# BEHIND THE MARKET FACADE: AN ASSESSMENT AND DEVELOPMENT OF THE THEORY OF THE FIRM

Keith Cowling and Roger Sugden

No.413

WARWICK ECONOMIC RESEARCH PAPERS

DEPARTMENT OF ECONOMICS

UNIVERSITY OF WARWICK
COVENTRY

# BEHIND THE MARKET FACADE: AN ASSESSMENT AND DEVELOPMENT OF THE THEORY OF THE FIRM

Keith Cowling* and Roger Sugden**

No.413

June 1993

**Department of Economics
University of Warwick
Coventry
CV4 7AL

**Roger Sugden
Research Centre for
Industrial Strategy
Department of Commerce
The Birmingham
Business School
University of Birmingham
Edgbaston
Birmingham B15 2TT

# BEHIND THE MARKET FACADE: AN ASSESSMENT AND DEVELOPMENT OF THE THEORY OF THE FIRM*

Keith Cowling[+] and Roger Sugden[++]

June, 1993

+ Department of Economics, University of Warwick, Coventry, CV4 7AL, UK

++ Research Centre for Industrial Strategy, Department of Commerce, The Birmingham Business School, University of Birmingham, Edgbaston, Birmingham, B15 2TT, UK

Abstract:
Our aim is to begin the construction of an alternative theory of the firm. We consider the essence of a firm, its overall nature and what it is. To do so we appraise the seminal contributions of Coase, Alchian and Demsetz, and Williamson. We also examine recent debate on the modern corporation. The paper joins with Aoki, Coase and Simon in criticising an excessive concern with markets. It may be seen as a correction to the way in which Coase has been previously interpreted. Our perspective has two crucial features: rather than addressing the theory of the firm as an aspect of the analysis of markets, we analyse from strategic decision-making to the theory of the firm and the use of markets, both within and without firms; we emphasise distributional considerations and argue that capitalist firms disallow Pareto efficiency. The paper is concluded with an optimistic look at future possibilities.

[* We would like to thank Marco Bellandi, Christos Pitelis, Stan Siebert and Mike Waterson for helpful comments on earlier work underlying this paper.]

## I INTRODUCTION

The prime concern of this paper is to begin the construction of an alternative theory of the firm. The basic justification for this is that, even though the theory of the firm is the subject of an extensive literature dating back many years and including various seminal contributions, there remain fundamental limitations with current analysis. We will base our ideas on an assessment of existing literature; making extensive reference to a wide range of contributions, limitations in current thinking will be revealed in a detailed examination of seminal analysis by Coase, Alchian and Demsetz, and Williamson, and in a consideration of recent debate.

We will suggest a new definition of the firm, thereby begin to outline an alternative set of questions for the theory of the firm and, in the light of our definition begin to provide some answers to these questions. Our contention is that all of this will point to a sometimes subtly yet nevertheless radically different analysis compared to that currently commanding widespread acceptance within mainstream economics.

Whilst we will develop the foundations of an alternative theory, we will join with Aoki (1990a), Coase (1991c) and Simon (1991) in their recent criticisms of excessive concern with markets and exchanges. For example Coase (1991c) reflects that there has been "an undue emphasis on the role of the firm as a purchaser of the services of the factors of production and on the choice of the contractual arrangements which it makes with them. As a consequence of this ... economists have tended to neglect the main activity of a firm, running a business" (p.65)[1]. For Simon (1991), classical and neoclassical theory, and the new institutional economics, put markets and exchanges on centre stage. In contrast he suggests that "the economies of modern industrialised society can *more appropriately* be labelled *organisational* economies than market economies" (p.42, emphasis added). See also Marglin's (1991) rejection of mainstream theory and Chandler's (1992) observation

1. Coase's point is taken up in Aoki (1990a).

that"the unit of analysis must be the firm, rather than transactions or contractual relations entered into by the firm" (p.99), an argument he sees as in line with writers on the evolutionary theory of the firm, notably Nelson and Winter (1982).

Whereas the concern of much existing analysis is essentially to incorporate the firm into the market, we will see the modern corporation as incorporating more of the market into the organisation, the firm. In the absence of purposive government policy, we see the long-term evolution of capitalist market economies as dictated by the strategic decisions of large and dominating organisations. It is the concentration of decision-making power within these organisations that shape the characteristics of capitalist markets. For us,markets are rooted in organisations, not vice versa.

However our agreement with Coase and Simon in criticising contractual theory does not extend to agreeing with their view that replacing the market mechanism by organisational coordination is essentially an efficiency calculus. Rather we will argue that capitalist firms disallow Pareto efficiency. Their organisation and structure is dictated by the wishes of strategic decision-makers, inevitably implying that choices are motivated by distributional issues and therefore do not yield Pareto improvements. This view is in line with Cowling (1982) and Marglin (1991), see also North's (1991) analysis of different economic performance across economies and over time[2].

We will explore these arguments in six Sections. The seminal contributions by Coase, Alchian and Demsetz, and Williamson will be in turn the concern of Sections III to V, respectively focusing on the definition of the firm, market and non-market activity, and transactions costs. Section VI will consider recent

---

2. "When economies do evolve ... nothing about that process assures economic growth. It has commonly been the case that the incentive structure provided by the basic institutional framework creates opportunities for the consequent organisations to evolve, but the direction of their development has not been to promote productivity-raising activities. Rather, private profitability has been enhanced by creating monopolies, by restricting entry and factor mobility, and by political organisations that established property rights that redistributed rather than increased income", North (1991) pp.109-110.

debate, more specifically: Aoki's (1990b) discussion of Japanese firms - important for the attention they are receiving and because of the challenging contention that they are fundamentally different from other firms; and Sabel's (1988) view that major corporations are currently reorganising into substantively different forms. It will then be left to Section VII to conclude with a summary and with an optimistic look at future possibilities. Before all of this, however, Section II will briefly position our concerns in the context of the wider literature.

## II THE WIDER LITERATURE

Our paper is not a comprehensive survey of the theory of the firm. It neither comments nor purports to be based upon all of the literature, and it does not cover all aspects of the theory. In line with this, we are not looking for broad themes in the literature and not attempting a synthesis. Nor are we proposing a categorisation of theories. We suggest that readers wishing to review the theory more widely may find it stimulating to begin with Putterman (1986), and Holmstrom and Tirole (1989)[3]. Putterman presents a selection of mainstream and radical material from leading contributors, and himself provides an interesting overview looking at differences and similarities in the literature. The overview identifies themes and depicts a spectrum of theorists from neoclassical to Marxist, via Simon and Williamson, Bowles, Edwards and Marglin. In contrast Holmstrom and Tirole (1989) focus on formal theorising by the mainstream, more specifically on contracting in the presence of asymmetric information.

Useful categorisations of the literature can be found in Bowles (1985) and Chandler (1992). The latter identifies four sets of "established theories" (p.85): neoclassical, principal-agent, transactions costs and evolutionary. Of these, we comment in depth on the transactions approach. Using the Bowles classification, our concern in Sections III to V is to assess seminal contributions in the neo-Hobbesian tradition and to do so by drawing on a wider literature, particularly Marglin's

3. Also useful is Pitelis (1991), providing a survey of mainstream and radical contributions as part of an attempt to develop a synthesis.

Marxian[4] analysis[5]. Following Williamson (1990)[6], an alternative nomenclature sees our critical assessment of Coase, Alchian and Demsetz, and Williamson as an assessment of key contributions to the contractual theory, an approach which views firms as a nexus of contracts or of treaties[7]. According to Williamson (1990), "whereas the neoclassical theory of the firm mainly withstood assaults by new managerial theories (Baumol, 1959; Marris, 1964) and the behavioral theory of the firm (Cyert and March, 1963), more recent work, in which a quasi-contractual approach to the theory of the firm is employed, has made substantial headway" (p.1).

In line with this, by using an appraisal of Coase, Alchian and Demsetz, and Williamson for the beginnings of an alternative theory, we are basing our ideas on identified shortcomings in mainstream analysis. Our specific aim is to consider the essence of a firm, its overall nature and what it is. When addressing these issues, the mainstream essentially root their analysis in Coase (1937), Alchian and Demsetz (1972) and Williamson (1975). This is seen in Holmstrom and Tirole (1989), for instance: when surveying "the limits and nature of firms" they examine Alchian and Demsetz (1972) as the starting point for a discussion concentrating on Grossman and Hart (1986) and other contributions to the incomplete contracting literature.

