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**FREEDOM OF CHOICE IN THE PRODUCTION SPHERE:
THE CAPITALIST AND THE SELF-MANAGED FIRM**

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Abstract

A formula for measuring freedom of choice in the production sphere is proposed. Then a capitalist firm and a worker self-managed firm are compared in terms of freedom distribution. It is shown that the workers have little freedom, if any at all, in a capitalist firm, whilst the capitalist enjoys a great deal of freedom. In a self-managed firm, on the other hand, the amount of freedom enjoyed by the workers is positive and often even greater than that of the capitalist. The analysis is further developed by the introduction of asymmetric information. It is argued that, based on plausible hypotheses of monitoring costs, the difference between the amount of freedom enjoyed by self-managed workers and that enjoyed by the capitalist increases.

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1. Introduction

In the study of comparative economic systems self-management has often been considered superior to capitalism in terms of efficiency and justice. Economic literature on this issue has achieved high levels of analytical refinement, but no general and unambiguous result.¹ More clear-cut findings could perhaps be achieved if the comparison were made in terms of freedom. Now, it is a common and long-standing view that self-management offers the workers greater freedom than does capitalism. Some people take this opinion to be true by definition, even though it has never been proved analytically, perhaps because an appropriate scientific method for dealing with freedom distribution has never been available. Now this lacuna has been overcome by recent research and it is hoped that an application of novel analytical tools will give rise to new studies of comparative economic systems.

Nowadays there is vast literature on the construction of objective measures of freedom that make it possible to rank opportunity sets.² In this literature the fields of human activity are defined in rather general and generic terms, without discriminating, for instance, between consumption and production activities. Few efforts have been made to define freedom in specific fields and above all to construct measures for use in empirical research and political analysis.

In this essay I address the problem of defining a measure of freedom in the production sphere.³ I single out two different institutional structures with three kinds of agents: the capitalist firm, in which capitalists and wage workers are present, and the self-managed firm, in which only co-operating partners work. In the former concern decisions are made by the capitalist and carried out by the workers. In the latter they are made by the workers themselves.

I use the term ‘capitalist’ in the Marxian sense of ‘active capitalist’ or ‘functioning capitalist’ (Marx, 1867-94, III, chaps 23, 27). He may be the owner of the capital or an agent of the (private or public) owners. In either case I assume he has wide decision-making autonomy as to what and how to produce. Basically he is the subject who makes the firm’s production decisions. He

¹ See Jossa and Cuomo (2000) for an extensive and systematic treatment. For good surveys, Pryor (1983), Ben-Nur (1987), Logue and Yates (2005).

² Here are some essential references: Pattanaik and Xu (1990), Klemisch-Ahlert (1993), Bossert, Pattanaik and Xu (1994), Gravel (1994), Gravel, Laslier and Trannoy (1998), Puppe (1998), Suppes (1987), Peragine (1999), Van Hees and Wisseburg (1999), Savaglio and Vannucci (2006).

³ See Screpanti (2006; 2009) for an attempt at freedom measurement in consumption activity. For a general Marxist approach to the social distribution of freedom see Screpanti (2007), a chapter of which provides an analysis similar to the one presented here.

is not an agent of the workers who, as subordinates, have entered an *employment contract* under which they have assumed an obligation to obedience to the employer.

The self-managed firm too is defined by abstracting from capital ownership. Equity may belong fully or in part to the workers or may not belong to them at all; and it may have been provided partly by a public authority or by private lenders. What really matters is that the workers have entered a *partnership contract* by which they set themselves up as the ultimate decision-making subjects in the production process. I assume that decision prerogatives are equally distributed among the partners according to the ‘one head one vote’ rule. The workers may appoint a manager as their agent, in which case I assume they have effective monitoring power over him.

Clearly these assumptions are rather schematic. In reality, situations are multihued and it is difficult to define precisely the actual extent of the decision-making powers of the capitalist or the workers’ assembly. The aim of this simplification is to achieve a clear-cut theoretical definition of the two institutional structures in terms of freedom.⁴

In section 1, based on highly simplified assumptions, I put forward an initial definition of the capitalist’s and the workers’ freedom in the capitalist firm. In section 2 I deal with the self-managed firm and, always based on simplified assumptions, I argue that a self-employed worker enjoys greater freedom than a wage worker and a capitalist. In section 3 I introduce perfect competition, arguing that again in this case the self-employed worker enjoys greater freedom. Lastly, in section 4 I introduce information asymmetries and show how they may enable the subordinate workers of a capitalist firm to limit the capitalist’s power and freedom. The greater freedom of self-managed workers compared with subordinate workers is, however, confirmed. Moreover I show that the positive difference in their freedom vis-à-vis that of the capitalist may increase by virtue of their greater efficacy in tackling information asymmetries.

