that the same good can be subject to different pricing mechanisms.

Prices as opinion facts and representations

Durkheim argued that prices should be understood as opinion facts which vary according to morphological factors such as population size, density, or communications. Beckert [2002] called his approach the "normative price theory". Durkheim's critique of political economy is above all epistemological: for him, wealth is not only objective but

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strongly dependent on public opinion too. This approach was developed by Durkheimians such as Simiand who studied the price of coal [1925], and Halbwachs who studied the price of land in Paris [1909] and workers' consumption [1912]. For sociologists, economic facts should be considered as social facts, in the same way as morals, law, religions, or the arts. They must be studied empirically, and subjected to sociological categorization. Thus, from its very beginnings, sociology has shown that there is no single law of pricing, but rather various pricing processes.

Studying the living standards of working-class households, Halbwachs discovered that they express three types of relationships to prices [Steiner 2003]. First, they consider the prices of essential goods (for instance, food) as natural, as they are usually stable, moderate, and represent useful purchases. Second, they consider the prices of more specific goods (for instance, clothing) as arbitrary: they negotiate these prices and are suspicious of them. Third, they consider the prices of constrained goods (for instance, rent) as abusive, because they see them as an illegitimate tax. Halbwachs' typology is a preliminary attempt to categorize prices from a sociological perspective. It distinguishes prices according to their perception by social groups.

A similar perspective is adopted on a different and contemporary topic: land prices in the Paris area [Piganiol 2017]. Negotiations take place between the French railway company (SNCF), which owns large tracts of land, and local municipalities that are looking for space to build housing. The ethnographic description of transactions highlights two representations of what a fair price is, depending on the viewpoint adopted. The SNCF considers that it is a maximized price, i.e. one whose setting mechanism takes into account the law of supply and demand. The municipalities consider that it is a minimized price, i.e. one set in relation to the project as a whole and its social utility. This typically Durkheimian normative price approach has inspired numerous economic sociologists.

Categorizing sociological approaches to prices

Beckert considers that price is a social fact and distinguishes three different currents of sociological analysis. The first includes studies on prices that use networks in a broader sense, i.e. based on the notion of power, trust, and status. The second comprises various institutional approaches to price, i.e. those focused on how public authorities shape competition, influence production costs and externalities, mitigate market uncertainties, and direct economic flows through taxes or monetary policies. The third current brings together studies that consider prices in

terms of the cultural meanings they carry, i.e. pricing technologies, the expectations of market actors, legitimacy, ethics and morality of prices, and studies of consumer preferences and tastes.

This typology classifies the approaches to price in economic sociology and not the prices themselves as from Halbwachs' perspective. However, in both cases, the analytical categories are not directly related to pricing mechanisms. By criticizing the universal dimension of the "law of supply and demand," the Durkheimian perspective necessarily involves identifying and distinguishing the different types of price setting.

Beckert and Aspers [2011] also distinguish between three forms of price corresponding to different steps in the price-setting process. First, "price quoting" refers to the process whereby prices are proposed. Second, "set price" refers to the effective product selling price. Third, "market price" refers to the monetary value given when the product actually changes hands. Vatin [1996] indicates, in the case of milk, that the simultaneous encounter between suppliers and customers that produces a price is an abstraction, and that there is in fact "not *one* milk but *several* milks" distinguished by different prices.

The "architecture" of prices

Empirical observations of prices show that the same good may be subject to different pricing mechanisms. Thus, some studies define the economic world through different types of prices. Chauvin [2013] proposes the concept of "architecture" to analyze the range of prices in the Bordeaux Grand Cru wine market where four pricing categories coexist simultaneously. These prices form an "architecture" because they are hierarchically structured and because they connect a system of actors composed of producers, traders, and brokers. Each type of price has its own temporality and its own setting mechanism. First, there is the price set by the wine producers and announced to the traders, who accept it without negotiation. Second, there is an advertised minimum price, also fixed by the wine producers, which is a benchmark price used to oblige traders to respect a certain price level. Third, there is the market price established by the brokers who consider information on different prices for a same year. Fourth, there is the latest transaction price, i.e. that of the most recent sales on the main marketplaces.