As a corollary to these points, our discussion does not focus on all aspects of even mainstream theory of the firm. For example we do not explicitly address the contractual literature on either the alleged separation of ownership and control or corporate financial structure, an issue heavily influenced by the principal-agent

4. Following Putterman (1986) Marglin's work may be classified as "radical" rather than Marxian.

5. Bowles (1985) identifies three categories of literature on the internal organisation of firms: Walrasian, neo-Hobbesian and Marxian.

6. See also Conyon (1992).

7. The term nexus of contracts is associated with principal-agent theory, a strand of the contractual approach. According to Putterman (1991), Williamson (1990) prefers the word treaties because it "is meant to emphasise that the relationships between parties to the enterprise coalition are primarily self-enforcing ... and that a multidisciplinary approach, to include sociology and political science, may be warranted" (p.1202). Another view may be that replacing "contracts" with "treaties" enables Williamson to classify, for example, Aoki (1990a) as within the contractual approach, despite Aoki's reservations about an excessive concern with contracts in the theory of the firm.

analysis associated with Jensen and Meckling (1976). However we do implicitly comment on a wider literature; our fundamental observations about contractual analysis apply more broadly. For example we suggest that, rather than identifying the distinctive features of firms, a tendency in mainstream analysis is to be concerned with incorporating the firm into the market; this approach can not only be seen in Alchian and Demsetz (1972), as we will show in Section IV, it can also be seen in the likes of Jensen and Meckling (1976)[8].

## III THE DEFINITION OF THE FIRM; COASE

An obvious starting point for a theory is to define a firm. This is considered by Coase (1937), the ideas in which are also discussed in Coase (1991a, 1991b, 1991c and 1992)[9].

Coase's starting-point is the idea that production is coordinated by the price mechanism (markets) and the task he sets himself is to explain why alternative means of coordination (firms) arise. His concern is to consider why firms exist "in a specialised exchange economy in which it is generally assumed that the distribution of resources is 'organised' by the price mechanism" (Coase, 1937; p.393). His explanation is set in terms of saved transactions costs. Coase (1992) sees firms as "planned societies" (p.715). It is argued (p.716) that "to have an efficient

8. Having argued that it is correct to "emphasise the role of contracts as a vehicle for voluntary exchange" (p.310) within firms, Jensen and Meckling (1976) go on to argue: "The private corporation or firm is simply one form of *legal fiction which serves as a nexus for contracting relationships and which is also characterised by the existence of divisible residual claims on the assets and cash flows of the organisation which can generally be sold without permission of the other contracting individuals*. While this definition of the firm has little substantive content, emphasising the essential contractual nature of firms and other organisations focuses attention on a crucial set of questions - why particular sets of contractual relations arise for various types of organisations, what the consequences of these contractual relations are, and how they are affected by changes exogenous to the organization. Viewed this way, it makes little or no sense to try to distinguish those things which are 'inside' the firm ... from those things that are 'outside' of it. There is in a very real sense only a multitude of complex relationships (ie, contracts) between the legal fiction (the firm) and the owners of labour, material and capital inputs and the consumers of output" (p.311).

9. Demsetz (1991) describes Coase (1937) and Knight (1921), which is explicitly criticised in relative detail in Coase (1937), as "the only two works ... about the theory of the firm that have altered the perspectives of the [economics] profession" (p.159) from 1776 until 1970.

economic system it is necessary not only to have markets but also areas of planning", ie firms.

For Coase (1937), the essence of the firm is that it is the means of coordinating production - seen as a set of transactions - without using market exchange. He argues that "outside the firm ... production ... is coordinated through a series of exchange transactions on the market. Within a firm these market transactions are *eliminated*" (p.388, emphasis added). Hence a pure Coasian definition sees firms as the means of coordinating production without using market exchange. Coase's argument is that a firm "consists of the system of relationships which comes into existence when the direction of resources is dependent on an entrepreneur" (Coase, 1937; p.393); it is made clear in Coase (1991b) that, by entrepreneur, he means "the hierarchy in a business which directs resources and includes not only management but also foremen and many workers" (pp.58-59).

The idea of firms as means of coordinating production is acceptable (with a qualification[10]). For the purposes of developing an alternative approach there is also some value in initially assuming that production entails a set of transactions. However we reject at the outset the focus on market versus non-market activity.

In querying this dichotomy we are not alone. For instance Imai and Itami (1984) talk of non-market exchange using "market principles" whilst agreeing that market exchanges occur only between firms or between firms and consumers. See also Brown (1984) on firm-like behaviour in markets, Demsetz (1991) on when a nexus of contracts is more firm-like, Richardson (1972) on inter-firm cooperation and Williamson (1991a, 1991c) on hybrid forms of organisation. But our concerns go much deeper than these, challenging the widely accepted reading of Coase (1937) at a more fundamental level. Moreover in doing so we recognise that Coase himself draws a less sharp distinction between market and non-market transactions than first reading

---

10. In practice firms are also means of consuming goods and services but, as a first approximation, concentrating on production is useful.

of his 1937 paper may suggest. Refuting criticism in Klein, Crawford and Alchian (1978) and in the context of franchising, it is made clear in Coase (1991b) that a firm can actually include market transactions. He observes that "over the years I have come across numerous examples of markets found within firms, but one which particularly amused me was the discovery of a kind of market operating in the heart of a nationalised industry in England, the electricity supply industry .... An analogous situation may, of course, be found within a privately owned firm in which separate departments of divisions may supply one another as a result either of instructions from a higher authority or of what are essentially market transactions between them. When there are extensive market transactions, the question has been raised as to whether we are dealing with a single firm or a group of associated firms. *No doubt for some purposes it is better to think of a single firm* and for others as a group of firms. But if we do think in terms of a single firm, *it is clearly one in which some transactions are coordinated by the price mechanism* ... and not as a result of administrative decisions" (p.55, emphasis added). To this extent it may be argued that the difference between Coase and ourselves is one of emphasis; Coase's position on the market/non-market distinction has similarities to our own. Indeed our analysis may be seen as a reinterpretation of Coase, to some extent, and as a correction to the way in which Coase has been previously interpreted. However this does not deny that, in the 1937 paper, Coase's concern is to focus on the essence of the firm, that he sees the essence as confining firms to non-market transactions, and that we dispute this point.

Focusing on the type of transaction used in production - be this market, non-market or any other, perhaps composite type - is to focus on an essentially superficial attribute[11]. It ignores the important insight that, insofar as production entails transactions, the crucial factors distinguishing transactions are their essential qualities. The very nature of a transaction is what matters. Whether or not the market is involved is of no fundamental relevance; it should be

11. This is not to deny that the choice of transaction type can have important implications, see for instance the discussion of putting-out system versus factory in Section Vii.

some underlying qualities which are the foundation for analysis because it can only be the essential characteristics which really distinguish transactions. This approach corresponds to that used by Marglin (1974, 1984, 1991) in his discussion of transition from the putting-out system to factory in the English textile industry. Marglin focuses in detail on what is happening in production, in particular on control of the work process, and does not get diverted into the market/non-market distinction.

Hence a key problem in devising a better theory of the firm is to determine the essential characteristics distinguishing transactions. With this in mind, particularly interesting has been the concern of a very extensive literature with firms' decision-making. This literature is significant because analyses of decision-making tend to concentrate directly on what is actually happening when production takes place; they tend to go to the heart of production, cutting through superficialities. Such an incisive approach is precisely what we need for an alternative theory.

In general, the concern with decision-making is seen in such seminal works as Simon (1959), arguing that satisficing is the norm, and Cyert and March (1963), which develops an analysis closely associated with all behavioral theories of the firm. Decision-making is at the heart of many contributions to the literature in the organisational behaviour and management theory traditions, a point reflected in Drucker (1961), Channon (1979), Andrews (1980), March (1988) and Butler (1991). More specifically - and for us more importantly - it is seen in analyses of the control of firms.

