

THE RISE AND FALL OF THE FOREST
WORKERS' COOPERATIVES OF
THE PACIFIC NORTHWEST

by

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


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This is a study of the emergence, success and failure of the forest workers' cooperative movement in the Pacific Northwest. The spontaneous emergence and early success of these cooperatives is explained by features of the reforestation market and production process. Tendencies to degeneration have been observed of workers' cooperatives, and theory traces such tendencies to various features of the cooperative form. What explains the failure of the reforestation cooperatives; changes in their environment or flaws intrinsic to the cooperative form of enterprise? The study concludes that the failures resulted from sudden and severe collapse in the reforestation market, not from the cooperative organization of the firms.

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CHAPTER I

INTRODUCTION

Summary

The forest workers' cooperatives of the Pacific Northwest were recently considered a promising experiment in industrial democracy. But the movement collapsed in the mid-1980s. This essay will examine the emergence, success, and failure of this cluster of cooperatives. What was it in their environment or in their institutional rules that explains the emergence and initial successes of the forest workers' cooperatives? Because of the obvious lack of incidence of workers' cooperatives, cases of their spontaneous formation are of special interest. What explains the failures of the reforestation cooperatives; changes in their environment or flaws intrinsic to the cooperative form of enterprise? Critics have detected strong degenerative tendencies in the workers' cooperative form, which call into question the broader viability of such enterprises. Viability is of interest, because some liberal political theorists call for establishment of democracy in the economic realm, or at minimum a mixed market socialism composed of a

private-enterprise sector and an encouraged sector of workers' cooperatives.

Overview

Chapter II reviews the thinking of some political theorists favorable to democratic enterprise. John Stuart Mill believed that workers' cooperatives would gradually overtake capital-owned firms, due to superior incentives. Carole Pateman saw democratization of the workplace as a transformative means to participatory democracy in government and all areas of life. Amy Gutmann's egalitarian liberalism permits workers control of the workplace, but no say over wages or profits. Michael Walzer finds workplace autocracy inconsistent with developing democratic understandings, and believes economic democracy would make for a better pluralism. Robert Dahl foresees a third transformation of democracy, arguing that if democracy is justified in governing the state, it is also justified in governing the enterprise. Charles Lindblom believes that the private corporation is unsuited for democracy, and recommends self-management. Carol Gould finds a basic right to workers' self-management, following from the nature of liberty and equality.

Krouse and McPherson more modestly urge a mixed-regime of worker-controlled and privately-owned

enterprises in a market economy. Jon Elster, from the nonconsequentialist value of autonomy, finds the case for workers' self-management to be simple and fair enough to mobilize popular support for endurance of the costs of democratic transition to such an economy. Various New Left theorists also include workplace democracy among their desiderata.

Chapter III reviews and summarizes recent literature on the viability of producers' cooperatives. From their inception in the nineteenth century, such enterprises have been frequently observed to fail or degenerate into capitalist firms. Workers' cooperatives may have an incentive advantage over conventional firms, but if so, why are there so few labor-controlled firms (in the liberal democracies)?

First, the organizational form itself may affect firm survival. Recent neoclassical economic analysis developed by Yugoslav economists shows that a collective firm maximizing return to individual workers produces perverse economic consequences. It shows, particularly, that collectively-held capital inexorably leads to shrinkage and then transformation of the cooperative to individual ownership or to dissolution (degeneration), assuming individual objectives. The problem can be avoided

by individual ownership of capital, which typifies long-lived cooperatives, but here another predicted and observed degenerative tendency towards the increasing employment of nonmembers comes into play. The solution is to separate entirely democratic control from capital ownership, while creating a structure of internal capital accounts which build worker investment in the enterprise. A recent econometric survey of European cooperatives supports the prediction of greater success for firms under individually-attributed, rather than collective, capital. The individually-attributed internal-capital-accounts variation of cooperative ownership is modelled on the unusually successful Mondragon complex of cooperatives in Basque Spain, which has shown no signs of degeneration.

Second, what factors in the environment might discourage the survival of labor-controlled firms? The explanation of ideological hostility is dismissed. Some theorists argue that an economy of workers's cooperatives is thwarted by a collective action problem of one sort or another. A quantitative survey shows that worker-controlled firms in Europe from 1970 to 1983, although small in number, were forming and surviving at better rates than capitalist firms, suggesting that wholesale transformation is not a precondition of success.

Third, what are the obstacles to cooperative formation? Analysis suggests that the cooperatives are at a formation disadvantage, due to lack of worker capital and also, perhaps, due to group size. Therefore, low capital barriers and preformed groups would encourage cooperative formation. Democratic enterprises spontaneously emerge only when advantages of formation exceed the rather serious environmental disadvantages. The larger environment affects firm formation, due to lack of information and the absence of models. Prosperous cooperative enterprises occur in clusters, which suggests that particular production processes encourage the cooperative form, or that labor-controlled firms succeed by imitation, or both.

Chapter IV explains the spontaneous emergence of the reforestation workers' cooperatives in the early 1970s. Special attention is paid to the particular market and production process. The reforestation business was new when the cooperatives emerged. Contractors were notoriously unreliable in honoring wage contracts, but the capital barrier to business entry was trivial. Perverse landowner incentives in the early market rewarded dishonest contractors, who dominated the business. Small groups organized and trained under contractors had an incentive to reform under democratic control so as to ensure deliverance

of their pay. To avoid fraud losses, landowners gradually changed over to new contract incentives which happened initially to favor the emerging cooperatives.

The new contract incentives were also such as to make social supervision more efficient than exterior supervision. In addition, some aspects of the tree planting process are practically immune from affordable supervision of any kind. The cooperative crews also were able to solve the collective dilemma of team production through the natural sociality of small-groups, which was inherently more efficient (in an unconventional sense) than exterior supervision. These conditions accidentally rewarded a cultural preference for democratic enterprise.

The largest and leading firm in this cooperative cluster, the Hoedads, began as a fusion of very small groupings who had worked together on contractor crews, which, in a single leap, added existing and newly-formed small groups in a federation of work teams. The harshness of the work and of the formative season initially selected for hardy members. The autonomous work crews gradually converged in abandoning initial share compensation for production-related compensation. The federation structure took maximum advantage of small-group cooperation. The cooperative combined direct democracy in work crews and

general membership meetings with representative democracy in general operations, and delegation and division of labor for central administrative functions. Consensus decision-making in crews was sometimes attempted, but was not generally endorsed.

Chapter V describes the rise and fall of the forest workers' cooperative movement. The Hoedads and similar smaller cooperatives thrived in the late 1970s. By 1980, there were a dozen cooperatives affiliated with the cluster's league, the Northwest Forest Workers Association. The Hoedads particularly, which reached a working membership of 350 in 1977, became the target of a zealous and tenacious attack by an association of threatened conventional contractors. Later collapse revealed hidden flaws in the Hoedads' formative structure. Membership was instantaneous, building in an inescapable short-term bias to collective decisions. The Hoedads' cultural milieu was prone to workerist denigration of administrative and leadership functions, which were annually rotated. Capital was individually attributed, but refundable within one year, enforcing a short financial and moral time-horizon.

The autonomous crew structure worked well for operations, but internal mobility led to wide quality differences among crews. Because of the low capital

barrier to firm formation, above-average crews tended to split off from Hoedads and form their own small cooperatives, eventually leaving Hoedads with less qualified members on average. At the same time, Hoedads was saddled with the expensive public good of cooperative defense, since the contractors' attacks were strategically aimed at them.