2. *The capitalist firm*

⁴ Note that in this approach the residual right of control is not necessarily associated with ownership rights (see Hansmann, 1988, 269-72). It is institutionally determined by the contract structure with which the firm is set up and by the real distribution of power within it. In the real world there may be cases of worker cooperatives in which power is held by an assembly of workers who are not the firm’s owners, or joint stock companies with dispersed share ownership in which actual power is exercised by managers. There may even be cooperatives owned by workers who are so incapable of monitoring their managers that the latter behave as ‘active capitalists’ who exploit the workers.

To start with, I assume that the prices of all goods, including those of the firm's production requirements, are given: wages are fixed by national agreement; as to the prices of output and the non-labour inputs, I assume that the firm operates in oligopolistic markets in which it is not a price leader.⁵ Finally I assume that capital stock is given. For the moment let us consider a firm with only one capitalist and one wage worker.

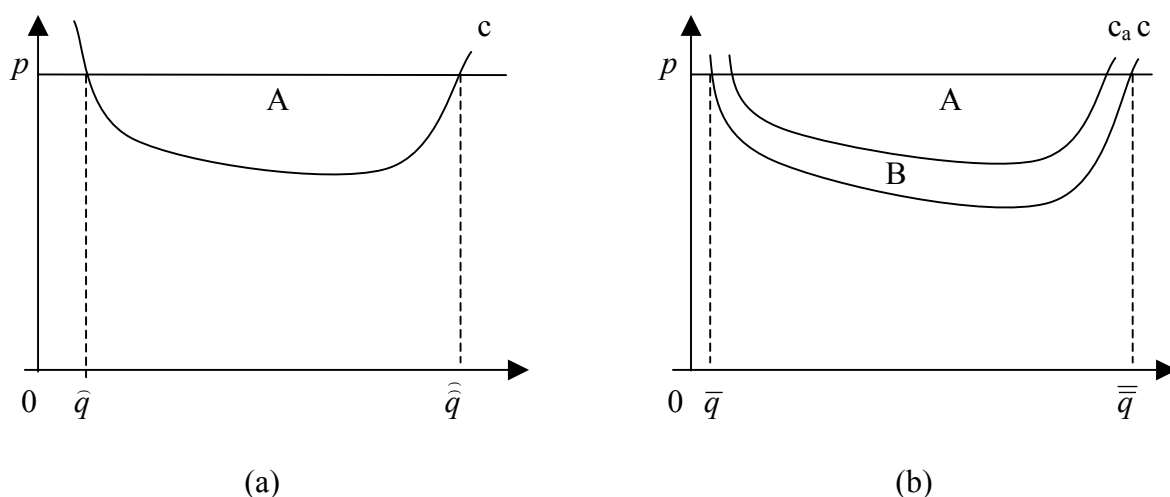


Figure 1

The situation is illustrated in figure 1(a), where p is the output price, c the total average cost and q the output level. The rising tract of the curve is justified by the usual hypothesis that labour productivity shrinks when plants are overutilised. \hat{q} and $\hat{\hat{q}}$ are the minimum and maximum production levels yielding zero profit. Total average cost is an increasing function of wages. The cost function is:

$$(1) \quad c=c(w,q), \quad \partial c/\partial w > 0.$$

Area A represents the opportunity set. Each of its points identifies a technical choice, measured in value. The area should not be interpreted in terms of profits, since profit is a magnitude determined *ex post* with respect to production decisions, i.e. after a decision as been made and implemented, and has produced real effects in terms of costs, revenue and output level. Area A , instead, is defined

⁵ If it is a price leader, there will be a problem of defining freedom in price fixing. This can be dealt with on the basis of knowledge of the structure of oligopolistic power in the industry. I will not consider this problem here.

as the set of all production choices accessible *ex ante*, i.e. before any decision is made. Since fixed capital stock is given, the choice of techniques concerns all possible combinations of fixed and circulating capital, labour and capital, and the various inputs of circulating capital. The level of output is also an element of choice opportunities, as the opportunity set is defined *ex ante* even with respect to knowledge of demand.⁶

c is a curve of minimum costs, i.e. those incurred when the most efficient techniques are chosen. Inefficient techniques are represented by the points above the curve. Since the opportunity set is defined in purely objective terms, nothing is known of the capitalist's psychology, motivations and ability, whether he aims to maximize profits, or is moved by a sense of social responsibility etc. Even his degree of rationality and calculation ability are unknown. Therefore he may possibly choose inefficient techniques.

