

# LABOUR MANAGEMENT AND THE MARKET ECONOMY

David O'Mahony\*

## INTRODUCTION

In spite of its apparent advantages the labour-managed firm is conspicuous by its absence while the capitalist firm continues to thrive and to constitute the main form of business organisation wherever the market economy prevails. In the pages that follow an attempt is made to resolve this paradox.

First, the organisation and structure of the self-managed firm are described and the advantages, which its advocates claim it possesses over the conventional firm, are explained. The nature of business firms in general is then dealt with and this leads naturally to a discussion of entrepreneurship. It is shown that the formation of *any* firm, no matter what its legal form, involves entrepreneurship, and that entrepreneurship in turn is a matter of alertness to opportunities and of the provision of the means whereby contractual commitments can be underwritten. Following this, the role of venture capital in the traditional firm is analysed and the problems which arise in dealing with risk and uncertainty in the self-managed firm are confronted. Finally, the conclusion is reached that self-managed firms fail to emerge in the market economy because they are not conducive to the performance of the entrepreneurial functions.

## SELF-MANAGEMENT

The traditional "capitalist" firm has long been regarded as one of the main causes of the ills that beset society today. The labour-managed, or self-managed, firm is now widely advocated as an alternative in the belief that many of the social problems attributed to capitalism would disappear if production were organised along "participatory" or self-managed lines.

Considered as an organisation the labour-managed firm is thought to be analogous to a political system governed on the basis of both direct and indirect democracy by those working in it.<sup>1</sup> Accordingly, the

\*The author is Professor of Economics at University College Cork. He wishes to express a note of thanks to the Institute for Humane Studies, Menlo Park, California for providing the facilities to undertake the research on which the article is based.

main distinction between it and its conventional counterpart is said to lie in the source of control. In the labour-managed firm control is seen as being derived from active, or working, participation within the firm and not from the ownership of financial capital which, it is contended, is the source of control in the traditional firm. Those who provide the financial capital are regarded as having a right only to whatever return they and the working borrowers agree upon.

There could be many variants of the labour-managed firm. Ideally, however, the self-managed system as envisaged by Professor Vanek, its most distinguished advocate, is defined by five basic characteristics and one behavioural principle, that of the maximization of net income per worker. The five characteristics are as follows:—<sup>2</sup>

(1) The firm is controlled by labour. Labour includes everybody working in the enterprise and each member of the enterprise has an equal voice in decision-making. Management is conducted on the basis of a combination of direct decision-making in major matters and indirect decision-making in other instances through elected representatives.

(2) Income is defined as the value of sales minus all costs, including the cost of capital, and is shared by all members of the enterprise on the basis of an income distribution schedule decided on by the members themselves.

(3) The members of the enterprise enjoy the usufruct only of the assets of the enterprise. They do not enjoy full ownership in the sense that they may neither destroy the real assets nor sell them and distribute the proceeds among themselves.

(4) Each person is free to seek to join a firm or to leave it at any time according to what he sees as his own best interest, while each firm is free to add or not to add a new member.

(5) The firms operate under market economy conditions.

Whether or not the members provide some or all of the money capital makes no difference as far as control is concerned. External financing is, however, preferred to internal financing. Vanek indeed regards external financing as essential to the success of the self-managed firm.<sup>3</sup> Internal financing is rejected partly because of the danger that it would lead to the degeneration of the labour-managed firm into a conventional business, and partly because it would tend to produce undesirable investment decisions. Moreover, a group of workers who wished to set up a firm of this kind would normally not be able to provide the funds themselves in any case.

The advocates of self-management claim that the labour-managed firm has many distinct advantages as compared with the conventional firm.

Firstly, it does not split the personality of the individual worker into two, as it is argued other forms of the firm do. This splitting of the personality arises, it is maintained, because in his capacity as a worker an individual is merely a factor of production and as such cannot use his faculties of initiative and judgement and cannot participate in the overall responsibility for the operation of the firm. He is, therefore, "alienated".<sup>4</sup> In the self-managed firm, on the other hand, the individual acquires, as Vanek puts it, "a far greater degree of internal unity" with consequent advantages to himself, the firm, and the community as a whole.<sup>5</sup>

Secondly, it eliminates industrial conflict and strikes. Since there would be no possibility of worker-owner differences and no reason for worker-management differences there would no longer be an "industrial-relations" situation and, therefore, none of the problems to which it gives rise.

Thirdly, as there is a very high degree of "identification" between the workers and their firm they would be much more "production-minded" than in traditional firms and this in turn would lead to greater productivity. Instead of trying to minimize his effort "without being noticed by his supervisor" the worker would be concerned with how to improve the performance of his enterprise.<sup>6</sup> Consequently, what Marshall described as "some of the minor works of superintendence" would become unnecessary because the workers "for their own pecuniary interests and the pride they take in the success of their own business make each of them averse to any shirking of work either by himself or by his fellow workmen".<sup>7</sup> In this connection Vanek distinguishes three aspects of effort, namely, duration, intensity, and quality. He supposes that a reasonable range of variation in relation to each aspect is between 100% and 200% and concludes, therefore, that "the aggregate reasonable range for effort taken as a whole may be as high as between 100% and 800%. Accordingly, he maintains that "the reasonable range of value of product of a given firm will be of similar magnitude" and that the labour-managed firm will tend to be in the top of this range.<sup>8</sup>

Fourthly, externalities are dealt with very effectively. As Vanek argues those who hold power and control also happen to be those who would suffer or benefit from external effects. Hence he concludes that there is a strong presumption that "the processes leading to the correction of the effects of externalities will be more direct and more effective than they would be in other economic systems".<sup>9</sup>

Fifthly, for a variety of reasons labour-managed firms tend to have a smaller optimum size than other kinds of firms. Moreover, as a rule firm and plant will coincide, there being little or no place for the multi-plant firm. Consequently, industries composed of labour-managed firms will tend to be more competitive than industries not so organised. At the same time, however, the "wastes of competition" would be less and not greater.<sup>10</sup>

Sixthly, as there could be no wage rigidity there could be no general unemployment. Instead there would be a strong tendency towards full employment. In so far as general unemployment might emerge it would only be in conditions that would be conducive to the entry of new firms which in turn would help to maintain and expand employment. The "general price level" might fluctuate a good deal in the short run but the trend would be comparatively stable.<sup>11</sup>

Seventhly, the growth potential of the economy would be very great. Vanek envisages that as much as 20% to 30% of the net national product could "be mobilized for investment in the long run, without anyone feeling the burden of such national savings".<sup>12</sup>

Summing up the case for labour-management, Vanek says:—

"... it can be said that under the scrutiny of economic theory the participatory economy appears in a very favourable light, both in comparison to an absolute standard of efficiency and in comparison with other economic systems. In the context of absolute evaluation it will tend to produce solutions at or very near the conceivable maximum and can reach very high rates of growth and development.

"Comparatively ... there is every reason to believe that the participatory economy is, all things considered, superior to western capitalist economies. In the sphere of how well it allocates resources in production, it has both advantages and disadvantages compared to the western market alternative. It has a definite advantage in generating full-employment, long range price stability, and growth. A similar comparative advantage, quite considerable in terms of its quantitative implications, must be assigned to the labour-managed solution in the context of what we may term its 'special dimensions', that is, dimensions largely absent from economic systems where the role of labor is exclusively that of a factor of production."<sup>13</sup>

Yet in spite of all the apparent advantages of labour-management and in spite of the goodwill of some of the most eminent economists,

including Mill, Jevons, Walras, and Marshall towards workers' co-operatives the self-managed firm does not seem to be capable of emerging as a normal form of business organisation in the market economy.<sup>14</sup> Despite its defects it is the traditional capitalist firm in its various forms which flourishes while the labour-managed firm, though it is certainly the subject of a flourishing literature, scarcely exists in practice. The reason for this paradox, we suggest, is to be found in terms of entrepreneurship. But before we can elaborate on this we must digress to consider what a firm is, why it comes into being, and how it is established.

