

Capital&Class



MODERNISATION
AND POWER

Misconceptions of power: From Alchian and Demsetz to Bowles and Gintis

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Is there any difference between Alchian and Demsetz's ultra-liberalism and Bowles and Gintis's radicalism? My answer is that, ontologically and methodologically, there is none. Their common neoclassical methodology results in the same conception of power as incompatible with Walrasian competition, and the sole difference between them concerns the extension of power and competition in reality. Notwithstanding Bowles and Gintis's labelling as 'radicals', their conception coincides with the liberal view that sees competition as a natural and universal mode of social interaction, rather than as the historical product of the process of commodification that characterises capitalism.

Introduction

In this paper, I critically discuss the debate on power within mainstream economics. In that debate, apparently opposite conceptions have been developed, spanning from the ultra-liberal view of Armen Alchian and Harold Demsetz to the radical approach of Samuel Bowles and Herbert Gintis, and including more moderate positions developed within transaction-costs economics, property-rights theory, and within part of the (old) institutional school. My thesis, however, is that the acceptance of neoclassical methodology (and its implicit ontology) that these

approaches have in common leads them to the same conception of power as being an exception to perfect Walrasian competition.¹

In the first part of the paper, I review the debate and single out the common methodological and ontological traits of these theoretical approaches to power. In the second part, I criticise this general conception by pointing out its theoretical contradictions and the mystified view of capitalist relations that it incorporates.

1. The debate on power within mainstream economics

The debate on power in modern economic literature starts formally in the 1970s in the domain of the theory of the firm, with the contrasting contributions of Stephen Marglin (1974, 1975) on the one hand, and Alchian and Demsetz (1972) on the other. The former argues that power relations play a decisive role in the organisation of the firm; the latter contend that formal authority within the firm is only an appearance that hides a reality of perfect reciprocal freedom. Ronald Coase's (1937) paper on the nature of the firm, however, forms part of the background to the debate. In that paper, Coase explicitly sets the mechanisms of authority and command within the firm against the market price mechanism as alternative modes of coordination.

1.1. Coase's starting point

Coase's paper, let us remember, is not about the nature of capitalist power relations, but rather deals with the nature of the firm in capitalism. Such a problem may appear trivial, for the firm is an integral part of the capitalist system and therefore, one might argue, the nature of the firm and of other institutions of capitalism can be understood by analysing the historical origin and developments of capitalism.

This problem, however, is anything but trivial if placed in the context of neoclassical economics—a context in which economic institutions are seen as universal and everlasting, just like the economic problem they solve: the allocation of scarce resources. In neoclassical economics, the firm and the market are just two alternative allocative mechanisms. The problem, however, is that in the general equilibrium model, coordination between isolated individuals both in

the sphere of production and in that of consumption takes place entirely within the market, which makes all other institutions economically redundant—the story told in order to describe the general equilibrium model sometimes makes reference to the firm and to other institutions (such as the family), but analytically, they are superfluous add-ons. This leaves the internal relations of the firm undetermined. As Paul Samuelson (1957: 894) put it, ‘in a perfectly competitive model, it really doesn’t matter who hires whom; so let labor hire capital’.

The general equilibrium model, like any theoretical model, is defined by a decision-making context (DMC) and an organisational structure (OS). The former defines the features of the world in which agents of the model live and interact; the latter defines the relations between them and the way in which they interact. The DMC of the Walrasian model is characterised by perfect information, full rationality and zero transaction costs. In this paper, I will refer to it as the ‘perfect’ DMC. The OS is a completely decentralised one, based on market relations and perfect competition.

Starting from the fact that the firm is redundant within the Walrasian model, Coase raises his scientific questions: Why do hierarchies exist in the market system? Where do power relations within the firm come from? These questions can be approached in many ways. Coase’s method consisted in exploring the reasons why authority and direction can be economically superior to market relations in a context of positive transaction costs. Methodologically, Coase thus rejects the perfect DMC, and investigates how OSs with some degree of centralisation might perform better than the Walrasian one.² Within this logic, Coase’s explanation of the nature of the firm insists on the existence within the firm of a relation of formal authority that is absent in the market. In one way or another, thus, Coase introduces a form of power into the neoclassical model and uses it to analytically characterise the firm as an institution that is qualitatively distinct from the market. If power is the ability to condition the behaviour of other individuals, then authority is the strongest form of power, for it implies that one subject orders and the other obeys. In terms of decision-making theory, *A*’s authority over *B* is expressed by *A*’s ability to restrict *B*’s decision-making to just one option.³

Theoretically, the introduction of authority as a specific coordination mechanism operating within the firm solves

the problem raised (that of the nature of the firm); but on the other hand, it cracks the harmonious vision of interpersonal relations provided by the general equilibrium model. From the viewpoint of the liberal doctrine (which is at the origin of neoclassical economics), the problem is thus to reconstruct a harmonious vision of spontaneous (and possibly Pareto-efficient) interactions in a context in which there exists, alongside the competitive mechanism of the market, a mechanism of command working within the firm.

Some forty years after its publication, Coase's paper has become the starting point of a new research programme which aims at explaining all the institutions of capitalism and their internal power relations. This research programme is developed in particular by the 'new institutional economics' school of thought and has, in my interpretation of that school, developed along two distinct lines. In the first approach, Coase's intuition has been developed by a denial of the existence of real authority relations within the firm, and by the explanation of the mechanism of command as a specific form of competition. The main exponents of this line of research are Alchian and Demsetz. In the second, the costs and benefits of competition and command have been analysed systematically in the attempt to determine virtues and vices of markets and hierarchies. Oliver Williamson's transaction-costs economics and the property-rights theory of Stanford Grossman, Oliver Hart and John Moore are the main contributors to this line.⁴ Outside the sphere of new institutional economics, research on power and the institutions of capitalism has been developed in particular by exponents of radical political economics such as Bowles and Gintis, and by exponents of the institutional school, such as Victor Goldberg. In the pages that follow, I discuss these theoretical positions and examine the reasons why acceptance of neoclassical methodology (and its underlying ontology) engenders a narrow conception of power, viewing it as an alternative mode of interaction with respect to Walrasian competition.

1.2. The contractual approach of Alchian and Demsetz

The idea that capitalism is characterised by the absence of any substantial power relations between individuals has been vigorously defended by Alchian and Demsetz (1972). Their paper is one of the most cited contributions on the subject

of interpersonal relations occurring within the firm, and has become the starting point of a new approach to the study of capitalist institutions. In their 'property rights approach', they explicitly deny the existence of any form of power or authority even in those contexts in which, according to many, they are clearly manifest.

Alchian and Demsetz consider production within the firm to be the result of the cooperation of individuals belonging to a team. The essential feature of team production is the impossibility of determining the relative contribution of each component of the team to final production, which makes it difficult (1) to fix an efficient level of remuneration for each of the different work activities, and (2) to prevent negligent and free-riding behaviours within the team (also see Alchian, 1987). Such difficulties raise a problem of monitoring. From the assumption that the benefits of monitoring (an increase in overall productivity) are greater than its costs (the wages of the monitor), it follows that there is an incentive to establish a monitor. The monitor, however, has no real power over the other members of the team, since he is subject to the same discipline imposed by market competition, in the sense that he would be replaced if another member of the team were to offer the same monitoring activity at a lower price. In this way, Alchian and Demsetz bring all the relations within the firm back to market relations and, in their discussion of the boss-worker relation, show that hierarchy within the firm is only apparent. This is how they discuss the boss-worker relation.