These problems were not apparent until after a severe and sustained collapse of the reforestation market began in 1980. A network of gangster operations exploiting illegal aliens gained a foothold in the boom years of 1978 and 1979, and flourished under the Carter Census amnesty in 1980. At the same time the region lapsed into a years-long depression because of collapse of its basic timber industry. Reforestation work supply fell by half, and the gangster network seized control of the marketplace, with some collusion from large forest landowners. These scofflaws were practically immune from law enforcement, due to reputation for violence among potential witnesses and because of informal arrangements with some officials.

As the rule of law disappeared in the reforestation industry, past efforts of the contractors came to fruition in forcing the cooperatives to comply strictly with payroll laws as employees rather than as partners. This was

accompanied by punishing technical liabilities, and heavy transition costs. By 1986, the Hoedads was down to 15 members, and the other cooperatives, with one exception, had voluntarily dissolved.

Second Growth cooperative, the first spinoff from Hoedads in 1978, was on average composed of older and more experienced workers than Hoedads and the other cooperatives. It initially imitated the informalities of the general cluster model, but in 1983 responded to the trough of the depression with a controversial reorganization. It established probationary membership, and longer capital commitment, and informally eliminated rotation of officers. Second Growth has since thrived and is an unqualified success.

Chapter VI concludes that the forest workers' cooperative movement failed, not because of any degenerative tendencies inherent to the cooperative form, but rather because of the utter collapse of their market. Failure to adapt collectively to radical market changes is ascribed to the youth of the workforce. Closing observations are tendered.

CHAPTER II

POLITICAL THEORY AND INDUSTRIAL DEMOCRACY

The study of workers' cooperatives, because they are so rare, would be little more than the reporting of a curiosity, were there not a larger ethical interest in propagating this form of enterprise. Utopian socialism, anarchism, and syndicalism have variously enthused over workers' control, but these traditions are themselves little more than intellectual curiosities. Marxism, at least in its Leninist materialization, is hostile to democracy and has lost all moral force. However, a number of recent theorists, most of them liberal, have seen promise for an economic system of self-governing enterprises. This chapter reviews the political theories of J.S. Mill, Carole Pateman, Amy Gutmann, Michael Walzer, Robert Dahl, Charles E. Lindblom, Carol Gould, Krouse and McPherson, and Jon Elster, in relation to industrial democracy.

John Stuart Mill

John Stuart Mill was most suspicious of government intervention in the economy, but was most favorable to "the

association of labourers among themselves" in his Political Economy (1965). Few new arguments have been devised since Mill's brief for cooperation 140 years ago. Mill, inspired by the then unequivocal successes of workers' cooperatives in France after 1848, opposed the seizure of capital as advocated by some early socialists, and instead recommended the association of labor in democratic enterprises, collectively owning capital and working under elected and removable managers, with cooperatives to slowly displace capitalist firms through natural advantage on the market. Mill observed that the successful cooperatives were better disciplined than their capitalist twins, because of the superior incentives of self-rule; the natural advantage of cooperatives is in the better alignment of material incentives, which carries also the large social benefits of reducing industrial conflict and advancing the moral education of the workers. The French cooperatives he studied held capital in common and unrecoverable.¹ Similar cooperative successes were also reported in Germany, Switzerland and England, but Mill noticed, as well, the puzzle of degeneration.²

¹An incentive incompatibility of huge importance, not fully understood by cooperators until the 1970s.

²Conversion to conventional ownership, likely under collective capital, as discussed in Chapter III below.

The only, albeit large, advantage of cooperatives is better incentives; capitalists retain the advantage of individual management which is always more efficient than collective management, said Mill. Individual capitalists might be better innovators, and cooperatives better emulators. But sooner or later, as cooperative associations multiplied:

they would tend more and more to absorb all work-people, except those who have too little understanding, or too little virtue, to be capable of learning to act on any other system than that of narrow selfishness. As this change proceeded, owners of capital would gradually find it to their advantage, instead of maintaining the struggle of the old system with work-people of only the worst description, to lend their capital to the associations . . . and at last, perhaps even to exchange their capital for terminable annuities. (Mill 1965, 793)

Thus, capital would come to be collectively owned, and this, Mill concluded, assuming that both sexes participate equally in enterprise and government, would be "the nearest approach to social justice . . . possible at present to foresee."

Carole Pateman

Pateman (1970), inspired by Rousseau, John Stuart Mill and guild socialist G.D.H. Cole, put participation on the agenda of political science with her study of democratic theory, and stirred general interest in workers'

self-management. She was critical of liberal democratic theory, such as Dahl's polyarchy, for its alleged separation of the political and private spheres, its reliance on beneficial apathy, and its reduction of political participation to the occasional formal exercise of vote for representation. In place of rejected liberal democratic theory Pateman proposes her alternative conception of participatory democracy, which is direct democracy in every area of life, beginning with the workplace; representation would be forbidden except for strict delegation. The extension of "polyarchal" democracy to economic organizations as Dahl later advocated, would not fuse the political and personal, and so would be a hollow victory (Pateman 1975).³ Industrial democracy is not the end; lower-level participation (mostly direct democracy) in industry is the means to an individual feeling of political efficacy which then allows for full participation at the higher-level (government).

Pateman (1983) later observed the demise of participation as a popular political slogan, but applauded advances in empirical research and democratic theory. The

³When formulating her attack on Dahl for failing to include workers' control in his democratic theory, Pateman was apparently unaware of Dahl's quiet but lifelong interest in the topic.

argument for political apathy is no longer ascendant. Citing Goodin and Dryzek on the rationality of participation, she discards the concept of political efficacy. What she would emphasize is not only the extension of political supervision over the workplace, but also now to the household. The patriarchal, in addition to the class, structures of liberal democracy must be challenged, she now believes. For Pateman, industrial democracy was of primary value not for its own sake but as an educative project. Moreover, what most people take for democracy she declares illusory; anything other than direct, universal and constant participation does not count. The omnipresence of supervision in her vision, and the striking absence of trust, leads to an unintended totalitarianism; in her world one is hounded from block committee to work committee to commune assembly with never a moment of individual peace.

Amy Gutmann

Amy Gutmann (1980) calls for democratizing economic relations in her construction of egalitarian liberalism. She starts with traditional liberalism's concern for individual interests, especially, of course, the liberty interest. State limitation on ownership and use of private

property is justified by the need to equalize all individuals' shares of freedom. Freedom begins in freedom from want, she continues, so goods must be more equally redistributed among persons, so as to expand the realm of individual choice. The argument is convincing, she says, only to convinced egalitarians, and depends upon "empirical assessments . . . concerning the economy and individual psychology" (Gutmann 1980, 12). Gutmann revises Rawls' principles of distributive justice so that, first, broad welfare rights in primary goods are imported into his equal-liberty principle, and second, so that the residual goods ("money") remaining for his difference principle are distributed as equally as possible; she rejects the prospect of egalitarian collapse. The goal is not maintenance of any minimum standard, but thorough equality of goods.

Liberal egalitarianism requires comprehensive redistribution of goods, but also maximum participation; however these two aims are in tension if and when democratic rule rejects egalitarian justice. The solution, writes Gutmann, is that "we" make welfare a constitutional right; participation "will be encouraged [only] as far as is consistent with a just distribution" (Gutmann 1980, 177, 197). After the addition of the Gutmann-amended Rawlsian

principles to conventional constitutional rights, the national legislature will ensure that "incomes are equitably distributed across the nation"; local communities will contain "democratic political forums" which will forward information to the higher authorities, but may decide on such matters as the optional portion of the local school curriculum (200-202). One could not give up more goods for more choices.