## THE FIRM

The "theory of the firm" is concerned with problems of maximization and minimization.<sup>15</sup> It tells us little about the problems of organisation, decision-making, and control such as we find in real firms.<sup>16</sup> It is not indeed intended to do so.<sup>17</sup> Paradoxically, it virtually assumes that the firm does not exist at all as an organisation.<sup>18</sup> Hence it offers little insight into what firms are or as to how and why they are established. Apart from the theory of the firm, however, economists have written a good deal about the firm as an organisation and about the reasons for its existence. Four main approaches as to what its nature or essence is may be distinguished.

1. It is looked upon as an alternative to the market. Its "distinguishing mark", as Coase puts it, "is the supersession of the price mechanism".<sup>19</sup> It arises because of the costs and risks of using the market and also because of ignorance.<sup>20</sup> By substituting a long-term general contract for a series of short-term ones the costs of making contracts are reduced as is the risk that the short-term agreements will not be renewed.<sup>21</sup> In many cases the information that would be required to engage in market transactions is simply not available. We cannot enumerate all the possible consequences of a decision taken here and now nor can we set out all the possible appropriate courses of action that ought to be taken even in the case of the consequences we can foresee.<sup>22</sup> Hence we cannot conclude anything more than an extremely limited set of contingent contracts. But the firm being a "system of relationships" based on long-term open-ended or unspecified contracts permits us to organise and manage situations as they emerge over time.<sup>23</sup>

2. The firm is regarded as the embodiment of the employer-employee relationship and, therefore, as a "hierarchy".<sup>24</sup> A factor is employed "within the firm" and the contract made with the factor supplier is "one whereby the factor, for a certain remuneration (which may be fixed or fluctuating) agrees to obey the direction of an entrepreneur *within certain limits*".<sup>25</sup> Thus the direction of resources becomes dependent on the buyer, or hirer, and the "relationship" which constitutes

the firm is obtained. Accordingly the firm is a "simple" or a "complex" hierarchy involving authority and subordination.<sup>26</sup> Hierarchical organisation is resorted to because it conduces to quick decision-making and, therefore, to "adaptability" as compared with a group of autonomous individuals.<sup>27</sup>

3. The firm is seen as a team.<sup>28</sup> If it is possible to increase productivity through group or team production and to estimate marginal productivity by choosing a particular input behaviour the "classical capitalist firm" will emerge as a means of "monitoring" or "metering" the performance of individual members of the team and seeing to it that they do not "shirk".<sup>29</sup> The monitoring is performed by the "central contractor" or owner of the firm who must have power to revise the contracts of individual members of the team. Alchian and Demsetz insist that his relationship to the members of the team is based on a *quid pro quo* contract in the sense that the employee "orders" the owner of the firm to pay him money in the same way as the employer directs the team members to perform certain acts. There is no authoritative control.<sup>30</sup> The arrangement is simply a network of contracts subject to continuous re-negotiation with the central agent.<sup>31</sup>

4. As everyday speech reminds us, the firm is identified as an "enterprise" or "entrepreneurial unit".<sup>32</sup> Robbins and Stauss equate the firm and the entrepreneur.<sup>33</sup> Generally, however, entrepreneurship is seen simply as a necessary element in the formation and operation of the firm.

Leibenstein notes that the firm, which he describes as a time-binding, input-transforming entity, is created by the entrepreneur.<sup>34</sup> Loasby points out that differences in valuation being the basis of profit opportunities provide a reason for establishing the firm.<sup>35</sup> Coase refers to the "entrepreneur co-ordinator who directs production" and defines the firm as "the system of relationships which comes into being when the direction of resources is dependent on the entrepreneur".<sup>36</sup>

Mises points out that the factors of production cannot come together spontaneously. They must be combined by the purposive efforts of men aiming at certain ends.<sup>37</sup> Indeed the factors of production could no more combine themselves spontaneously for the purpose of engaging in production than consumers' goods could combine spontaneously for the purpose of providing utility to individual consumers. In each case they have to be actively selected and combined in appropriate ways. The entrepreneur combines the factors for a specific purpose. He and the factors associated with him then constitute the "complex entity" which is the firm.<sup>38</sup>

The firm emerges, as Papandreou puts it, when "the owners of productive services sell them to an entrepreneur". Thus the firm is not the same thing as the pure entrepreneur. Rather is it that which "results *after* the entrepreneur has completed some entrepreneurial decision-making, specifically the purchase of certain resources".<sup>39</sup> Once the entrepreneur has acquired some of the resources necessary to produce a particular commodity he is, as Kirzner says, "in business" and is committed to a particular branch of industry.<sup>40</sup>

This interpretation of the firm is more comprehensive than any of the others to which we have alluded. It applies to all types of firms whatever their size and legal form and explains why they come into being and why they grow. It embraces what is valid in the other interpretations, places them in perspective, and gives them coherence.

The concept of the firm as "a complex entity" consisting of entrepreneur and factors of production leads easily to the recognition that one of the ways it can grow is by superseding the market as, for example, through vertical integration if the entrepreneur perceives a possibility of profit in so doing. Williamson cites several reasons for "internal organisation", as opposed to market transactions, all of which are merely instances of what might make profit possible.<sup>41</sup> If they are perceived as such by the entrepreneur they will be availed of. Otherwise they will not.

Similarly, the hierarchical aspect of the firm falls into place since the entrepreneur may hire labour. He does so in pursuit of an end which he has perceived and which the individuals he hires agree to pursue with him in return for the payment he contracts to make to them. They thus constitute his "team". He monitors the members of the team for his own purposes; but in doing so serves their purposes also since they choose to hire themselves where they expect to secure the greatest remuneration, that is to say, be most productive. The firm is set up not, of course, to monitor but to produce. Monitoring is an incidental, albeit a very necessary, activity in the firm.

Production always requires a combination of factors since production with one factor alone is impossible.<sup>42</sup> An appropriate combination of factors cannot arise spontaneously. It must be organised. In a market economy production is carried on to meet the actual or potential demands of buyers. It follows that the factors will be organised only if someone sees that by so doing these demands can be met. Hence production is always purposive. A factor owner may perform the entrepreneurial function of bringing the factors together or it may be performed by an independent initiator. He and the factors he secures to engage in production then constitute the firm. He, or the legal entity he establishes, plays the role of the "central contractor". Thus the firm

is the entity the entrepreneur creates (and which includes himself) to engage in production for the market. Once there is production (for sale) there is a firm. No matter how small it is it must always be regarded as an organisation because it must always include more than one factor and it will always be intended to remain in being for a period of time because all production takes time.

Production with a view to its sale is the ultimate *raison d'être* of the firm. In a production-exchange (or market) economy, therefore, though internal organisation may up to a point replace the market the firm is itself an essential element in the market process. Without the firm there could be no production for sale and, as a result, no market.

