

**Severely abridged copy.**

Discussant: Please ask author for  
long version

[r.richter@mx.uni-saarland.de](mailto:r.richter@mx.uni-saarland.de)

## **On the New Institutionalism of Markets: The Market as an Organization**

Rudolf Richter<sup>\*</sup>

### **1.Introductory Remarks**

This paper is motivated by the remark of Coase (1988, 7) that “although economists claim to study the working of the market, in modern economic theory the market itself has an even more shadowy role than the firm.”<sup>1</sup> In this paper, we’ll reflect on Coase’s complaint using analytical concepts of the new institutional economics, i.e., by assuming positive transaction costs, bounded rationality and imperfect foresight. We further assume that the elementary constitutional rules of the liberal state prevail (property rights, law of contracts, liability law) and that the operational rules of the economy (common language, measures and weights, means of exchange etc.) are given and fully accepted.<sup>2</sup> In such a world, potential traders of some good face two (interrelated) problems of institutional choice: First, to concur with other potential traders on the type and financing of the institutional framework of the market (on the “market order”, a collective good) within which they wish to trade that good; second, given this market order, to agree with their trading partner on a specific governance structure of their exchange contract. The first problem is a problem of non-market coordination of individual plans (a problem of common interest, i.e., of

---

<sup>\*</sup>Professor of Economics (em.), Universität des Saarlandes, Rechts- und Wirtschaftswissenschaftliche Fakultät, P.O. Box 151150, D-66041 Saarbrücken, Germany, e-mail: [r.richter@mx.uni-saarland.de](mailto:r.richter@mx.uni-saarland.de).

The author thanks Max Albert, Eirik Furubon, Ulrich Schlieper, and Dieter Schmidtchen for valuable comments.

<sup>1</sup>For a fuller description and explanation of Coase’s complaint see Furubotn and Richter (2005, 313).

<sup>2</sup>As described, e.g., by Furubotn and Richter (2005, 294 f.); lawlessness and economics is analyzed by Dixit (2004).

collective choice), the second one is part of the problems of market coordination (a problem of individual interest, i.e., of individual choice). Thus, the new institutional economic perspective of pure exchange reminds us that market allocation and non-market allocation are closely related to each other. Their separation is merely an analytical trick of neoclassical economists who wish to distill the pure case of economic exchange. For that purpose they disregard the establishment and running of a market and assume that the institutional framework of markets is given *a priori*,<sup>3</sup> inclusive some “standard” set of exchange contracts<sup>4</sup> to be automatically applied by a plurality of anonymous, perfectly rational traders. In other words, neoclassical economists think of markets in terms of a given formal (or explicit)<sup>5</sup> governance structure (a set of rules<sup>6</sup>) that steers demand and supply of perfectly rational trading automats at no costs toward market equilibrium.

The new institutional economics of markets, in contrast, allows traders to develop social ties and to conclude non-standard contracts (i. a., relational contracts<sup>7</sup>). It further allows traders to set up or change their market order, their “cage”, within which they wish to do business with each other. Thus, the NIE of markets is a much wider concept than that of the ideal type of neoclassical perfect competition. It allows traders to pursue their common interest (their choice of market order) *and* their individual interests (the choice of exchange contracts). As for the former – collective action – a market may be interpreted as a mode of organization in the sense of Arrow (1974 33).<sup>8</sup>

---

<sup>3</sup> By law on the basis of the three fundamental laws of nature “...that of the stability of possession, of its transference by consent, and of the performance of promises.” (Hume [1739/40] 1969, 578).

<sup>4</sup> Relating to complete contracts, i.e., contracts whose terms are completely stated and verifiable for all possible contingencies. Such contracts would be applicable to “...truly discrete exchange transaction[s] ... between total strangers, brought together by chance...” (Macneil (1978, 856f.).

<sup>5</sup> For simplification, we use in this paper the terms „formal“ and „explicit“, respectively “informal” and “implicit,” as synonyms.

<sup>6</sup> Inclusive their enforcement mechanism.

<sup>7</sup> Macneil (1978).

<sup>8</sup> Formal organizations like firms, labor unions, universities, or government are not the only kind of organizations. “Ethical codes and *the market system itself* are to be interpreted as organizations; the market system, indeed, has elaborate methods for communication and joint decision making.” (Arrow 1974, 33; italics added)

In other words, markets are not given by nature. Like firms or other organizations they have to be established, operated and financed by collective action of some players. In the institutional environment of a capitalist economy founders of new markets, or operators of old ones, are in the first instance market actors themselves. Traders agree to compete with each other for buyers or sellers within an organization “market”, which they set up and administer – to a degree – by themselves.

Certainly, not all individuals, who wish to buy or sell some good, have to establish or operate a market by themselves. Most of them will be able to participate in one of various already existing market organizations that compete with each other for participants. But all markets (like all other organizations) require the input of resources to be established and run (fix and variable transaction costs), which, in the case of markets, in general have to be contributed by buyers and sellers themselves.

In this paper we concentrate ourselves on the problem of choice of a market order (the rules of an organization “market”) which by itself is a rather wide topic that surpasses the limits of a conference paper. We therefore restrict ourselves further, viz., to cases of “implicit collective actions”: The formation and operation of the rules of the organization “market” based solely on the formation of implicit multilateral agreements – such as ethical codes,<sup>9</sup> customs,<sup>10</sup> conventions<sup>11</sup> the latter with respect to transactional activities like the conclusion of contacts, the fulfillment or enforcement of promises, and competitive practices such as price policy, R&D or advertising activities. Competitive practices include “tacit collusion” - a term of ill repute among

---

<sup>9</sup> Arrow (1974, 33)

<sup>10</sup> That is, “conventions” in the sense of Weber (1968, 34). It designates “...that part of the custom followed within a given social group which is recognized as ‘binding’ and protected against violation by sanctions of disapproval.”

<sup>11</sup> In the sense of Lewis (1969).

neoclassical economists, though not necessarily among new institutional economists favoring the “equilibrium-of-a-repeated-game” approach to institutions (or organizations).<sup>12</sup> Certainly, to interpret tacit collusion as a collective good is an unusual way to look at an equilibrium of oligopolies or other forms of imperfect competition. However, as we hope to demonstrate, it is possible to do so.