Gutmann agrees on "the value of industrial democracy for self-dignity and development," but rejects the notion of justice as "the actual will of the citizens" (206). She declares:

Workers' control in a fully egalitarian society will be limited to issues unrelated to wage- and profit-scale negotiations, for these issues must be equitably resolved on an industry-wide or national scale. . . . Yet full decision-making power will be granted to workers on many nonwage, nonprofit issues--particularly issues relating to job structure. . . . where the job structure preferences of workers are completely unacceptable to owners because of potential profit losses, a neutral government board, or the judiciary, might arbitrate the case . . . (206)

Gutmann's industrial democracy apparently preserves a group of owners, but they are forbidden control over profit, wages and the workplace. Ownership remains in name only; all the social disadvantages of property are collected in the central state, while its several advantages are denied to all smaller institutions. The

workers are "granted" the workplace. There is nothing left for owners to do, workers have say over everything except pay and profit, which are calculated by a national government. The scheme contradicts, without confronting, familiar empirical assessments of psychology and economics (and also fails to satisfy ordinary definitions of industrial democracy). In short, why work? Workers have control of the workplace, but, whatever they do or decide, they have no control over their reward. If the work-team votes to work half as hard or twice as smart, they get the same pay, because everyone in the country does. If one worker shirks, the work-team may not reduce his pay (except by judicial action, and even then, what about the shirker's right to respect?). So, by the egalitarian fiat of their moral superiors democratic workers are denied resort to a common egalitarian principle: equal pay for equal effort. If one work team keeps an unusually clean and pleasant shop, must the national legislature forbid the inequality, or extend it as a right throughout the land? True, cooperatives do tend to be more egalitarian than equivalent capitalist firms, but that comes from working shoulder to shoulder, not from clever Supreme Court briefs. Workers would have less autonomy in Gutmann's America than they do in the imperfect present. The boss is replaced by the

judge.

Michael Walzer

Walzer (1983) disdains philosophical justice and appeal to personal rights in favor of a "radically particularist" account of our "shared understandings"

(xiv). Literal egalitarianism is repressive and false, he begins. Instead:

The aim of political egalitarianism is a society free from domination. This is the lively hope named by the word equality: no more bowing and scraping, fawning and toadying; no more fearful trembling; no more high-and-mightiness; no more masters, no more slaves. It is not a hope for the elimination of differences; we don't all have to be the same or have the same amount of things. (Walzer 1983, xiii)

For Walzer there are a number of contextually given social goods (or sets of goods), each constituting a relatively autonomous sphere of distributive justice, for example, money should not buy church office and piety should not make for market advantage. Trouble comes when one good or set of goods "becomes dominant and determinative of value in all the spheres of distribution" (10), and comes double as such dominance is inevitably monopolized. Resistance to the monopoly arises, demanding more equal redistribution of the the dominant good (simple equality); or, best, opening the way for autonomous distribution of all social goods

(complex equality); or, demanding a new dominant good monopolized by a new group (revolution).

Simple equality challenges the monopoly over but not the dominance of a social good, to no end. To illustrate, redistribution of money (possible only through a centralized and activist state) would neutralize its dominance, but then those of talent would arise to seek the dominance of educated merit. Then, simple equality would call on the state to regulate skill, and soon enough those arise who would monopolize dominant political power. Political power might be limited through wide distribution, as in democracy, but again, breaking the monopoly over the good of political power neutralizes its dominance, thus breaking its efficacy in enforcing money equality. Complex equality seeks to narrow the range of convertibility among spheres, so that wealth does not command political power, political power does not command the market, nor the market command grace, nor grace wealth, and so on. Free exchange, desert, and need, for example, each have their place as distributive principles, in different spheres, and always depending on the particular political community.

Plutocracy is clearly superior to totalitarianism, but the sphere of property and the sphere of power are better separated, on Walzer's account. "Ownership [of the

enterprise] constitutes a 'private government,' and the workers are its subjects" (293). Feudalism was private government, and separation of property from polity a long struggle, ending in a redefinition of ownership which excluded taxation, adjudication, and conscription, now socialized in the political community as a whole. The modern firm is distinguished in that workers voluntarily enter its doors, and is justified by the enterprise, energy, and risk-assumption of its owners. But the same can be said for cities and towns (and sometimes for democratic states). But no one owns the town.

To illustrate, Walzer tells the story of Pullman, Illinois, a company and a town owned by one man, George Pullman. Pullman had built the town from the ground up, and owned every machine and curtain in it. There was no municipal government; Pullman ruled the town as he did the firm, with benevolent autocracy. Residents were always free to leave. While subordination was harsher in the workplace than in the town, contemporary opinion condemned Pullman's town, but not his factory, as contrary to the American spirit. But, Walzer asks, how are rule in town and factory distinguished? Not by enterprise and risk. Not by capital investment, as owners of municipal bonds do not own towns. Not by willing entry, as the freedom to

leave does not justify autocratic municipal rule. Where the town taxes, the firm fines; where the town punishes, the firm fires. There is no deep difference, and so democratic distributions of political power "can't stop at the factory gates" (298).

Cooperatives should run their own affairs, subject only to general regulation such as to assign negative externalities (293); they should even be free to choose their own coworkers however they please, other than on racial criteria (162). As for wage differentials, although cooperatives tend to be egalitarian, compensation would be different between firms according to the market, and firms should be free to make their best democratic decisions on internal distributions, and this is to the good (117-118). Finally, future democratization of the firm would resemble the diverse experiments and arrangements of government democracies, and should not be confined to any single design (302).

Dahl and Lindblom

Democratic theorist Robert Dahl began his dissertation a few weeks after the signing of the Molotov-Ribbentrop Pact, and was awarded his doctorate between Dunkirk and the fall of France. His theme was the

compatibility of socialism with liberal democracy, best attained through some kind of market socialism rather than authoritarian planning, and by workers' control of industry in preference to central state control (Dahl 1985a). Setting aside fifty intervening years of communist terror, fellow-travelling apologia, and radical demonization of Dahl, the essay would be at home in almost any socialist journal today.

Dahl begins his Preface to Economic Democracy (1985b) with the observation that Tocqueville's fear that democratic equality would destroy liberty has not been borne out (although the conditions which protect liberty against equality must be identified and retained). The larger problem now, following from the change from agrarian democratic republicanism to corporate capitalism, is the threat of a certain economic liberty to democracy, specifically, the ownership and control of firms as a source of political inequality, both through unequally large corporate power in the governance of the state and in the complete absence of democracy in governance of the firm.

The right to private ownership and control of the firm is defended in two ways, instrumentally, as socially beneficial, and morally, as a natural right, says Dahl. A

purely instrumental defense would mean that private control of the firm is subordinate to the fundamental and inalienable right of self-government. A rights defense of such property would have to encounter democratic rights. Property rights and democratic rights each may be portrayed as a danger to the other. The classical republican solution to the antagonism is rough equality in property, a self-regulating egalitarian order (imperfectly) realized in the early American republic through the accident of cheap land, but since replaced by an inegalitarian corporate capitalism which has usurped the legitimacy of the earlier order. Dahl finds a right to economic liberty, but holds that entitlement, labor, and liberty defenses of property fail in establishing any derivative right to private ownership of corporate enterprises.

Dahl invites us to imagine a new economic order which would generate a distribution of political resources favorable to democracy, be fair or just, preferably be efficient, encourage popular virtue, and, finally, allow for personal economic freedom. Given such values, corporate capitalism and bureaucratic socialism are out. Workers' cooperatives, or Dahl's preferred term, "self-governing firms," are in. Dahl declares that Pateman's argument for the transformative promise of

industrial democracy is empirically unsupported. A system of self-governing enterprises would not mean utopian regeneration of humankind, but would reduce conflict, improve political equality and democracy in the state, and develop stronger standards of fairness.