His freedom is bounded only by objective factors: existing technology, availability of capital and market structure. Graphically these constraints are represented by:

- The curve of average total costs, which depends on
 - availability of finance and therefore the given stock of fixed capital
 - variable costs and therefore technological knowledge and input prices
- The price line, which depends on the structure of output markets

The points above line p cannot be chosen, as they would cause losses. Those below curve c cannot be chosen because they represent inaccessible technical combinations.

The capitalist's freedom of choice, F_c , can be measured by the width of area A , and is:

$$(2) \quad F_c = \int_{\hat{q}}^{\hat{q}} (p - c(w, q)) dq > 0$$

It cannot be the case that $F_c < 0$ because otherwise the firm would be driven out of the market. Nor can it be the case that $F_c = 0$ because the market in which the firm operates is not perfectly competitive.

⁶ Note that here, having assumed there is only one worker, the various levels of labour input are represented by different lengths of working time.

As to the subordinate worker's freedom, F_l , it is nil due to the worker's obligation to obedience under the employment contract:

$$(3) \quad F_l = 0$$

It goes without saying that freedom in the production process is a much more complex affair than described here. It depends on the way rights and duties are assigned within the firm, and thus it is affected by institutional arrangements, customs, firm and labour laws, and the specific employment contract. All these circumstances, which I take as exogenously given, contribute to limit the capitalist's authority. However they cannot change the fact that the employment contract is a fundamental institution of capitalism precisely because it establishes the workers' obligation to obedience in the production process, consequently generating the capitalist's authority (Screpanti, 2001). For the moment I am assuming that, in the absence of information asymmetries on labour performance, the workers are not in a position to limit the capitalist's freedom.

3. The self-managed firm

I assume the self-managed firm faces the same prices as the capitalist firm. Moreover, to facilitate comparison, I assume that it has the same stock of fixed capital and the same technical knowledge.⁷ The self-employed worker, however, is not paid a wage, but appropriates the entire value added. He

⁷ This hypothesis is highly unrealistic. According to Ward (1958) and the stream of research initiated by him, the capital/labour ratio should be higher in self-managed firms. However more recent research seems to converge on the opinion that Ward's result depends on the excessive simplicity of the neoclassical model he adopted. More realistically one should observe that a self-managed firm is unlikely to use more capital per head than a capitalist firm or adopt the same techniques and the same machines as a capitalist firm. First of all, cooperating workers, to the extent they are the owners of the firm's capital, would tend to use it more parsimoniously and scrupulously, with a consequent decrease in wear and tear and depreciation. Secondly, capitalist firms tend to invest in technical apparatuses with an eye to checking the workers' hidden information. Presumably this implies a tendency to invest in more costly machinery than self-managed firms would do. Finally, since the workers' turnover should be higher in capitalist than in self-managed firms, the cost of on-the-job training should be higher in the former. For all these reasons the cost curve is probably lower in a self-managed firm than in a capitalist firm. For the moment I will ignore all these considerations. I will deal with some of them below, when I introduce information asymmetries. I thank Ermanno Tortia for calling my attention to these problems.

might decide to pay himself a fixed monthly income, subsequently pocketing the residual return at the end of the year.

The worker may well decide to work for a lower monthly income than he might earn in a capitalist firm. However there will be a minimum monthly pay, w_a , below which the worker will not be prepared to work in a self-managed firm. I call this *self-management reservation pay*. One might wonder why a self-employed worker should agree to work for a minimum fixed income lower than the wage. Would it not be more expedient to accept an employment relationship in which he earns a higher income? The fact is that a self-employed worker enjoys the psychological advantage attached to self-management—an advantage that derives from the prospect of taking profits at year end, and from his condition of being a free decision-making actor. This advantage can be conceptualized in the form of a self-management premium determining the difference between wage and *self-management reservation pay*.⁸ Thus one can assume

$$(4) \quad w_a < w$$

Note that this condition does not imply that the self-employed worker earns less or expects to earn less than a wage worker, because his *actual* monthly pay may well be higher than w_a , and because end-of-the-year profits must be added to it.