### ENTREPRENEURSHIP

Before any firm can be established an opportunity to engage in business must have been perceived and the means of acquiring the necessary resources secured. The perception of business opportunities and the provision of the means of acquiring resources constitute entrepreneurship.

The primary attribute of entrepreneurship may be regarded as the capacity to see, or discover, and appraise opportunities to use the factors of production in new and better ways.<sup>43</sup> This in turn may involve either the production of an existing good by a more efficient use of the factors of production or the production of an entirely new commodity the demand for which is purely potential and is seen only by the person endowed with this entrepreneurial capacity. The capacity to see such opportunities depends above all on alertness to actual or potential discrepancies between current factor prices and the price of the product the factors, when appropriately combined, will produce.<sup>44</sup> It also requires imagination to "see" potential demand, the ability to research for and discover hitherto unnoticed opportunities, and the will to engage in the line of production the opportunity for which is noticed.<sup>45</sup>

Innovative use of the factors of production consists not so much in the exploitation of new inventions as in "new combinations" of the factors themselves.<sup>46</sup> Carrying out new combinations of resources, though it may involve nothing more than employing existing goods to greater effect, requires qualities of leadership which Schumpeter sees as an essential ingredient of entrepreneurship and concerns the will more than the intellect.<sup>47</sup>

The foundation of a new firm may not involve what may be called primary innovation. A new firm may be merely a copy of an existing one. Nevertheless, a degree of entrepreneurship is needed in founding such a firm because a firm will not be founded unless an opportunity is



seen to employ resources not necessarily in a completely new way but at least in a different way from that in which they were previously employed. This in turn will not be possible unless the price discrepancies, to which we have referred, are still seen to exist.

The capacity to see opportunities is highly personal and subjective in that it depends on mental qualities and so must originate in particular individuals. Two or more people may see the same opportunity at the same time. But even if they do, they will see it as individuals and not as members of a pre-existing group. Because entrepreneurship in this sense is primarily a mental faculty it is open to anybody. It does not require the person who exercises it to possess assets of his own. As Kirzner stresses, entrepreneurship involves the organisation and direction of resources to production but does not itself involve the contribution of a resource.<sup>48</sup>

Entrepreneurship and ownership are functionally quite distinct.<sup>49</sup> Basically entrepreneurship, in the sense in which we are now dealing with it, consists in buying at low prices and selling at higher prices and not in the exchange of owned assets into assets of higher value. This can be seen most clearly when the opportunities to buy and to sell arise simultaneously, that is, when there is pure arbitrage.<sup>50</sup> In this case it is obvious that "initial resources" are not necessary for the exercise of entrepreneurship. All that is necessary is that the opportunity be perceived and acted upon. When entrepreneurship is "exercised across time", that is, when there is production, purchase must precede sale.<sup>51</sup> Hence the investment of capital, including venture capital, is always necessary. The role of the capitalist *qua* capitalist is to provide the entrepreneur with the means of acquiring resources. Without prior ownership of funds it is impossible to be a capitalist just as it is impossible to be a labourer without possessing the capacity to work. But in order to exercise entrepreneurship in the narrow initiating sense prior ownership of a resource is not necessary.<sup>52</sup>

Production and uncertainty are inseparable since production takes time and we cannot know what time will bring. Over the above the price discrepancies that exist by reason of the limited knowledge of each individual there are likely to be other price discrepancies arising because we cannot know the future. While the entrepreneur can (at least in principle) observe present price discrepancies he cannot observe price discrepancies across time. He can only estimate what they are likely to be. To a greater or lesser extent, therefore, he will always be in some degree uncertain of them. But though he is especially concerned with the uncertainties of the future, he cannot be regarded as bearing the burden of uncertainty. It is because he estimates that the cost of the resources he organises is going to be less than the value they produce that he initiates a productive process. But he may be wrong. The resources may

turn out to have been undervalued in relation to the process for which he uses them. If so, there will be a loss. And if there is, it cannot fall on the entrepreneur as such since, as we have argued, he does not in his capacity of entrepreneur commit resources to production. It must, therefore, fall on resource owners and particularly on those who provide venture capital. Accordingly, while uncertainty and entrepreneurship are inseparable in relation to production the initiating entrepreneur as such cannot be regarded as suffering the consequence of his errors. As Schumpeter points out, the entrepreneur unlike the capitalist is never the bearer of risk or uncertainty.<sup>53</sup> Risk falls on the owners of the means of production or of the money capital that was used to pay for them. Even though the entrepreneur risks "his reputation the direct economic responsibility of failure never falls on him".<sup>54</sup> Though all factors operate under conditions of uncertainty the capitalist bears uncertainty and suffers the consequences of entrepreneurial error in a special way since he alone can suffer a negative income in production.

Viewed *ex ante* the entrepreneur envisages profit. If he envisaged loss he would not initiate the project. As Kirzner puts it: "Treating profit as a residual fails to disclose that from the point of view of the prospective entrepreneur the profit opportunity is, with all its uncertainty *there*, it is not seen as something that may or may not be left over after all contractual obligations have been met".<sup>55</sup> Profit arises because of correct intuitions about opportunities and not for bearing uncertainty or risk as such. It accrues to the entrepreneur not as a "reward" for anything but because his forecast was correct. Losses arise if his predictions are incorrect but fall not on him but on the capitalists or owners. There is thus a lack of symmetry in the incidence of profit and loss. That this must be so arises from the fact that only those who have assets can "dis-save". Ultimately then it is only on capital that the consequences of paying the factors of production more than the value of what they produce must fall since there is no other source from which these excess payments could come. This lack of symmetry is a reflection of the inherent differences between capital (or savings) and the particular goods and services which are bought or hired for use in production.

*Ex post*, however, not only may there be no profit but the residual, after all contractual commitments have been met, may even be negative. Hence there is always a problem as to how to meet the *ex post* situation should it turn out to be unfavourable. The entrepreneur "sees" positive profit subjectively but he cannot guarantee it objectively. He must, therefore, make some arrangements to anticipate the possibility that it may turn out to be inadequate. If he were absolutely sure of the future he could borrow the money capital he required on a contractual basis, enter into firm contracts with the factors he wished to hire, buy the rest for spot cash, and keep all the profit for himself. But because

he cannot be sure of the future he must seek a partner or partners who will "accept" responsibility for the residual should it be unfavourable and thereby enable contractual commitments to be entered into with the suppliers of resources. Only those with capital can play this rôle.

The suppliers of capital of this type are, of course, acting entrepreneurially too. They "venture" their capital because they, too, "see" price discrepancies which they believe will give rise to entrepreneurial profit over and above the interest they could earn if they used their capital to make a risk-free loan. They use their capital not only as a means of access to the results of entrepreneurial action but also as a means of enabling such action to be brought to fruition. By exposing their capital to loss they accept final responsibility for the contractual obligations of the firm and thereby provide resource owners with the assurance that contracts they make with the firm will be honoured.<sup>56</sup> Without such an assurance resource owners would be unlikely to commit their resources to a firm even for a short period.

Venture capitalists also act as owners in that they make a decision as to how they will use their capital. By choosing to venture it they choose in a very special way to expose it to partial or even total loss. But this risk differs in degree only from the risk of loss to which all capital is subject.

Thus the foundation of a firm requires (a) the recognition of an opportunity to employ the factors of production in a way which is better than they have hitherto been used, (b) its appraisal, and (c) the provision of the means whereby contractual commitments can be guaranteed or underwritten. In addition, of course, a definite plan of action must be devised and implemented for the purpose of realizing the opportunity which has been recognised. The devising and implementation of the plan of action are functions or tasks that can be delegated to a manager or managers but the others cannot. Initiative, on the one hand, and final responsibility, on the other, in the nature of things are not transferable.