Dahl then moves from the instrumental defense of industrial democracy to a stronger justification, and addresses three objections:

If democracy is justified in governing the state, then it must also be justified in governing economic enterprises; and to say that it is not justified in governing economic enterprises is to imply that it is not justified in governing the state. (111)

The first objection is violation of a superior right to property. Dahl already rejects a strong property right in the abstract, but concretely would not expropriate capital in any transition. Capital hiring labor would be replaced by labor hiring capital.

The second objection is that decisions in the firm are not binding in the same sense as they are binding in the state. The state is backed by coercion, but the worker in the firm voluntarily exchanges subjection for pay. The government of the firm makes decisions directing its subjects, backed by enforcement and the ultimate sanction of firing; but the worker is free to leave. The argument that any decision of national government is justified by

its citizens' freedom to leave is generally rejected; because exit is so costly, membership is practically compulsory. Dahl says that the case more similar to the firm, decisions of local government, are also rarely justified by the freedom to leave; moreover, unlike applying for employment in the firm, one need not petition for citizenship in one's new municipality.

The third objection is that, unlike democratic government, members of the firm lack sufficiently equal qualifications to decide which matters should be subject to binding collective decision and which should be delegated to recoverable authority; guardianship is better than democracy in economic enterprise. In response, Dahl distinguishes between ends and means in the firm. Conceding it as an empirical question, Dahl asserts that "it is not inconceivable" (128) that a system of self-governed enterprises could further the social ends of savings, investment, growth, and employment. Moreover, such firms would enjoy the means of hiring or developing managerial skill, and the means of efficiency, as demonstrated by successful cooperatives such as the Mondragon complex. The "iron law" of oligarchy does operate, but so does an opposing tendency toward autonomy and mutual control.

In closing, Dahl believes that an economy of self-governing enterprises would discover pragmatic, but more egalitarian, tradeoffs between equity and efficiency. He reviews the merits and demerits of individual, collective, state, and "cooperative" ownership of self-governed enterprises, and concludes in favor of "cooperative" ownership.⁴ For transition, Dahl recommends that a few typical firms in several industries be converted to self-governance, and if successful, then perhaps self-governance could expand through wage-earner funds on the model of the Meidner plan of Swedish social democracy.

Finally, in his latest book, Dahl (1989) envisions a third transformation of democracy, rejecting nationally regulated equality as impractical and probably oppressive, for democratization of the economic order. Democracy's first transformation was to the democratic city-state in classical antiquity. The second democratic transformation was from the city-state to the pluralist nation-state in the modern era. A third transformation would achieve democratic governance within the firm, an idea as "foolish and unrealistic," Dahl claims, as the idea of extending democracy to the nation-state. Democratically run firms

⁴The Mondragon structure of internal capital accounts, described by Ellerman (1984, 1986), and described below.

need not be economically superior, he remarks, but only as good as conventional firms. Democracy then would tip the scales.

Lindblom (1977) explores the links between politics and markets. All polyarchal (liberal democratic) political systems rely on market-oriented (and private-enterprise) economic systems. Why? The connection originates in their common birth in constitutional liberalism, but is not a necessary connection according to Lindblom. Their continuing association is explained by the privileged position of business in existing polyarchy, in that the business executive serves as a public official in the market system. Popular control of enterprise is limited largely by consumer choice, since business serves indispensable public functions and so requires both extraordinary inducements and deference from the state, to the point that, while libertarian, existing polyarchies "are controlled undemocratically by business and property" (170-178, 169). Lindblom more or less recommends industrial democracy, market socialism and self-management, as the best future for democracy. His work concludes:

It has been a curious feature of democratic thought that it has not faced up to the private corporation as a peculiar organization in an ostensible democracy. . . . The large private corporation fits oddly into democratic theory and vision. Indeed, it does not fit. (356)

Carol Gould

Gould (1988) presents a thorough normative theory of democracy and workers' self-management. She argues that individual liberty (liberalism) and social cooperation and social equality (socialism) are compatible rather than conflicting values, and that democratic participation is required as much in the economy as in politics. For Gould, individual freedom is not only the capacity for free choice, but also an activity of self-development. This entails individual equality, and social cooperation as a necessary condition of individual self-development. Individual equality extends to equal rights to conditions of self-development, including enabling minimal material conditions, civil liberties, political rights, and the right to participate in areas of joint decision-making. Increased state power or centralized authority is ruled out as a means, since that would inhibit individual rights to self-determination and participation.

Gould observes that theories of economic justice typically concentrate on distribution, not production. For Rawls, the equal-liberty principle applies to the political domain, but in the economic domain justice is concerned

only with the distribution of social and economic advantages. Gould says that equal liberty requires workplace democracy as well. Moreover, the goods that Rawls would distribute are produced by people, who are entitled to them. This is not a full endorsement of Nozick, of course, whom she says fails to appreciate the fact of joint or social labor and appropriation. Contrary to Nozick, the exchange between capital and labor in the conventional firm is not fully voluntary, but constrained by the worker's practical lack of choice.

Given equal rights to self-development, Gould would include rights and powers to participate in decisions involving joint production, and permit distributional inequalities, as desert, above minimal subsistence, health, and education standards. Such democracy would normally be located in the firm, its citizens the worker-members, who would have the right to decide jointly on all aspects of operation including wages and investment, in direct or representative democracy as need be. A market, to the extent it permits free agreement among democratic firms, is compatible with economic democracy. The democratic state may regulate abuses of the market system.

Where others justify workers' self-management as a means to meaningful work, property right, productive

efficiency, or democracy, Gould says she justifies self-management as a principle of justice, from the equal right to the conditions of self-development. Dahl, for instance, argues that economic democracy follows on simple analogy from political democracy; but the negative freedom and abstract equality adduced in his support of political democracy could just as well support the private-enterprise form of economic decision-making, Gould claims. But is it wise to remake society on justice alone?

Krouse and McPherson

Krouse and McPherson in Ethics (1986) call for a mixed regime of worker-controlled (worker-owned or socially-owned) and privately-owned enterprises in a market economy, allowing workers to choose the work relationships they prefer. The admirable modesty of their argument can be captured in summary, but not the many nuances. Such a regime, they say, is not inspired by grand moral foundations, but is attentive to the values of liberty, equality, efficiency. To the libertarian contention that the choice is already available, they respond that initial inequality in property precludes the establishment of a worker-controlled sector, which should be encouraged by government intervention. To attain equality, they resort

to Meade's obscure scheme of a "property-owning democracy" with strict inheritance laws, reward of small savings, and strong educational opportunity. With egalitarian background conditions, the establishment of a cooperative sector still might be impeded by collective-action problems or by positive externalities. Some theorists, along the lines of Walzer (and Dahl), assert an inalienable right to democratic control of the firm. The dark side of such an inalienable right would be the denial of freedom to enter into contracts of wage labor, and this liberty objection cannot simply be dismissed, given, among other problems, the empirical link between polyarchy and private-enterprise market systems.

Could an egalitarian mixed regime be sustained? This is the question of viability. Equality could decay through the privately-owned sector or from market dynamics. The mix of firms could be unstable, either through economic or political aggression on the part of either the privately-owned sector or the cooperative sector. Krouse and McPherson respond that stability could be maintained through relatively mild government intervention, involving less interference than the alternative of the capitalist welfare state. Sustainability ultimately depends on widespread moral support. The rest of the case defends

retention of a privately-owned sector. The proposal is more than a compromise, they say, in actually respecting the values of personal autonomy and political liberty, noncoercion and free choice. Transition is problematic, but is at least as feasible as the more ambitious socialist proposals.