Given positive transaction costs, bounded rationality and imperfect foresight we ask the following two questions:

- 1) How does the economic literature answer the problem of the choice of a specific implicit market order?
- 2) How does the choice of a particular implicit market order affect the economic results of this market?

We shall try to answer these questions by examples in a purely argumentative style of the NIE.

## **2. On Terminology and Hypotheses**

### 2.1 Definition “Organization”:

There exist different definitions of the term “organization.” We use the term organization in the sense of an institution (an order) established and administered by certain actors with the purpose to achieve a common goal.<sup>13</sup> It may be established either by the order of some actor(s) (the founder(s) of a firm, a university, a stock exchange) or by agreement between a number of interested parties (the founders of a club, the promoters of a circle of friends, the leading producers of, e.g., cigarettes or automobiles). The subtitle of this paper relates to organizations in the latter sense.

---

<sup>12</sup> According to which an institution is defined as a salient Nash equilibrium of a recurrent “supergame” about the way a given “underlying game” is repeatedly played (cf. ,e.g., Furubotn and Richter (2005, 8).

<sup>13</sup> Or in Schmolter’s (1900, 61) terms “the personal side of the institution.”

## 2.2 How do Institutions and Organizations arise?

Two strands of thought are standing out:

1. A line of thought that is characterized by self-adjusting processes. Transaction costs play no explanatory role. We call this line of thought the "invisible-hand approach to institutional economics" or the equilibrium-of-a-repeated-game-approach to institutions.<sup>14</sup>

2. Another line of thought in which transaction costs (or information costs) are an essential explanatory element. We dub this line the "visible-hand approach to institutional economics" or the constructivist approach to institutions.<sup>15</sup>

To apply a mix of the two approaches seems obvious. In fact, Hayek (1973, 45) himself concedes this, however, with the qualification that what finally matters are "...those super-personal 'self-organizing' forces which create spontaneous orders" (loc. cit. 54). The answer to this problem is to leave reasonable gaps in the organizational design that can be closed according to circumstances as they arise.

We view the organization "market" as a mix of the work of the visible and invisible hand (as a mix of a "constructed" and a "spontaneous" organization).

## **3. Which Market Organization?**

Economists are "functionalists" in the sense of Turner and Maryanski (1979, 113): They are trying to find general laws (models, concepts) of human organization, i.e., stable mechanisms that underlie the working of economic organizations (correspond with rules that are imaginable to arise spontaneously) such as the concepts of incentive mechanisms, the price mechanism, the law

---

<sup>14</sup> Representatives are, i.a., Hayek (1967), Schotter (1981), Greif (1998, 2006). It is sometimes referred to as the "Hayek programme" (Elster 1989, 250).

<sup>15</sup> Among its representatives are Coase (1937), Williamson (1975, 1985), North (1981, 1990). As North (2005, 51) stresses: "Humans deliberately try to shape their future and indeed have no alternative but to try to structure human interaction – the alternative is anarchy or chaos."

of one price, etc. The concept of the price mechanism is based on a complex set of assumptions regarding human behavior and institutional framework<sup>16</sup> by which it is controlled. It presupposes, i.a., the existence of “perfect” competition among actors. Before we continue, it seems appropriate to repeat briefly the basic (“functionalist”) theory of the “price mechanism” under the ideal conditions of perfect competition.

### 3.1 The Market Mechanism: Theory of Perfectly Competitive Markets

An early graphic description of the theory of competitive market equilibrium provides the Marshallian Cross. An excellent verbal description of how a market equilibrium can be reached is given by Böhm-Bawerk (1888) by his *Grundgesetz der Preisbildung* (basic law of price formation),<sup>17</sup> which later was corroborated by Vernon Smith (1962) in his experimental study of competitive market behavior. As the Marshallian cross, this theory assumes truly discrete exchange between total strangers.<sup>18</sup> Traders compete with each other in the sense that they neither explicitly nor implicitly (tacitly) agree on the price they bid or ask and that competition relates only to prices not to product quality or advertising (homogenous products, no personal preferences). Furthermore, traders are perfectly informed - however, only on the quality of their traded good and its quoted or traded prices. They do not know, in particular, the reservation price of other marketers. Finally, after the bell's gone, all contractual claims are met to the point.

Marshall's demand and supply curves represent the reservation prices of buyers and sellers. Price formation (= price competition) is organized by way of a double auction. Information on quoted and traded prices of the traded commodity is immediately available for all marketers at no cost.<sup>19</sup>

---

<sup>16</sup> Incentive structure, governance structure, market order.

<sup>17</sup> Böhm-Bawerk (1888/1909, 357 ff.).

<sup>18</sup> “...brought together by chance (not any common social structure, since that link constitutes at least the rudiments’ of a relation outside the transaction.” (Macneil 1978, 856)

<sup>19</sup> “Each marketer is ignorant of the reservation prices at which other buyers and sellers are willing to trade. ...the only way that a real marketer can obtain knowledge of market conditions is to observe the offers and bids that are tendered, and whether or not they are accepted.” (Smith 1962, 115)

Vernon Smith demonstrated in his market experiments that under such conditions prices will in fact converge to their competitive equilibrium even if the number of traders is small. What matters from an institutional economic viewpoint is the proper *design of markets*;<sup>20</sup> following McMillan (2002, 9) in particular of

- the mechanism that organizes buying and selling,
- the channels of the flow of information,
- the rules of property rights and contract law.

Vernon Smith's market experiment demonstrates visibly that the abstract model of the Marshallian Cross is more than a thought-up ideal. It is also suited for practical use provided the conditions of perfect competition are somehow met – with one exception: no large (or infinite) number of buyers and sellers is needed.

The model of the Marshallian Cross is not only plausible and corroborated by experiments; its underlying ideal type of a “perfect market order” is also reflected by the design of organized markets like stock or commodity exchanges, auction houses, electronic markets etc..<sup>21</sup> It is, further, recognizable among old style local markets - held at the same place, same time, for the same goods.<sup>22</sup> Properties of old style local markets, on which people talk with each other on prices and qualities of traded goods, appear to be revived by the internet.<sup>23</sup> Further, the Marshallian Cross can also be used to predict what is going to happen if sellers, buyers or the government suspend the price mechanism by fixing maximum or minimum prices. No question,

---

<sup>20</sup> This is the central thesis of German *Ordnungspolitik* as advocated in particular by Walter Eucken, Franz Böhm, Wilhelm Röpke, Alexander Rüstow and the “Austrian” economist Friedrich August von Hayek; see Schmidtchen (1984).