Following Zeitlin (1974), control implies the ability to determine broad corporate objectives despite resistance from others. In other words, to control is to have the power to make decisions over strategic issues and hence to take a firm in a particular direction even though others would prefer something different. This is not to say that what actually happens in production is determined solely by these strategic decisions. Rather, they are the pinnacle of a hierarchical system of decision-making. They constrain the operational, day-do-day decisions over such tactical issues as the choice of a particular project from a subset of alternatives. Moreover they also constrain the choices made by everybody in a firm over work intensity, etc. Thus what actually happens in production is determined by all three sets of decisions. Nevertheless it is the strategic decisions which play the prime role because, by definition, they determine a firm's broad direction, see Pitelis and Sugden (1986).

What all of this suggests is that the concept of strategic decision-making goes to the core of the way in which production is carried out in a firm. It implies that the crucial distinguishing feature of transactions within a firm is that they are subject to strategic decision-making from one centre. This view has some similarities to Coase (1937), given the latter's focus on hierarchical direction. However the concern with strategic decision-making as against a hierarchy which "includes ... management ... foremen and ... workmen" is a discriminating focus on the prime determinants of a firm's activity. Indeed it also leads us to the suggestion that whilst we have thus far been content to go along with Coase's focus on transactions, and without denying that recognising their presence can provide important insights into an understanding of firms' activities, this is not something to be retained in a definition concentrating on the real essence of a firm. What really matters is strategic decision-making. Thus we not only reject the Coasian focus on market versus non-market activity, we reject the focus on transactions. Our concern is to analyse from strategic decision-making to the theory of the firm and the use of markets. Looked at in this way, the firm is not essentially about a set of transactions. Rather it is essentially about strategic decision-making. This is in stark contrast to Coase, who explicitly analyses from markets to firms. Furthermore our rejection of the market/non-market dichotomy and of the transactions focus are related; it is because Coase starts his analysis with the view that production is coordinated by the price mechanism that he focuses on transactions.

Accordingly, based on the above discussion we propose the following alternative definition: a firm is the means of coordinating production from one centre of strategic decision-making[12].

To explore our definition consider a simple illustration. Suppose an economy is characterised by one consumption good being produced without any market exchange and under the coordination of an operation with centralised control. The pure Coasian approach sees this operation as a firm: it is the means of coordinating production, there is no market exchange, and therefore it is "the means of coordinating production without using market exchange". We, too, would see the operation as a firm, but because of the centralised control. However the critical difference between the approaches is seen by relaxing one of the simplifying assumptions: suppose now that there are market exchanges in production. For instance, if the consumption good is clothing, one stage of production may require the putting together of a sales catalogue containing samples of the cloth used. One possibility is to bring workers into a factory, where their job is to glue squares of cloth onto a piece of card. From the pure Coasian perspective this would be a non-market activity. Another possibility is to subcontract the work to homeworkers. From the pure Coasian view this would involve a market exchange. Such a transaction would therefore fall outside the ambit of a pure Coasian firm but insider the ambit of a firm as we see it. Our view is preferable because production is still being coordinated from one centre of strategic decision-making whether or not there is a market exchange. In ignoring this, the pure Coasian approach denies the especially important role of strategic decision-making in coordinating production. We suggest that the pure Coasian concern with superficial attributes misrepresents the activities of firms and can lead to misunderstanding and error, for instance underestimating the span of a particular firm's production and consequently, perhaps, underestimating the extent of concentration in an economy (amongst other things).

---

12. It is within this perspective that we examined the activities of transnational corporations in earlier work, see Cowling and Sugden (1987a, 1987b).

## IV MARKET AND NON-MARKET ACTIVITY; ALCHIAN AND DEMSETZ

The juxtaposition of firms and markets as means of coordinating production is, in our view, a misunderstanding that has characterised most theory of the firm over the last fifty and more years. As a consequence, that theory has been fundamentally flawed, a point that can be illustrated by studying the influential Alchian and Demsetz (1972).

The two allegedly crucial questions asked in Alchian and Demsetz (1972) are as follows:

(1) why organise team production in a firm rather than use markets?;

(2) when organising team production in a firm, why choose one form of organisation rather than another?

Their answers focus on cooperation and mutual benefit.

For Alchian and Demsetz (1972) the power of fiat is not a distinguishing feature of firms as against markets, a polar view from which Williamson (1991) suggests both Alchian (1984) and Demsetz (1991) have since withdrawn. Nevertheless they argued in (1972) that a firm "has no power of fiat, no authority, no disciplinary action any different in the slightest degree from ordinary market contracting" (p.777). Thus the power to manage workers is "exactly the same as one little consumer's power to manage and assign his grocer to various tasks" (ibid). Essentially, they see transactions within a firm as having the same character as transactions on a market and they see all transactions being on terms which benefit all transactors. In line with this, their answers to questions (1) and (2) are that the choice is made so that each team-member can gain from savings on transactions costs associated with "metering problems"[13], although compare Demsetz (1991), arguing (p.167) that it is "not differences in transaction cost" that Alchian and Demsetz (1972) rely on to explain the organisation of firms. Metering problems refer to the desirability of organising production to avoid rewards either unrelated

---

13. Alchian and Demsetz conclude in their summary that metering "productivities to match marginal productivities to costs of inputs and thereby to reduce shirking can be achieved more economically (than by across market bilateral negotiations among inputs) in a firm" (p.794). This suggests transactions costs are the real issue.

to productivity - otherwise "no incentive to productive effort would be provided by the organisation" (Alchian and Demsetz, 1972; p.778) - or negatively related to productivity - otherwise "the organisation would be subject to sabotage" (ibid). Their focus on metering stems from their concern with team production, where metering is seen to be especially difficult.

### IV.i Alternative questions to Alchian and Demsetz

The first thing to realise is that Alchian and Demsetz are concerned with a comparatively restricted concept of production, namely team or non-separable production, defined as where person i's marginal product varies with a change in input from person j. Our definition of a firm entails a broader concept. In this respect we are in line with, for instance, Williamson (1975), which in fact suggests that "non-separabilities are much less widespread than is commonly believed" (p.49). Ignoring this difference, however, when focusing on team production are the Alchian and Demsetz questions relevant?

We see firms as encompassing market and non-market transactions. On the face of it, trying to explain the organisation of team production in a firm rather than via markets is therefore fundamentally flawed; production is simply not coordinated by firms rather than markets. To question the use of firms versus markets would only make any real sense - and even then it would be deceptive - if firms only ever contemplate organizing their team production via non-market methods. But if it makes sense to contemplate market organisation of team production at all - and clearly Alchian and Demsetz think it does - then it makes sense for a firm to contemplate the organisation of its team production via both non-market and market means.

Having said this, the question Alchian and Demsetz pose is a specific form of the more general query: why organise team production in a firm rather than outside a firm? Their specific form simply follows from their view of markets and firms as alternatives. For us the specific form of the general question is: why coordinate team production from one centre of strategic decision-making rather than in some other way? This is the question we ask in place of their (1).

As for their second question, this is relevant in our approach. However in our analysis it raises some issues which Alchian and Demsetz cannot accommodate. For instance it includes the following: when organising team production in a firm, why do so using a non-market rather than a market method? This has no place in the Alchian and Demsetz analysis.

### IV.ii Alternative answers to Alchian and Demsetz

Their grocer analogy reveals that Alchian and Demsetz see all transactions as having essentially the same nature. For them, whether or not a market is used makes no difference on this count. Their approach consequently has similarities to ours, insofar as we recognise that a non-market transaction can have the same character as a market transaction. But the approaches are very different. Alchian and Demsetz (1972) essentially reduce the firm to an element of the market; when they peer into the black box of Walrasion theory they only see more of what is on the outside. Thus firms are seen as having no essential, distinguishing characteristic[14]. We see firms as including market transactions; these have the same character, for us, as other intra-firm transactions. However we suggest that market transactions outside the firm have a different character. Like intra-firm transactions, they are still power relations: a market transaction outside a firm is crucially concerned with power, ie the terms of the relation are based on the power of the transactors. Nevertheless this is not the same power relation as exists within a firm.