Arneson (1986) criticizes property-owning democracy as beyond tolerable efficiency costs and as too much of a concentration of state power, and criticizes a mixed regime as an overly costly manufacture of options given the liberal safety of decentralized market socialism. Elster (1986) agrees with Dahl in rejecting state ownership of enterprises as undermining of workers' control, and so is critical of Krouse and McPherson's retention of that option. Also, Elster finds Meade's property-owning democracy both unenforceable and undesirable. He adds to the analysis of a mixed property regime. An alternative neglected by Krouse and McPherson is a mix at the firm-level; first, in that a gradual transition could rebundle rights so that capital initially retains voice in the firm; second, as observed of some existing cooperatives, members can employ nonmembers. Next, Elster defines the central issue as whether a mixed regime would be a "stable polymorphism." The paucity of cooperatives

could follow because their present frequency is below some stability threshold; or there are only two equilibria, pure capitalism or pure market socialism; or pure capitalism is the Pareto inferior equilibrium; or pure capitalism is uniquely optimal. Assuming that the last is not the case, inertia could be explained by myopia, externalities, risk aversion, and adaptive-preference formation.

Jon Elster

Elster (1988) favors a constitutional democratic transition to socialism, supported by arguments from consequence and from justice. The consequentialist argument is more an argument for skepticism: social science is a long way from predicting "the global net long-term equilibrium effects of major institutional changes," while piecemeal social engineering is little remedy since it permits estimate of only "local, partial, short-term or transitional effects" (309). For example, the mixed record of individual workers' cooperatives in a capitalist economy (local) tells little about large-scale market socialism (global).

Next, knowledge of partial effects from the ceteris paribus approach of the social sciences does not permit estimation of net effects from the many changes attendant

on a major reform. Also, the static advantages of, say, an economic system, must be compared to its dynamic advantages. Finally, the equilibrium of large reform cannot be predicted from the phenomena of transition. Piecemeal social change can not detect institutions viable only in the large and the long-term, but people understandably have no motivation to "participate in massive and protracted experiments of uncertain efficacy, unless the reform is perceived to be inherently fair and just" (316).

Elster's argument from negative justice applies to smaller reforms also justified on consequentialist grounds. Given the abundance of reform proposals, "the very plurality of cooperative arrangements prevents any one of them being chosen," a bargaining problem (317). Schelling's theory of bargaining observes that agreement sometimes hits upon a naturally salient outcome, a focal point, such as "divide equally," or "do nothing." So, democratic politics arrives at focal policies, which should show at least the appearance of simplicity, efficiency, and fairness.

The argument from positive justice applies to larger reforms:

It is my contention that the nonconsequentialist values of justice, liberty and democracy have been the major

proximate causes of social change over the last few centuries. . . . If a reform is perceived as fundamentally just, people will be motivated to endure the costs of transition and the extensive trial-and-error procedures that may be required before a viable implementation is found. (319-320)

Universal suffrage was won on justice, not on calculation of consequences, which were dreaded, says Elster. A major reform such as Weitzman's profit-sharing makes no appeal to justice, and thus there would be no motivation to endure transition:

By contrast, the case for workers' self-management rests on the intuitively appealing idea that any joint or cooperative enterprise ought to be governed in common, by the equal influence of all concerned and to the equal benefit of all concerned. Because the proposal rests on the nonconsequentialist value of autonomy, it is more resistant to practical difficulties of implementation. (320-321)

There is a certain irony in Elster's emphasis on the instrumental value of justice in winning change.

Elster and Moene (1989) provide a more particular analysis. The most general problem is economizing on information and trust; if both were unlimited central planning would work. Information is limited in principle, but a higher level of trust is possible, although trust, solidarity and altruism would be the byproducts of a good economic system, not its preconditions. A capitalist wage system relies on unemployment to discipline shirking, the firm's internal efficiency thus resting on external

inefficiency. Neither capitalism nor central planning can satisfy "producers' preferences" for participation, although capitalism probably offers greater scope for self-realization. Preferences should be respected when there is genuine freedom of choice. A little central planning is an impossible choice for workers under capitalism, while the choice of decentralized market socialism is confronted by problems of transition and stability.

If there are externalities, then change from an inferior stable system to a superior stable system justifies state intervention, usually undesirable because costly to maintain and detracting from individual autonomy. If different workers prefer different systems, the question is that much more complex. Further, Elster and Moene, without detail, say they are skeptical of arguments by Dahl, Krouse and McPherson, Pateman, and Milton Friedman, asserting close logical and sociological connections between the political and economic realms.

Isolated cooperatives face negative discrimination, and adverse self-selection of members: only rebels go against the current. There could be positive self-selection too, as in the Pacific Northwest forest workers' cooperatives. However, Elster's impression that

the forest workers' cooperatives depend on idealistic wage and time sacrifice is wrong. In fact, pay and conditions are usually better than in their capitalist counterparts. Those cooperatives do tend to select their members (workers) with care, but that is true of all economic enterprises, throwing some confusion over Elster's local-global distinction. In both the pure capitalist or pure cooperative economies firms would compete in selecting their workers, but all is not equal, the differing criteria of worker selection (say, diligent subordination as compared to diligent cooperation) shape the cultural qualities of the labor pool even when it is the whole population. In addition, various alleged externalities are evaluated.

Economic theory is presently unable to offer strong conclusions on the large-scale and long-term viability of cooperatives, Elster and Moene continue. Comparisons are still overly stylized, although economic theory does begin to indicate the merits of choices within a larger system of rights and institutions. For example, there is progress in analyzing problems of ownership choice for workers' cooperatives.⁵ Here is their description of market socialism:

⁵Presented in the following chapter of this essay.

Our concept . . . is that of a system of labour cooperatives. The system, however, need not cover all economic activities. . . . Some productive and regulatory activities would have to be carried out by the state, as they are in all contemporary capitalist economies. More controversially, there could be room for traditional capitalist enterprises alongside the cooperative ones. Market socialism could even be compatible with the cooperatives being in the minority, if they interacted to form a substantial cooperative bloc in the economy. (26)

A mixed system furthers economic freedom, and allows for the fact that "not all production processes lend themselves easily to the workers' monitoring of one another that may be a condition for a viable cooperative" (27).

Other Theorists

A number of writers have repackaged the demand lists of the New Left in the more winsome wrappings of Democracy; these works deal informally, or peripherally, with workplace democracy. Perhaps as with Pascal's wager, or the goal of the common good in deliberation, sooner or later one will end up believing in what one says. Carnoy and Shearer (1980) founded this genre in their manifesto for Tom Hayden's ("the American Lenin") electoral campaign organization. Tacked on to support for sweeping nationalizations, guaranteed incomes, solar energy, illegal immigration, and nonintervention in Soviet proxy wars is the call for a democratic workplace as already won in

places like China and Cuba. Their program was social-democratic in form, but popular-front in essence.⁶ Dolbeare (1986) recommends a New Left-inspired state socialism as "economic democracy," with nary a mention of self-governing firms.

As the decade has passed, and now as it ends with all of communism in disgrace, democracy and liberalism have supplanted hard utopianism in left theory.⁷ Cohen and Rogers (1983) present an interesting democratic program, including workplace democracy, based on a "principle of democratic legitimacy." The program is prefaced by an extended portrait of a ugly and brutal America on the eve of destruction. Cohen more formally presents the ideal of deliberative democracy elsewhere (1989); the conventional business firm, of course, would fail the deliberation test.⁸ Barber's (1984) call for strong democracy includes public support of experiments in workplace democracy among

⁶The comments are a self-criticism.

⁷In practice, the American Left still refuses to confront the moral and political necessity of trading in its obsessive anti-Americanism for obsessive anti-communism, and thus is destined for continued public disdain.