It is common to see the firm characterized by the power to settle issues by fiat, by authority, or by disciplinary action superior to that available in the conventional market. This is delusion. The firm does not own all its inputs. It has no power of fiat, no authority, no disciplinary action any different in the slightest degree from ordinary market contracting between any two people. I can 'punish' you only by withholding future business or by seeking redress in the courts for any failure to honor our exchange agreement. That is exactly all that any employer can do. He can fire or sue, just as I can fire my grocer by stopping purchases from him or sue him for delivering faulty products. (Alchian & Demsetz, 1972: 777)

According to Alchian and Demsetz, the reason why power relations should have no place in theory is that they do not

exist in reality. They claim, too, that the opposition between firms and markets is only illusory. The market is universal and perfect competition is always at work, even within the firm. The firm is nothing but a particular form of the market—one in which price is not continually re-bargained, though the outcome is as if it were.

This position has been abundantly criticised by Marxist historians and radical economists who, on the contrary, see the organisation of the firm as strictly dependent on the question of power (Braverman, 1974; Marglin, 1974, 1975; Edwards, 1979). But perhaps the best way to appreciate the limits of this approach is by following its internal development to its inevitable dead end.

Alchian and Demsetz's theory is not sufficiently general in the eyes of Michael Jensen and William Meckling (1976), since it explains only a limited type of firms (those based on team-production technologies). Hence they propose a more general theory based on the principal-agent relation. An agency relation is a contract by which the *principal* hires the *agent* to perform services on his behalf. The principal-agent problem emerges if information is asymmetric and if the optimal strategy of the agent does not optimise the utility function of the principal; the problem of the principal is thus to establish a system of incentives and/or to monitor the activity of the agent so to make the agent behave in accordance with his own optimal strategy. An equilibrium solution is one in which the principal minimises agency costs and the agent maximises utility (given the incentive system provided by the principal). In this framework, 'the "behaviour" of the firm is like the behaviour of the market; i.e., the outcome of a complex equilibrium process' (Jensen & Meckling, 1976 [1986: 216]). As in Alchian and Demsetz's work, the asymmetry between the parties is not assumed to be substantial, and competition in the job-market for managers ensures that they do not receive any rent for their activity as managers. In Alchian and Demsetz's theory, technology *requires* team production; in Jensen and Meckling's generalisation, technology (even when it does not presuppose team production) *requires* an agency relation. Needless to say, both technology and information are taken as given.

The point is pushed to its extreme consequences by Alchian's pupil, Stephen Cheung (1983, 1987a, 1987b, 1992). In order to deny the existence of power relations within the

firm, Cheung's solution is to deny the existence of the firm itself as an object of the social realm. In his view, what we generally call a 'firm' is, in fact, simply a complex nexus of market contracts. The firm is itself a sort of market, and is thus theoretically indistinguishable from it. Hence the concept of the *firm* is unimportant and theoretically useless. Nobody could be clearer on this than the author himself:

It is often the case that the entrepreneur who holds employment contracts (and it is not clear whether it is the entrepreneur who employs the worker or the worker who employs the entrepreneur) may contract with other firms; a contractor may sub-contract; a sub-contractor may sub-sub-contract further; and a worker may contract with a number of 'employers' or 'firms'. ... With this approach the size of the firm becomes indeterminate and unimportant. (Cheung 1987a: 57)

Elsewhere, he writes: 'The truth is that according to one's view a firm may be as small as a contractual relationship between two input owners or, if the chain of contracts is allowed to spread, as big as the whole economy' (Cheung, 1983: 17); and 'If we cannot in any meaningful economic sense identify "firms", as separate entities, we do not know what a firm is when we see one in the real world' (Cheung, 1992: 56).

Cheung's contribution is peculiar: he assumes that markets are universal and everlasting, and on this basis carries Alchian and Demsetz's approach to its logical conclusion. Faced with the inevitable conflict between his theory and reality, Cheung rejects, on theoretical grounds, the existence of the reality he wished to explain: in his theory of the firm, firms do not exist!⁵

1.3. *The transaction-costs economics of Williamson*

Williamson's contributions (1967, 1971, 1973, 1975, 1979, 1985, 1995, 1996a, 1996b; Williamson & Ouchi, 1983) constitute the most systematic attempt to approach the problem of institutions within new institutional economics. His market/hierarchies framework is explicitly defined within a deductivist methodology, and is developed by means of neoclassical analytical tools. Williamson, however, explicitly distances himself from the approach of Alchian and Demsetz:

'The argument that the firm "has no power of fiat, no authority, no disciplinary action any different in the slightest degree from ordinary market contracting" (Alchian and Demsetz, 1972, p. 777) is exactly wrong: firms can and do exercise fiat that markets cannot' (Williamson, 1996b: 33).

In Williamson's theory, firms are explained by determining the conditions that make a centralised OS more efficient than the market, in a context of positive transaction costs. His method can be described as follows. The author assumes 'for expositional convenience, that "in the beginning there were markets"' (1975: 20) and, through successive exercises in comparative statics, introduces non-market institutions, based on different forms of hierarchy, authority and power, every time the market fails to allocate resources efficiently. Finally, by interpreting these comparative-statics exercises as if they described a real historical process, Williamson provides his explanation of the existing institutional configuration of modern capitalist economies.

In this approach, markets and hierarchies are considered to be alternative instruments for the same end—to complete transactions—and their existence is explained in terms of their relative efficiency. If markets and hierarchies coexist in reality, it is because transaction costs prevent both of them from solving the entire allocation problem efficiently. Their relation is thus one of substitution. Once hierarchy is introduced, the (virtual) process of substitution proceeds until the economic benefits of centralisation exceed economic costs. In this way, Williamson explains not only the nature of the firm but also its boundaries, since the optimal degree of centralisation defines the optimal dimension of the firm.⁶

As a theoretical reference, the initial system of pure markets is defined in a context of zero transaction costs. In such an ideal context, as is well known, there can be market failures. The analysis of such failures, however, is not developed by Williamson. Instead, the zero-transaction-costs context serves uniquely as a reference for defining the contexts of positive transaction costs.⁷ Williamson thus focuses only on those market failures caused by transaction costs, leaving aside other kinds of market failures (Williamson 1975: 20). In principle, there is nothing wrong in abstracting from the zero-transaction-costs context, which is surely quite unrealistic. This, however, should not suggest that the existence of hierarchies depends on the existence of

transaction costs, since, as we have said, the market can fail in the zero-transaction-costs context as well.

Williamson's 'market and hierarchies' framework is built on three theoretical categories: (1) opportunism, (2) bounded rationality, and (3) asset specificity. The simultaneous presence of (1), (2), and (3) produces transaction costs and prevents any single institution from allocating resources efficiently. The advantages of hierarchy over the market stem from the fact that hierarchy (a) reduces opportunism (both by means of authority and by stimulating solidarity); (b) attenuates problems stemming from bounded rationality (by facilitating adaptive sequential decision-making processes in situations in which contracts on the contingent states of nature are not possible, and spot markets are risky); and (c) lowers bargaining costs caused by assets specificity (both through authority and by generating convergent expectations between the parties). The benefits of markets with respect to hierarchy are constituted by the incentive mechanism of competition, and by the growing diseconomies associated with hierarchical organisation.

The assumption of bounded rationality as an initial category of Williamson's framework is problematic and, as we will see, is abandoned in the developments of the new property-rights school. This assumption collides, in fact, with the fundamental assumption of Williamson's method, namely that institutional evolution follows economic efficiency. Put very simply, on the one hand individuals are supposed to be rationally bounded; but on the other hand, however, their *sub-optimal* decisions are supposed to select *optimal* institutional configurations. (General criticisms of Williamson's analysis of institutional evolution are developed by Mark Granovetter [1985] and Geoffrey Hodgson [1993].)