The *actual* monthly pay is determined autonomously by the worker himself. Therefore the differences between its possible levels and w_a are part of his opportunity set. On the other hand, since the self-managed firm must anyway pay w_a to carry out its production activity, this expense does not come within the worker's free decisions, so that the self-management reservation pay can be likened to a minimum labour cost. Thus a measure of the self-employed worker's freedom, F_a , is

$$(5) \quad F_a = \int_{\bar{q}}^{\bar{q}} (p - c(w_a, q)) dq$$

⁸ This premium should be curtailed by the disadvantages associated with risk bearing, if one accepts the hypothesis that the risk of bankruptcy in a self-managed firm plus the risk associated with variability of the self-employed worker's income is greater than the wage worker's risk of being fired due to bankruptcy plus the risk associated with wage variability. I am not considering this possibility because I do not believe the hypothesis is realistic.

Evidently the self-employed worker's freedom is greater than the capitalist's. Since $w_a < w$ and $\partial c / \partial w > 0$, it is $c(w_a, q) < c(w, q)$, and therefore⁹

$$(6) \quad F_a > F_c > F_l = 0$$

The self-employed worker's opportunity set is represented by area $A+B$ in figure 1(b). This worker may like to use his greater freedom to reorganize work in such a way as to make it less frustrating and wearing, and more gratifying. And he may do so without necessarily earning less profits than the capitalist, e.g. by choosing techniques in area B .

4. Perfect competition

Oligopoly has unpleasant social consequences. It implies that producers may exploit the consumers, besides the workers; and it also allows differential wages to be paid to workers employed in different industries. On the other hand it is well known that perfect competition does not exist in real industrial markets when these are 'free'—i.e. unregulated or badly regulated—because technological heterogeneity continually generates oligopolistic positions. Perfect competition, though, can be approximated.

⁹ Since the form of $c(w_a, q)$ is identical to that of $c(w, q)$ and since $w_a < w$, condition (6) holds true if

$$\frac{\partial F_c}{\partial w} = \frac{\partial}{\partial w} \int_{\hat{q}}^{\hat{q}} (p - c(w, q)) dq = \int_{\hat{q}}^{\hat{q}} -\frac{\partial c}{\partial w} dq + \hat{q}'(w)(p - c(w, \hat{q})) - \hat{q}'(w)(p - c(w, \hat{q})) < 0$$

As $c(w, q) > 0$, $\partial c / \partial w > 0$ and $(p - c(w, \hat{q})) = (p - c(w, \hat{q})) = 0$, it is

$$\frac{\partial F_c}{\partial w} = -\int_{\hat{q}}^{\hat{q}} \frac{\partial c}{\partial w} dq < 0$$