## VENTURE CAPITAL AND THE TRADITIONAL FORM

We have now seen that the firm is an entrepreneurial unit which includes those performing the entrepreneurial function and the resources they organise. In other words, it is the organisation which the entrepreneur creates in order to enter into some line of production. We may now return to the question: why in a market economy does this organisation normally take the form of the traditional capitalist firm rather than the labour-managed firm or workers' co-operative?<sup>57</sup>

If entrepreneurship, in the initiating sense, is open to anybody, as we have seen it is, why do workers not act entrepreneurially and set up

their own firms? Why does a worker who does act entrepreneurially and founds a firm, develop it along capitalistic lines rather than as a workers' cooperative? Why does the "one-man" firm, which is the prototype of all firms, almost invariably develop along these lines rather than along self-management lines? Why, apart from governmental action, are such labour-managed firms as are to be found in the market economy established either by enthusiasts for "social reform" who are not themselves involved in business, or as a last-ditch attempt to save jobs where a firm is about to close down? Why in so far as they do exist have they to be "engineered" into being? In a word, why has the labour-managed system of industrial organisation not emerged "spontaneously"? In view of the nature of the market economy, which permits and indeed compels innovation and experimentation not only in products but in organisation as well and which facilitates adaptation to all kinds of changing circumstances, it might be expected that labour-management would have emerged of its own accord.<sup>58</sup>

If an individual can combine the two main entrepreneurial functions in himself there is no obstacle to his "going into business" on any terms he wishes. It is to be expected that he would wish to set up his business in the most straightforward and cheapest way possible and at the same time allow himself the maximum room for manoeuvre in the future by keeping his commitments to a minimum. This points to hiring rather than buying in the case of capital goods, whenever possible, and to hiring rather than the formation of a partnership in the case of labour. Thus the kind of firm that best meets the needs of the entrepreneur is one based on the hiring or purchase of resources.

If the entrepreneurial functions cannot be performed by one person, that is, if the alert initiating individual has insufficient assets of his own to start a business, it would seem natural that he should try to secure the risk capital in the first instance because, as we shall see, without it he would find it very difficult to proceed any further. Both entrepreneurial functions must be performed before a firm can be brought into being. In order to secure the requisite venture capital the initiating entrepreneur would have to be able to find and convince potential "backers" that there was a profit opportunity in which they could participate if they provided the necessary funds. If they saw the profit opportunity as he did they would then be prepared in effect to go into partnership with him in the enterprise. The form of this partnership could range from one in which the partners would seek no more than a share in the profits on some agreed basis to one in which they became actively involved in the promotion and direction of the businesses.<sup>59</sup>

Venture capital is at risk in a special way as compared with the resources that are hired because it becomes embodied in specific capital goods and because it is committed to the payment of wages in advance

of any receipts from sales. If the business fails the capital goods, which are always to a greater or lesser extent specific, may become virtually worthless while the wage payments will already have been made so that the capital may quite literally be lost. Labour, on the other hand, is usually less specific so that the worker who loses a job by reason of business failure can get another job without much delay in normal circumstances. He loses "his" job, not his capacity to work. How soon he will get another job will depend primarily on the state and structure of the labour market.

As it is capital which is particularly at risk the forms of business organisation, as Knight stresses, centre round the arrangements made for raising it.<sup>60</sup> In other words, it is at the stage of securing the venture capital that the crucial agreements are made which determine the form the firm will take. Those who venture their funds buy (or hire) resources in partnership with the initiating entrepreneur. They may do this directly as in the case of a simple partnership, or they may do it indirectly through the intermediary of a company. But whether they own or hire the resources directly or indirectly it is the initiating entrepreneur who organises and directs them so that he is able to engage in business virtually on the same basis as if he had provided the venture capital himself.

Once the venture capital is secured definite contractual commitments can be made to all those who supply resources and the risk to which they are exposed can thereby be minimized. Indeed resource suppliers are likely to seek purchase or hiring contracts, rather than partnership arrangements, precisely in order to minimize risk and so enable them to make their own plans with less uncertainty than if they had to wait for a return on the goods and services they provided until the output of the firm had been sold.

The legal vehicle through which the initiating entrepreneur and the venture capitalists enter into partnership is, of course, pre-eminently the corporation or company. Except in the case of very small businesses, where the formation of a company would not justify the expense involved, the company provides the entrepreneur with a form of business organisation which is eminently suited to his needs and also to those of potential investors of all types. Through it the entrepreneur can secure not only the venture capital but all other types of capital as cheaply as possible because he can arrange the capital structure of the enterprise in such a way as will cater for the requirements of investors.<sup>61</sup>

Basically the company is simply a set of contractual arrangements by which the entrepreneur can go into business on, as nearly as possible, the same basis as if he was able to venture his own capital in the business. The contractual nature of the company indicates that its origin is also

contractual.<sup>62</sup> It developed from the partnership through the action of individuals as a device both for raising large amounts of capital and for spreading risk.<sup>63</sup> Though legislation sets out certain conditions and limitations to which the contracts underlying the company must conform, it does not create it. The principle of limited liability, too, is rooted in contract.<sup>64</sup> Being contractual in nature and origin the company does not, and never did, require the assistance of the state to bring it into being.<sup>65</sup> It is very much a phenomenon of the market economy which evolved to meet real needs and which in practice was and is found to meet them. Indeed when large amounts of capital are required it may, in Rothbard's words, be said to be the "natural structure" of the firm.<sup>66</sup> Being the outcome of a "natural" evolutionary type of process, governments were never concerned with trying to establish and propagate it as a form of business organisation nor was it ever the purpose of a "social movement" to do so.

The venture capitalists, who are the partners of the initiating entrepreneur, provide funds to enable him to acquire the resources he needs to go into business on his own and on their behalf. It is for him, therefore, to decide how the funds are to be used. It is evident then that the exercise of control over the activities of the firm derives from entrepreneurship and not from the ownership of capital. Ownership obviously involves control over the object owned. In the case of the firm, owners use their ownership right to transfer control over the object owned to the entrepreneur either by selling it or by hiring it for specific purpose. Within the firm, considered as an organisation, the control over the disposition of the resources of the firm thus passes by agreement into the hands of the entrepreneur in order that he may through them achieve his purpose. But since the resource owners do this voluntarily it follows that in selling or hiring their resources to an entrepreneur they are also seeking to achieve their own purposes. Resource owners, subject to their agreement with the entrepreneur, are always free to resume full control over their resources by withdrawing them from the firm.