The first application of the market-and-hierarchies framework concerns the work relation. As Christos Pitelis (1991: 13) notes, this application is particularly important since it is only the work relation that can explain the emergence of hierarchies from a situation of pure markets. All the other applications of Williamson's framework—vertical integration, M-form, conglomerates—presuppose the existence of the firm, and thus deal with the problem of the *evolution* of the firm, not with its *origins*. The (hierarchical) work relation represents, in the story that starts with 'in the beginning there were markets', the first suppression of the market. All other changes in the internal structure of the

firm and in the relations between firms are *subsequent* and presuppose a certain degree of hierarchy, i.e. the existence of a work relation. If at *time 0* there were only markets, at *time 1* there are markets and hierarchical work relations, i.e. firms; then from *time 2* onward, all the more complex forms of power relations can develop.

The importance of the work relation in the explanation of the firm makes Williamson's framework unlike Alchian and Demsetz's approach: Williamson's framework implies (1) a clear-cut distinction between firm and market, based on the presence/absence of hierarchical relations; and (2) a distinction between the work relation and other economic relations (like the grocer-customer one).

1.4. The property-rights approach of Grossman, Hart and Moore

The new theory of property rights (or simply 'the theory of property rights') developed by Grossman, Hart and Moore finds its inspiration in the original contribution of Alchian and Demsetz (1972) but, at the same time, aims to overcome the lack of formal analysis of transaction-costs economics, whose arguments are developed mainly verbally (Grossman & Hart, 1983, 1986; Hart, 1987, 1988, 1989, 1990, 1995; Hart & Moore, 1988, 1990; Moore, 1992). As far as the issue of power is concerned, this theory is closer to the approach of Williamson—so much so that it is often presented as just a sophisticated version of it—and reaches, in many regards, quite opposite conclusions with respect to the original property-rights theory of Alchian and Demsetz.

As in transaction-costs economics, the property-rights school assumes an imperfect DMC in which contracts are necessarily incomplete. Contract incompleteness, however, depends solely on imperfect information, as in Alchian and Demsetz's approach—unlike in Williamson's theory, where it depends also on bounded rationality. According to Hart (1990), the problem is not that agents are not capable of conceiving of all possible contingencies, but rather that it is impossible, or extremely costly, for a third party (a tribunal) to verify the execution of the contract. In other words, individuals are not bounded in their cognitive abilities, but in their ability to communicate to a third party the terms of their agreement. Bounded rationality is thus unimportant for a theory of institutions. This thus overcomes the contradiction between rationally bounded individuals and

efficient institutional arrangements that characterises Williamson's framework.

The approach of Grossman, Hart and Moore starts from the so-called 'hold-up problem' discussed by Benjamin Klein, Robert Crawford and Alchian (1978), and formalised by Paul Groot (1984).⁸ Suppose that *A* must make an investment in order to transact with *B* and that this investment is relation-specific, i.e. it is less valuable in any use other than transacting with *B*. In this case, *A* is vulnerable to hold-up: once he has made his investment, knowing that such an investment is less valuable in other uses, *B* can force a price reduction. With perfect information, this problem might not arise because a complete contract is sufficient to protect *A* from *B*'s opportunistic behaviours. With incomplete contracts, however, it is costly for *A* to protect himself against *B*'s opportunism. Therefore, either he accepts these additional costs or he does not invest at all in the specific asset. In both cases, the result is inefficient. The efficient solution to this problem is integration between *A* and *B* into a unified firm. More generally, the authors argue that as assets become more specific and more appropriable, the possible gains from opportunistic behaviours increase, which, in their view, makes vertical integration more likely to be observed empirically.

Starting from an analysis of the hold-up problem, Grossman, Hart and Moore analyse the problem of when transactions should be carried out within a firm or through the market. They classify contractual rights into two categories: specific rights and residual rights. The former are the rights explicitly specified in the contract; the latter are the rights to use assets according to one's wishes in all cases not mentioned in the contract. Residual rights are conferred by ownership. The owner of an asset can decide how it should be used and by whom (within, of course, the constraints imposed by law and specific contracts). In particular, he is entitled to prevent the other party from using his assets in case of disputes. When the cost, for party *A*, of listing all specific rights over an asset of party *B* is high, it might be optimal for him to purchase all residual rights. In this way, by assuming the ownership of the specific asset, *A* acquires the residual rights of control over it and can dispose of it as he wishes.

With this classification, the authors provide a straightforward definition of the firm and of its boundaries with the market. A firm is identified with the physical assets

its owners control (Grossman & Hart, 1986; Hart, 1989; Hart & Moore, 1990; Moore, 1992). If two assets have the same owner, then they form a single, integrated firm; if they have different owners, then they form two separate firms, and the relation between them is a market one. Decisions about integration or non-integration are important because control over assets gives the owner decision-making power in case of unforeseen contingencies. This has consequences both on the ground of efficiency and on the grounds of power relations. From the viewpoint of efficiency, this approach studies the way changes in ownership affect the incentives of both workers and owner-managers. With respect to Coase's famous (1960) theorem, contract incompleteness here implies that the distribution of property rights has efficiency consequences. Grossman, Hart and Moore argue, differently from transaction-costs economics, that the relevant comparison is not one between the non-integrated outcome and the complete contract one. This would be to assume that integration yields the outcome that would arise under complete contracts. In a context of imperfect information and asset specificity, however, integration does not remove the incentives for opportunistic behaviour; it simply modifies them depending on which party purchases residual rights. In any case, opportunism creates distortions that prevent the theoretical first-best solution—defined under complete contracts—from being obtained. Therefore, the relevant comparison is between three necessarily inefficient situations: non-integration and integration, with either *A* or *B* acquiring residual rights.

Grossman and Hart (1986) analyse the case of the managers of two firms who, at date 0, sign a contract, and soon after make relationship-specific investments. At date 1, they then take proper production actions, on the basis of the specific investment made at date 0. In this case, it is possible to achieve the first-best solution only if production actions taken at time 1 are *ex ante* contractible. Otherwise, distortions arise and the two managers will choose suboptimal levels of investment. The problem is then to determine how residual rights should be attributed in order to minimise the economic consequences of these distortions within a second-best framework. This analysis is developed and generalised by Hart and Moore (1990). The authors formally define particular notions such as 'idiosyncrasy' and the 'essentiality' of an asset to an agent, the 'indispensability' of an agent to

an asset, the 'dispensability' of an agent, 'complementarity' and 'independence' of assets, and demonstrate a number of propositions about how assets should be owned and by whom. This allows the rectification, clarification and qualification of the results that have been reached by transaction-costs economists using purely verbal arguments.

Ownership of physical assets, however, is not only a matter of efficiency, but also one of power. According to this approach, the power of the boss over the worker is a consequence of his ownership of physical assets, within a context of imperfect information.⁹ As Moore (1992: 496-7) puts it, 'a boss exerts authority over workers because, in the event of a dispute, he can deny access to important physical assets'. This solves the paradox of Alchian and Demsetz's grocer, based on the assumption that the work relation is not qualitatively different from any other market relation.