<sup>21</sup> Telser and Hoginbotham (1977, 997).

<sup>22</sup> Thus the anthropologist Fröhlich (1940) on pre World War I African markets. Even though he does not quote economic theory he must have known its doctrines. His paper is written as if he intended to illustrate if not all then most of the elementary assumptions of the ideal type of the perfect market.

<sup>23</sup> See Levine, Locke, Searls, Weinberger (2000) or *The Economist* (April 22<sup>nd</sup> 2006).

the hypothetical market organization underlying the theory of the Marshallian Cross is widely applicable. Still, why are not all real life markets organized in a manner closer to the ideal type of the perfect market? Why are auction style price mechanisms such rare events in reality? The answer is contained in the criticisms of the theory of competitive markets.

### **3.2. The Market Mechanism: Three Waves of Attacks**

The theory of perfect competition was attacked for various reasons. Three waves of attack are of particular interest for our purposes – that of (1) monopolistic competition, (2) new institutional economics and (3) new economic sociology. All three were directed against the assumptions of the classical theory of the market process. In all three attacks, transaction costs play a role – implicitly or explicitly. Given transaction costs, Pareto efficiency does not make sense (Furubotn & Richter 2005, 108 f.). Other measures are to be used such as adaptive efficiency (North 1990, 80). In such a world, a market equilibrium may be socially preferable, even though, the conditions of perfect competition are violated, in particular,

1. if a producer (supplier) keeps the price of his product temporarily fixed (administers his prices), and uses, instead, his product quality and advertising outlays as parameters of action;<sup>24</sup>
2. if the parties to a contract do not try to write a complete contracts but trade on the basis of incomplete or “relational” contracts<sup>25</sup> or non-standard contracts;<sup>26</sup>
3. if marketers are tending their social contacts;<sup>27</sup>

---

<sup>24</sup> NIE reasons for price fixing are given, e.g., by Alchian and Woodward (1987).

<sup>25</sup> Macneil (1978).

<sup>26</sup> E.g., Williamson’s four forms of efficient governance (Williamson 1985, 79).

<sup>27</sup> Even in highly organized markets. --- Markets do not function in a social vacuum (Hamilton and Feenstra, 1995, 61).



**The first** insight makes use of Chamberlin's (1933) theory of monopolistic competition in combination with Coase's costs of using the market (transaction costs).<sup>28</sup>

**The second** insight is part of Williamson's transaction cost economics. It is aimed at the governance of bilateral relations (exchange contracts). However, Williamson's concept of *fundamental transformation* can be applied also to (informal) multilateral social relationships like a market order.<sup>29</sup>

**The third** insight makes use of the work of sociologists, who argue that the social structure of markets matters for their economic performance. Burt (1992, 8 ff.) uses in this connection the term of "social capital".<sup>30</sup> In contrast to financial or human capital, social capital is owned jointly by the parties to a relationship (Burt 1992, 58). Thus, the question of individual investments in social capital is a typical problem of collective action (Olson 1965).

To test the applicability of above three insights, we are going to discuss some empirical cases from the literature.

#### **4. The Choice of Market Organization as Reflected in the Literature**

Our hypothesis is that under conditions of the NIE and a given explicit (formal, "constructed") market order, there is enough room left for the growing in of an implicit order,<sup>31</sup> i.e., for "the work of the invisible hand." As a consequence, the actual organization of real world markets diverges more or less from their explicitly "constructed" order based on the neoclassical ideal of

---

<sup>28</sup> Note: The attack on Chamberlin's theory by Friedman (1953, 7 ff) and Stigler (1968, 311 ff.) is directed against its predictive power, not its normative conclusions. Nobody doubted at this time the inefficiencies of imperfect competition.

<sup>29</sup> As is typical for oligopoly theory or the theory of monopolistic competition,

<sup>30</sup> Their social capital offers actors opportunities to use their financial and human capital profitably and, thus, contribute to their individual wealth (Burt, *ibid.*).

<sup>31</sup> As Adler and Adler (1984, 197) put it: "...the formal market structure is supplemented and occasionally subverted by an informal social structure or network of roles, relationships and social organization." (Emphasis in the original)

perfect competition (the principles of *Ordnungspolitik*). In the world of positive transaction costs, deviations from perfect competition *may* be socially preferable.

#### 4.1 Implicit Market Organization I: Administered Pricing

It is a well known fact that most prices do not react immediately to demand or supply shocks as neoclassical price theory would predict. Prices of large numbers of goods are "rigid" (Carlton 1983, Blinder et al. 1998). In view of the existence of transaction costs, price fixing is plausible. It would be extremely costly to organize real life markets in the style of a commodity or stock exchange, where prices adapt to changes of demand or supply in fractions of a second. Instead, most prices are administered.<sup>32</sup> They are announced by one side of the market (in production markets usually the suppliers) and kept constant for some time. With price competition out of operation, rivalry among sellers is carried out by other means such as product variation<sup>33</sup> or advertising outlays<sup>34</sup>. That is hardly understandable without speculating on some tacit agreements (tacit collusion) between sellers, as is assumed in the case of price leadership among oligopolists. Yet non-price competition is not restricted to oligopolies, it is a characteristic of all markets with rigid prices (i.e., all kinds of monopolistic competition). Implicit market organizations seem to be a widespread social phenomenon.

Tacit collusive behavior of oligopolists is theoretically analyzed, i. a., in a repeated game framework as reviewed by Jacquemin and Slade (1989). It is analytically the same as the institution-as-an-equilibrium-of-a-game approach mentioned above. We sympathize with this approach – but we'll leave it at that. In our paper we simply assume the existence of some Nash equilibrium – some "tacit meeting of the mind" (Posner 2001, 60). In this sense the rules of price

---

<sup>32</sup> For detailed examples see Furubotn and Richter (2005, Ch. 7).

<sup>33</sup> By "variation" of product in the broad sense: "...alteration in the quality of the product itself – technical changes, a new design, or better material; it may mean a new package or container; it may mean more prompt or courteous service, a different way of doing business, or perhaps a different location." (Chamberlin 1948, 71)

<sup>34</sup> "Selling costs", see Chamberlin (1948, Ch. VII).

leadership (a form of tacit collusion) are understood as an implicit order of the organization “market” (that grew into a “constructed” order, i.e., an explicitly laid down legal framework) within which competition takes place by means of R&D or advertising expenditures.