Caliskan [2007] proposes a similar description of the three types of prices on the cotton market at the Izmir Mercantile Exchange (IME). They correspond to different moments and locations in the market. First, *rehearsal prices* are determined when producers, brokers, and

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traders meet every morning in the pit. These preliminary transactions only concern small quantities and are carried out in a theatrical atmosphere. Second, larger quantities are sold at *transaction prices* established during a round of bargaining in post-pit trading. Finally, a *market price* is set at a committee meeting where participants bargain one last time for that day.

Studies such as those of Chauvin and Caliskan demonstrate the kind of empirical descriptions produced in economic sociology. Although they deal with very different goods (in this case, wine and cotton), they both reveal the coexistence of various types of prices whether for a single market or a single good. These approaches pave the way for the categorization of prices and the construction of typologies. So far, few typologies look at pricing processes and, when they do, they focus on specific prices such as "auction prices" [Smith, 1990] or "market prices" [Baath, 2022]. Based on the literature reviewed, we propose a more general typology of price setting.

A Typology of Price Setting Processes

"Does price somehow inevitably come down to market price?," asks Stark [2011]. For him, there are several good reasons to think not, because there are non-market orders of worth. From the same perspective, Beckert and Aspers [2011] explain that different types of markets generate prices in different ways. The sociological approach to prices is often comparative. Observing modern retail, Velthuis [2011] proposes a comparison of three kinds of empirical situations where prices differ in terms of price-setting mechanisms: first, bargain prices, which have not been determined in advance but are negotiated between sellers and buyers; second, auction prices, where buyers and sellers, meeting at a specific place and time, call prices in order to find an equilibrium between supply and demand; third, fixed prices, where sellers set prices before the sale takes place.

Following Baath [2022], we consider that, in order to fully understand prices, it is necessary to study pricing processes. We propose to complement Velthuis's typology by using an analytical perspective. We identified two criteria from the existing literature that play a role for pricing, i.e. the moment of price determination and the level of competition. These criteria stand out because of their ability to adapt to many situations, without presupposing the existence of any particular social

TABLE I
Typology of price-setting

Level of competition		
Moment of setting	Strong	Weak or absent
During the transaction	a. Self-regulated (a stock exchange listing)	d. Bargained (a crate of fruit on a wholesale market)
Before the transaction	c. Composed (a supermarket commodity)	b. Administered (a postage stamp)

configuration such as a government ruling the economy or of specific economic features such as a market of large size, involving many sellers and buyers. We decided to combine the two criteria to distinguish four types of pricing (of which three correspond roughly to those identified by Velthuis): administered, composed, bargained, and self-regulated (see Table 1).

We start with the *moment of pricing*. The sociological description of price setting points out that prices are set before or during the transaction. This excludes cases where a sum of money is fixed and given after a transaction without being due, which can then be considered as a gift. Anthropologists have long highlighted the importance of the moment of pricing. They have underlined that, in peasant societies, bargained prices were the usual means of setting a price and, thus, that buyers and sellers discovered during the transaction which prices would be accepted in the market. Conversely, they emphasized that, in industrial societies, commodities were mostly sold through posted prices [Alexander and Alexander, 1991].

The second criterion that influences price setting concerns the *level of competition*. It is more commonly discussed in the literature on prices. Indeed, just as economists have studied the different conditions of competition and market design that can exist, economic sociologists have also noticed that prices are largely influenced by competition. Once again, anthropologists have emphasized the importance of this criterion, explaining that the locus and the conditions of competition differ in peasant and industrial societies. Indeed, the adoption of posted prices promotes competition between sellers who offer similar commodities at different prices [*Ibid.*, 1991].