⁸Other than passing suggestions, I failed to find application of the ideal of deliberative democracy to the problem of the business firm; it would be an interesting analysis. Gould (1988) claims that Habermas rejects self-management in the economy.

its twelve points, but that point of his program is barely developed. Cohen and Rogers, and Barber, argue that their programs need to be enacted as a whole, and naturally they reject nondemocratic means. Bowles and Gintis (1986) argue for a postliberal democracy, where extended personal rights displace property rights, achieved through a democratic dynamic including workplace democracy, economic planning, and state control of capital.

CHAPTER III

THE VIABILITY OF PRODUCERS' COOPERATIVES

Promise and Degeneration in
Producers' Cooperatives

Initial enthusiasm for workers' cooperatives can be found among the utopian socialists, in the founding of German social democracy under Lassalle (Kolakowski 1981, 242), in the faint beginnings of English socialism with J.S. Mill (1965), and among the Knights of Labor of the American 1880s. Marx, while full of praise, believed that cooperatives were bound to degenerate in the capitalist environment. By the end of the nineteenth century commonly observed degeneration of cooperative enterprises led the emerging labor movement to abandon cooperation for trade unionism, state socialism, or, later, Bolshevism. Sidney and Beatrice Webb influentially opposed producer cooperation, declaring, "All such associations of producers that start as alternatives to the capitalist system either fail or cease to be democracies of producers" (Russell 1985b, 28).

Blumberg (1968),¹ a pioneer of the modern wave of enthusiasm for industrial democracy, noted the following tendencies to degeneration:

Transforming the cooperative into a simple profit-making, profit-seeking business, indistinguishable from private enterprise . . . ; closing off of cooperative membership; raising the cost of membership to a prohibitively high level; and resorting to the anti-cooperative device of taking on hired labor.

Such phenomena deserve careful study. Particularly as, in recent years, the labor-controlled sector in market economies has attained its largest absolute and relative size. In the U.S. that sector includes a few thousand firms serving about 100,000 members, up from next to zero in the 1950s, exemplars being the plywood cooperatives and (until 1985) the reforestation cooperatives of the Pacific Northwest. In the European Economic Community, there were some 14,000 firms serving a half million members in 1981, the exemplars being the Mondragon complex of Basque Spain, as well as developing sectors in France and Italy. The kibbutz movement in Israel, and to a lesser extent the Histradut (trade-union) firms, are another notable example. Finally, the Yugoslav experiment in self-management is of some interest, although marred by initial underdevelopment and political dictatorship (Ben-Ner 1988a).

¹Quoted in Russell (1985, 29).

Abell (1982) characterizes the supposed comparative advantage of producer cooperatives,² assuming self-interest, as superior incentives, making for increased productivity from greater expenditure of member effort, more appropriate direction of effort, and more effective utilization of capital. In addition, appealing to Sen, Abell aptly remarks that producer cooperatives "encourage altruistic behavior without necessarily relying on it. They are, thus, prudently 'idealistic'" (76). To the extent that work product is not attributable to individual effort, he continues, the democratic work team faces a collective dilemma. Can the cooperative enterprise better foster and capture the benefits of partial altruism? The comparative question becomes, how best escape suboptimal outcomes, through democratic coordination and distribution, or through autocratic coordination and distribution?

A different characterization of comparative advantage is offered by Ben-Ner (1988b). The democratic firm is free to choose its style of governance from a broad range of possibilities, including hierarchical management, participatory management, or direct worker self-management; while the capitalist firm is precluded from choosing any

²Abell's paper does not neglect supposed disadvantages.

form which impinges on owners' rights of control. Thus, in the abstract, the worker-controlled firm can match any governance efficiencies chosen by the capital-controlled firm, while the capital-controlled firm can not match some governance efficiencies chosen by the worker-controlled firm. In the capitalist firm, owners and workers have some conspicuously different interests. What is optimal for one party may be suboptimal for the other and for the whole firm. For example, workers may be averse to performance-related compensation, while owners may stint on firm-specific capital if union wage demands can exploit sunk investments. Workers and owners may exploit each other's firm-specific assets. Ben-Ner claims that these conflicts of interests can be internalized in the worker-controlled firm.

Another possible advantage in the worker-controlled firm is cheaper supervision and better reward to effort:

Monitoring by specialized supervisors is partly replaced and supplemented by mutual monitoring by co-workers who, as a by-product of their presence at the workplace, observe each other's performance, and have incentives to share their observations with management as well as enforce performance standards on fellow workers. This effect is strengthened by enhanced motivation to work due to sharing of profits. (Ben-Ner 1988b, 293-294)

Alchian and Demsetz (1972) and Jensen and Meckling (1979) argue the contrary, that the worker's diluted share of

profit makes for little incentive to supervise as compared to the residual claimant. A final major advantage may be freer flow of information in the democratic enterprise.

Organizational Form and Firm Survival

Why are there so few labor-controlled firms? That is the major question for economic democracy. Lack of incidence could be explained by low rates of birth (in comparison to capital-controlled firms) or by low rates of survival (again, in comparison to capital-controlled firms). Rates of birth or survival, in turn, could be explained by the workings of the organizational form or by the workings of the larger environment. Lack of incidence is a powerful argument against any supposed economic advantages of such firms, and any argument of ethical superiority is surely influenced by the question of viability. First, consider the relationship of organizational form to firm survival. A labor-controlled firm can survive, die, or metamorphose into a capital-controlled firm (degeneration).

Theoretical analysis of worker-management only began to gain sophistication in the 1970s. Neoclassical economics reduces the capitalist firm to a production function which acts to maximize profit; from this and a few

other assumptions the elegant deductions of microeconomics follow. That capitalist production function is:

$$(1) \quad \text{capitalist managers: } \max \pi = pq - (wL + \sum p_i x_i + k)$$

where π = profit, q = output, p = its price, w = wage rate, L = number of workers employed, p = price of various inputs, x = input, k = fixed costs, and y = income per worker.³ Ward (1958) fathered the theory of the Illyrian⁴ firm, which explores formal variations of price theory following from the alternative assumption that the the Illyrian firm acts to to maximize income per worker:

$$(2) \quad \text{worker-managers: } \max y = \frac{pq - (\sum p_i x_i + k)}{L}$$

With the conventional capitalist production function "the first-order conditions for a maximum generate the familiar marginal equalities" (Horvat 1987, 358), that is, the value of the marginal product equals the price of the relevant factor, and when factor prices rise output and employment fall, when output prices rise output and employment rise too.

³The discussion here closely follows Horvat (1985a, 1985b).

⁴Ward (1958) was prompted by early reports of Yugoslav self-management. Illyria was the Roman name for parts of modern Yugoslavia.

However, the Illyrian production function leads to perverse consequences. The primary finding is a perverse supply response, that is, in the short-run single-product firm an increase in price causes the firm to contract supply while a decrease in price causes it to expand supply. Related findings are: (a) Illyrian firms would be smaller than their capitalist twins in the short run when profits are positive, (b) labor, and in the short run output, increases (decreases) when fixed cost increases (decreases), (c) in an economy of Illyrian firms, workers are not efficiently allocated among firms, and (d) because capital is collectively or socially owned⁵ under the Illyrian assumptions, workers have no incentive to invest in the firm, thus, there would be a tendency to underinvest and to distribute all income as wages.

Mygind (1986) emphasizes that "the combination of collective ownership and individual objectives is the fundamental assumption in the Illyrian model." Formal economic theory has subjected the simple Illyrian model to numerous modifications, such as more complex technology, no perfect competition, uncertainty, variable effort, compensation discrimination by seniority, and external

⁵Yugoslavian firms, formally controlled by their workers, are not owned by them, but by "society."

finance, the upshot summarized by Mygind as "the more realistic the assumptions are, the more efficient the self-managed firm will be compared to its capitalist twin" (74).