Thus capital does not give control or authority over or within the firm. It is not a matter of capital hiring labour, as Meade, for example, suggests but rather, as Knight points out, a matter of the entrepreneur hiring both capital and labour.<sup>67</sup> There is no way by which the ownership of capital can confer on anyone the right or authority to control labour. That right can be acquired only by agreement with the labourer who owns his labour. In so far as people put themselves under the direction of an entrepreneur it is because he has an overriding sense of purpose and knows how to achieve his goal by combining resources in a particular way. People expect that they will be able to attain their own limited goal by agreeing to accept the entrepreneur's direction and thereby allow him to direct them towards his end. He knows what his

purpose is. They know that he knows it but they need not and usually do not know it themselves. Ultimately then it is the sense of purpose of the entrepreneur which is the source of control and authority in the firm. If there were no such sense of purpose there could be no firm because it is, as we have seen, the entrepreneurial organisation of resources for a particular purpose which is the origin of the firm. Thus control and direction necessarily derive from entrepreneurship not as a "right" but as functions that must be performed if the entrepreneurial objectives are to be achieved. If resource owners did not agree to allow the entrepreneur to use their resources to achieve his objectives then they simply would not join his firm in the sense that they would not hire their resources to him. But by agreeing to place themselves, within limits, at the disposal of the entrepreneur they allow him to direct and control them. The fact that labour and the labourer are inseparable creates certain difficulties as we have seen. But analytically labour is no different from any other resource the owners of which contract with the entrepreneur to use it for his purposes. In so doing it must be presumed that the resource owner believes he is using his resource better than he could otherwise use it.

When we view the firm in this light it is clear that the contention that something is amiss when ownership and control are separated is without foundation.<sup>68</sup> As we have indicated, the control which derives from ownership relates only to what is owned. It cannot relate to the firm since the firm, as a whole, is a complex entity normally consisting of many resources owned by different individuals but all necessarily under a common overall guidance because they are all brought together for one overall purpose. If ownership of capital were to be identified with control then capital as such would have to be identified with entrepreneurship. This is patently absurd since capital is a thing and entrepreneurship is an activity. Neither could ownership be equated with entrepreneurship since ownership is a set of rights and not an activity.

## ENTREPRENEURSHIP AND THE SELF-MANAGED FIRM

Workers cannot join fully-fledged labour-managed firms that arise spontaneously out of thin air. The labour-managed firm just like any other type of firm consists of several factors of production. As we have stressed, the factors cannot organise themselves spontaneously. They must be deliberately organised and brought together. But before this can be done an opportunity to combine the factors in new and better ways must have been perceived. In other words, some person or persons must display entrepreneurial alertness and act to realize the opportunity that has been noticed. Who will perceive the opportunity and who will take the appropriate action in the case of the labour-managed firm? These questions are simply another way of putting the question: who will set up the labour-managed firm?

Vanek suggests that there are four ways in which such a firm might be set up, *viz.*, by the government, by a local authority, by an existing labour-managed firm, or by a group of workers.<sup>69</sup> Since we are dealing with the problem in the setting of a market economy we must exclude the first two possibilities. We must also rule out the third since it brings us back to the question as to how the founding labour-managed firm itself came into being in the first instance. We are, therefore, left with the fourth possibility.

Alertness and initiative, as we have already noted, are highly individualistic characteristics. An opportunity is likely to be perceived by an individual rather than by a group. Similarly, the initiative to exploit the opportunity is also likely to be taken by an individual. Vanek argues that one of the main functions of labour-management is to create the conditions of a collective mind.<sup>70</sup> But even if it succeeded in doing so after the firm had been in being for some time, and it is highly doubtful if it could, we certainly could not expect a collective mind to exist even before the firm was set up. Collective entrepreneurship could no more be expected than collective art. Even if we were to assume that a group could be alert and could take an initiative it could be nothing more than sheer coincidence if the group seeing the opportunity also happened to have the appropriate distribution of labour skills to exploit it. There are only two cases where a group contemplating the setting up of a workers' cooperative has the appropriate distribution of personnel to operate it. One is where an existing firm is converted into a cooperative. The other is where a number of tradesmen combine to set up a small workshop.<sup>71</sup> But even in such cases it is most probable that the initiative is taken by a single individual rather than that all the workers concerned simultaneously see the possibility of forming a cooperative.

There seems to be no doubt then that in a market economy labour-managed firms, like all other kinds of firms, would have to be promoted in the first instance by an individual. This is not because members of the "working class" as such are more lacking in the entrepreneurial qualities than any other group in society.<sup>72</sup> It is rather because entrepreneurship is essentially and by its very nature a set of highly individualistic functions which simply cannot be performed collectively. The idea that there could be collective alertness and initiative is basically as self-contradictory as the idea that everybody could be first. Since entrepreneurship is above all else a mental attribute, collective entrepreneurship would indeed require a collective mind.

We must now consider how the second main aspect of the entrepreneurial rôle, that is, the bearing of final responsibility for the contractual commitments of the enterprise, is to be performed in the labour-managed firm. The workers' cooperative, just as much as any other kind of firm, operates under conditions of uncertainty. There can, therefore,



be no assurance that the residual, after all contractual costs have been met, will be positive. The possibility that it might be negative must be arranged for from the start as in other kinds of firms.

In the conventional firm the residual income goes to those who supply the venture capital. Indeed what distinguishes venture capital from other kinds of capital is that it is the means by which the contractual payments the firm makes can be underwritten and is itself in consequence particularly exposed to the risk of receiving no positive return and even of being entirely lost. In the labour-managed firm the residual income goes to the working participants. At first sight then it might appear as if there is "venture labour" in the labour-managed firm analogous to venture capital in conventional firms and that it is labour which is exposed to loss if the firm's receipts are insufficient to cover its contractual outlays.<sup>73</sup> Besides, as labour cost is normally very much bigger than the return to equity capital, it might also appear as if there is a much larger "buffer" between a firm's receipts and its contractual outlays in a labour-managed as compared with a conventional firm. Consequently, it might look as if the risk run by lenders on a fixed interest basis is less in labour-managed firms so that the cost of borrowing at contractual rates would be lower than in ordinary firms.

There is, however, one very important difference between labour in the labour-managed firm and venture capital in the conventional firm. The supplier of venture capital can and must wait for his return while the supplier of labour cannot. In the nature of things the working members of the cooperative would have to withdraw income at frequent intervals as the process of production proceeds and in anticipation of the sale of the product. To a greater or lesser extent indeed, depending on the length of the process of production, they must necessarily hire capital in order to pay themselves "wages". The part of capital so used is a wages fund which is "advanced" by the capitalists to the workers. But it places the working members in a dilemma. If they draw their "wages" regularly in anticipation of the sale of the product they cannot be sure that receipts will be sufficient to cover not only their own drawings but also the various contractual commitments of the firm including, of course, the contractual commitments to the suppliers of capital. Moreover, the suppliers of capital will know that the risk they run in lending capital to a labour-managed firm operated on this basis would be greater rather than less than in the case of a loan to a conventional firm.

It would seem, therefore, that if the labour-managed firm is to give some degree of security to its creditors and thereby be in a position to engage in business, some arrangement must be made whereby venture capital is in fact provided. One possible way of doing this is by raising capital on a variable return basis by the issue of non-voting shares.<sup>74</sup> This would give the shareholder a return which would be related either

to labour income or to the value added in the cooperative. In principle it would mean that the residual would be divided between the working members and the providers of venture capital. But, as we have seen, total labour income is not, in fact, a residual. Wages are drawn not only in anticipation of the sale of the product but even before many of the contractual commitments of the firm are met. Hence there would be very great, possibly insuperable, difficulties in deciding *ex ante* what the working members would withdraw during the production period.<sup>75</sup>

Even if such a decision could be made, its implementation would have to be supervised or "monitored" by or on behalf of the suppliers of the venture capital because of the absence of "commitment" on the part of the members of the labour-managed firm.<sup>76</sup> This lack of commitment is an inevitable consequence of the fourth characteristic of the labour-managed system which means that the working participants can leave the firm at any time they wish (see above). But if the participants were to be monitored in this way a form of co-determination would prevail and the firm could not be said to be a self-managed one in the full sense. On the other hand, unless the providers of venture capital were to be in a position to see to it that their funds were being properly used they would be virtually making a gift of them to the members of the firm.