Each of the four types of pricing we obtained by combining the two criteria can be illustrated with an example from the sociological literature on prices.

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Self-Regulated Pricing

Self-regulated prices largely follow the theoretical model of the so-called "law of supply and demand". This model represents, for example, the case where a seller offers their product to several buyers and sells it to the highest bidder at the end of an auction procedure, as is the case in the stock market or in an auction room. The price is thus set during the transaction (criterion 1) and according to the competition (criterion 2) fully effective here, between either sellers or buyers. The performativity of economics has promoted the institutionalization of this type of market, whose emergence is by no means a spontaneous phenomenon [MacKenzie, Muniesa and Siu 2007].

When a price is set during a transaction and under competition pressure, it is referred to as a "self-regulated" price, in reference to Polanyi's "self-regulating market" [1944]. In this case, price setting is less the consequence of economic agents' free will than of the intensity of competition between them, which regulates their decisions. This type of pricing is not properly speaking anomic because it is based on its own set of rules. However, it does not correspond to a situation of "perfect pricing" (in reference to the notion of perfect competition) because the rules can be easily subverted by actors, and indeed are subverted, as some empirical studies show [Beunza, 2019]. In neoclassical theory, the mechanism that drives the setting of such a price, also known as a "market price," is the auction system. This mechanism is regarded as optimal by many economists who use it as a yardstick to judge the efficiency of markets. However, this is only one way of setting a price, as we will show in the following subsections. Obtaining a self-regulated price requires an institution to organize the auctions, a technology able to mimic it, and a broker such as the trader.

Auctions are an ancient tradition that can be traced back to antiquity. They now have their own institutions (auction rooms) and their professionals (auctioneers). In some auction rooms, rare or even unique non-manufactured goods (handicrafts, artworks, collectibles) are traded. These objects are defined less by their usefulness than by their symbolic worth [Bessy and Chateauraynaud 2019; Thornton 2009]. Their price cannot generally be directly linked to production costs. The sale requires a two-stage estimation operation, first to determine an initial "reserve price," then to reveal the actual selling price by placing potential bidders in competition with each other.

In the art world, auctions are only a secondary market because the artworks have usually already been purchased at least once in a gallery and thus already have a price. Beckert and Rössel [2013] explore contemporary art by German-speaking artists and show that the determinants of price formation differ between primary and secondary markets: the length of the artists' careers has an impact on the price of works sold in the galleries, while for the auction price the most significant factor is the artist's reputation. In a study of the Dutch art galleries market, Rengers and Velthuis [2002] point out the effect of other criteria such as the size of the artworks and the materials used, the artists' age or their place of residence.

Auctions enable economic agents to compete. Microeconomics text-books usually cite four main conditions for perfect competition: atomicity, homogeneity, free entry and exit, and perfect information. Atomicity refers to the situation where no single agent is able to influence price formation. Homogeneity means that the products are substitutable and that price is the only relevant choice criterion for consumers. Free entry and exit mean that there are no barriers to entering or leaving the market. Finally, perfect information refers to perfect knowledge of available information and prices. In economic life, markets, including financial markets [Baker 1984], never organize themselves spontaneously and never function entirely under these optimal conditions [Garcia (1986) 2007]. It is therefore useful to examine the social conditions for setting up market architectures that mimic perfect competition. In this type of process, the coupling between economic theory and new technologies is central.

Financial markets have been analyzed in depth by economic sociologists. In their study of the Chicago Board Options Exchange (CBOE), MacKenzie and Millo [2003] show how two articles by the renowned economists Fischer Black, Myron Scholes and Robert Merton influenced one of the very first modern financial markets established in 1973. Similarly, in his study of the launch of the Computer Assisted Trading System (CATS) on the Paris Stock Exchange in July 1987, Muniesa [2000] shows how this technology enables complete automation of the stock price trading process. He also highlights how it has given rise to a Walrasian organization of price discovery.