When a customer 'fires' Alchian and Demsetz's grocer, the grocer (being a separate contractor) gets to keep the store; whereas if the grocer were an employee of the customer, the customer (the boss) could deny the grocer (the worker) access to the store, and could hire another grocer on the spot labor market. (Moore, 1992: 497)

1.5. The radical approach of Bowles and Gintis

The 'post-Walrasian' approach of Bowles and Gintis is an attempt to show that power relations are not confined within the boundaries of the firm, but exist in competitive markets as well (Bowles & Gintis, 1988, 1990, 1992, 1993a, 1993b, 1993c, 1993d, 1994a, 1994b, 2000; Bowles, 1985; Gintis, 1989; Gintis & Ishikawa, 1987). Bowles and Gintis define competition as a situation characterised by free entry and large numbers of buyers and sellers, but not by market clearing. With this definition, the authors demonstrate that even in competitive equilibrium (with non-clearing markets), a market economy sustains a system of power relations among agents (a competitive equilibrium is a situation in which actors are incapable of improving their position by altering variables over which they have control). This result is obtained by relaxing one of the assumptions of the Walrasian DMC that Bowles and Gintis (like Grossman, Hart and Moore) consider the most implausible: the assumption that contract enforcement by a third party is costless and unproblematic.

Bowles and Gintis (1993a: 325) define power as being 'the capacity of some agents to influence the behaviour of others to their advantage through the threat of imposing sanctions'. The absence of power relations in the Walrasian model is a consequence of the condition that supply equals demand, which implies that each agent loses nothing by abandoning his optimal transaction in favour of his next best alternative: in equilibrium, the cost to agent *B* of foregoing an exchange with agent *A* is zero, so that *A* cannot affect *B*'s wellbeing by terminating the relation. Hence, Bowles and Gintis continue, *A* has no power over *B*. More generally, the fact that in a Walrasian equilibrium no agent can impose sanctions on other agents implies that the economy works without any underlying power relation between agents.

If contract enforcement is problematic, however, the picture changes radically. Bowles and Gintis (1993a: 332) 'call an exchange *contested*, when *B*'s good or service possesses an attribute that is valuable to *A*, is costly for *B* to provide, yet is not fully specified in an enforceable contract'. When exogenous contract enforcement cannot be guaranteed determined by the monitoring and sanctioning mechanisms instituted by *A* to induce *B* to provide the desired level of the contested attribute. One such enforcement mechanism is *contingent renewal*: 'contingent renewal obtains when *A* elicits performance from *B* by promising to renew the contract in future periods if satisfied, and to terminate the contract if not' (1993a: 333).

A typical example of contested exchange is the employer-worker relationship, in which 'while the employer's promise to pay the wage is legally enforceable, the worker's promise to bestow an adequate level of effort ... is not' (Bowles & Gintis, 1993a: 333). Other examples studied by Bowles and Gintis are the relationships between owner and manager, lender and borrower, and between parties in international exchanges (Bowles, 1985; Gintis, 1989; Bowles & Gintis, 1990, 1993a, 1993d, 1994b). In all of these cases, competitive equilibrium is characterised by non-clearing markets, and agents on the *short side* of the market have power over the agents on the *long side* with whom they transact (where excess supply exists, the demand side is the short one, and vice

versa). The cause of this power relation is that the agents on the long side who are lucky enough to enter the relation with agents on the short side enjoy a 'rent' (defined as the difference between the utility they obtain thanks to the transaction and the utility they will have in case the transaction terminates), which is costly for them to lose. The fact that within imperfect DMCs, perfectly competitive markets do not necessarily clear thus produces an asymmetry between the two sides of the market which, in turn, conditions interpersonal relations between single buyers and sellers.

In the case of the work relation, employers are on the short side of the labour market and workers on the long one. Employers thus have power over workers and workers enjoy the so called 'employment rent' (similarly, Bowles and Gintis show that creditors have power over debtors and owners of enterprises have power over managers). This rent is the instrument by which the employer places the worker under constant threat (Gintis, 1976; Bowles, 1985; Gintis & Ishikawa, 1987; Bowles & Gintis, 1993d). It is, thus, the fact that unemployment is harder than work that confers on the employer a power of retaliation over the worker, and that makes the latter provide an adequate level of effort at work.¹⁰

Bowles and Gintis's theory indirectly sheds light on the theoretical consistency of Alchian and Demsetz's claim that intra-firm relations are power-free. In fact, within non-clearing markets, contrary to what Alchian and Demsetz assume, free contracting still engenders power relations between the parties. The problem of Alchian and Demsetz's approach can thus be seen as follows: to say that the firm is a form of (competitive) market is not sufficient to prove that intra-firm relations are power-free, simply because, as Bowles and Gintis demonstrate, perfectly competitive markets within an imperfect DMC can still involve power. If only Alchian and Demsetz had remained coherent with their imperfect DMC, they would have realised that, in an imperfect grocers' market, they could no longer fire their grocer at zero cost.

With respect to new institutionalism, Bowles and Gintis's theory provides a completely different picture of capitalism. Indeed, the authors show that, under general conditions, (non-Walrasian) competitive equilibriums are characterised by involuntary unemployment and by wage differentials based on gender or race (or on other characteristics that have nothing to do with productivity); that the democratic firm is superior to the capitalist one; and that capitalism is

technologically inefficient. But, most importantly, the result that power relations exist even under voluntary market exchange again collapses the picture of a harmonious society provided by standard Walrasian economics, and reconstructed by new institutional economics. Outside the Walrasian world, when markets do not necessarily clear the market can no longer be seen as an arena of free interactions devoid of coercion, as liberal political philosophy suggests. But notwithstanding these theoretical differences, Bowles and Gintis's conception of power coincides with that of new institutional economics: power is conceived of as a consequence of imperfections, and is analysed by introducing transaction costs in an otherwise perfect DMC.

1.6. The institutional perspective of Goldberg

Things are no different with Goldberg's (1980) theory, whose objective is to build a bridge between new institutional economics and radical economics (Goldberg's theory takes Williamson and Richard Edwards as spokespersons of these economic schools). Although close to the old US institutional tradition, Goldberg develops this exercise by following methodological individualism—a methodological choice that distances him from old institutionalism and the radical approach of Edwards, and makes his theory closer to the new institutional economics of Williamson. But first of all, let us consider Edwards's position.

By explicitly referring to Marx, Edwards reconsiders the distinction between labour and labour power (Marx, 1867): *labour power*, which is the commodity that the employer buys, is the capacity to perform certain types of productive activity; *labour* is the active, concrete process carried on by the worker. Actual labour activity is determined not only by labour power, but also by the ability of the employer to extract labour from labour power. In Edwards, as well as in Marx, this distinction is used to explain exploitation (exploitation is here seen as a manifestation of economic power).

The process of extraction of labour from labour power has been the object of a wide research programme within the Marxist-radical tradition (including Gintis, 1976; Gintis & Bowles, 1981). Edwards, in particular, notices that in this concrete process there might be a discrepancy between what the employer buys in the market and what he needs for production. In Goldberg's reading of Edwards, this

discrepancy is due to imperfections in the DMC. He thus assumes a DMC of imperfect information, opportunist individuals, costly contract enforcement, and historical time.¹¹ In such an imperfect DMC, the extraction of labour from labour power is problematic, since imperfections prevent the parties from precisely knowing, at the time of contracting, the labour that will be extracted in the labour process. This, according to the author, gives rise to discrepancies between *promise* and *execution*, making room for the exercise of power. In other words, Edwards's claim that the labour contract is exploitative is not interpreted as a consequence of the class structure of the economy as Edwards himself suggests, but is seen as a consequence of some empirical specificity of the work relation such as the fact that to work takes *time*. An empirical attribute of the work relation is so interpreted as the *cause* of power in capitalism.

But, Goldberg continues, a discrepancy between promise and execution can arise every time a relation between two parties is not instantaneous, as in the general equilibrium world. Therefore, it is not peculiar to the employment relation as Marxists contend, but characterises in varying degrees most exchange relations (Goldberg, 1980: 252–3). Goldberg thus concludes that power relations are not confined within the firm, since an incentive not to keep a promise can emerge in several types of contractual relations, even outside the firm.