We are going to discuss such an implicit order of the organization “market” by examples and start with a particularly well documented case of price leadership, viz, the price policy of the American cigarette industry during the interwar period.<sup>35</sup> Following Nicholls, we believe

....that the policies of the American cigarette industry have much in common with those of other large-scale industries, especially those in which advertising is of paramount significance. As such, the policies of the cigarette industry can serve as the basis for at least tentative generalizations about a much larger sector of all industry...." (Nicholls 1951, 4).

In the long version of our paper we retell some characteristic pieces of Nicholls's detailed report on the US Cigarette industry to give the interested reading a feeling for what we mean by an implicit order of an organization “market”, i.e., the result of implicit (tacit) collective actions of marketers. What follows are short summaries )ask for the long version of my paper).

#### **4.1.1 An Example of Price Leadership: The American Cigarette Industry During the Interwar Period**

During the 1919 - 1939, the American cigarette industry was dominated by three big firms (Reynolds, American Tobacco, Ligget & Myers). They were created by the dissolution of the American Tobacco Trust in 1911. The "Turkish and Domestic blend" had been introduced by Reynolds who launched its “Camel” cigarette already in 1913 (Nicholls 1951, 36). It was enormously successful. American Tobacco followed the Turkish and domestic blend market with

---

<sup>35</sup> We are following Nicholls (1951).

its brand “Lucky Strike” and Liggett & Myers with its “Chesterfield” cigarette (loc. cit. 37 ff.).<sup>36</sup> After a period of experiments with price competition 1912 - 23 the industry adopted a policy of rigid prices in 1923 (loc. cit. 57). Between 1923 and 1939 there were only seven mutual price changes: four price increases led by Reynolds (Camel), three price cuts of which one (1928) was led by Reynolds, two were led by American (1933). Until 1931, “first comer” Reynolds, who had the biggest market share until 1928, became the industry’s undisputed price leader. With prices virtually fixed, competition was shifted almost wholly to a non-price basis, in particular to advertising.

In view of the cut by the Great Depression we shall discuss the intervals of 1923 - 1931 and 1931 - 1939. separately.

1923 - 31: During this period, price leader (with two exceptions) was Reynolds, the firm that had successfully introduced the new cigarette taste. The three major cigarette producers remained the “makers” of the “cigarette market order” since 1923. Their advertising expenditures were apparently fully recovered by cigarette sales.<sup>37</sup>

Forget about that nowadays detested object of trade (cigarettes) and ask: What is the social gain of the implicit agreement of suppliers to compete by advertising expenses instead of price reductions? A new institutional economic answer could be: For repeatedly bought experience goods like cigarettes (soft drinks etc.), the social advantage is that the sunk investments in advertising serve as “hostages” in the hands of the firm’s customers (Klein and Leffler 1981, Shapiro 1983). As a consequence, the sellers’ promise to offer steady (high) quality products

---

<sup>36</sup> Lorillard, the fourth successor of the Tobacco Trust among the cigarette producers, lagged far behind. It failed to develop a popular blended cigarette until it introduced Old Gold in 1926. It was not able to make up for its missed opportunity. Its market share remained well below 10% through the rest of our period of research. Mr. Hill remarked triumphantly: “Lorillard is a good example of what happens to a tobacco organization that doesn't keep up with what the trends are.” (Nicholls, 39, n. 11)

<sup>37</sup> Nicholls (loc. cit. 191): “...the three principal successor firms have succeeded in maintaining a level of net earnings well above normal competitive levels throughout the period since the dissolution” (of the Tobacco Trust).

becomes credible. The high price for brand name products may be justified as the consumers' contribution to the provision of the public good "market organization" by the three market makers.<sup>38</sup> On the other hand, because of the sellers' predominance, the price of cigarettes may still be too high or otherwise socially undesirable. Yet we cannot judge from the outward appearance of "price leadership" alone. A *per se* rule banning "price leadership" as socially undesirable and therefore illegal seems indefensible.<sup>39</sup>

1931 . 1939: This period is characterized by the grave mistake of a mutual price increase of the dominant American cigarette firms at the heights of the Great Depression in 1931. The increase was initiated by Reynolds.

Whatever the true reason was for the ca. 12 per cent price increase in the midst of an unprecedented economic crisis - the market order of price leadership among the three major producers remained in tact. They seemed to have made a truce regarding their advertising activities trying to regain (unsuccessfully though) the terrain lost to the economy brands. In any case, advertising expenses decreased; the shares of advertising expenses remained different but assumed a certain continuity.<sup>40</sup> Their counterattack was limited to two drastic price cuts led by American, the producer with the highest market share at that time. The cuts, however, were soon taken back (in 1934, 1937) under the leadership of the original price leader Reynolds. The quality of their product remained on its high level throughout that time. The rationale of this policy may have been, not to destroy their enormous investments into the credibility of their high quality promises.

---

<sup>38</sup> Which helps reduce the otherwise high level of market transaction costs (The costs of search, inspection, contracting, execution, control, and enforcement (Furubotn and Richter 2005, 51 f., 295).

<sup>39</sup> As with regard to the legal side, the Sherman Act, Turner (1962, 671) argues that "oligopolists who take into account the probable reactions of competitors in setting their basic prices, without more in the way of an 'agreement' than is found in 'conscious parallelism,' should not be held unlawful conspirators under the Sherman Act even though, as in *American Tobacco*, they refrain from competing in price."

<sup>40</sup> Adams (1950, 252) comments that the major cigarette producers made large advertising expenditures which they would not have made "... if they were concerned solely to maximize the profits of the industry as a whole." The argument of the hostage character of advertising and its positive effect on product quality was unknown at that time.

What is the social gain of the continuation of the implicit agreement of suppliers to stick to their pre 1931 price leadership order? A new institutional economic answer could be: The three leading cigarette producers may have saved transaction costs by not messing around with their well established and proved implicit market order and by keeping up their high product quality. For the rest, the welfare arguments are the same as above. The defense of the higher price for brand name products would consist of the argument that consumers' have to pay an extra "tax" to the three private market makers for their provision of the conveniences of the public good of a high quality product market organization. However, different from a public body ("the state") private market makers bear the full risk of losing their investments in the provision public good "high quality market".<sup>41</sup>

So much on implicit market organization in oligopolies. One may argue, the more actors on both sides of a market the less important implicit arrangements between competitors. However, that hardly corresponds with the facts.