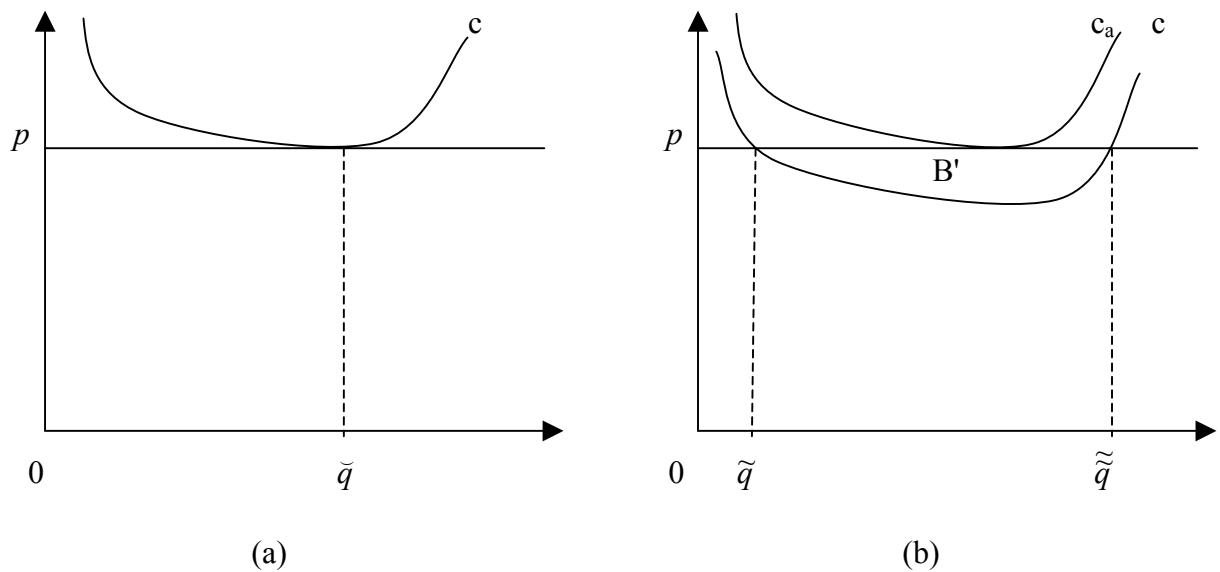


Figure 2

A government which is democratically controlled by the workers might wish to do away with the unpleasant effects of oligopoly. Let's suppose it is able to do so through political and institutional provisions that compel or induce capitalist firms to equal output price to minimum average cost and to pay all equally skilled workers the same wage. And imagine that both capitalist and self-managed firms work in such a system. The output price is the same for both kinds of firms. The new situation is described in figure 2.

Note that the capitalist firm, as represented in figure 2(a), can only survive if it uses techniques efficiently. The only technique it can use is the one corresponding to the point where the price line touches the cost curve at its minimum. The only admissible output level is \tilde{q} . Area *A* has been zeroed and freedom of choice wiped out. The institutional change, though, has not zeroed area *B'* in figure 2(b). Therefore the self-employed worker still enjoys some freedom. His maximum income will be equal to that of the wage worker, but he will have greater freedom than him and the capitalist.

Obviously this example is a limit case, for perfect competition can only be approximated. It is certain, however, that it can be approximated better in a *well regulated market* than in a 'free' one. The perfect competition model may be used as a counterfactual. As such, it is not a limit case devoid of any explanatory power for it enables us to compare a capitalist controlled system with a worker controlled one and draw some interesting conclusions. In a well regulated competitive market, self-employed workers cannot earn more than a wage worker. So, the sole real advantage of self-management concerns the distribution of freedom. In oligopolistic markets the capitalists'

freedom is positive while that of wage workers is nil. Conversely, in competitive markets, the capitalists' freedom is nil and that of the self-managed workers is positive. Moreover, in the latter system there is no exploitation of either workers or consumers. Finally, if self-employed workers use techniques efficiently, their incomes are uniform and equal to those of wage workers. In other words, there is income equality for all workers, whilst capitalists' incomes are nil. But self-employed workers can organize their work to their liking. The latter achievement seems to be purchasable with a cut in income, but this conclusion holds true only assuming that there are no information asymmetries.

5. Freedom and hidden information

What happens when many workers partake in a self-managed firm? As an extreme case, assume there is complete team production, i.e. the production contribution of any single worker cannot be separated from that of the others. Therefore, decisions cannot be made autonomously by any single worker but must be made collectively. Presumably the workers agree to adopt a majority rule, thus establishing an industrial democracy regime. Since each of them freely accepted the rule, and choices are made by all of them, they remain free. This is true even if they appoint a manager and grant him some decision-making powers. If the manager performs his mandate diligently and the workers monitor him efficiently, the firm remains self-managed and the workers' freedom is unimpaired.

In this case freedom in production decisions can be defined as a property of either the individual workers or of their community. If the 'one-head-one-vote' rule applies, the choice faculties of each worker are identical to those of the others, and their freedoms are additively separable (even though their productivities are not). Therefore collective freedom coincides with the summation of the freedom of the individuals. Its formula is the same as in equation (5). If there are n workers, an individual's freedom is $F_{ai}=F_a/n$ ($i=1, \dots, n$).

It is well known that team production poses the problem of information asymmetries, especially those of the moral hazard kind with non-observable and non-verifiable effort—call it 'hidden information'.¹⁰ In cooperatives too, as in capitalist firms, some workers might be tempted to shirk. So, in self-management too there are problems of monitoring.

¹⁰ Asymmetric information in the monitoring of managers is also important. The workers of a self-managed firm are likely to have more information on their managers than wage workers have on the agents of their firm's shareholders (Weitzman and Kruse, 1990; Bai and Xu, 1995). This fact should substantially affect freedom distribution. I will not however deal with this here.