Also in this case, power relations exist only if contracting is problematic, and problematic contracting is a consequence of imperfections in the DMC.

1.7. *The terms of the debate*

All the approaches discussed above share the idea that power relations exist only within imperfect DMCs. Authors explicitly adhering to the liberal doctrine believe that the perfect (Walrasian) DMC is the rule in reality. This, in their view, justifies the fact that economic theory ignores power relations, at least in its general formulation. By contrast, their rivals in the debate on power consider the Walrasian DMC as quite unrealistic. With asymmetric information, uncertainty, historical time, bounded rationality or other imperfections, they argue, interpersonal relations necessarily involve power.

Ontologically, these apparently competing theories develop the same conception of reality—a conception according to which the existence of power depends on the

features of the DMC in which agents interact. In a perfect DMC, there is no room for power relations: the internal structure of the firm is irrelevant, and competition clears all markets, therefore nobody can have power over anybody else. In imperfect DMCs, by contrast, intra-firm relations have an impact on the firm's performance, and markets do not necessarily clear. In these circumstances, power relations can emerge both within the firm and within the market. Thus in all these theories, imperfections are the *cause* of power relations. Eliminate them, these authors maintain, either implicitly or explicitly, and power relations disappear.

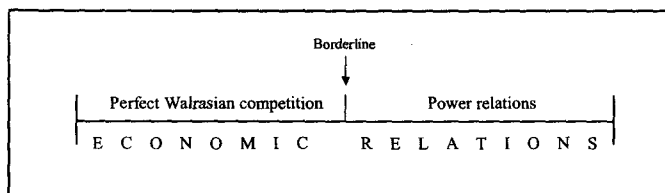
The problem of power is thus an empirical one, and its solution is to be found in the relevance of imperfections in the real world. According to this ontology, economic reality is split into two empirical domains: one with power, the other without it. Although this ontology remains mostly implicit in the discourse of mainstream economists, it is however the sole justification of the neoclassical methodology, according to which economic reality must be explained by two (incompatible but complementary) sets of models: a model of Walrasian competition, explaining the relations within the perfect DMC; and a set of models of economic power, explaining interpersonal relations within those parts of the system characterised by imperfect DMCs. (It goes without saying that the former defines the body of economic theory, whereas the latter serves uniquely to explain what the former cannot.)

This underlying ontology explains why the theoretical investigation of power relations starts from the firm, a domain in which hierarchy and authority are so evident as to be considered *the phenomena to explain*. In a first stage of the debate, the fact that, for a number of reasons, market relations have been depicted as power-free has led debaters to analyse economic power (within the firm) as an exception to the general model (of the market). This has led to the question of 'the boundaries of the firm'—as if the firm, with its authority relations, were in fact antagonistic to the market with its power-free relations. In this way, the obvious fact that the firm and the market are both essential institutions in capitalism (in the sense that no capitalist system can be conceived of without markets and firms) is lost. The successive step in the debate, consisting of questioning the assumption that power is effectively confined within the firm, has finally led authors to redefine the problem more accurately.

The theoretical question has then become: where are the boundaries of economic power? Or, to put it in the antagonistic terms of this approach: where is the demarcation line between power and power-free relations?

With this narrow definition of the problem, the sphere of existence of power relations and that of power-free relations can be represented on a segment expressing the whole set of economic relations, and by situating the borderline between power and Walrasian competition, with the convention that to the left of the borderline, interpersonal relations are regulated by Walrasian competition, and to the right, by economic power. If we let the borderline move from left to right, the sphere of existence of power relations is progressively compressed. As limit cases, if the borderline is at the left boundary of economic relations, we have a conception according to which power relations embrace the whole economy. If it is at the right boundary, we have a conception of the economy as involving no power relation, whose formal representation is provided by the general equilibrium model.

Figure 1. The boundaries of economic power



In this representational scheme, the approach of Alchian and Demsetz is the most radical one on the right-hand side. They see perfect competition everywhere, even when this mode of interaction is actually suppressed by other economic mechanisms. For this reason, they deny the existence of any power relation in the economy and compress the sphere of existence of power into the nil set. Their underlying DMC, however, is ambiguous. On the one hand, in order to explain the firm Alchian and Demsetz explicitly introduce imperfect information in the DMC; yet on the other hand, they implicitly assume a perfect DMC when they claim that the employer has no real power over his workers. Faced with this contradiction, the authors remain caught in the middle. Cheung, however, takes a

well defined route and, in order to coherently defend the thesis that there is no power in capitalism, comes back again to the perfect DMC—a context in which power relations disappear, but the firm disappears as well, exactly as in the general equilibrium model.

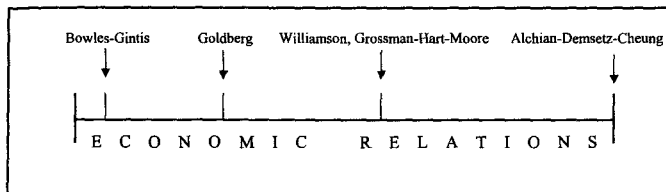
New institutional economists such as Williamson, Grossman, Hart and Moore, in open contrast with this position, recognise that power relations do in fact exist. They explicitly define imperfect DMCs in order to explain the firm and identify power relations with intra-firm relations. For this reason, they restrict the analysis of power relations to the particular forms that these relations acquire within the firm, namely authority and hierarchy. At the same time, however, they concede that outside the firm, in the market, there is no room for power. Like Alchian, Demsetz and Cheung, they thus assume that the boundaries of power coincide with those of the firm. Unlike them, however, Williamson, Grossman, Hart and Moore do not see the firm as a form of a (perfectly competitive) market, but rather as an alternative (and, under certain conditions, more efficient) allocative mechanism.

Bowles and Gintis on the one hand, and Goldberg on the other make a further step on the left and show that power relations exist even beyond the boundaries of the firm, to the extent that markets are imperfect. It is not clear whether Bowles and Gintis push the borderline between power and perfect Walrasian competition to the far-left boundary of economic relations. The authors explicitly contend that power relations are ubiquitous in real capitalist economies. This might suggest that there is no room for power-free relations in their conception. But this is only because they see imperfections as pervasive in the real world. Just as for their less radical colleagues, then, the sphere of existence of power relations coincides with the diffusion of imperfections in the DMC.

Therefore if, in a particular market, it happens that demand equals supply, then their theory implies that within such a subset of the economic realm, interpersonal relations are power-free.¹² Bowles and Gintis's theory, therefore, does not at all challenge the orthodox conception of power relations. Their radicalism consists simply in moving the borderline a bit more to the left. But at the same time, it is entirely internal to the logic of orthodox economics—a logic according to which imperfections are the *cause* of power relations.

Figure 2.

The terms of the debate



2. Critique

In this approach, power and Walrasian competition are conceived of as alternative modes of social coordination. Curiously, however, in concrete model-building they are treated asymmetrically: power is the scientific problem, the phenomenon to explain; (Walrasian) competition is a starting point, an assumption that deserves no scientific explanation. This asymmetry, however, has no theoretical justification. It is just the consequence of a mystified conception of the market and of its mode of coordination, namely competition. As William Dugger observes:

The neoclassical market is an act of God, not an act of man. It is natural rather than artificial. ... The natural market is beyond the will of humans. It is a product of nature existing outside of history. ... But the spontaneous market, the natural market, is an assumption. It is not a unit of enquiry, something to be investigated. Instead it is something to be assumed, taken for granted. ... The market is taken as the only real circulation process and the market is simply assumed to exist. It is viewed as a self-generated phenomenon, a product of immaculate conception and virgin birth. (Dugger, 1992: 89)

In all the research on capitalist institutions originated by Coase, the nature of the firm has been the problem to explain. The market, by contrast, has been seen as universal and everlasting, and its nature has never been seriously investigated. When the debate has shifted from the relations between firms and markets to the relations between power and perfect competition, power relations and authority—not perfect competition—have been the modes of interaction to explain.