Consider a comparison between an intra-firm (market or non-market) transaction and an inter-firm (market) transaction. This comparison is in issue when asking

14. According to Klein (1983), "Coase mistakenly made a sharp distinction between intra-firm and inter-firm transactions, claiming that while the latter represented market contracts the former represented planned direction. Economists now recognise that such a sharp distinction does not exist and that it is useful to consider also transactions occurring within the firm as representing market (contractual) relationships. The question what is the essential characteristic of a firm now appears to be unimportant" (p.373).

why coordinate team production from one centre of strategic decision-making rather than in some other way? Both situations involve power relations but the forms of power relation differ. Relations within a firm can be conceptualised by focusing on the three tiers of decision-making determining what happens in production. The amount of a good produced, how it is produced, etc are determined by decisions at the three levels: strategic, operational and working. The relation between the decision-takers is essentially described by the nature of the decisions. The owner/manager of a grocers, for instance, will make both strategic and operational decisions over production, leaving the sales assistant to make working decision; the latter are severely constrained by the former. More generally, what happens in an intra-firm transaction depends largely upon decisions from a particular set of strategic decision-makers. In contrast, what happens in an inter-firm transaction depends largely on at least two sets of strategic decision-makers. Accordingly what happens in an inter-firm transaction depends on an essentially different structure of decisions to that which is especially crucial within a firm; it also depends on a different set of decision-makers to that within a firm. In other words, it is a power relation with a different form. As a consequence, our question is concerned with why there is one power relation rather than another.

Furthermore we are concerned with the distribution of power. Compare Alchian and Demsetz. For them, whether there is a market or non-market means for organising team production, they see the power of transactors in each situation as the same (and indeed the same as the power of transactors in any situation!). But for us there are differences in the distribution of power being wielded according to whether or not a transaction in the production process is within a firm. Quite simply, transactions within a capitalist firm are unique; the reason is that amongst transactions concerned with production those within a capitalist firm have a unique distribution of power. More specifically, a firm's strategic decision-makers have the power to influence the terms of an intra-firm transaction to a degree that they do not have to influence the terms of an inter-firm transaction. As we see it, whereas the essential characteristic of an intra-firm transaction is that its terms are governed from one centre of strategic decision-making, the terms of an inter-firm transaction are primarily determined by as many strategic decision-making centres as there are firms involved. This different distribution of power must be addressed when looking at coordination of production from one centre of strategic decision-making rather than in some other way.

Thus we take issue with the Alchian and Demsetz view that transactions within a firm necessarily have the same character as transactions on a market. Furthermore we also take issue with their suggestion that the key issues are efficient savings on transactions costs and metering problems. The idea of mutual benefit from lowered transactions costs has been explored with more insight and more influence by Oliver Williamson than in Alchian and Demsetz (1972). Hence our comments on this point will be essentially explored in the next Section, focusing on Williamson's work. As for metering, in the context of our other comments, we suggest that this is a relevant but not a key concept for the theory of the capitalist firm. When looking at the choice of intra-firm organisational form, our basic view is that the choice will be made by strategic decision-makers and that metering is <u>a</u> factor they take into account in capitalist systems. Of course metering of team production can only be an issue insofar as there is team production, and we have already noted our broader concern. Nevertheless metering is relevant in capitalism, because strategic decision-makers have an interest in encouraging productive effort by others in a firm. Ceteris paribus, strategic decision-makers will therefore wish to avoid situations where rewards are seen[15] to be either unrelated to productivity or negatively related to productivity. This will be the case whenever there is capitalist production, both when there is and when there is not team activity.

15. The possibility of illusion is important but is unexplored by Alchian Demsetz (1972).

## V TRANSACTIONS COSTS; WILLIAMSON

One of the most influential works on the theory of the firm has been Williamson's "Markets and Hierarchies" (1975). This presented ideas which have since been explored and advanced in considerable depth - see especially Williamson (1981, 1985, 1986, 1989, 1991c) and Williamson and Ouchi (1983) - and which have precipitated considerable criticism, see for instance the collections of essays in Francis, Turk and Willman (1983) and Pitelis (1993), including Cowling and Sugden (1993a).

Williamson's basic concern is with the possibilities for economising on transactions costs, although he explicitly does not argue that this is all that matters for an understanding of the modern corporation, see Williamson (1981) and Williamson and Ouchi (1983). Similarly to Coase and unlike ourselves, he starts with markets: "it will be convenient to assume that transactions will be organised by markets unless market exchange gives rise to serious transaction costs. In the beginning, so to speak, there were markets" (Williamson, 1981; p.1547). Firms and markets are argued to be "alternative modes for organising the very same transactions" (Williamson, 1991b; p.4), although Williamson's work has paid increasing attention to hybrid forms of organisation, see in particular (1991a, 1991c). In Williamson's approach, firms, markets and hybrids are different "governance structures" and the task is to analyse the association between sets of transactions and particular governance structures. A crucial feature of the analysis is saved transactions costs, giving the approach what Williamson and Ouchi (1983) term its "unremitting emphasis on efficiency" (p.33).

In the particularly influential "Markets and Hierarchies" volume, for instance, Williamson poses two basic questions, namely:

(1) why markets versus hierarchies, ie why carry out a transaction in a hierarchy rather than on a market?

(2) what organisational form within a hierarchy, ie why carry out a transaction in a hierarchy in one way rather than another?

Both questions are aspects of the same general issue - the choice between alternative ways of completing a transaction - and thus it is not very surprising that his answers to both employ the same factors used in the same way. He concentrates on transactions costs and their alleged causes - more specifically bounded rationality, uncertainty and complexity, opportunism and small numbers[16] - and is concerned with efficiency. Consider for instance his analysis of a transaction being "shifted out of a market and into a firm" (Williamson, 1975; p.20). His general approach is that "whether a set of transactions ought to be executed across markets or within a firm depends on the relative efficiency of each mode" (ibid, p.8). The source of efficiency gains is savings in transactions costs, the idea being that transacting on a market has different costs to transacting in a firm. These savings are associated with bounded rationality, etc.

### V.i Alternative questions to Williamson

Like Williamson (1975), we see (large) firms within capitalism as hierarchies; indeed our definition of a firm focuses on strategic decision-making, seen as the pinnacle of a hierarchical system of decision-making. However we see firms as hierarchies which can include what Williamson (1975) distinguishes as market and non-market transactions. This was illustrated earlier by the case of homeworkers fixing cloth samples to sales catalogues. Providing production is being coordinated from one centre of strategic decision-making, a person carrying out this task is an employee of the firm whether working according to a market or non-market exchange; in either case the transaction would still be taking place within a hierarchy, there would still be a hierarchical relationship between a worker and the controllers of the firm. The crucial point is that what Williamson (1975) views as market versus non-market does not alter the essence of the transaction.

Accordingly if our definition of the firm is appropriate, counterposing markets and hierarchies in the theory of the firm is not merely deficient, it is

---

16. Asset specificity is a factor Williamson has emphasised more recently, see for example the collection of previously published work in Williamson (1986).

wrong. This is similar to one of our criticisms of Alchian and Demsetz. The market <u>versus</u> hierarchy question is fundamentally flawed because we are simply not faced by markets <u>rather than</u> hierarchies. It is a false dichotomy.

Having said this, Williamson's (1975) markets versus hierarchies is a specific form of the more general question: why are some activities performed inside a firm and others performed outside a firm? Williamson's specific form simply follows from his view of markets and firms. The more general question is clearly interesting - for example its answer explains why there is vertical integration (an issue given considerable attention by Williamson). Accordingly we can usefully address the more general question. Given our view of markets and firms it becomes, more specifically, why are some activities coordinated from one centre of strategic decision-making and others not? This is the question we would ask in place of the markets versus hierarchies issue.

As for Williamson's second basic question, what organisational form within a hierarchy, this is relevant to our view of the firm. However, unlike Williamson and again similarly to our earlier criticism of Alchian and Demsetz, for us the question does not merely compare non-market transactions. Rather it can be broken down into various issues, some of which Williamson (1975) cannot accommodate. We can sensibly ask: why carry out a transaction in a hierarchy in one non-market way rather than another non-market way?; why carry out a transaction in a hierarchy in one market way rather than another market way?; why carry out a transaction in a hierarchy in a non-market way rather than in a particular market way? Whereas the first of these questions is the one that Williamson (1975) is really asking, neither of the others can arise in his analysis.