The development of new market technologies and the growth of modern telecommunications with their extensive use of algorithms have driven the move towards "quantitative finance". However, these innovations do not eliminate the need for traders to operate the computers and carry out hedging, speculation, or arbitrage operations. For example,

Beunza and Garud [2007] show that the main activity of securities analysts is to develop calculation frameworks to reduce market uncertainty. Pinaud's [2014] study of the milk market shows the collective dimension of traders' work—setting the "market price" of milk requires multiple interpersonal exchanges (phone calls, emails). These forms of cooperation can be observed in arbitrage strategies in decentralized markets [Miyazaki 2007].

Beunza and Stark [2004] show that not everything can be automated and, ironically, the more computerized a trading room becomes, the more time traders spend on communicating. The challenge is to monitor the computer programs that buy and sell stocks for traders. Focusing on financial markets, Preda [2007a] shows that "price data" are not a given but a problem for market actors. He studies how these data are produced and how they are veridic, robust, and reliable. On the New York Stock Exchange, in the 19th century, price data were transmitted via telegraph and stock tickers, and the quality of information transferred was progressively improved by a group of experts [Preda 2007b].

Thus, market mechanisms based on the encounter between supply and demand require specific organizational and technical arrangements. The literature describes the functioning of these specific social spaces that rely on ever more sophisticated financial instruments [Beunza, 2019]. In line with the theoretical model of perfect competition, prices are formed during the transaction, according to supply and demand. Sociologists are interested both in the actors who build marketplaces and in the behavior of those who operate them. However, these self-regulating markets, of which the finance industry is the typical example, are not as common as one might imagine. When they do exist, they do not always occupy a predominant place. Moreover, whether or not they are justified by efficiency, their impact on society and on inequalities is controversial. One way to address this is to administer prices.

Administered pricing

A typical example of an administered price is that of postage stamps, at least when regulated by the government. This was the case in many countries until at least the end of the 20th century, with postage rates being established without competition (criterion 2), generally for the sake of the common interest. Because the rates are determined before the transaction and are publicly disclosed (criterion 1), it is easy to work out the price of a stamp, which varies according to weight, distance and speed of the mail service. Administered prices are therefore always fixed

before any transaction and do not depend on competition. They exist in a variety of social spheres, and not only in the public sector. They are established by communities of actors (government officials, occupational groups, lobbyists, economic experts, etc.) who seek to justify them in the name of moral principles.

Law and custom play a role in price control in different ways. Three forms of administered prices can be defined. The first form is that of maximum prices, which dates back to antiquity [Michell 1947]. This practice exists when a sovereign or a public authority decrees a ceiling price for goods, the objective being to fight inflation but also to establish "fair" prices justified as much on economic grounds as on political ones. A second form of administered prices is that of prices fixed by the crowd at a customary level in times of scarcity. Thompson [1971] describes situations during the food riots in 18th century urban England, where "necessities," such as bread or grain, were appropriated by the poor and sold at a price they deemed fair. This kind of action, which is embedded in a moral economy of the crowd, allowed labourers to shield themselves from the high prices set by bakers and millers. A third form of administered prices is tariff equalization, whose emergence coincided with the 19th century birth of modern public utilities such as postal services, railroads, and gas and electricity supply networks. For these goods and services, several price setting methods are available, including tariff equalization: it consists in sharing the costs equitably among all consumers. Here, price is an instrument used by engineers and civil servants to fulfill a national project, which may be political, economic, social or military [Finez 2014; Yon 2020].

Administered prices are not confined to the public sector. In some industries, pricing is rooted in internal regulation, sometimes complemented by a legal framework. This is the case of book sales, traditionally based on vertical control, with publishers setting prices before marketing [Feather 1988]. In the case of doctors working in the private sector, in several countries including France studied by Batifoulier [2011], fees are set on a different basis, through horizontal control by professional peers. According to him, their remuneration is based on the "ethics of moderation" enshrined in the French Social Security system since its creation in 1945.