If capital were borrowed on a fixed interest basis the members of a labour-managed firm would have no alternative but to try to solve the problem of the venture capital themselves by keeping their regular withdrawals of income as small as possible so as to build up a "contingency fund" to cover a possible deficiency in the firm's receipts as compared with its contractual outlays which now would include interest. In other words, they would have to treat their income, in part, as a residual by deferring its withdrawal to the greatest possible extent so as to give the firm's creditors some assurance that it could pay its debts. If they were to do this, however, they would in effect be "saving" and so playing a capitalistic role in regard to the financing of the firm. Accordingly, the preference for external financing could not be fully implemented.

Whether such a contingency fund could be large enough to enable a realistic assurance to be given to the firm's creditors that they could be paid if sales turned out to be less than was anticipated is very much open to question. Vanek offers no evidence in support of his contention that labour productivity would be very high in the labour-managed firm. Others contend that it would be low either because management would "shirk" or because of disciplinary problems.<sup>77</sup> In the absence of evidence one way or the other it seems to be more realistic to assume that productivity would be very much the same as in similar conventional firms. If this assumption is correct the extent to which the

working participants could defer the withdrawal of income would be very limited. Hence the guarantees that could be given to creditors would also be very limited and the cost of raising loan capital and doing business generally, other things being equal, would be correspondingly great.

Nevertheless, an initiating entrepreneur might believe that an adequate contingency fund could be built up and that other things would not be equal, and so might decide to set up a labour-managed firm in preference to another kind if he saw an opportunity to use resources advantageously. He would then be faced with the two inter-related tasks of raising the necessary capital on a fixed interest basis and finding prospective partners.

But whatever the contractual terms of a loan to a labour-managed firm were the lenders would really be in the position of venture capitalists as regards risk. In addition to the ordinary risks of business, lenders to a labour-managed firm whether on a "fixed" or a variable return basis also run the risk that the working participants would use the funds to pay themselves high wages and then leave the firm if it became evident that their contractual obligations could not be met. There would be nothing to prevent them from doing so since they themselves, as we have seen, would have no commitment to the firm.<sup>78</sup> It would be very difficult for an initiating entrepreneur to give any guarantee to the prospective lenders on behalf of his prospective partners that this would not happen especially as the borrowed funds would, in part, be required to pay wages. Even if it were possible to devise a method of ensuring that "excessive" wages would not be withdrawn without involving the lenders in the internal operations of the firm, it would seem to be quite impossible to ensure that the working members would not "shirk" until such time as they decided to leave the firm, unless the lenders were in a position to see to it that their funds were being used for the purposes for which they were provided.

Under normal conditions all that is necessary to overcome risk aversion is the offer of a sufficiently high rate of interest. Higher interest rates, however, mean higher production costs and so a smaller residual. Under labour-management conditions, therefore, the higher the promised rate the greater would be the incentive to draw upon the borrowed funds and then abandon the firm. The conclusion seems to be inescapable that it would be particularly difficult for an initiating entrepreneur to borrow funds for the purpose of establishing a labour-managed firm. The difficulties arise, it must be emphasized, not because potential lenders are hostile to the "working class" or to the principle of self-management but because of the risk involved.<sup>79</sup>

The initiating entrepreneur would be faced with yet another set of problems in seeking to organise working partners. Far greater care would need to be exercised in selecting members of a cooperative than in hiring employees because of the difficulty in dealing with members who failed to pull their weight or otherwise turned out to be unsuitable. Consequently, the cost of organising any given number of people into a cooperative would be greater than the cost of hiring the same number.<sup>80</sup> Moreover, what the initiating entrepreneur could offer his prospective partners by way of income and by way of participation in management would in practice be rather limited. Even if everything went according to plan the individual member could not hope to earn very much more than the wage he would earn as an employee in a conventional firm. But instead of being able to draw his full wage weekly or monthly he would have to defer the withdrawal of part of his estimated income to build up the contingency fund, to which we have referred, if capital were borrowed at a fixed rate of interest. Even if the capital were obtained on a variable return basis the working members would also have to defer the withdrawal of some part of their income pending the calculation of the firm's net income at the end of the production or trading period.

Except in very small firms the prospective member of a labour-managed enterprise would know that his voice, as an individual member, in the running of the business would count for very little. He would also know that management itself is a specialized function frequently requiring a high degree of training to develop particular skills. Accordingly, he would be likely to conclude that his participation in management would be very largely illusory. As far as the individual worker is concerned, therefore, membership of a labour-managed firm is hardly likely to be seen as possessing decisive advantages, material or otherwise, as compared with being employed in a conventional firm. In this connection it is noteworthy that the trade unions have not sought to foster and encourage the development of labour-management.<sup>81</sup> While it might be going too far to say that in not doing so they are reflecting the wishes of their members, it is certainly no exaggeration to say that they are not acting against the wishes of their members in this regard either. At all events it cannot be taken for granted that the majority of workers would be at all anxious to join labour-managed firms so that the initiating entrepreneur might well find it as difficult to obtain working partners as to obtain lenders.

Thus an entrepreneur who wished to found a firm to exploit an opportunity he had noticed would be faced with difficulties and costs if he chose to organise a labour-managed firm which he would not encounter if he chose to set up a conventional firm. These extra difficulties and costs might be outweighed by other factors, but there is yet another

problem that the labour-managed firm would create for the entrepreneur. The advocates of labour-management are under a misapprehension in claiming as they do, that ownership of capital is the source of control in the conventional firm and that by a mere organisational change labour can play the rôle which they assume is played by capital. They make this mistake because they conceive of the firm in terms that do not allow for entrepreneurship. And this in turn is the result of using static models (or their "dynamic" variants) of the firm and of its economic environment, and of interpreting the firm as an organisation in political terms. Consequently their economic analysis is conducted in terms that do not require entrepreneurship to be considered while the organisational frame of reference and analogies being political relate to problems of power within the firm. As we have argued, however, direction and control derive from entrepreneurship and must be exercised if the opportunities perceived are to be exploited. But, and this is the problem, if an entrepreneur sets up a labour-managed firm he parts with the possibility of directing it towards his goal.

In the conventional firm the initiating entrepreneur will normally have to cede a share in the profits to those who provide the venture capital and will have to operate in partnership with them. But there is no inherent contradiction here. The initiating entrepreneur and the venture capitalists will be in a position to work out an arrangement which is satisfactory to all and fully in keeping with the nature of the capitalist firm. The initiating entrepreneur will not proceed unless he anticipates that he will be able to achieve his purpose. In the case of the labour-managed firm, however, the initiating entrepreneur, though he might get a comparatively large share in the profits, could not get any greater share in the formal control of the firm than anyone else without doing violence to the very nature of the labour-managed firm. He could, of course, exercise a decisive influence in the firm though nominally having only one vote. If he did, however, the firm would be only nominally labour-managed. Consequently, it would seem that if a firm is to have the entrepreneurial purpose and direction which is required not only to bring it into being but to keep it in being it cannot be genuinely self-managed. Unless the prospective members "follow" the entrepreneurial leadership and allow themselves to be organised and directed a labour-managed firm will not come into being let alone survive. Yet if they do, the firm is not labour-managed. In other words, the concept of labour-management is self-contradictory and the labour-managed firm is an inherently contradictory form of organisation and so is not likely to be chosen by an initiating entrepreneur who wished to organise the factors of production for the purpose of engaging in business.