Firstly, consider the case of a capitalist firm employing many workers. The hidden information of a wage worker may reduce the capitalist's power and enable the worker himself to exert some form of counter-power. Power in a firm is different from freedom: whilst the latter is the faculty to choose techniques, the former is the capacity to determine a worker's behaviour with an act of command (Screpanti, 2001, chap. 4). The employer's power in a capitalist firms stems from the worker's obligation to obedience under the employment contract. Now, the existence of hidden information enables the workers to exert some resistance to the capitalist's power. This is what I call 'counter-power'. It is not a form of freedom, for production decisions are always made by the capitalist and always executed by the workers.¹¹

Capitalists must sustain monitoring costs to cope with workers' hidden information and counter-power. Since we are studying freedom of choice, which is an *ex ante* concept, we must investigate *ex ante* monitoring costs, i.e. those foreseen by the capitalist to get rid of counter-power. If these costs are added to production costs, the capitalist's freedom is reduced. Curve *c* in figure 1(a) shifts upward and area *A* shrinks. Thus the possibility of workers' counter-power reduces the capitalist's freedom.¹²

Now consider the self-managed firm. If we assume that monitoring costs are the same as in the capitalist firm, we must conclude that the hidden information of any single worker reduces collective freedom to the same extent that it would reduce the capitalist's. This implies that the freedom of all workers shrinks. Individual opportunism reduces the freedom of all and thence that of the opportunist himself. An individual might find it expedient to decrease labour effort if he

¹¹ As an alternative approach, one might argue that workers' counter-power results in some form of freedom. Even if workers do not make decisions, they could modify the outcome of the capitalist's decisions and so affect technical choices. Then it might be argued that since monitoring cannot do away completely with all forms of hidden information, the wage worker enjoys at least some freedom. Graphically this worker's leeway area can be represented as an upward shift of the cost curve in figure 1(a). The ensuing cutback in the capitalist's freedom coincides with an upsurge of the worker's, which is measured by the area resulting from the difference between the new and the old cost curve. A similar approach could be used to account for those cases in which the capitalists themselves grant some leeway to the workers, either to encourage their commitment to the firm or because the technical process requires some form of creativity. I will not pursue this approach here because it would complicate analysis without adding anything substantial to my conclusions.

¹² One might surmise that it is impossible fully to eliminate the workers' counter-power, i.e. that a residue of hidden information remains which is inaccessible to control. In this case the workers may use their counter-power to reduce toil and fatigue, with the effect of reducing labour productivity. In other words, the upward shift of the cost curve is accounted for either by an increase in monitoring costs or by a decrease in productivity.

thought that the ensuing reduction in freedom would be more than compensated by a decrease in fatigue.

However it seems plausible that the impact of hidden information is lower in a self-managed firm than in a capitalist one. There are five reasons for this:¹³

- Self-managed workers are more inclined to commit themselves because
 1. they appropriate part of the profits produced by greater effort (direct residual claimant effect)
 2. the cooperative climate in self-managed firms may induce greater loyalty and fairness among workers who are thus less inclined to opportunism (loyalty effect)
 3. the opportunities for self-realization offered by self-managed work can render commitment less unpleasant and induce a greater attachment to the firm (self-realization effect)
- Self-managed workers have a greater propensity to exercise peer-to-peer monitoring because
 4. the cost of this kind of control is likely to be lower than hierarchical control in a capitalist firm (low monitoring costs effect)
 5. since the workers' productive contributions are inseparable, if one worker shirks, the fatigue of his colleagues might increase so that they would have good reason to exercise reciprocal control (contrasting of worked-off fatigue effect)

The direct residual claimant effect deserves some clarification. Literature on the free rider problem has brought to light a sound argument to prove its inefficacy. The effect is considered inefficacious because any self-interested individual would find it beneficial to avoid fatigue regardless of what the others do. This is because only he benefits from the reduction in fatigue, whilst the profit from effort is shared with all the other workers. A similar reasoning could be applied to the effect of low monitoring costs, when these are higher than the individual gain from monitoring (profit divided by the number of workers).¹⁴

¹³ The literature on the subject is now quite extensive. Here are some important contributions: Alchian and Demsetz, 1972; Mirrlees, 1976; Oakeshott, 1978; Horvat, 1982; Fitzroy and Kraft, 1986; Hansmann, 1988; Miller, 1993; Bowles and Gintis, 1993; 1994; Bai and Xu, 1995; Screpanti, 2001, cap. 5. Research in this field has investigated in depth the first four motives. I add a fifth one called *contrasting of worked-off fatigue*.