In the second half of the 20th century, the spread of neoliberal ideas within public administrations reshaped the way public utilities were priced. The goal of these reforms was to use price as a signal to influence consumer behavior and thus reduce public spending. In the French case, these transformations began in the 1950s. This method of governing

through prices was first embodied in the marginal cost pricing implemented in the electricity industry [Yon, 2020], by engineers who were typically graduates of elite French universities. This was followed by reforms in the railroads, postal, and telecom sectors. Finally, beginning in the 1990s, the principles of New Public Management were applied to pharmaceutical pricing [Nouguez and Benoit 2017] and hospital tariffsetting systems [Muniesa et al. 2017].

Administered prices reflect a pricing method in which competition is put aside for reasons that may not be purely economic. These reasons, which may be based on moral principles such as a concern for fairness or the common interest, tie in well with administered prices insofar as they are set before the exchange, and can therefore be discussed in the political arena. While governments often ensure compliance with these principles, other collective actors such as professional organizations can also play this role at intermediate levels. This may take the form of direct controls, as in the case of a maximum price, or sanctions in the event of non-compliance with these collectively instituted rules. This observation calls for an economic sociology that addresses the embedding of prices in politics or in other institutional contexts. As neoliberal ideology flourishes, price is increasingly seen as an instrument to shape behaviors. Research on price determination thus becomes a useful way to depict the market shift of modern societies.

Composed pricing

Composed prices are widely used in the commercial sector, for instance by supermarkets. The prices of their goods are set before the transaction (criterion 1). Displayed on a label, they are known by the end consumers and cannot be negotiated. These prices are also matched against other brands and competitors operating in the same catchment area, thus taking into account a certain level of competition (criterion 2). Composed prices result from calculations and judgements that require specific skills. In contemporary societies, characterized by division of labour, price setting has become a job in itself. However, contrary to the precepts of neoclassical economics, sellers in a same market do not set prices in the same way. The situation differs according to the type and size of the firms.

For small business owners, pricing is a key issue: the economic survival of their business depends on their experience and skill in setting prices [Leifer and White 1987; Jourdain 2018]. Pricing is based on an

expert assessment of various parameters such as production costs, market conditions, economic strategies, and profit goals. Moreover, a seller who has no idea of a price level can copy those of others. Callon [2021] notes in this respect that a price is always based on at least one other price. White [1981, 2002] postulates that, on a production market, producers observe each other. Mimetic pricing is a cheap empirical solution, but requires learning and market knowledge based on networks. Numerous studies underline the importance of the notions of status and quality to analyze composed price setting [Benjamin and Podolny 1999; Podolny 1993; Uzzi 1997].

Bigger retail firms employ specialized workers whose task is to monitor and calculate prices. In the mid 20th century, in order to implement regulations of federal government authorities (such as ceiling prices), US grocery stores reinvented price devices through new pricing policies, technologies and practices [Cochoy, Hagberg and Kjellberg, 2021]. In the same way, today's supermarkets use tools and computer technologies to standardize their pricing practices [Barrey 2006]. When goods are more singular, market conventions can be mobilized. For example, the use of pricing scripts has been observed on markets as varied as contemporary art or book publishing [Franssen and Velthuis 2016; Velthuis 2005]. One of the shared conventions is that of posted prices, i.e. stable over time and identical for all customers. A study by Garfinkel [1967] shows that negotiating posted prices is considered by consumers as a transgression of an internalised collective rule. During the 20th century, product standardization was accompanied by posted pricing policy but recent decades have seen the emergence and spread of new pricing techniques aiming to singularize and personalize prices, such as in the airline and the digital platform industries.