If, as we have argued, workers cannot collectively act entrepreneurially either in the initiating sense or as providers of venture capital, they cannot collectively set up labour-managed firms. Moreover, if, as we

have suggested, it may be impossible to make satisfactory arrangements for the provision of venture capital on any basis whatsoever to labour-managed firms and if such firms are inherently contradictory by reason of the entrepreneurial origin of direction and control, an independent initiating entrepreneur is not likely to be able to set up a labour-managed firm either. Accordingly, it looks as if the possibility that labour-management could emerge in a market economy as a normal form of business organisation must be ruled out.<sup>82</sup>

## CONCLUSIONS

The establishment of any firm involves the performance of the entrepreneurial functions. The traditional capitalist firm in all its various forms permits them to be performed in a simple straightforward way. Indeed, it evolved in response to entrepreneurial needs. It enables workers to engage in production by providing them with the necessary capital goods to work with and by assuring that their wages will be paid as the work proceeds. No matter how large it is and no matter what its legal form it remains in every sense an entrepreneurial organisation and, therefore, an integral part of the market process itself.

The labour-managed firm on the other hand is not conducive to the performance of the entrepreneurial functions and is not likely to be regarded as a good proposition by workers, other resource suppliers, or by savers. Moreover, the concept of labour-management itself is based on the erroneous assumption that direction and control in the conventional firm is derived from ownership. Once it is recognised that control, under business conditions, derives from entrepreneurship the inherently contradictory nature of the labour-managed firm and, therefore, the impossibility of its emergence, except in special cases, in the market economy becomes obvious.

## REFERENCES

1. J. Vanek, *The General Theory of Labor-Managed Market Economies*, Ithaca and London, Cornell University Press 1970, p. 256.
2. J. Vanek, *The Participatory Economy* Ithaca and London, Cornell University Press, 1971, pp. 8-12.
3. J. Vanek, "The Basic Theory of Financing of Participatory Firms" in *Self-Management: Economic Liberation of Man* (J. Vanek, ed.) Penguin Modern Economic Readings, 1975, pp. 445-455.
4. P. Blumberg, "Alienation and Participation: Conclusions", J. Vanek (ed.), *ibid.*, p. 329; E. G. Dolan, "Alienation, Freedom, and Economic Organization", *Journal of Political Economy*, Sept.-Oct. 1971, pp. 1084-94; and E. Furnbotn, "Worker Alienation and the Structure of the Firm", S. Pejovich, ed., *Governmental Controls and the Free Market; The U.S. Economy in the 1970's*, Texas University Press, 1976, pp. 196-199.
5. J. Vanek, *The General Theory*, op. cit., p. 267.

6. J. Vanek, *ibid.*, p. 266.
7. A. Marshall, *Principles of Economics*, 8th ed., London, Macmillan and Co. Ltd., 1936, p. 305.
8. J. Vanek, *The Participatory Economy*, op. cit., p. 31; and J. Vanek, *The General Theory*, op. cit., p. 237.
9. J. Vanek, *The General Theory*, *ibid.*, pp. 274–5.
10. A. Steinherr, "Profit-Maximizing vs Labor-Managed Firms: A Comparison of Market Structure and Firm Behaviour", *The Journal of Industrial Economics*, Dec. 1975, pp. 98–100; and J. Vanek, *The General Theory*, op. cit., pp. 272–4 and p. 384.
11. J. Vanek, *ibid.*, pp. 360–62.
12. J. Vanek, *The Participatory Economy*, op. cit., p. 33.
13. J. Vanek, *ibid.*, p. 38.
14. J. S. Mill, *Principles of Political Economy*, Vol. 11, 5th ed., London, Parker, Son, and Bourn, MDCCCLXII, p. 363 and pp. 305–6; W. S. Jevons, *The State in Relation to Labour*, 4th ed., London, 1910, reprinted New York, Kelley 1969, pp. 145–151; and L. Walras, *Etudes D'Economie Politiaue Appliquee*, deuxieme edition, Lausanne and Paris, 1936, p. 285.
15. W. J. Baumol, "Entrepreneurship in Economic Theory", *American Economic Review*, Papers and Proceedings, May 1968, p. 68.
16. R. M. Cyert and J. G. March, *A Behavioural Theory of the Firm*, Englewood, Cliffs, Prentice Hall, 1964, p. 8.
17. E. T. Penrose, *The Theory of the Growth of the Firm*, Oxford, Basil Blackwell, 1972, p. 11.
18. B. Loasby, *Choice, Complexity and Ignorance*, Cambridge, Cambridge University Press, 1976, p. 223.
19. R. Coase, "The Nature of the Firm", *Economica*, Nov. 1937, p. 389.
20. R. Coase, *ibid.*, p. 390; B. Loasby, op. cit., p. 66, p. 70, p. 79.
21. R. Coase, *ibid.*, p. 291; B. Loasby, op. cit., p. 66.
22. O. E. Williamson, *Markets and Hierarchies*, New York, The Free Press, A Division of Macmillan Publishing Co. Inc., London, Collier Macmillan, 1975 p. 9 and 72; B. Loasby, op. cit., p. 65, 70, 134 and pp. 213–4.
23. B. Loasby, *ibid.*, p. 134; O. E. Williamson, *ibid.*, p. 82; R. Coase, loc. cit., p. 39.
24. O. E. Williamson, *ibid.*, p. 9, 51 and 71.
25. R. Coase, loc. cit., p. 391.
26. O. E. Williamson, op. cit., pp. 49–54 and 98–102.
27. O. E. Williamson, *ibid.*, p. 51.
28. A. Alchian and H. Demsetz, "Production, Information Costs, and Economic Organisation", *American Economic Review*, Dec. 1972, p. 777–8.
29. M. Silver and R. Auster, "Entrepreneurship, Profit and Limits on Firm Size", *The Journal of Business*, July 1969; A. Alchian and H. Demsetz, *ibid.*, p. 780.