The starting point of the debate is not a historical reality, but a theoretical model. In the general equilibrium model, the firm is redundant and power relations are invisible. These

are the scientific problems to solve. The history of capitalism is not the object of the enquiry. Rather, the problem is to introduce firms and power into a model that works perfectly without them.

In the debate on the nature of capitalist institutions this has raised questions such as: why does the firm exist? Where are its boundaries with the market? In the debate on power, things have been suggested less explicitly, but the underlying questions are of the same kind: Why do power relations exist? Where are their boundaries with Walrasian competition? But the true problem is that even if one follows this narrow conception, as I will show in a moment, there should be no methodological asymmetry between firms and markets, or between power and Walrasian competition. Why, then, assume the market in order to explain the firm and not the other way round? And when we move to the debate on any, power relations do not depend on imperfections. For this reason I consider a perfect DMC and show that OSS based on power relations have the same theoretical legitimacy as the Walrasian one, based on perfect competition.

Then I analyse imperfect DMCs by discussing first the attempt to show (or deny) the existence of power relations within the Walrasian OS; and second, the attempt to explain the existence of mixed OSS, based on both power and competition. Finally, I criticise the logic of this mode of explanation of capitalist institutions based on universal, rather than historical, categories.

2.1. The perfect decision-making context

Theoretically, there is no reason why, in the perfect DMC, interpersonal relations should be regulated by perfect competition. In principle, any OS can be defined within any DMC. For instance, in the same perfect DMC of the Walrasian model it is possible to define a central planning model, based on purely hierarchical relations, or even OSS with intermediate degrees of centralisation such as multi-planning models, based on both competition and power relations. Power relations are thus absolutely compatible with the perfect DMC, and their existence is not subordinated to the existence of imperfections.

If, within this approach to power, all authors implicitly or explicitly start from the general equilibrium model (by assuming both its Walrasian OS and its perfect DMC), it is only because they conceive of markets and perfect competition as natural and universal. So when, in the context of a theoretical exercise, they start from the perfect DMC, they find it natural to assume a perfectly competitive OS as well. And once they realise that the resulting model works without power relations, they do not even consider that the cause is in the OS they have defined. Instead, they question the features of the DMC. But in fact, methodologically, there is no need to abandon the perfect DMC in order to analyse OSs based on power relations; and the assumption of a natural, pre-existing OS based on perfect competition reflects more an ideological competition is uncritically accepted by us. (and even less it considered here, there are some differences in appraising its realism as an adequate representation of modern capitalist economies. On this issue there is a curious convergence between the opposite radicalisms of Alchian and Demsetz, on the one hand, and Bowles and Gintis on the other—both equally convinced that the Walrasian OS is a good approximation of the working of real capitalist economies. New institutional economists, instead, distance themselves from such an OS. In their view, capitalism is better represented by a mixed OS based on both Walrasian competition and hierarchical relations, and the analysis of the Walrasian OS serves only as theoretical reference—as a starting point for the explanation of non-Walrasian OSs, typical of real capitalist economies. Let us consider these theoretical positions in some of their details.

2.2. *The Walrasian organisational structure*

Alchian and Demsetz's and Bowles and Gintis's opposite forms of radicalism are both based on the assumption that the Walrasian OS adequately describes real capitalist systems. In their view, the problem of the general equilibrium model is not in its OS but rather in its DMC, which is too aseptic to describe real decision-making problems within modern capitalism. As Bowles and Gintis (1993b: 83) put it, standard Walrasian theory 'depicts a charmingly Victorian but

utopian world in which conflicts abound but a handshake is a handshake'. In such a world, all human relations are regulated by private contracts but contract enforcement problems do not really exist; or, as the two radical economists say, they are regulated by a simple handshake. They thus keep the perfectly competitive OS of the Walrasian model, but question the realism of the perfect DMC. Similarly, Alchian and Demsetz introduce imperfect information in order to explain the firm but, at the same time, describe the firm as a form of perfectly competitive market, exactly as in the Walrasian OS.

Where the two approaches diverge is in their interpretation of the resulting model of perfect competition within an imperfect DMC. Alchian and Demsetz contend that perfect (Walrasian) competition regulates interpersonal relations even within the firm. This, in their view, rules out any possible power relation from the economy. As we have seen, however, this position is theoretically inconsistent, since it presupposes that market relations are necessarily power-free. Bowles and Gintis, in contrast, demonstrate that in an imperfect DMC, even perfectly competitive markets necessarily involve power.

It is noteworthy that neither Alchian and Demsetz nor Bowles and Gintis engage in any defence of the realism of the perfectly competitive OS. They all identify capitalism with a highly decentralised system based on competitive relations, and do not provide any evidence that capitalism somewhere, in some epoch, did in fact resemble a decentralised model. Bowles and Gintis write: 'Of course, if economic conditions in advanced capitalist countries deviated sufficiently from the norms of free entry and exit to account for the observed incidence of economic power, the need for an alternative account would be unnecessary. We do not believe this is the case' (Bowles & Gintis, 1993a: 328, n: 14).

But beliefs are not arguments. Within the empirical investigations on the degree of competition of modern capitalist economies, a much cited work has been developed by Sarah Anderson and John Cavanagh (1996). To quote just one result of their statistical elaborations, if by 'economy' we mean both a corporation and a country, 'of the 100 largest economies in the world, 51 are corporations; only 49 are countries'. This should cast some doubt on the assumption that the OS of modern capitalist economies has something in common with the Walrasian one, based on perfect atomistic competition.

2.3. Mixed organisational structures

New institutional authors follow a slightly different path. They, too, start from the perfectly competitive os ('in the beginning there were markets', says Williamson); but rather than remaining attached to it, they try to explain how it 'evolves' according to the features of the DMC. Of course, this process of evolution does not occur in the real history of capitalism but only in the mind of the economist. The Walrasian os itself is not a real entity but a theoretical one. Differently from Left and Right radicals, new institutional economists thus question the realism of this initial os, and try to explain how mixed oss might have come into existence as the evolutionary product of such a hypothetical starting point.

Depending on the type of imperfections in the DMC, they argue, an os might be more or less efficient than another. Therefore, if one follows the principle that institutional evolution is guided by Pareto efficiency, the mixed os of real capitalist economies can be seen as a consequence of imperfections in the DMC, which prevents the initial Walrasian os from being efficient. Methodologically, this is a way to establish a causal relation between the features of the DMC and the evolution of the os. According to this logic, hierarchies and power relations have a reason to exist only to the extent that they provide economically superior results with respect to pre-existing perfectly competitive markets.

This methodology, however, creates more problems than it solves. A first problem is that this functionalist mode of explanation is based on the purely ideological assumptions that existing institutions are necessarily efficient (otherwise they would not exist), and that the status quo is the best of all possible worlds.¹³ This engenders an ambiguity in the normative or positive content of the theory. At first sight, the objective of the theory seems to be merely normative: the problem is not to understand the historical development of capitalist institutions, but rather to specify the conditions under which different institutions efficiently solve predefined economic problems. Thereafter, however, new institutional authors use their normative framework to explain reality as well, and assume that *if it is efficient, it is likely to be observed empirically*. With respect to economic historians, they thus go the other way round. They do not start from the past in order to *explain* the present; rather, they start from the present

and *assume* that the past was such that the present is economically superior to it. Economic historians, in their attempt to explain the course of history, provide a picture of the present made up of contradictions and conflicts. New institutional authors, instead, assume that the present is a coherent expression of economic efficiency and thus invent a story of Pareto improvements whose logical end is precisely the existing reality. If David Hume urged that it is not scientifically correct to deduce *what ought to be* from *what is*, here we have *what is* being deduced from *what ought to be*, which is no less methodologically unsound.