One of these innovations is yield management or revenue management, created by airline companies in the US during the 1980s, in a context of deregulation [Boyd 2007]. This technique aims at selling the right product or service to the right client at the right price [Cross 1997] and generating maximum profit. Prices are still posted but the firm can increase them practically in real time if demand is high, and vice versa. However, it is not the differentiation of prices for the same good that is new here, since other systems already do this (i.e. discount sales), but rather in the use of computer tools to artificially mimic market mechanisms [Ezrachi and Stucke 2016]. In France, the national railway

company SNCF adopted yield management during the 1990s [Finez 2014] to improve its revenues and prepare for the opening of the European market to competition. Its implementation was contested by trade unions, some political parties and travelers' associations.

Beyond this specific case, pricing algorithms, such as Uber's *surge pricing* system, which sorts clients by giving priority to those willing to pay more, are increasingly common on the Web. This type of pricing system is controversial and raises many questions, especially when applied to vital activities like electricity supply¹. Its success depends partly on the capacity of its promoters to produce narratives which ensure that the price differentiation principle is "fair" in that it benefits the greatest number of people [Pigounidès 2020].

While composed prices are not editable during the transaction, they are nevertheless fully integrated in the framework of market competition—unlike administered prices which are based on extra-economic values. Composed prices thus involve actors who are seeking economic and symbolic profits [Bourdieu 2005]. The way composed prices are determined varies across different situations, from small business owners to big retail firms, and involves different calculation methods [Callon 2021; Yakubovich, Granovetter and MacGuire 2005]. Various pricing tools have been developed by engineers and marketers to shape consumer behaviors and improve performance—selling more goods, increasing occupancy rates, optimizing margins—by means of new digital technologies.

Bargained pricing

Bargained prices exist each time two trading partners have the opportunity to bargain during the transaction. For instance, the price of a crate of fruit on a wholesale market is generally a bargained price because it is determined through discussion between seller and buyer [Bernard de Raymond, 2011]. It is set during the transaction (criterion 1) and competition does not play a central role (criterion 2) and can even be set aside if the buyer is one of the seller's regular clients. According to the level of trust or distrust between partners exchanges can take various forms, from harsh and confrontational to benevolent and peaceful. They may involve

¹ IRWIN Neil, 2017, « Why surge prices make us so mad », *The New York Times*, october 15th, 2017.

customers ready to bargain as well as firms ready to cooperate, or employees seeking to influence their wage level. Bargained prices question the centrality of competition, which is weakened when routines and loyalty arise between clients, sellers, brands, etc.

Consider a simple situation which involves two people and one good. One is the seller, the other is the buyer. The former wants to exchange the good for money, the latter wants to buy it but not at the stated price. A discussion takes place called bargaining. It involves a direct, face-to-face, or remote (phone, internet) interaction during which the two protagonists seek to gain an advantage. They each have their own idea of the price, and there is a gap between the two amounts. Bargaining is a price setting process which determines price through successive processes of trial and error [Cassady 1968]. As Khuri [1968] shows, bargaining practices result in numerous strategies, such as giving the starting price so as to take the lead in the negotiation, knowingly over- or under-estimating a price to deceive the other party, or offering credit as a way to generate trust. Starting from the example of the Sefrou souk in Morocco, Geertz [1979] builds a model of the bazaar economy. In the souk, price negotiations are protracted and take place at the margin, in his own words "to the right of the decimal point". Geertz also underlines two crucial aspects of bargaining: it is multidimensional in the sense that it is not solely focused on price; and it is *intensive* in the sense that it requires a lot of information because the goods are not standardized.

Bargaining is common practice in traditional societies, and continues in contemporary Western economies despite the widespread practice of pricing before transaction. Boussard [2015] shows that bargaining is at the core of company acquisition transactions, even if actors use sophisticated calculation methods, such as Discounted Cash Flow (DCF), which are, in fact, used primarily as a starting point for negotiation. In other contexts, Caliskan [2007] underlines the importance of bargaining in the daily pricing of Turkish cotton, and Mears [2011] in the setting of models' fees in the fashion industry.