**V.ii Alternative answers to Williamson**

To ask why some activities are coordinated from one centre of strategic decision-making while others are not is to focus on the essential characteristics of activities. Insofar as it makes sense to concentrate on transactions, we suggest a focus on the essential characteristics, not type and not merely cost. For instance we ask why some transactions are of one nature and others of a different nature. This follows from the argument used to establish our definition: initially accepting the Coasian focus on transactions, we suggested that a concern with type is a concern with superficial attributes whereas the crucial factor is the essential qualities of a transaction; the distinguishing feature of intra-firm activities and intra-firm transactions was identified as their being subject to strategic decision-making from one centre; this led us to define a firm as the means of coordinating production from one centre of strategic decision-making; we disallowed a focus on market versus non-market activity and rejected a focus on transactions.

Put like this it is clear that our answer is not going to concentrate almost exclusively on transactions costs. The point is that, in part, we are addressing why transactions are of different natures - ie do essentially different things; this is not an issue of merely finding the cheapest way to do something, which is the essential concern of transactions costs analysis. Thus our approach is very different from Williamson, although it may be argued that the difference is in emphasis. After all, he recognises that transactions costs are not all that matters and seems to think that, in some sense, transactions can have different natures; Williamson (1985) explicitly observes that transactions "costs need to be located in the larger context of which they are a part. Among the relevant factors ... are ...: holding the *nature* of the good or service to be delivered constant, economising takes place with reference to the sum of production and transaction costs, whence trade-offs in this respect must be recognised" (p.22, emphasis added).

When we answer the second basic question (about organisational form within a firm), the factors identified in Williamson and the way he uses them have interest but on both counts the work is of limited relevance and contains fundamental flaws.

To illustrate the argument consider Marglin's (1974) explanation for replacing the putting-out system with factories in the English textile industry during the Industrial Revolution - an argument about alternative organisational forms within firms as we have defined them. He argues that the desire of capitalists - ie strategic decision-makers - to supervise and discipline workers was all important[17]. One interpretation of this is as follows. Under the putting-out system workers in the woollen industry, for instance, concealed imperfections in spinning to deceive capitalists - they behaved opportunistically. Accordingly capitalists brought workers into factories where they could be supervised. Assume for now that supervision in the putting-out system was impossible. What we have here is a transaction that could be carried out in a factory but could not be carried out in the putting-out system. Thus the costs of this particular transaction are finite in a factory and infinite under the putting-out system. Consequently the move to factory saves transactions costs - it is efficient. But this is a trivial and very deceptive conclusion. It merely says that the factory is more efficient than something which cannot exist! As an explanation of organisational form within a hierarchy this tells us very little.

In contrast, Marglin himself emphasises the importance of concentrating on what is really going on in production, and of appreciating distributional considerations[18]. His analysis is in tune with our view of the firm and implies that focusing on transactions costs and opportunism misses the crucial point. For Marglin, what really matters is the concept of supervision. True, opportunism makes supervision necessary (from the viewpoint of capitalists) and is therefore relevant. But it is the idea of supervision - an understanding of what is really going on in production - which provides the critical insight. As with the comparison between the pure Coasian definition of the firm and ours, there are significant differences

---

17. The old question of why capital hires labour and not the other way round decomposes into two: why hierarchy? and why capitalists at the pinnacle of that hierarchy? "The second question, put another way, asks why the rich do not simply lend their money out instead of undertaking production under their own supervision and control", Eswaran and Kotwal (1989) p.162. Their answer lies in the moral hazard in capital markets in the presence of limited liability; supervision is profitable. Thus hierarchical organisations will exist even when efficiency does not demand team production or the division of labour. See also Marglin (1974) on the importance of knowledge, Stewart (1992) on whether or not there is a strategic advantage to being a capitalist, and Dow (1993) on distribution and organisational forms. A point we would emphasise is that, examining modern firms, there is no single cause explaining why capital hires labour; a combination of factors, including strong historical and cultural influences, need to be brought into play.

18. Distributional considerations are emphasised in the context of the theory of the transnational corporation by Cowling and Sugden (1987a) and Sugden (1991). See also Cowling (1986) on deindustrialisation and transnational corporations.

between an analysis concerned with superficialities and one concerned with essential characteristics. By getting bogged down in superficialities it is all too easy to miss the point. If Marglin is correct the factory succeeded the putting-out system because it facilitated the supervision and discipline of workers. In other words, because it was to the advantage of capitalists. Moreover it is vital to appreciate that in Marglin's analysis the advantage to capitalists is obtained at the expense of workers. As Pitelis (1991) puts it: "the move from the putting-out to the factory system incorporated obvious productivity gains, through in particular the reduction of employees' opportunism. It also involved, however, the disappearance of labourers' opportunities to be opportunists!" (p.20). The welfare implications of Marglin's approach as compared to the transactions costs analysis are very different. Rather than having a positive efficiency implication, his analysis focuses on distribution and in fact implies that capitalist firms disallow Pareto efficiency; capitalists gain whilst workers lose, yet the concept of Pareto efficiency refers to gain for some and loss for none.

Suppose supervision in the putting-out system was possible; would this change our understanding? The transactions costs analysis and its (allegedly) beneficial efficiency implication make more sense, because the factory and the putting-out system are genuinely alternative means to an end, but they are still deficient and deceptive. It would certainly be inadequate to argue that the factory was simply an efficient outcome because again this misses the crucial point that supervision and discipline is about capitalists gaining at the expense of workers.

More generally, in the light of our definition of the firm our answer to the organisational form question is very different from Williamson's. He explicitly addresses the "radical" literature on the theory of the firm, highlighting Marglin (1974), see Williamson (1985). He seems to leave open the possibility that such literature identifies relevant issues yet sees the efficient outcomes of transactions costs economising as essentially dominant. In contrast, the logic of our focus on strategic decision-making as the pinnacle of a hierarchical system of decision-making is that, essentially and in general, the choice of organisational form suits the strategic decision-makers. In making this choice opportunism and so on will be relevant. Furthermore, insofar as strategic decision-makers could obtain an identical outcome from a particular transaction in some other way but at greater cost, the choice is concerned with transactions costs and is efficient. However, if no other method yields an identical outcome this efficiency claim is trivial. Even more importantly, in this case and even where there is another finite cost means to contemplate, the benefit to strategic decision-makers is always the critical factor, see also Dietrich (1993) on benefits from transactions. Thus distributional considerations are put on centre stage and the implication is that capitalist firms disallow Pareto efficiency; in a capitalist firm, the strategic decision-makers seek organisational forms which facilitate their pursuit of maximum returns, achieved both by increasing surplus and by influencing the distribution of a given surplus in their favour, hence against others involved with the firm. Strategic choices suit strategic decision-makers. By definition of control, they are in a position to take the firm in directions that others would prefer to avoid. Hence it is a foregone conclusion that, in a capitalist firm, at least on some occasions their choice will yield them advantages at the expense of others, for instance workers[19]. The only thing to prevent this would be for these others to have a veto over outcomes that they dislike. However this would mean that they are strategic decision-makers, which in a capitalist firm would be a contradiction. Moreover, even in situations where the chosen form does not leave others worse off, this is essentially coincidence; the point is that benefit to strategic decision-makers is the fundamentally important factor.

Hence we stress gain to strategic decision-makers as the prime factor and see efficient outcomes as sometimes feasible yet coincidental. The emphasis in Williamson's work is very different. This is seen very clearly in Williamson and Ouchi (1983). They argue that "the neglect of power by the 'Markets and

---

19. There is dispute over who controls a firm. For example some argue that it is senior managers, others that it is a subset of shareholders. However there is widespread agreement that control rests with a subset of those involved with a firm and certainly not the general workforce. See for example Marris and Mueller (1980) on managerialism, and Cubbin and Leech (1983) and Pitelis and Sugden (1986) on the proportion of shares needed for control.

Hierarchies' approach is not to suggest that power is either uninteresting or unimportant. We submit, however, that power considerations will usually give way to efficiency - at least in profit-making enterprises, if observations are taken at sufficiently long intervals, say a decade" (p.29). They also observe: "we think it invites confusion to explain organisational results that are predicted by the efficiency hypothesis in terms of power. Rather power explains results when the organisation sacrificed efficiency to serve special interests. We concede that this occurs. But we do not believe that major organisational changes in the commercial sector are explained in these terms. The evidence is all to the contrary" (p.30). In other words, Williamson and Ouchi see power as only relevant when efficiency is sacrificed whereas we suggest that power is always relevant, even where there happens to be an efficient outcome.