A second problem is that, as we have seen, in principle the Walrasian OS is only one of all possible OSs compatible with the perfect DMC. We must now try to understand why precisely such an OS should be taken as a starting point for comparative exercises out of the perfect DMC. It is only if the Walrasian OS were the sole OS to be efficient in the perfect DMC that it would be meaningful to explain the nature of power by means of imperfections. To this aim, before considering the imperfect DMCs of new institutional economics, we must discuss the implications of the new institutional methodology within the perfect DMC.

In the perfect DMC, the functionalist logic of new institutionalism is not sufficient to univocally determine an efficient OS. A well known theoretical result is that all the Pareto efficient allocations obtainable by a Walrasian OS are obtainable by a centralised OS as well. More precisely, it has been demonstrated that a model of perfect planning with purely hierarchical relations, formalised by the convex programming model, is perfectly compatible with Pareto efficiency (Kantorovich, 1965; Koopmans, 1951). The equivalency of these two OSs based on perfect competition and perfect authority can also be generalised to OSs with intermediate degrees of centralisation (such as OSs based on firms) as soon as one notices that shadow prices in the planning model can be used as signals for decentralised entrepreneurs in a multi-level planning OS, with hierarchical relations between the central planner and decentralised entrepreneurs, and competitive relations among the latter.

As I shall discuss later, the Walrasian and the centralised OSs are not equivalent, since the latter has some advantages over the former in the perfect DMC. For the moment, however, let us concede that they are entirely equivalent. This implies that, in the perfect DMC, it is impossible to explain the

coexistence of power and competition by means of comparative exercises. If one mode of social interaction appears first, no other mode should arise. This does not mean that it is contradictory to *assume* an economic system based on competition and power relations. What is contradictory, within the new institutional logic, is to *explain* power relations once a different mode of interaction is already assumed. Competition and power can both be assumed as starting points, but they cannot be explained as results of institutional evolution. The problem of the nature of power and competition should, therefore, either not be posed at all (since their existence must be assumed and cannot be explained), or else it should be posed for both of them (since they are theoretically symmetrical, each one being redundant as soon as the other is assumed).

Faced with these equivalency results, new institutional economists distance themselves from the perfect DMC. But with no analytical reason for it, they continue to assume the Walrasian OS as the starting point of their comparative exercises. As we have seen, the most explicit in this sense is Williamson, who assumes that in the beginning there were markets (a Walrasian OS), but assumes also opportunism, bounded rationality and asset specificity (an imperfect DMC). Having introduced imperfections in the DMC, competition and power can now be explained as efficient solutions to specific allocation problems. In the perfect DMC, equivalency results make this methodology insufficient to univocally determine an efficient OS. In the imperfect DMCs of new institutional economics, by contrast, general equivalency theorems do not hold, and the existing OS (with its forms of power relations) can thus be explained by means of exercises in comparative statics, provided that one initial mode of interaction is assumed to pre-exist. Of course, comparative statics assures that the 'final' OS does not depend on initial conditions. But the question remains: now that we have left the perfect DMC, why start from a system of complete markets and perfect competition and not, for instance, from the planning state and perfect authority?

Clearly the answer to this question cannot be sought in the perfect DMC since, as we have seen, within such a context the Walrasian OS has no special role to play. And yet, a new institutional economist might reply, neither is there any special reason to start from central planning. The curious thing, however, is that within this economic school nobody

follows the latter path, all unanimously agreeing that it is more 'convenient' to assume that in the beginning there were markets. But this is secondary. The point is rather that, upon more thorough scrutiny, this argument reveals itself as untenable. In fact, contrary to what we have assumed until now, central planning and perfect competition are not necessarily equivalent in the perfect DMC. If competitive equilibriums in the general equilibrium model are Pareto efficient, it is only because all factors that might prevent a competitive equilibrium from existing have been eliminated from the model by assumption. For instance, with increasing returns to scale (which can hardly be considered a rarity in the real world), competitive markets fail (whereas central planning does not). In this case, the Walrasian OS turns out to be incompatible with the perfect DMC (in the sense that, even if it accidentally came into existence, it would be at least partially superseded by some form of planning). This means that if we apply the methodology of new institutionalism within the perfect DMC, competition remains unexplained, whereas power can be explained as a solution to market failures. This suggests that when moving to imperfect DMCs, it might be more reasonable to start from a centrally planned OS rather than from a Walrasian one. And if, according to this logic, imperfections truly have something to explain, it should be competition, not power.

The problem is twofold: first, in assuming the existence of one primordial institution and one primordial mode of interaction, new institutional authors refrain from explaining them and thus treat them as universal; and second, by identifying this starting point with the system of perfectly competitive markets, they inevitably fall into a sterile idealisation of this institution and of its mode of functioning. Had they assumed an initial starting point of pure planning with rigid authoritarian relations, or one of a mixed institutional set-up with different forms of power, they would still have been unable to explain certain institutions of capitalism and their internal power relations, and the project would have been contradictory anyway. But the problem is that the choice of the market as a natural institutional arrangement is also apologetic, since it idealises the market and transforms it from a historically defined institution into a universal category. And the same applies to competition, which, instead of being considered as a mode of social interaction that is developed as a consequence of the historical

institution of private property, is transformed into a universal category, existing outside of history. And all this occurs without any theoretical reason.

2.4. Historical analysis and universal categories

The transformation of competition from a historical mode of interaction (typical of capitalism) to a universal category is a source of theoretical contradictions. As we have seen, according to mainstream economics power relations are caused by imperfections in the DMC such as bounded rationality, imperfect information, uncertainty, historical time and the like. But these imperfections are not specific to capitalism: they are features of all human relations in any historical context. Therefore, if we follow this logic, we must conclude that power relations are a constant of any social system. It is not the time to discuss whether this statement is right or wrong. For instance, Marxists argue that any society based on a certain division of labour and a certain specialisation of its members rests on a system of power relations (see Rueschemeyer, 1986; Sayer, 1995). The problem, however, is that within mainstream economics, the existence of power in human relations is not a consequence of the division of labour and of the forms of social coordination that this entails, but is a consequence of imperfections in the DMC. And since these imperfections have nothing to do with particular historical societies, it follows that power relations should be the same in all kinds of society.

But the truth is that market interaction and economic competition are not at all everlasting forms of social coordination. Markets have not always existed, and economic competition has become the main form of social coordination only in relatively recent times. The paradox is then the following: that on the one hand, mainstream economics recognises that power relations have existed even before the historical development of market relations and economic competition (since they are a consequence of universal qualities such as bounded rationality, uncertainty and imperfect information); but on the other hand, it conceives of them as a violation of Walrasian competition in a market system. In sum, according to this approach, power relations have always existed but have become visible only with the historical development of capitalism and the consequent

possibility of conceiving of a model of complete markets and perfect competition. In this sense, our theoreticians of power must consider themselves to be very lucky to live in the sole epoch in which everlasting power relations have finally become visible. But it is not difficult to understand that if pre-capitalist systems with less developed or completely absent market relations had not been regulated by Walrasian competition, it cannot be because of *market imperfections*, but because of a *lack of market relations*.