Another feature of bargaining is that its outcome depends on the power relationship between trading partners with divergent respective interests. Geertz distinguishes, on the one hand, casual transactions between anonymous people and, on the other, habitual transactions between partners who know each other. The second type reduces bargaining time and creates routines, thus softening the effects of competition. Loyalty, however, which is largely incompatible with rational

choice theory, is not specific to the souk and is widespread. Bernard de Raymond [2011] highlights the importance of loyalty on a wholesale market. Uzzi and Lancaster [2004] show that business lawyers create partnerships with client firms to get lower prices for some complex legal services. Podolny [1993] shows that investment banks use loyalty as a strategy to solve uncertainty problems on markets. However, the power entailed in the relationship can also lead to domination and very high prices. Such economic behavior can be observed in quasi-monopolistic situations, as in the market for superstars (in the field of sports, music, arts, etc.), or in the market for innovative drugs, where pharmaceutical firms charge gouging prices to governments because of their patent ownership.

Bargaining can therefore evolve through cooperative pricing and become part of two forms of embeddedness: loyalty and partnership. Bourdieu [2005] considers that, in the economic field, prices are above all tools for dominant firms to enforce their market power and to force weaker firms to adapt. Fernandez-Mateo [2007] illustrates this point through a study on the high-skill staffing sector, and shows that the staffing firms favor their most loyal clients by granting them discounts. However, in order to protect its revenues, it puts a limit on employees' wages during wage negotiations. Bargaining is actually a key component of wage setting. When determined through negotiation, the mechanisms of competition are similar to those governing the pricing of goods. For this reason, we adopt a broad definition of prices, which includes labour incomes. In the academic field, Musselin [2010] shows that for US and German scholars, opportunities to negotiate their working conditions and salary depend on their status. In the finance industry, Godechot [2017] shows how traders, whom he calls the "working rich," move from one bank to another to earn higher bonuses. High-performance sports players are also highly mobile and can earn exceptionally high sums of money. The most coveted then become financial assets for their club [Schotté 2016].

Within such a framework, competition takes different forms: either sellers and buyers compete, or they mitigate competition and seek to initiate durable relationships by using or creating interpersonal ties. Trust plays a key role in these bilateral transactions and can lead to loyalty that can affect prices. Interactionist tools and structural social network analysis are useful for describing these concrete negotiation mechanisms and competition-based power relations.

Conclusion

During the 1980s, the then new discipline of economic sociology still tended to ignore price as a topic and left this question to economists [Swedberg 2003]. From the 2000s onwards, pricing became an important concern and numerous articles have been published on the topic. Some highlight the role of strategies and social networks [White 2002], the status of firms [Benjamin and Podolny 1999], economic devices and knowledge [MacKenzie and Millo, 2003], or "pricing scripts" shared by professional communities [Velthuis 2005]. The first studies in the sociology of price used empirical data to describe specific economic tasks and challenge the theoretical model of perfect competition [Baker 1984; Garcia (1986) 2007]. More recent research [Callon 2021; Boltanski and Esquerre 2020] proposes a sociological approach aiming to renew the understanding of markets through the study of prices.

This article collates research on very different topics—from stock exchange listings to crates of fruits, from supermarket commodities to postage stamps or train tickets—in order to provide a typology of price setting mechanisms. This typology goes beyond the usual division in the literature between market mechanisms (based on supply and demand) and administered processes (based on political authority or professional organization). The opposition between market prices and administered prices is relevant but reductionist because it confounds two problems: first, the *moment of pricing*, and second, the *level of competition*. Focusing on the diagonal of Table I, which compares self-regulated and administered prices, this distinction ignores the other diagonal, which compares composed and bargained prices.