30. A. Alchian and H. Demsetz, *loc. cit.*, p. 780.
31. \_\_\_\_\_, *ibid.* p. 794. The "relationship" that constitutes the firm may itself be regarded as a set of implicit market transactions rather than as a set of "founding" contracts. For a discussion of the "contract of foundation" see G. Renard, *La Theorie de l'Institution*, Vol. 1, Paris, Flammarin, 1930, p. 95.
32. I. Kirzner, *Competition and Entrepreneurship*, Chicago and London, The University of Chicago Press, 1973, p. 27; I. Kirzner, *Market Theory and the Price System*, Princeton, New Jersey, D. Van Nostrand Co. Inc., 1963, p. 149.
33. J. H. Stauss, "The Entrepreneur: The Firm", *Journal of Political Economy*, Vol. L11, 1944, p. 120; L. Robbins, *The Theory of Economic Development*, London, Macmillan, 1968, p. 105.
34. H. Leibenstein, "Entrepreneurship and Development", *American Economic Review, Papers and Proceedings*, May 1968, p. 75.
35. B. Loasby, *op. cit.*, p. 66.
36. R. Coase, *loc. cit.*, p. 393.
37. Ludwig Von Mises, *Human Action*, London, Hodge, 1949, p. 248.
38. I. Kirzner, *Competition and Entrepreneurship*, *op. cit.*, 52.
39. A. G. Papandreou, "Some Basic Problems in the Theory of the Firm", in B. F. Haley (ed.), *A Survey of Contemporary Economics*, Homewood, Illinois, Richard Irwin, 1952, Vol. 11, p. 183.
40. I. Kirzner, *ibid.*, p. 54.
41. O. E. Williamson, *op. cit.*, pp. 29-30.
42. M. N. Rothbard, *Man, Economy and State*, Los Angeles, Nash Publishing Corp. 1970, p. 28.
43. M. N. Rothbard, *ibid.*, p. 272; H. Leibenstein, *loc. cit.*, pp. 74-5.
44. I. Kirzner, *Competition and Entrepreneurship*, *op. cit.*, p. 74.
45. C. Menger, *Principles of Economics*, (trans. J. Dingwall and B. F. Hoselitz), Glencoe, Illinois, The Free Press, 1950, p. 160.
46. J. Schumpeter, *The Theory of Economic Development*, Cambridge, Mass., Harvard University Press, 1934, p. 74; and M. N. Rothbard, *op. cit.*, p. 493.
47. J. Schumpeter, *ibid.*, p. 84.
48. I. Kirzner, *Competition and Entrepreneurship*, *op. cit.*, pp. 45-6.
49. G. Koolman, "Say's Conception of the Role of the Entrepreneur" *Economica*, Aug. 1971, p. 276; and I. Kirzner, *ibid.*, p. 47.
50. I. Kirzner, *Competition and Entrepreneurship*, *op. cit.*, p. 18, p. 48, p. 85.
51. P. H. Wicksteed, *The Common Sense of Political Economy*, London, Macmillan, 1910, p. 367, observes "... (the entrepreneur) must draw commodities, services, and privileges out of the circle of exchange, and so combine and direct them as to produce a result, that can itself be returned into the circle of exchange with a value higher than that of the factors or ingredients that were drawn out."; also, I. Kirzner, *ibid.*, p. 48-9.
52. I. Kirzner, *Competition and Entrepreneurship*, *op. cit.*, p. 55.



53. J. Schumpeter, *op. cit.*, p. 137.
54. G. Koolman, *loc. cit.*, p. 274.
55. L. M. Lachmann, "Uncertainty and Liquidity-Preference", *Economica*, August 1937, p. 300; and I. Kirzner, *op. cit.*, p. 83.
56. F. H. Knight, *Risk, Uncertainty and Profit*, New York, Houghton Mifflin Company, 1921, p. 278.
57. For our purposes the traditional capitalist firm includes the corporation.
58. F. H. Knight, *Intelligence and Democratic Action*, Cambridge, Mass., Harvard University Press, 1960, p. 84.
59. W. E. Grinder and J. Hagel, "Toward a theory of state capitalism; Ultimate decision-making and class structure", *The Journal of Libertarian Studies*, Winter 1977, p. 60.
60. F. H. Knight, *Risk, Uncertainty, and Profit*, *op. cit.*, p. 252.
61. \_\_\_\_\_ *ibid.*, p. 302.
62. *The New Encyclopaedia Britannica*, Vol. 3, p. 531.
63. H. Manne, "Our Two Corporation Systems: Law and Economics", *Virginia Law Review*, March 1967, p. 260; F. H. Knight, *op. cit.*, p. 252.
64. L. Robbins, *op. cit.*, p. 107.
65. B. C. Hunt, *The Development of the Business Corporation in England 1800-1867*, Cambridge Mass, Harvard University Press, 1936, p. 11-13.
66. M. N. Rothbard, *op. cit.*, p. 368.
67. J. Meade, "The Theory of Labour-Managed Firms and of Profit Sharing", *The Economic Journal*, March 1972 (supplement), p. 426; F. H. Knight, *op. cit.*, p. 66.
68. A. A. Berle and G. C. Means, *The Modern Corporation and Private Property*, New York, Macmillan, 1932, p. 121; L. M. Lachmann, *Capital and its Structure*, London, G. Bell & Sons Ltd., 1956.
69. J. Vanek, *The General Theory*, *op. cit.*, pp. 282-3.
70. \_\_\_\_\_ *ibid.*, p. 244.
71. L. Sirc, "Workers' Management under Public and Private Ownership" in B. Chiplin and J. Coyne, *Can Workers Manage?* London, Institute of Economic Affairs, 1977, p. 60 - contends that an enterprise larger than an artisan's workshop cannot be started by an assembly of workers before the plant has been built.
72. J. Schumpeter, *Theory of Economic Development*, *op. cit.*, p. 78, points out that entrepreneurship is generally not a lasting condition and that entrepreneurs do not constitute a social class.
73. Peter Jay, *Employment, Inflation and Politics*, London Institute of Economic Affairs, 1976, p. 28; Steinherr, *loc. cit.*, p. 103, note 9; Meade, *loc. cit.*, p. 402; D. Dubravcic, "Labour as Entrepreneurial Input: An Essay in the Theory of the Producer Co-operative", *Economica*, August 1970.

74. E. Schlicht and C. C. von Weizsacker, "Risk Financing in Labour Managed Economies: The Commitment Problem", *Zeitschrift für die Gesamte Staatswissenschaft, Special Issue, 1977 - Profit-Sharing*, p. 5; H. G. Nutzinger, "Investment and Financing in a Labor-Managed Firm and its Social Implication", *Economic Analysis and Workers' Management*, No. 3-4, 1975, pp. 192-7; R. A. McCain, "On the Optimum Environment for Worker Cooperatives", *Nationalökonomie, Journal of Economics*, Vol. 37, 1977, No. 3-4, pp. 358-61.
75. L. Sirc, *loc. cit.*, p. 65, states that workers in Yugoslavian firms do not 'perceive' the connection between their remuneration and the market and that at best they are prepared to accept variations in wages in accordance with changes in physical productivity. It is likely also that the continuity of sales in a going concern tends to conceal the fact that production takes time. See M. N. Rothbard, *Man, Economy and State*, *op. cit.*, p. 366.
76. E. Schlicht and C. C. Von Weizsacker, *loc. cit.*, p. 56.
77. A. Alchian and H. Demsetz, *loc. cit.*, p. 787; Meade, *loc. cit.*, p. 426.
78. E. Schlicht and C. C. von Weizsacker, *loc. cit.*, p. 56, pp. 60-2.
79. J. Vanek, *The General Theory*, *op. cit.*, p. 317, points out that labour-managed firms are faced with the "dilemma of the collateral" when they try to borrow funds. The problem arises because of the absence of venture capital.
80. Legislation has greatly diminished the comparative advantage of hiring in this respect. In this connection, see G. B. Marsh, "Employment Contracts Today", *National Westminster Bank Quarterly Review*, No. 1977, pp. 56-68.
81. A. Peacock, "The Political Economy of the 'Dispersive Revolution'", *Scottish Journal of Political Economy*, November 1976, p. 216, remarks that we cannot be certain that a worker or groups of organised labour would opt to join a worker-controlled firm rather than a firm organised on traditional lines if faced with such a choice.
82. The production cooperatives in Mondragon still appear to be no more than a special case from which it is not possible to draw general conclusions. But see A. G. Johnson and W. F. Whyte, "The Mondragon System of Worker Production Cooperatives", *Industrial and Labor Relations Review*, Oct. 1977, pp. 18-30; and also, R. Oakeshott, "Industrial Co-operatives: The Middle Way", *Lloyds Bank Review*, Jan. 1978, pp. 44-58.