3. Conclusions

Although the approaches to power that I have considered differ to some extent, I have argued that in some relevant respects, they share the same general conception. This conception, however, has several implications that severely restrict the understanding of power relations in capitalism.

First, it starts from a theoretical model, not from a historical reality. Being an exercise in pure logic, it can at best solve the problems of the model (i.e. it can explain the nature of the firm and the role of power relations in a general equilibrium framework), but it cannot explain the nature of the firm and the role of power relations in the real history of capitalism.

Moreover, given that the firm is redundant in the general equilibrium model, its nature can be grasped only as being an imperfection of the market. In other words, if the model of perfect and complete markets works without the firm, the only way to coherently introduce the firm is by making markets imperfect and/or incomplete. Seen from the perspective of power relations this means that within this conception, power can only appear as an exception to perfect Walrasian competition.

Third, the fact that the market is a self-sufficient category in the general equilibrium model (in the sense that the model works without the need for any other institution) implies that the nature of the firm cannot be conceived of as complementary to the market. The relations between the firm and the market can only be relations of substitution: the eventual space reserved for the firm is a space taken from the market. But their different roles in the functioning of capitalism cannot be grasped. In turn, this relation of substitution between the firm and the market is at the origin

of a relation of substitution between power and Walrasian competition: if power extends its boundaries, Walrasian competition restricts its own.

Finally, the assumption that the market and Walrasian competition are initial categories makes this approach incompatible with a broader project aiming at explaining *all* the institutions of capitalism and all the modes of social interaction of this mode of production. In the neoclassical framework, the market and competition are not explained as the product of history. Rather, they are universal and everlasting categories.

Of course, the fact that this general conception is shared by authors belonging to different schools of thought, including those of institutional economics and radical political economics, does not imply that these economic schools unanimously take the general equilibrium framework as an explicit or implicit theoretical benchmark, nor that these schools share, more generally, the methodology of neoclassical economics. Indeed, much of the work developed by the institutional and the radical schools is in open contrast with the general equilibrium framework and the principles of neoclassical reasoning, and even some aspects of the more conservative new institutional economics arise as critiques of neoclassical economics. The kind of reasoning based on the definition of an abstract context of perfect and complete markets, however, has been accepted (sometimes only implicitly) well beyond the border of neoclassical economics. Within this general conception, power relations can be considered either as rare exceptions or as the rule in capitalism. But their scientific explanation remains based on the unjustified assumption that competition is a natural and universal mode of social interaction.

Notes

1. Throughout the paper, I follow Bowles and Gintis's distinction between 'perfect competition' and 'perfect Walrasian competition' (or simply 'Walrasian competition'). The latter implies market clearing, the former does not.
2. This approach, based on the introduction of imperfections in a general equilibrium framework as explanatory causes of inefficiencies in real capitalist economies, is also shared by new Keynesian economics. In the words of Bruce Greenwald

and Joseph Stiglitz (1993: 24), 'modern Keynesians have identified these real world "imperfections" as the source of the problem: leaving them out of the model is like leaving Hamlet out of the play'.

3. Within mainstream economics, the notion of authority is also referred to as 'hierarchy', 'verticality' or 'command'. In political writings, the term 'authority' is sometimes used to describe situations in which 'B complies because he recognizes that A's command is reasonable in terms of his own values' (Bachrach & Baratz, 1970: 34). This latter meaning finds its inspiration in Weber's (1968) conception of 'legitimate authority', which presupposes a consent to obeying commands.
4. In Palermo (2000), I argue that new institutional economics fails both its attempts (1) to theoretically characterise the capitalist firm, and (2) to analyse power relations in capitalism. In Ankarloo and Palermo (2004), we focus the critique on Williamson's transaction costs economics.
5. Gary Becker's (1992: 68) comment to Cheung (1992) is sharp: 'We generally know a firm when we see one'. Alchian and Demsetz themselves have finally admitted that intra-firm relations are qualitatively different from pure market ones (Alchian, 1984; Alchian & Woodward, 1987; Demsetz, 1988).
6. With respect to Alchian and Demsetz's approach, the demarcation line between market and hierarchy is a more problematic issue: the costs and benefits of different organisational structures do not depend solely on imperfect information, as in their approach. In Williamson, for every organisational structure there is an associated package of costs and benefits with respect to the three categories of opportunism, bounded rationality and assets specificity; and the choice of an organisational structure implies the choice of the entire package (Williamson, 1975: 130).
7. Transaction costs are never defined in Williamson's work. Quoting Kenneth Arrow's (not very precise) definition (1969: 48), Williamson writes of the 'costs of running the system' (Williamson, 1985: 18); and later, he defines transaction costs as 'the equivalent of friction in physical systems' (Williamson, 1985: 19). A rigorous definition of transaction costs is not provided by authors following Alchian and Demsetz's approach either: Cheung (1992: 51) defines transaction costs as the costs that would be absent in a Robinson Crusoe economy. According to Coase (1992: 73), Cheung's definition is too wide and imprecise, and derives from an incorrect interpretation of his 1937 article: 'If I were asked (when I came to be interested in transaction costs) to imagine an economic system in which transaction costs did not exist, it would be a completely communist society'.

8. Goldberg (1976a) had previously examined the hold-up problem in the context of government regulation.
9. As Hart (1995: 5) notices, 'given its concern with power, the approach proposed ... has something in common with Marxian theories of the capitalist-worker relationship'. Different from this approach, however, Marx's analysis of power relations within the firm and, more generally, in capitalism, has to do with ownership (of the means of production), but not with imperfect information.
10. There is a large convergence between this (neoclassical) stream of radical political economics, focusing on power relations originating in the process of extraction of labour from workers' labour power, and the efficiency-wages literature that focuses on workers' 'shirking', in the pre-sence of imperfect information and incomplete contracts (Akerlof & Yallen, 1986; Shapiro & Stiglitz, 1984; Stiglitz, 1987; Greenwald & Stiglitz, 1988; Bulow & Summers, 1986; Weiss, 1990; and for an evaluation of the new labour-market theories within new Keynesian economics, see Newbery and Stiglitz, 1987). In both cases, a wage higher than the market clearing one is seen as a device with which to induce the worker to work harder than she wishes. Rigorously speaking, this issue has to do with productivity, not with efficiency, for total output is increased by increasing the amount of one input: namely, labour.
11. In a previous contribution, Goldberg (1976b) discusses the implications of the introduction of historical time in a zero-transaction-costs context. In another paper, Goldberg (1974) observes that with the introduction of opportunism in the DMC, the problem is not only in understanding how people pursue their self-interest *within* the rules, but also how they allocate resources towards *changing* the rules to their private benefit. This can introduce distortions on the grounds of efficiency and invalidates the new institutional assumption that evolution follows efficiency. Within institutionalism, Goldberg's approach is developed by Ian Macneil (1980a, 1980b).
12. Elsewhere, I have developed an alternative conception of power relations within a Marxian perspective, and I have argued that capitalism is a *system of power* (Palermo, forthcoming). However, I would not locate my position on the far left boundary of economic relations since, as I will try to clarify, I find this antagonism between power and Walrasian competition untenable.
13. This Panglossian logic has been carefully questioned in modern biology, but is still easily accepted in economics. Within heterodox economics, it has been criticised in particular by authors belonging to the institutional and

evolutionary tradition (see Hodgson, 1991, 1993, 1994). The spread of QWERTY keyboards in computers, notwithstanding their technical inefficiency (once the mechanical technology of old typewriters was abandoned), is perhaps the most quoted example of a possible divergence between evolution and efficiency in a context of path dependency (David, 1985).

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