However, the four categories of prices are not mutually exclusive. Rather, they form a continuum, as shown by the shifts from one category to another. For instance, Garcia [(1986) 2007] showed how strawberry prices initially set by a bargaining process have been replaced by self-regulated prices. Using the example of the French railway system, Finez [2014] illustrates how companies shift from administered prices to a system of composed prices that mimics pricing mechanisms in a competitive market. While all paths from one price category to another seem to be theoretically possible, the end of the 20th century was marked by a decline in the use of administered prices in favor of composed and self-regulated prices incorporating competition.

Prices can be seen as a way to analyze historical changes in the economy. This perspective is pursued by Callon [2021] for whom the

study of pricing is key to understanding the dynamics of economic devices. It is also pursued by Boltanski and Esquerre [2020] who consider that enrichment processes allow us to better understand the new forms of capitalist accumulation and the growth of inequalities. Using prices and pricing as a means of governing is a specific feature of neoliberalism. Since the 1980s, the spread of this ideology has profoundly reshaped price setting practices and price engineering, as evidenced in digital platforms and algorithms. However, the changes driven by this ideology and by financialization sometimes lead to resistance. Some social movements contest both price levels and pricing mechanisms.

For the future of the sociology of prices and pricing, three main issues can be identified. The first requires research to go beyond economic sociology and sociology of markets. This dual framing has been particularly fruitful so far, but it would now be worthwhile to turn to new theoretical and thematic insights, and to connect the analyses of price setting to broader questions. The latter may address the evolution of prices (their variation and level), the beliefs and the systems of representation regarding prices, or the opposition to changes in prices and pricing methods. In this regard, the contemporary sociology of prices would gain from strengthening connections with the sociology of consumption, the social studies of finance, organizations studies, and policy analysis. It could also question more directly some key macroeconomic phenomena (e.g. inflation), or microeconomic phenomena (e.g. price flexibility).

A second issue is that prices have no intrinsic value in themselves (nominal value) but exist only as statement of a certain power (relative value). Indeed, price levels strongly influence the economic future of individuals (household standard of living, development of inequalities and consequent feelings of injustice, etc.) and of society (economic development of a country, situation of public budgets, government dependency with respect to the market and private companies, etc.). For this reason, prices are central to many controversies and conflicts. Such a perspective allows us to go beyond a purely supply-side reading of prices or an analysis focusing only on supply and demand interactions. The analysis of pricing is of course a central question in itself, but the above-mentioned mechanisms are even more meaningful for sociology if they are combined with an assessment of their practical effects, especially with regard to the beliefs and social representations of the people concerned by economic exchanges. For example, how do customers view prices? Do they consider them unfair or legitimate, and why? Are they able to alter the level of prices, through negotiation or boycotting?

A third issue refers to how prices are linked to each other. As Simiand (or more recently Callon) points out, a price always exists in relation to other prices. Prices are thus set by taking into account rival prices—when competition exists—but also on the basis of the prices of goods traded on upstream markets. Such a view is another way of seeing markets as the links in a chain. Markets are interdependent, ordered and hierarchical arenas, and the economic exchanges in each of them have a direct influence on the price level and pricing of other connected markets. Consider the example of gasoline: the price paid at the gas station displays the features of what we call a composed price. However, this price is calculated according to a price formula that combines the market price of a barrel of crude oil (self-regulated price), the purchase price of refined oil by the retailer from its supplier (bargained price), and a range of taxes fixed by the government (administered price). Depending on their position in the value chain, prices are therefore not determined by the same mechanisms. Only by examining the successive stages in this process can we fully understand the price for the final consumer. This price is the outcome of the merging of several prices that involves various social actors at each link in the chain. This approach has two implications. First, it allows us to describe and explain the diversity of sequences depending on the goods considered: the price chains of gasoline are not the same as those of contemporary art which, themselves, differ from those of food products, etc. Second, it questions the dominance of certain pricing mechanisms over others, both according to the type of commodity, but also according to the geopolitical, political, ideological or socioeconomic contexts.

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