#### **4.1.2 Evidence of General Price Rigidity**

There exists a growing empirical literature on the evidence of general price rigidity. Most papers are purely descriptive and have a different purpose, viz., to prove the hypothesis of the non-neutrality of money.<sup>42</sup> Competitive issues are hardly or not at all taken into account. Findings are of the kind that on average prices remain unchanged for 4.1 or 7.9 months (Barharad and Eden, 2004), that annual price changes are by far the most typical (Blinder et al. 1998, 64), that the degree of price rigidity differs greatly across industries (Carlton 1989, 921). To understand price

---

<sup>41</sup> Note: Private actors (buyers and/or sellers) will only provide the public good "market", if they have a chance to at least regain their investments into the public good.

<sup>42</sup> Check the internet; see also Deutsche Bundesbank, Monthly Report of ??? 2005; ECB, Annual Report 2005.

rigidity, Blinder et al. have asked two hundred firms, why they don't change their prices more frequently? The most frequent answer was: "I would antagonize or cause difficulties for our customers."<sup>43</sup> The next two equally frequent replies were: "Competitive pressures" and "costs of changing prices". The first reply comes down to the same as the above described case of price leadership: abstention from price competition in favour of quality competition. The second answer corresponds to Coase's argument of transaction costs or, in macro-economic language, to "menu costs". Levy et al. (1997) measured menu costs at five multistore supermarket chains, and show that changing prices requires a nontrivial amount of resources. – Not amazingly, Barharad and Eden (2004, Appendix) found also some kind of price leadership among local retailers.

In sum: Price rigidity is a widespread phenomenon that appears not to be restricted to oligopolistic competition but to be also a characteristic of monopolistic competitors among "neighboring" firms. Given the conditions of the NIE, sticky prices may be socially preferable. Though there seem to exist no detailed studies of price stickiness in relation to competitive behavior, sticky prices are hard to imagine without existence of a suitable implicit market order.

Social interdependence is a typical sociological issue. We therefore look into what economic sociologists have to say on implicit cooperation between marketers.

## **4.2 Implicit Market Organization II: The Social Structure of Markets**

Economic sociologists emphasize the importance of the informal social structure of markets for their performance.<sup>44</sup> For illustration two examples (a fuller presentation see in the long version of my paper):

(1) Abolafia (1984) studied an open auction [double auction] of commodity futures in an

---

<sup>43</sup> Renner and Tyran (2003) show by experiment – what seems reasonable – viz, how long-term customer relations may cause price rigidity in markets for experience goods.

<sup>44</sup> As Hamilton and Feenstra (1995, 61) put it: "Markets do not function in a social vacuum."

American exchange. He finds that what seemed to be near-anarchy between traders is actually steered by a coordination and control system. Abolafia argues that markets are in effect coalitions of economic actors who compete with each other subject to an agreed upon system of "...informal norms among traders, formal rules of trade and organizational arrangements to coordinate collective action." (loc. cit. 132) The implication would be that "competitive markets do not emerge and maintain themselves 'naturally'".

(2) Granovetter (1974/1995) deals in his empirical study *Getting a Job* with the job search of professional technical and managerial workers. In his sample, personal contact is (social ties are) the predominant method of finding out about jobs. He finds, the relevant factors of finding a job is social. Job finding behavior is "... heavily embedded in other social processes that closely constrain and determine its course and results." (1995, 39). Weak ties play a major role in this context.

(3) Burt (1992) deals in his book *Structural Holes. The Social Structure of Competition* with the transaction activities of "information"<sup>45</sup> and "control" (what we would subsume under "contracting"). He views markets as networks of social contacts between actors. Competition is the struggle of actors for profitable positions within market networks. The price you pay for an advantageous positioning within your market (to build ones brand name) is included in your expenses for fair selling practices like money back guarantees etc.

In any case, real life markets are more than abstract systems of formal norms. Personal relationships matter. They can be described as networks of informal relational ties between market actors (traders). To belong to such a network requires collective actions incl. material contributions. Long-term network relationships between economic actors ease local and global

---

<sup>45</sup> Including information about new opportunities like "...new institutions and projects that need leadership, new funding initiatives looking for proposals, new jobs for which you know of a good candidate, valuable items entering the market for which you know interested buyers" (loc. cit., 13).



trade and thus help lowering transaction costs. Note that exchange networks are both, difficult to build and hard to demolish. To destroy them by plain force (war or revolution) takes more than ten or fifteen years - as is illustrated by the German *Wirtschaftswunder* of 1948 ff. in comparison with the slow adaptation of the East German economy to the West German situation after German reunification of 1990.<sup>46</sup>

### **5.The Choice of Market Order in Retrospect**

The basic argument of this paper is that markets are not given by nature but have to be set up and managed by individuals like firms or other types of organizations. Our argument comprises a mountain of problems, of which we picked a rather modest one: that of implicit forms of market organizations and their (possible) social benefits. This had the advantage that we could fall back on, and reinterpret, an existing and well known set of theories of oligopoly and monopolistic competition and its related empirical work. Under the conditions of the NIE, the (Nash) equilibrium of an oligopoly or monopolistic competition may be taken as a socially useful (even preferable) implicit order of the organization "market", e.g., the American cigarette market. As a result, the violation of the conditions of perfect competition in cases of oligopoly or monopolistic competition may be less serious than neoclassical economists assumed. It may be even nil. Regarding price leadership, the social advantage of the implicit market organization of administered pricing and the rule to compete instead by advertising and R&D expenditures may consist in the achievement and guarantee of high product quality and the reduction of transaction costs.

---

<sup>46</sup> As for the German *Wirtschaftswunder*, much of the pre 1933 global personal and business connections still existed or were easily revived in 1948. Big West German corporations like Mercedes, Siemens, Bosch, Leitz etc – and West German small and medium-sized firms and their networks of national and international contacts still existed. On the other hand, East Germany had lost all of its old firms and business contacts by 1990. It had to start virtually from scratch.