## VI THE MODERN CORPORATION; RECENT DEBATE

Until now we have treated the typical modern firm as a homogenous, hierarchical entity and yet recent attempts have been made to distinguish a different type of firm characterised by a non-hierarchical coordination of production, see for example Aoki (1990b). This alternative mode, the so-called J-mode, being allegedly descriptive of the central features of the large Japanese firm, is one in which management may feel secure in delegating tasks of coordination to lower levels "because employees are aware that they are being evaluated by their own long term contributions to organisation goals" (Aoki, 1990b; p.13). Thus all employees actively participate in decision-making. Is this then worker control? Aoki is clear that it is not. He argues that corporate decisions in the Japanese firm are subject to the dual control of financial interests (ownership) and employees' interests. However, Aoki fails to make a distinction between employee participation in operational decision-making and in strategic decision-making. There is nothing in Aoki that would suggest that the strategic oversight of the Japanese firm is determined by any more than a tiny minority of those involved with the firm.

This limited role of most employees in corporate decision-making within the J-mode is evident both from Aoki's description of the processes of coordination and the underlying motivation, and from the empirical evidence relating to the content of joint consultations in Japanese firms, see for example Koike (1990). For Aoki (1990b), the central feature of the J-mode of production coordination is "the horizontal coordination among operating units based on ... the sharing of ex-post on-site information .... That is prior planning sets only the indicative framework of operation" (p.8). This description sets the J-mode apart from the typical Western corporation with its more extreme separation of planning and implementation, but it fails to imply a fundamental change in the strategic oversight of the firm. This is further borne out by statements to the effect that employees, by various incentive schemes, "are induced to comply with management authority without explicit hierarchical direction over daily operation" (Aoki, 1990b; p.13), whereas within Western society "where more individualistic values prevail, management authority is not automatically assured within the firm organisation and needs to be asserted by a contractually agreed, hierarchical structure of decision-making" (ibid, p.13). Thus the ultimate purpose of the firm remains unchanged.

This conclusion is bolstered by some interesting empirical observations on Japanese firms reported by Koike (1990). He asserts that the major channel through which employees have a voice in management decisions is via joint consultation machinery and a Ministry of Labour survey reveals the topics covered in such schemes. Data for 1977, the only year reported, reveal that whereas in most establishments employees negotiated working hours and holidays (79.6%) and retirement benefits (74.4%), employees in very few establishments were able to negotiate major management policy (8.2%) or major plans for production and sales (10%), and even in these cases where negotiation was allowed, management can retain the final say.

Clearly workers have voice within the Japanese firm, the joint consultation schemes in approximately seventy percent of the establishments allowed <u>discussion</u> of important areas, but it would seem that given the general inability to negotiate over strategic issues, it would not be correct to describe the Japanese firm, as Aoki chooses to do, as subject to the dual control of financial and employee interests:[20] employee participation in operational decision-making does not constitute a dualism of control. The fact that both owners and employees, under certain conditions, gain from the J-mode of organisation form as compared with the H-mode, the term used by Aoki to refer to the standard hierarchical form of the contractual literature, does not deny the more fundamental point that the choice of organisation form suits the strategic decision-makers.

This conclusion has broader implications: it means that adaptations towards J-mode structures currently being made in Western H-mode firms, as reported by Aoki and many others - see for example the surveys contained in Sabel (1988) and Womack et al (1990), and the contributions of Leibenstein (1987) and Tomer (1987) - do not undermine our central thesis. Worker participation will only constitute control when that participation extends to the realms of strategic decision-making and the J-mode would appear to stop well short of that. But there is another view, represented by, for example, Piore and Sabel (1984), and more recently by Sabel (1988), which comes close to that of Aoki in suggesting that the modern corporation can exist and indeed prosper in a form very different from that of the H-mode. Does this raise any additional difficulties for our view of the firm?

The argument is that the major corporations are in process of reorganising along lines reminiscent of the characteristics of flexible specialisation, see for example Sabel (1988). They are thus reproducing within themselves and their associated subcontractors (part of the firm as earlier defined) the central characteristics which describe sets of autonomous but interrelated firms operating in so-called industrial districts. It is argued they have been inspired to do this in the light of their past failures in adapting to the turbulent conditions of the

20. Sometimes rather than using the term "control" Aoki substitutes the term "influence". Whilst we regard the latter term as more appropriate, it hardly accords with the rather strong distinction Aoki draws between the Japanese corporation and the typical Anglo-American corporation. Even in the Anglo-American case it can be argued that employees have influence, even though it may be very limited and essentially defensive in character.

seventies and eighties, the apparently greater success of the new industrial districts in doing exactly this and lastly by the challenge offered by the Japanese giants, themselves organised along flexible, albeit different, lines. West German, Italian and the Japanese corporations are moving most quickly with such reorganisation because they never fully accepted the mass production model originating in the United States and defined by the notion of the separation of conception and execution, and where they did it was "institutionalised in a way to allow future reorganisation" (Sabel, 1988; p.87), whereas US corporations have been moving most slowly for converse reasons[21].

Within the old order strategic decisions were made at the centre and executed within the operating unit, whether division or subcontractor. The fragmentation of markets in the seventies made this separation of conception and execution more problematic[22]. The corporation had to learn to cut the costs of reorganising production as product life cycles contracted - they had to learn to become flexible. For Sabel many of the giants are in the process of shifting a significant part of strategic decision-making to operating units which are increasingly resembling autonomous firms. He talks of a two-fold convergence of large and small firms structures - operating units now have the alertness and flexibility of small firms and are inserted into a network of independent small firms, with which they are increasingly similar. However he also recognises cases where less fundamental changes are being made, changes which he refers to as a move to flexible mass production. But no matter the precise changes in organisation that are made to changing situations, we suggest that the choice of organisational form corresponds

---

21. In the J-mode case the recent redefinition of subcontracting relations represents a significant change. The large corporations are beginning to delegate the complete assembly of small lot products to leading suppliers. Aoki (1990b) describes the nature of the newly defined relationship with suppliers.

22. It is of course true that this assumption about the fragmentation of markets has not been adequately demonstrated. For example, Luria (1990) shows in the important case of the US auto industry that although variety apparently increased it was often cosmetic and was not inconsistent with there being less "real" variety, coupled with longer runs for most of the parts going into the car.

with that which suits the elite strategic decision-makers[23]. There is no suggestion in the recent observations and analysis reviewed by Sable that strategic decisions in the major corporations do not continue to emanate from one centre. The fact that circumstances have dictated the devolution of more decisions to lower levels does not alter the other fact that these devolution decisions have been made from the top, and can be reversed in similar fashion.

## VII CONCLUSION

Our aim in this paper is to begin the construction of an alternative theory of the firm, basing our ideas on an assessment of existing literature. More specifically, we consider the essence of a firm, its overall nature and what it is. To do so we have appraised in detail the contractual approach of Coase, Alchian and Demsetz, and Williamson. This approach is the basis for mainstream analysis. Our appraisal has drawn on a wider range of literature and in particular Marglin's radical or Marxian analysis. We have also examined recent debate on the modern corporation.

Our contention is that we have pointed to a sometimes subtly yet nevertheless radically different analysis compared to that currently commanding widespread acceptance within mainstream economics. In particular, the perspective we offer has two crucial features. Firstly, rather than addressing the theory of the firm as an aspect of the analysis of markets, we analyse from strategic decision-making to the theory of the firm and the use of markets, both within and without firms. Secondly, we emphasise distributional considerations and argue that capitalist firms disallow Pareto efficiency.

We have suggested a new definition of the firm: the means of coordinating production from one centre of strategic decision-making. We queried the accepted reading of Coase's classic 1937 paper, disallowed a focus on market versus non-

---

23. This point is developed in the context of the transnational corporation by Cowling (1991).

market activity and rejected a focus on transactions. Following this we began to outline an alterative set of questions for the theory of the firm and, in the light of our definition, began to provide some answers to these questions.