Vanek (1977), the leading Yugoslav economist of self-management, shows that collective capital is the mortal flaw of labor-controlled firms, and thus explains observations of their degeneration and demise. If firm assets are held in a collective and nonrecoverable form (as has been commonly the case, for firms established by benevolent patrons, or in boot-strap firms by naive or ideological choice),⁶ then four forces of self-extinction come into play. Assume a technology with constant returns to scale. The first force of self-extinction is that income per worker can be increased by reducing the labor force, because of diminishing returns to labor. That is, the fewer members the more each member receives in return on collective capital, (if expulsions are implausible, then attrition produces the effect). The second force of self-extinction follows from the first: capital is disinvested or consumed in order to re-establish the

⁶Beginning with the pioneer Rochdale cooperative movement in mid-nineteenth century England, to today, "limited return to capital" is enunciated as one of the fundamental principles of cooperation.

optimal capital-labor ratio; thus capital and labor are successively reduced until the collective disappears.

A third, "underinvestment" force of self-extinction, follows from nonrecoverable funding with no rental payment to capital: the marginal productivity of capital is always above the member's time preference; that is, with nonrecoverable principal, and with benefit only from increasing income as a worker, return must be extraordinary for the worker to choose firm investment. For example, given a rate of time preference of 6 percent, then an investment return of 7.2 percent would be required by the worker committed to the firm for 30 years, and 54.5 percent for the worker committed to the firm for two years (Gunn 1984, 230). The fourth, "never-employ" force of self-extinction, resulting from the previous three, is that adjustment from a suboptimal capital-labor ratio is always by changing capital or decreasing labor, never by increasing labor, that is, adding labor would only have the effect of reducing income per worker.

Next, assume a technology with increasing then decreasing returns to scale. During increasing return to scale, the forces of self-extinction are reduced (not eliminated) because the benefits of reducing membership are counteracted by the loss of scale economies. The first and

third forces are attenuated, and equilibrium is attained, but at socially inefficient levels. Also, the second force may not operate when law or firm-constitutional restraint forbids disinvestment or consumption of firm capital. The model explains how collective-assets cooperatives can first come to grow, but also come to underinvest, shrink, and devolve to one owner or disappear.⁷

The problem of institutional design is to align individual rationality with collective rationality. A provisional solution to the collective-assets problem is to attribute firm capital to the individual member. Each member has one share of ownership, and so becomes indifferent to whether surplus is paid as dividend or wage, and attains an individual interest in the accumulation of capital in the firm and an interest in the firm's performance beyond his or her tenure. Sertel (1982) proposes a market of worker-partnership shares.⁸ An arrangement of individual ownership also happens to dissolve the Illyrian perversities. Assuming individual objectives, according to Mygind (1982), "the objective of

⁷The discussion is informed by Vanek (1977), Gunn (1980), Stephen (1982a), and Mygind (1986).

⁸Gui (1984) states that tradable membership-shares are both grossly inefficient and contrary to democratic control of membership.

maximizing income is, in this [individual] ownership structure, transformed to maximization of surplus," (87), that is, net revenue minus market wage.⁹

Individual ownership solves the Illyrian problem given individually maximizing behavior. Mygind (1982) enriches the discussion by adding that collective ownership is efficient to the extent that there are collective preferences. Some more plausible collective preferences might be for the long-run survival of the firm,¹⁰ or for the expansion of the firm or of the cooperative movement. Mygind argues that while a pure collective model is unrealistic, that individual- and collective-ownership elements can be "combined in accordance with the members' combination of individual and collective preferences."

Ben-Ner (1984) shows that, with success, the optimal collectively-owned producers' cooperative will contain only one member, the rest of the workforce becoming hired employees; while also successful individually-owned cooperatives will prefer cheaper employees to more expensive profit-sharing members. So, another tendency to degeneration arises when the membership right in the

⁹This is formally derived by Sertel, according to Mygind.

¹⁰This preference is individually rational to the extent of exit costs.

cooperative is identified with an ownership share. Most obviously, if vote is linked to share and one can own more than a single vote-share, the firm has become a joint-stock company, not a cooperative defined by one vote per member; where such schemes are enacted, transformation to capital control is rapid.

More subtly, as a single vote-share cooperative matures and prospers, the value of the share increases to the point where young new members simply can not risk buying in, even if stock purchase is financed by the firm (in the more successful Northwest plywood cooperatives, the initial \$1,000 share grew 10, 20, or even 100 times in value from the birth of the firm). Thus, there is a new incentive to favor employment of nonmembers. That problem can be avoided through a firm-constitutional prohibition against (long-term) employment of nonmembers (at a possible cost to proper growth).

However, that prohibition only worsens problems similar to the following. As an initial cohort of cooperators reaches retirement age they face a most imperfect market for their shares, and thus are tempted to sell the entire company to an outside interest, typically, of course, not another cooperative. The pioneer plywood

cooperative (Olympia Veneer, founded 1921¹¹) sold out in this fashion (Berman 1982); as did earlier U.S. cooperatives especially the Minneapolis cooperages, surviving a wave of cooperative formation in the 1880s (Jones 1977), and more recently some cooperative scavenger companies in the San Francisco Bay area (Russell 1985).¹² These firms were probably more successful and long-lived due to their structure of individual-share ownership, but at the same time fated eventually to transform by that same structure. The effect has been widely observed among individually-owned cooperatives, and may have contributed to early cooperative doctrine's preference for collective assets.

The dilemma of individual and collective capital is solved, theoretically and with some practical utility, by Ellerman (1984 1986), who recommends a redefinition of rights in the firm. First, in the conventional capitalist corporation, shareholders enjoy a property right which includes (1) voting rights, (2) economic profit rights, and (3) net book value rights. In the employee-owned corporation, the employee-shareholders own those same

¹¹Russell (1985, 178).

¹²In this sector, the largest scavenger cooperative was sometimes the buyer.

property rights. Workplace democracy and participation are fleeting in employee-owned firms. Second, in the collectively-owned workers' cooperative, (1) voting rights and (2) economic profit rights are a membership right held by individual workers, while (3) net book value rights are collective or social property. These collectively-owned firms suffer from underinvestment and suicidal tendencies.

Third, in the individually-owned workers' cooperative, (1) voting rights and (2) economic profit rights are each both a membership right and a property right by virtue of the individual's ownership of a capital share, while (3) net book value rights are a property right by virtue of an ownership share. Note that such firms have gone only halfway in separating democratic voice from capital contribution. Such individually-owned firms are more likely to succeed, but the more successful they become the less affordable new membership becomes, inviting eventual sale to outside interests.

Fourth, and preferred, is the solution of internal capital accounts. In this structure, (1) voting rights and (2) economic profit rights are personal rights held by virtue of membership in the cooperative, while (3) net book value rights remain property rights "apportioned among the members in a set of capital accounts. Each current

worker-member would have an internal capital account representing the equity value eventually due back the member" (Ellerman 1984, 877). The worker contributes to his or her capital account, which bears interest, and in accounting terms is a debt to the worker, due when the personal right of membership comes to an end. The firm's debt to the member resembles a bond. Thus, the problems of collective ownership are avoided, in that capital is both recoverable and compensated (although a cooperative may choose to maintain an additional collective account, not assigned to individual members, to receive gifts and grants from members or outsiders, or for other collective purposes). And, the problems of individual ownership are avoided.