As for the rest, a market economy may be seen as a persistent network of tacit agreements (meeting of the minds) between marketers. Its order may be understood as a Nash equilibrium whose establishment and administration requires specific investments of real resources that Burt (1992) calls social capital. Thus, the collective good “implicit market order” of a market economy (or single market) can be understood also as the outcome of specific investments in the social capital of a market organization. Market makers (in our examples producers) pay in advance, e.g., by their R&D and marketing expenses for the provision of the collective good “implicit market order”. They are interested, of course, to protect their specific investments into the social capital of markets (a collective good) against ex post opportunism (= free riding) of competitors.<sup>47</sup> Consumers, on the other hand, contribute to the collective good “implicit market order” only later on the condition that they actually “go to that market” and buy its product. The financiers of the market entrepreneurs (“market makers”), who supply the collective good “implicit market order,” carry the financial risk of its provision.

We claim that implicit orders are characterizing all markets –organized markets (like stock exchanges) as well as the non-organized ones (like the cigarette industry). The latter have to be established, financed and managed in a way similar to formal market organizations or firms. Leadership “by example” – as in the case of price or quality leadership - or shrewd managerial strategies (as in the case of the evolution of “IBM compatibility”) can play an important role.<sup>48</sup>

We justified our decision to deal only with problems of *implicit* market organization by the fact that a full treatment of the choice of the market order or organization by traders would surpass the limits of a conference paper. In actual fact, it surpasses the limits of our own research work up till

---

<sup>47</sup> The regulation of barriers to entry depends on the role model of competition, see, e.g., C.C. v. Weizsäcker (2005 58 f.).

<sup>48</sup> Reynolds was not only a price leader but also a “quality leader” of the American cigarette market of the early 20<sup>th</sup> century. Similarly, IBM turned out to be a quality leader of the market for personal computers by the introduction of the open standard “IBM compatibility”.

now. However, for a German economist, used to persistent national debates on *Soziale Marktwirtschaft* or *Soziale Gerechtigkeit*, an addition of theories of and empirical work on special interest politics would be of primary concern for a new institutional economics of the market. It is hard to believe that under real world conditions (as those of the NIE) traders will always choose the economically best (most “efficient”) order of their aimed at market order. Politicians are no saints either. North rightly argues against the view: “...that institutions are created only to reduce transaction costs and increase economic efficiency.” The reason for inefficient institutions are inefficiencies of political markets, “...democracy in polity is not to be equated with competitive markets in the economy.” (North, 1990, 8, 52 f). There exist many ways to influence the determination of equilibrium prices round the back, e.g., through activities of interest groups, political parties, powerful individuals etc. As for antitrust policy, the impression of an outsider (like this author) is that its advocates think of the economy as of a world separated from the polity. Antitrust arguments are at most applied to economic coordination mechanisms, not to political ones. It is as if society would be neatly separated into two halves: commerce and politics. But real world markets do not work in a political vacuum. Look at German labor market policy. An equilibrium price or wage may be better understood as being part of a more general political-economic (bad) Nash equilibrium. If we wish to understand economic policy issues, not only transformation or development economics, we need to be able to better explain the complex system of political-economic relations under condition of the NIE – both with regard to its positive and its normative aspects.

## References

- Abolafia, M.Y. (1984), "Structural Anarchy: Formal Organization in the Commodity Futures Markets", in: Adler and Adler (1984), 129 – 149.
- Adams, W. (1950), *The Structure of American Industry. Some Case Studies*, New York: Macmillan.
- Adler P.A. and Adler, P. (eds.), (1984), *The Social Structure of Financial Markets*, Greenwich, CN: JAI Press.
- Akerlof, G. A. (1970), "The Market for 'Lemons': Quality Uncertainty and the Market Mechanism", *Quarterly Journal of Economics*, 84, 488 -500.
- Albert, H. (1967), *Marktsoziologie und Entscheidungslogik - Ökonomische Probleme in soziologischer Perspektive*, Neuwied und Berlin.
- Alchian, A. A. and Woodward, S. (1987), "Reflections on the Theory of the Firm", *Journal of Institutional and Theoretical Economics*, 143, 110-137.
- Aoki, M. (2001), *Toward a Comparative Institutional Analysis*. Cambridge, Mass.: MIT Press.
- Arrow, K.J., 1969, "The Organization of Economic Activity: Issues Pertinent to the Choice of Market versus Non-Market Allocation" in *The Analysis and Evaluation of Public Expenditures: The PBB-System*, Joint Economic Committee, 91st Congress, 1st Session, Vol.. 1, Washington, DC.
- Arrow, K. J. (1970), *Essays in the Theory of Riskbearing*, Amsterdam: North Holland
- Arrow, K.J. (1953), „Généralization des theories de l'équilibre économique général et du rendement social au cas du risque,“ *Econométrie*, Paris, Centre National de la Recherche Scientifique, 81 – 120.
- Arrow, K.J. (1964), „The Role of Securities in the Optimal Allocation of Risk-Bearing,“ *Review of Economic Studies*, 31, 51 – 96.
- Arrow, K.J. (1974), *The Limits of Organization*, New York: Norton.
- Axelrod, R. M. (1984), *The Evolution of Cooperation*, New York: Basic Books.
- Baharad, E. and Eden, B. (2004), "[Price Rigidity and Price Dispersion: Evidence from Micro Data](#)," *Review of Economic Dynamics*, 7, 613-641.
- Bain, J. (1956), *Barriers to New Competition*, Cambridge, MA: Harvard University Press.
- Bertrand, J. (1883), [Revue] *Recherches sur les principes mathématiques de la théorie des richesses* par Augustin Cournot (Paris, Riviere 1838).
- Bickenbach, F., Kumkar, L, Soltwedel, R. (2000), *The New Institutional Economics of Antitrust and Regulation*, Kiel Working Papers, Kiel: Institut für Weltwirtschaft.
- Blinder, A.S.; Canetti, E.R.D.; Lebow, D.E.; Rudd, J. B. (1998), *Asking About Prices. A new Approach to Understanding Price Stickiness*, New York: Russell Sage Foundation.
- Böhm-Bawerk, E. von (1888/1909). *Positive Theories des Kapitals*, 3. Auflage, Erster Halbband, Innsbruck: Wagner'sche Universitätsbuchhandlung.