Questions posed by Alchian and Demsetz and by Williamson were compared to alternatives. Although there is overlap between analyses and hence to some extent our alternative approach is eclectic, the comparison revealed substantively different questions and answers. The evaluation of Alchian and Demsetz focused on market and non-market activity. It was suggested that they essentially reduce the firm to an element of the market; peering into the black box of Walrasian theory, they only see more of what is on the outside. In contrast we suggested, for example, that an intra-firm (market or non-market) transaction has a fundamentally different character to an inter-firm (market) transaction. The reason is that the respective transactions are different power relations. Turning to Williamson's contribution, we focused on his analysis of transactions costs. This led in particular to a consideration of efficiency and distribution. We stressed gain to strategic decision-makers as crucial to firm's activities and saw efficient outcomes as sometimes feasible yet coincidental. Whereas Williamson sees power as only relevant when efficiency is sacrificed, we suggested that power is always relevant, even where there happens to be an efficient outcome.

Our analysis, although rejecting much of the Anglo-American literature that has dominated the mainstream theory of the firm, joined with that literature in focusing particularly on the Anglo-American corporation. This is not simply parochialism: the US form of the capitalist firm became the dominant form of organisation within twentieth century capitalism and indeed the dominant form also within the so-called socialist economies, see for example Davies (1990). We went on to argue that our results retain their validity in the increasingly important case of the Japanese firm as in cases where imperfect adaptations along Japanese lines have been made within the West. Nor did we see our results undermined by organisational developments within the major corporations, which may have been learnt from very different production systems characterised by networks of small scale production units.

However, given our view that the existence and dominance of the large firm is incompatible with efficiency, we would not wish to end on this pessimistic note. It has become apparent over the past fifteen to twenty years that an alternative and fundamentally different system of production is capable of emerging and effectively competing with the dominant mode. This alternative non-hierarchical system has been identified and analysed within the literature relating to flexible specialisation and industrial districts, but within that literature it is treated alongside the reorganised and rejuvenated large corporations which have themselves innovated with more flexible modes of production, see for example Piore and Sabel (1984) and Sabel (1988). Thus they have tended to be treated as two species of the same genus. Our analysis does not allow this.

The industrial district, and the large vertically-integrated corporation are quite distinct modes of production, the former being characterised by essentially symmetric relationships and the latter, no matter the nature of the reorganisation, preserving a hierarchical or asymmetric set of relationships between its constituent parts. As Dei Ottati (1991) has argued, "the quality of intersubjective relations is different in the two forms of organisation" (p.68). She supports this view by considering how transactions problems are faced in the two cases, and concludes: "in an industrial district, opportunism is discouraged without resource to expensive hierarchical control, as in large firms. Uncertainty is faced with flexibility and innovation that tend to diversify the final demand, rather than standardise it as in large corporations. Ambiguity is overcome by dividing and distributing the economic process and by splitting entrepreneurial functions as well, through the units specialised in buying and selling, rather than by introducing bureaucratic rules and by entrusting command to salaried managers" (ibid). We find this both a compelling analysis and an exciting vision to which economic policy-making should be directed. We have argued elsewhere of the necessity of economic democracy for social efficiency, Cowling and Sugden (1993b), and we regard the shifting of the boundaries between the domains of the major corporations and the industrial districts in favour of the latter as a feasible and necessary step on the path to that objective. That this needs to be done as a matter of purposive policy rather than evolving naturally in a process of free competition between alternative systems does not deny the efficiency of the industrial district, rather it reflects a realistic assessment of the power of the major corporations. A truly devolved and democratic system of decision-making power cannot be achieved without challenging this power base.

Finally, this points to the necessity for a reassessment of the history of twentieth century capitalism. The essential theme of Alfred Chandler's recent monumental work is that the process of evolution of the modern business enterprise is explained by the exploitation of economies of scale and scope and the lowering of transactions costs, Chandler (1990). But little supporting evidence is in fact offered. Rather Chandler reveals that first movers had a high degree of persistence, but that when challenges did emerge they were from other countries or related industries; only rarely were they new entrants to production. This would seem to suggest that the matter of power rather than efficiency was the more fundamental, given that at least some extant giants can be expected to falter in terms of efficiency and be displaced by new firms, were it not for the ubiquitous nature of giantism providing power. Indeed analysis of performance after merger, the increasing incidence of demerger, the movement back to core business, and the broader present concern with the American system of production, all point to the increasingly evident problems of efficiency within the major corporations. Does this not suggest that what we are observing is a logical consequence of the forces which Chandler so approvingly describes in his book? Perhaps the time has come for a fundamental reassessment of scale and scope.

## REFERENCES


Alchian, Armen, 1984, "Specificity, Specialization, and Coalitions", *Journal of Economic Theory and Institutions*.

Alchian, Armen A and Harold Demsetz, 1972, "Production, Information Costs, and Economic Organization", *American Economic Review*.

Andrews, Kenneth R, 1980, *The Concept of Corporate Strategy*, Homewood, Richard D Irwin.

Aoki, Masahiko, 1990a, "The Participatory Generation of Information Rents and the Theory of the Firm", in: Masahiko Aoki, Bo Gustafsson and Oliver E Williamson (eds), *The Firm as a Nexus of Treaties*, London, Sage.

Aoki, Masahiko, 1990b, "Toward an Economic Model of the Japanese Firm", *Journal of Economic Literature*.

Baumol, William, 1959, *Business Behavior, Value and Growth*, New York, Macmillan.

Bowles, Samuel, 1985, "The Production Process in a Competitive Economy: Walrasian, Neo-Hobbesian, and Marxian Models", *American Economic Review*.

Brown, Wilson B, 1984, "Firm-like Behaviour in Markets: the Administered Channel", *International Journal of Industrial Organization*.

Butler, Richard, 1991, *Designing Organizations. A Decision-Making Perspective*, London, Routledge.

Chandler, Alfred D, 1990, *Scale and Scope: The Dynamics of Industrial Capitalism*, Cambridge Mass, Harvard University Press.

Chandler, Alfred D, 1992, "Organizational Capabilities and the Economic History of the Industrial Enterprise", *Journal of Economic Perspectives*.

Channon, Derek F, 1979, *Multinational Strategic Planning*, London, Macmillan.

Coase. Ronald H, 1937, "The Nature of the Firm", *Economica*.

Coase, Ronald H, 1991a, "The Nature of the Firm: Origin", in: Oliver E Williamson and Sidney G Winter (eds), *The Nature of the Firm. Origins, Evolution and Development*, Oxford, Oxford University Press.

Coase, Ronald H, 1991b, "The Nature of the Firm: Meaning", in: Oliver E Williamson and Sidney G Winter (eds), *The Nature of the Firm. Origins, Evolution and Development*, Oxford, Oxford University Press.

Coase, Ronald H, 1991c, "The Nature of the Firm: Influence", in: Oliver E Williamson and Sidney G Winter (eds), *The Nature of the Firm. Origins, Evolution and Development*, Oxford, Oxford University Press.

Coase, Ronald H, 1992, "The Institutional Structure of Production", *American Economic Review*.

Conyon, Martin, 1992, *Monopoly, Capitalism, Profit, Income, Distribution and Unionism*, Unpublished PhD Thesis, University of Warwick.

Cowling, Keith, 1982, *Monopoly Capitalism*, London, Macmillan.

Cowling, Keith, 1986, "The Internationalization of Production and De-industrialization", in: A Amin and J B Goddard (eds), *Technological Change, Industrial Restructuring and Regional Development*, London, Allen and Unwin.

Cowling, Keith, 1991, "The Modern European Corporation: Transnational and Decentralised?", in: D Sadowski and O Jacobi (eds), *Employers' Associations in Europe: Policy and Organisation*, Baden-Baden, Nomos.

Cowling, Keith and Roger Sugden, 1987a, *Transnational Monopoly Capitalism*, Brighton, Wheatsheaf.

Cowling, Keith and Roger Sugden, 1987b, "Market Exchange and the Concept of a Transnational Corporation: Analysing the Nature of the Firm", *British Review of Economic Issues*.

Cowling, Keith and Roger Sugden, 1993a, "Control, Markets and Firms", in: Christos Pitelis (ed), *Transaction Costs, Markets and Hierarchies: Critical Assessment*, Oxford, Blackwell.