¹⁴ But this possibility is not so obvious. The individual gain from discouraging opportunism may be low, for the single controller appropriates only a tiny part of the ensuing profits. But the cost of peer-to-peer monitoring is also rather low,

This reasoning could be rebutted by assuming that self-managed workers are endowed with a ‘class consciousness’ so defined: (1) they know that the collective good is maximized through cooperative behaviour; (2) each knows that all the others know; (3) each knows that his own benefit increases when the collective good increases. The first two conditions are not difficult to justify. In many game-theoretic models it is assumed that each player knows the game structure and that all the other players know it. The third, however, is not so obvious, for it implies identification of self-interest with collective interest. If this is class consciousness, and if it is reasonable to assume that workers who work for themselves (rather than for a capitalist) endow themselves with such consciousness, then the problem is solved. Note that an individual who behaves cooperatively because he has this consciousness is not necessarily an altruist, for he knows that by pursuing the collective good he contributes to maximizing his own. The non-cooperative solution, which gives the *impression* of maximizing individual benefit to the detriment of the others, is self-defeating and, anyway, would not correspond to reality *if it were shared by all*. Instead, the *conviction* that individual benefit increases with the collective good would correspond to reality *if it were shared by all* (or most of) the workers.

The existence of this kind of consciousness could be accounted for on the ground of a process capable of forming it. If social interaction is repeated and its end is uncertain, as assumed in repeated games models, condition (3) could be substituted with the following: (3b) each individual tends to react by imitating the others’ behaviour. He cooperates if the others cooperate; retaliates if the others try to be too smart. In this way cooperative behaviour would be rewarded and opportunism punished, so that the former would gradually prevail. That kind of class consciousness would emerge spontaneously from social interaction as an implicit connotation of individual behaviour. As time passes, each individual would realize that the others cooperate only if he himself cooperates, and then would understand that his personal benefit will grow with cooperative behaviour. Thus, for those workers who have learned a lesson from this kind of experience, condition (3b) could be re-substituted by (3). Note that this kind of consciousness does not coincide with a loyalty effect, which presupposes a certain form of altruism.

One can deduce that, even if self-management reservation pay were equal to the wage of subordinate workers, the freedom of cooperating workers would be greater than that of the capitalist, both in oligopoly and in perfect competition. In other words, due to the lower costs of

for each worker is well aware of the job, skill and ability of the colleague who works beside him. If the cost of reciprocal control is lower than that gain, workers would find it beneficial to exert it.

monitoring and the greater propensity to commitment in self-management, area A in figure 1(b) would be larger than area A in figure 1(a).¹⁵

Finally it should be observed that this difference does not alter the width of area B in figure 1(b), since the latter is not affected by monitoring costs. Thus not only in an oligopoly, but also in perfect competition, self-managed workers may enjoy greater freedom and have greater opportunities for self-realization than subordinate workers, and even earn higher incomes.

6. Conclusions

In a production setting in which choice opportunities are reduced to technical combinations freedom can be measured cardinally by valuing the firm's book of blueprints. The opportunity set is positive if the firm operates in an oligopolistic market. In a capitalist firm the wage worker's freedom of choice is nil, whilst the capitalist's is greater the higher the degree of monopoly and the lower the minimum costs. In a self-managed firm, on the other hand, the worker's freedom is positive. Moreover it is greater than the capitalist's freedom to the extent the self-management reservation pay is lower than wage and the impact of hidden information in self-management is lower than that in the capitalist firm.

Finally, by using the perfect competition model as a counter-factual, one can understand the fundamental advantage of self-management to the workers. Self-managed firms operating in competitive markets may pay their workers higher incomes than capitalist firms pay theirs. What is more, self-managed workers enjoy some freedom, which is utterly barred to capitalists and subordinate workers.

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¹⁵ These advantages of self-management may be partly impaired by the disadvantages deriving from the 'costs of democracy' (Jensen and Meckling, 1979; Hansmann, 1988; 1990). I do not believe they can be completely wiped out by them.

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