- Burns, A.R. (1936), *The Decline of Competition. A Study of the Evolution of American Industry*, New York: McGraw-Hill.
- Burt, R. S. (1983), *Corporate Profits and Cooptation. Networks of Market Constraints and Directorate Ties in the American Economy*, New York, Academic Press.
- Burt, R.S. (1992), *Structural Holes. The Social Structure of Competition*, Cambridge, MA: Harvard University Press.
- Campbell and Eden (2005), Rigid Prices: Evidence from U.S. Scanner Data, Federal Reserve Bank of Chicago, Working Paper Series.  
[http://www.chicagofed.org/publications/workingpapers/wp2005\\_08.pdf](http://www.chicagofed.org/publications/workingpapers/wp2005_08.pdf)
- Carlton, D. W. (1983), "Equilibrium Fluctuations When Price and Delivery Lag Clear the Market", *Bell Journal of Economics*, 14, 562-572.
- Carlton, D. W. 1989. "The Theory and the Facts of How Markets Clear: Is Industrial Organization Valuable for Understanding Macroeconomics?" In R. Schmalensee and R. D. Willig, eds., *Handbook of Industrial Organization*, 1:909-46. Amsterdam: North-Holland.
- Chamberlin, E.H. (1933/1948), *The Theory of Monopolistic Competition. A Reorientation of the Theory of Value*, Cambridge, MA: Harvard University Press.
- Coase, R.H. (1937), "The Nature of the Firm," *Economica*, 4, 386-405.
- Coase, R.H. 1960, "The Problem of Social Cost", *Journal of Law and Economics*, 3, 1-44.
- Coase, R.H. (1988), *The Firm, the Market, and the Law*, Chicago and London: The University of Chicago Press.
- Commons, J. R. 1934. *Institutional Economics*. Madison: University of Wisconsin Press.
- Cournot, A. (1838/1927), *Recherches sur les Principes Mathématiques de la Théorie des Richesses*, Paris : Bacon 1927.
- David, P. A. und Greenstein, S. (1990), "The Economics of Compatibility Standards: An Introduction to Recent Research," *Economics of Innovation and New Technologies*, 1, 3-41.
- Dixit, A. K. (2004), *Lawlessness and Economics. Alternative Modes of Governance*, Princeton, NJ: Princeton University Press.
- Eccles, R. (1981), "The Quasifirm in the Construction Industry," *Journal of Economic Behavior and Organization*, 2, 335 – 357.
- Economist, The (2006, 22<sup>nd</sup> April), "Among the Audience. A Survey of New Media."
- Elster, J. (1989), *The Cement of Society. A Study of Social Order*, Cambridge: Cambridge University Press.
- Fellner, W. (1949), *Competition Among the Few. Oligopoly and Similar Market Structures* New York: Alfred Knopf.
- Fligstein, N. (2001), *The Architecture of Markets. An Economic Sociology of Twenty-First-Century Capitalist Societies*, Princeton, N.J.: Princeton University Press.
- Fröhlich, W. (1940), "Das afrikanische Marktwesen", *Zeitschrift für Ethnologie*, 72, 234-328.

- Furubotn, E. G. and R. Richter (2005), *Institutions and Economic Theory: An Introduction to and Assessment of the New Institutional Economics*, 2<sup>nd</sup> ed. Ann Arbor, Mich.: University of Michigan Press
- Granovetter, M- (1995), *Getting A Job*, Chicago, IL: University of Chicago Press.
- Granovetter, M. (1974, ), *Getting A Job. A Study of Contacts and Careers*, Chicago: University of Chicago Press;
- Granovetter, M. (1985), "Economic Action and Social Structure: The Problem of Embeddedness", *American Journal of Sociology*, 91, 481 – 510.
- Greif, A. (1994), "On the Political Foundations of the Late Medieval Commercial Revolution: Genoa during the Twelfth and Thirteenth Centuries." *Journal of Economic History* 54:271–87.
- Greif, A. 1998, "Historical and Comparative Institutional Analysis," *American Economic Review*, 88, *Papers and Proceedings*, 80 – 84.
- Greif, A. (2005), "Commitment, Coercion and Markets: The Nature and Dynamics of Institutions Supporting Exchange," pp. 727 – 786 in: C. Ménard and M.M. Shierley (eds.), *Handbook of New Institutional Economics*, Dordrecht et al.: Springer.
- Greif, A. (2006), *Institutions and the Path to the Modern Economy: Lessons from Medieval Trade (Political Economy of Institutions and Decisions)*, Cambridge: Cambridge University Press.
- Hamilton, G.G. and Feenstra, R.C. (1995), "Varieties of Hierarchies and Markets: An Introduction," *Industrial and Corporate Change*, 4, 51 - 91.
- Hayek, F.A. (1948) *Individualism and Economic Order*, Chicago: University of Chicago Press.
- Hayek, F.A. (1967), *Studies in Philosophy, Politics, and Economics*, Chicago: University of Chicago Press.
- Hayek, F.A. (1973), *Law, Legislation, and Liberty: Rules and Order*, Vol. 1, Chicago: University of Chicago Press.
- Hirschman, A.O. (1982). "Rival Interpretations of Market Society: Civilizing, Destructive, or Feeble?" *Journal of Economic Literature*, 20, 1463 – 1484.
- Hume, D. (1739–40/ 1969), *A Treatise of Human Nature*. Edited by E. C. Mossner, London: Penguin.
- Kaplan, A.D.H., Dirlam, J.B.; Lanzillotti, R.F. (1958), *Pricing in Big Business. A Case Approach*, Washington, D.C.: The Brookings Institution.
- Kaplan, D. A. (1999), *The Silicon Boys and Their Valley of Dreams*, New York, N.Y.: Harper & Collins.
- Klein, B. und Leffler, K.B. (1981), "The Role of Market Forces in Assuring Contractual Performance", *Journal of Political Economy*, 89, 615-641.
- Klein, B., Crawford, R. G. und Alchian, A. A. (1978)", Vertical Integration, Appropriable Rents, and the Competitive Contracting Process", *Journal of Law and Economics*, 28, 297-326.
- Knight, F. 1922, *Risk, Uncertainty, and Profit*, New York: Harper and Row.