Cowling, Keith and Roger Sugden, 1993b, "A Strategy for Industrial Development as a Basis for Regulation", in: Roger Sugden (ed), *Industrial Economic Regulation. A Framework and Exploration*, London, Routledge.

Cubbin, John and Dennis Leech, 1983, "The Effects of Shareholding Dispersion on the Degree of Control in British Companies: Theory and Measurement", *Economic Journal*.

Cyert, R M and J G March, 1963, *A Behavioral Theory of the Firm*, Englewood Cliffs, Prentice-Hall.

Davies, R, 1990, "Gorbachev's Socialism in Historical Perspective", *New Left Review*.

Dei Ottati, Gabi, 1991, "The Economic Bases of Diffuse Industrialization", *International Studies of Management and Organization*.

Demsetz, Harold, 1991, "The Theory of the Firm Revisited", in: Oliver E Williamson and Sidney G Winter (eds), *The Nature of the Firm. Origins, Evolution and Development*, Oxford, Oxford University Press.

Dietrich, Michael, 1993, *Transaction Cost Economics and Beyond: Towards a New Economics of the Firm*, London, Routledge.

Dow, Gregory K, 1993, "Why Capital Hires Labor: A Bargaining Perspective", *American Economic Review*.

Drucker, Peter, 1961, *The Practice of Management*, London, Mercury.

Eswaran, N and A Kotwal, 1989, "Why are Capitalists the Bosses?", *Economic Journal*.

Francis, Arthur, Jeremy Turk and Paul Willman (eds), 1983, *Power, Efficiency and Institutions. A Critical Appraisal of the 'Markets and Hierarchies' Paradigm*, London, Heinemann.

Grossman, S and O Hart, 1986, "The Costs and Benefits of Ownership : A Theory of Vertical and Lateral Integration", *Journal of Political Economy*.

Holmstrom, Bengt R and Jean Tirole, 1989, "The Theory of the Firm", in: Richard Schmalensee and Robert D Willig (eds), *Handbook of Industrial Organization. Volume 1*, Amsterdam, North-Holland.

Imai, Ken-Ichi and Hiroyuki Itami, 1984, "Interpenetration of Organization and Market: Japan's Firm and Market in Comparison with the US", *International Journal of Industrial Organization*.

Jensen, Michael C and William H Meckling, 1976, "Theory of The Firm: Managerial Behavior, Agency Costs and Ownership Structure", *Journal of Financial Economics*.

Klein, Benjamin, 1983, "Contracting Costs and Residual Claims: The Separation of Ownership and Control", *Journal of Law and Economics*.

Klein, Benjamin, Robert G Crawford and Armen A Alchian, 1978, "Vertical Integration, Appropriable Rents, and the Competitive Contracting Process", *Journal of Law and Economics*.

Knight, Frank H, 1921, *Risk, Uncertainty and Profit*, New York, Hart, Shaffner and Marx.

Koike, Kazuo, 1990, "Intellectual Skill and the Role of Employees as Constituent Members of Large Firms in Contemporary Japan", in: Masahiko Aoki, Bo Gustafsson and Oliver E Williamson (eds), *The Firm as a Nexus of Treaties*, London, Sage.

Leibenstein, H, 1987, *Inside the Firm*, Cambridge Mass, Harvard University Press.

Luria, D, 1990, "Automation, Markets and Scale: Can Flexible Niching Modernize US Manufacturing", *International Review of Applied Economics*.

March, J G, 1988, *Decisions and Organizations*, Oxford, Blackwell.

Marglin, Stephen A, 1974, "What do Bosses do?", *Review of Radical Political Economics*.

Marglin, Stephen A, 1984, "Knowledge and Power", in: Frank Stephen (ed), *Firms, Organization and Labour. Approaches to the Economics of Work Organization*, London, Macmillan.

Marglin, Stephen A, 1991, "Understanding Capitalism: Control versus Efficiency", in B Gustafsson (ed), *Power and Economic Institutions: Reinterpretation in Economic History*, Aldershot, Edward Elgar.

Marris, Robin, 1964, *The Economic Theory of Managerial Capitalism*, New York, Free Press.

Marris, Robin and Dennis C Mueller, 1980, "The Corporation, Competition, and the Invisible Hand", *Journal of Economic Literature*.

Nelson, Richard and Sidney G Winter, 1982, *An Evolutionary Theory of Economic Change*, Cambridge Mass, Harvard University Press.

North, Douglass C, 1991, "Institutions", *Journal of Economic Perspectives*.

Piore, M and C Sabel, 1984, *The Second Industrial Divide*, New York, Basic Books.

Pitelis, Christos, 1991, *Market and Non-Market Hierarchies. Theory of Institutional Failure*, Oxford, Blackwell.

Pitelis, Christos (ed), 1993, *Transaction Costs, Markets and Hierarchies: Critical Assessment*, Oxford, Blackwell.

Pitelis, Christos and Roger Sugden, 1986, "The Separation of Ownership and Control in the Theory of the Firm: A Reappraisal", *International Journal of Industrial Organization*.

Putterman, Louis (ed), 1986, *The Economic Nature of the Firm. A Reader*, Cambridge, Cambridge University Press.
Putterman, Louis, 1991, Review of Aoki, Gustafsson and Williamson (1990), *Journal of Economic Literature*.
Richardson, G B, 1972, "The Organisation of Industry", *Economic Journal*.
Sabel, C, 1988, "The Re-emergence of Regional Economies", *Papers de Seminiari*.
Simon, Herbert A, 1959, "Theories of Decision-making in Economics and Behavior Science", *American Economic Review*.
Simon, Herbert A, 1991, "Organizations and Markets", *Journal of Economic Perspectives*.
Stewart, Geoff, 1992, "Capitalists and Workers: Knowledge and the Strategic Role of Investment within the firm", Warwick Economic Research Paper Number 395, University of Warwick.
Sugden, Roger, 1991, "The Importance of Distributional Considerations", in: Christos Pitelis and Roger Sugden (eds), *The Nature of the Transnational Firm*, London, Routledge.
Tomer, J F, 1987, *Organizational Capital*, New York, Praeger.
Williamson, Oliver E, 1975, *Markets and Hierarchies: Analysis and Antitrust Implications*, New York, Free Press.
Williamson, Oliver E, 1981, "The Modern Corporation: Origins, Evolution, Attributes", *Journal of Economic Literature*.
Williamson, Oliver E, 1985, *The Economic Institutions of Capitalism. Firms, Markets, Relational Contracting*, New York, Free Press.
Williamson, Oliver E, 1986, *Economic Organization. Firms, Markets and Policy Control*, Brighton, Wheatsheaf.
Williamson, Oliver E, 1989, "Transaction Cost Economics", in Richard Schmalensee and Robert D Willig (eds), *Handbook of Industrial Organization. Volume 1*, Amsterdam, North-Holland.
Williamson, Oliver E, 1990, "The Firm as a Nexus of Treaties: an Introduction", in: Masahiko Aoki, Bo Gustafsson and Oliver E Williamson (eds), *The Firm as a Nexus of Treaties*, London, Sage.
Williamson, Oliver E, 1991a, "Comparative Economic Organization: The Analysis of Discrete Structural Alternatives", *Administrative Science Quarterly*.
Williamson, Oliver E, 1991b, "Introduction", in: Oliver E Williamson and Sidney G Winter (eds), *The Nature of the Firm. Origins, Evolution and Development*, Oxford, Oxford University Press.
Williamson, Oliver E, 1991c, "The Logic of Economic Organization", in: Oliver E Williamson and Sidney G Winter (eds), *The Nature of the Firm. Origin, Evolution and Development*, Oxford, Oxford University Press.
Williamson, Oliver E and W G Ouchi, 1983, "The Markets and Hierarchies Programme of Research: Origins, Implications, Prospects", in: Arthur Francis, Jeremy Turk and Paul Willman (eds), *Power, Efficiency and Institutions. A Critical Appraisal of the 'Markets and Hierarchies' Paradigm*, London, Heinemann.
Womack, J, D Jones and D Roos, 1990, *The Machine that Changed the World*, New York, Harper-Collins.
Zeitlin, M, 1974, "Corporate Ownership and Control: the Large Corporations and the Capitalist Class", *American Journal of Sociology*.