- Levine, D., Locke, Chr., Searle, D., Weinberger, D. (2000), *the cluetrain manifesto. The end of business as usual*, Cambridge, MA: Perseus Publishing.
- Levy, D., M. Bergen, S. Dutta, and R. Venable. 1997. "The Magnitude of Menu Costs: Direct Evidence from Large U.S. Supermarket Chains." *Quarterly Journal of Economics* 112:791–825.
- Macneil, I. R. (1978), "Contracts: Adjustment of Long-term Economic Relations Under Classical, Neoclassical, and Relational Contract Law", *Northwestern University Law Review*, 72, 854-905.
- McMillan, J. (2002), *Reinventing the Bazaar. A Natural History of Markets*, New York: Norton & Co.
- Ménard, C (2004), "The Economics of Hybrid Organizations," *Journal of Institutional and Theoretical Economics*, 160, 345 – 376.
- Ménard, C (2005), "A New Institutional Approach to Organization," in: C. Ménard and M. : Shirley (eds.) :*Handbook of New Institutional Economics*, 281 – 318, Dordrecht: Springer.
- Menger, C., (1883/1963), *Problems of Economics and Sociology*. Translated by F.J. Nock from the German edition of 1883. Edited by L. Schneider. Urbana: University of Illinois Press.
- Milgrom, P.R., North, D.C., and Weingast, B.W. (1990), "The Role of Institutions in the Revival of Trade: The Law Merchant, Private Judges, and the Champaign Fairs," *Economics and Politics*, 2, 1 – 33.
- Nicholls, W.H. (1951), *Price Policy in the Cigarette Industry. A Study of "Concerted Action" and its Social Control 1911 -50*, Nashville: The Vanderbilt University Press.
- North, D.C., 1981, *Structure and Change in Economic History*, New York and London: Norton.
- North, D.C. (1990), „A Transaction Cost Theory of Politics," *Journal of Theoretical Politics*, 2, 355 – 367.
- North, D. C. (2005), *Understanding the Process of Economic Change*, Princeton: Princeton University Press.
- Olson, M. (1965), *The Logic of Collective Action*, Cambridge, MA: Harvard University Press.
- Ostrom, E. and Ahn, T.K. (2003), "Introduction", pp. xi – xxxix in: E. Ostrom and T.K. Ahn (eds.) *Foundations of Social Capital*, Cheltenham, UK: Elgar.
- Podolny, J.M. and K.L. Page (1998) "Network Forms of Organization." *Annual Review of Sociology*, 24, 57 – 76.
- Posner, R. (2001), *Antitrust Law*, 2<sup>nd</sup> ed., Chicago: University of Chicago Press.
- Renner, E. and Tyran, J.-R. (2003), "Price Rigidity in Customer Markets" St. Gallen: Electronic Publication: Forschungsgemeinschaft für Nationalökonomie an der Universität St. Gallen: [www.fgn.unisg.ch/public/public.htm](http://www.fgn.unisg.ch/public/public.htm)
- Richter, R. (1954), *Das Konkurrenzproblem im Oligopol*, Berlin: Duncker&Humblot.
- Robinson, J. (1933), *The Economics of Imperfect Competition*, London: Macmillan.
- Saxenian, A. (1994), *Regional Advantage. Culture and Competition in Silicon Valley and Route 128*, Cambridge, MA: Harvard University Press.

- Schmidtchen, D. (1984), "German 'Ordnungspolitik' as Institutional Choice," *Zeitschrift für die gesamte Staatswissenschaft/Journal of Institutional and Theoretical Economics*, 140, 54 – 70.
- Schmidtchen, D. (1994), „Antitrust zwischen Marktmachtphobie und Effizienzeuphorie: Alte Themen – neue Ansätze, in: W. Möschel et al. (eds.), *Maktwirtschaft und Rechtsordnung*, Baden – Baden: Nomos-Verlag.
- Schmoller, G. v. (1900), *Grundriß der Allgemeinen Volkswirtschaftslehre*, München.
- Schotter, A., 1981, *The Economic Theory of Social Institutions*, Cambridge, MA.
- Schumpeter, J.A. (1942), *Capitalism, Socialism, and Democracy*, New York: Harper.
- Shapiro, C. (1983), "Premiums for High Quality Products as Returns to Reputations", *Quarterly Journal of Economics*, 97, 659-679.
- Shapiro, S. P. 1984. *Wayward Capitalists: Target of the Securities and Exchange Commission*. New Haven: Yale University Press.
- Smith, A. ([1776] 1976 *An Inquiry into the Nature and Causes of the Wealth of Nations*, Ed. by Edwin Cannan, Chicago, IL: University of Chicago Press
- Smith, V. (1962), "An Experimental Study of Competitive Market Behavior," *Journal of Political Economy*, 70, 111 - 137.
- Stackelberg, H. von (1934), *Marktform und Gleichgewicht*, Wien und Berlin: Springer.
- Stigler, G. J. (1968), Art. „Competition“ in: *International Encyclopedia of Social Sciences*, 3 New York: Macmillan, 181 – 182.
- Stigler, G.J. (1952), *The Theory of Price*, rev. ed., New York: Macmillan Co.
- Teece, D.J. (1992), "Competition, Cooperation, and Innovation. Organizational Arrangements for Regimes of Rapid Technological Progress," *Journal of Economic Behavior and Organization*, 18, 1 – 25.
- Telser, L. G. (1980), "A Theory of Self-Enforcing Agreements", *Journal of Business*, 53, 27-44.
- Telser, L. G. and Hogenbotham, H.N. (1977), "Organized Futures Markets: Costs and Benefits," *Journal of Political Economy*, 85, 969 – 1000
- Turner, D. F. (1962), "The Definition of Agreement Under the Sherman Act: Conscious Parallelism and Refusal to Deal," *Harvard Law Review*, 75, 655 – 766.
- Turner, J. H. and Maryanski, A. (1979), *Functionalism*, Menlo Park, CA: The Benjamin/Cummings Publ. Co. 1979
- Weizsäcker, C.C. von (2005). „Marktzutrittsschranken“, 43 – 61, in: P. Oberender (ed.) *Effizienz und Wettbewerb*,
- Williamson, O.E. (2005), "The Economics of Governance", *American Economic Review*, Papers and Proceedings, 95, 1 – 18.
- Williamson, O.E. (1975), *Markets and Hierarchies. Analysis and Antitrust Implications*, New York et al.: Free Press.
- Williamson, O.E. (1985), *The Economic Institutions of Capitalism*, New York et al.: Free Press.
- Zelizer, V.A. (1983), *Morals and Markets: The Development of Life Insurance in the United States*, New Brunswick, NJ: Transaction Publ.