A membership share could be issued for conformance to prevailing legal requirements, and a refundable membership fee charged so as to cushion debits and build commitment to the firm, but essentially membership is divorced from "ownership." Where are the firm's owners? Ellerman (1976, 1986) argues that the notion of "ownership" is fictional with respect to capitalist firms as well. The firm is defined by who is the hiring party, by contractual relations, not by "ownership" of the factors:¹³

¹³Jensen and Meckling (1976) make the same point, with quite different purposes, from the standpoint of mainstream economics.

There is only one fundamental difference in a labor-managed economy: The employer-employee contract is legally recognized as being an invalid contract. Any differences in property rights are more apparent than real. The differences are reflections of the basic inability to hire labor in a labor-managed economy. (Ellerman 1986, 76)

Ellerman's approach not only offers an elegant solution to the finance question, its clear definition of rights goes straight to the heart of the normative question.

Barzelay and Thomas (1986), independently of Ellerman, propose an efficient capital market for a labor-controlled economy. The separation of ownership and control is an obvious feature of the modern business corporation. The capital market is said to be necessary for the efficient allocation of resources:

Any remaining problems of justifying property rights in common stock owned by passive investors are surmounted in the most recent [neoclassical] contributions by dispensing with the concept of ownership altogether. Stockholders are now characterized functionally as "residual risk-bearers." Their claims on the firm are not thought to be qualitatively different from those held by creditors. (227)

Labor-controlled firms, say Barzelay and Thomas, can issue two distinct equity instruments: residual claims with voting rights (type A stock) and pure residual claims (type B stock). When membership ends, type A stock converts automatically to type B stock. So, former members can sell their converted type B stock at the prevailing market

price. To the objection that members of the labor-controlled firm would have an incentive to transfer wealth from outside investors to themselves, Barzelay and Thomas answer that the incentive is identical in the conventionally managed firm, and that either type of firm can lower the price of its debt through the same methods celebrated in the finance literature: reputation for efficiency, and firm-constitutional constraint or bond covenant on transferring wealth from non-controlling investors to controlling investors. Meade (1972) puts it well: "It must not be possible for a group of workers any more than for an entrepreneur to borrow money, use the proceeds for riotous living, and then go bankrupt."

Gintis (1989) on the other hand, argues that financial markets disfavor democratic enterprise because,

Owners can induce the firm to reflect their interests as residual claimants more effectively by directing their incentives to a small group of managers unaccountable to the firm's membership, rather than by distributing these incentives to capital. (317)

Gintis counts this as a market failure calling for public policy to grant credit to democratic enterprise.

Empirical analysis of worker-managed firms only began to gain sophistication in the 1980s, explicitly following from earlier theoretical advances. The Stephen (1982b) collection surveys the performance of labor-managed

firms in Yugoslavia, the U.S., France, Spain (Mondragon), Ireland, Chile, Israel and West Germany. The Jones and Svejnar (1982) collection evaluates economic performance of participatory and self-managed firms in Chile, Yugoslavia, Spain (Mondragon), Great Britain, West Germany, the U.S., Italy, Israel, and the Third World. While appropriately professional, these initial views yielded findings more positive than their editors expected, and laid the ground for the first comparative work.

Estrin, Jones and Svejnar (1987) present estimates of productivity effects of worker participation from three data sets covering 500 French producer cooperatives, 150 Italian cooperatives, and 50 in Great Britain, with further partial consideration of producer cooperatives in Spain and the U.S. The firms differ in the proportion of workforce as members, participation bonus, capital stake, form of capital, and so on. The results support the prediction that the overall effect of participation is positive.

Also,

The results suggest that, if higher productivity is the goal, producer cooperatives should provide for substantial sharing of profits and capital ownership by individual workers together with worker participation in decision-making. Collective ownership of assets ought to be avoided unless considerations other than productivity strongly justify its existence. (57)

Thus, empirical observation supports the argument that individual ownership works better than collective

ownership. Ellerman's most preferred solution of internal capital accounts, an articulation of the successes of Mondragon, is the better form of individual ownership.

The Mondragon cooperative complex in Basque Spain is the most robust experiment in democratic enterprise on record. The movement was founded in 1943 by a charismatic priest working in a vocational education school, and the first economic enterprise was begun with 23 workers in 1956. By 1986, the complex included 103 cooperatives (at all levels of capital intensity) with a total of 19,500 workers, the largest firm comprising over 3,000 workers; a credit cooperative with 300,000 accounts, consumer and housing cooperatives, and several large educational institutions from a polytechnical school to a college. The members of a firm each have one vote and meet in general assembly meet once a year, and elect a supervisory board which supervises managers. In addition, a social council represents members as workers to management, a management council reports to the supervisory board, and a watchdog council, elected by the General Assembly, upholds the principles of cooperative law and spirit. Thus, Mondragon meets any reasonable condition of democratic control. Expansion has been rapid, and economic performance equals

or exceeds capitalist counterparts (Thomas 1982; Whyte 1988).¹⁴

Gui (1984) distinguishes the Basque (Mondragon) and Illyrian (Yugoslav) labor-managed firms by the assignment of property rights. In the Illyrian firm "workers have no individual claim on the net assets of the firm but only on its current income," while in the Basque firm "individual and collective claims on the net assets of the firm coexist: the former are called 'internal capital accounts'" (171). In the Illyrian firm workers receive a reference wage during the year, while in the Basque firm workers receive a reference wage and reference interest on their individual capital accounts. In the Illyrian firm "workers collectively decide whether to allocate the residual to investment in the firm or distribution" and distribution is proportional to the worker's reference wage, while in the Basque firm the residual is allocated "partly to members proportionally to their reference income (wages plus interest)" (171) and partly to a collective fund.

¹⁴Bradley and Gelb (1982) dismiss Basque ethnicity as an explanation for Mondragon's success, but stress that low mobility and community attachment are important. Major accounts of Mondragon include Bradley and Gelb (1983), Thomas and Logan (1982), and Whyte and Whyte (1983).

In the Basque firm, the member's capital account is what the firm owes the member on exit, and also serves annually to make up excesses should the member's "advances," or reference income, exceed actual income. Also, part of the surplus is distributed, by internal capital account, at variable annual rate, so that workers are rewarded for previous investment decisions. Thus, senior members happily lack the financial incentive to oppose adding to firm membership. These advantages are not shared by the Illyrian firm. The Basque firm also, perhaps at some hazard, distributes a portion of surplus to the collective account. Gui says that the Basque collective fund works as firm-specific insurance in the event that new members are unable to cover their losses in a bad year from their individual capital account, and also protects the firm should an unforeseen number of members resign (and claim their individual capitals). Financial stability might better be provided, notes Gui, by providing for orderly delay in the refund of individual capital accounts.

Environment and Firm Survival

So far we have considered the relationship of organizational form to firm survival in response to the

question, Why so few labor-controlled firms?¹⁵ Now, what is the relationship of the larger environment to firm survival? Just as organizational failure can be unconvincingly blamed on bad management, some partisans blame failure on ideological or competitive hostility.¹⁶ However vicious such hostility might become, some cooperative firms survive, while failed capitalist firms might be just as likely to blame failure on economic or political hostility.

A more sophisticated argument is that the absence of democratic enterprise is due to some wholesale collective action problem, which, if solved, would deliver us from the argued suboptimality of capital hiring labor to the optimality of labor hiring capital. The simplest proposal, assuming the undesirability of economic pluralism, involves the argument that the availability of hired labor inexorably degenerates democratic enterprises, thus calling for total prohibition of the employer-employee relationship. This proposal must ignore the fact of successful cooperative firms and clusters. Miller (1981),

¹⁵Dow (1987) responds with a challenge to functionalist explanation in economics; Dow (1988) argues, alternatively, that market selection operates on factor suppliers rather than firms, generating inefficient organizational forms.

¹⁶Described, but not endorsed, by Abell (1982).

considering the democratic firm's choice between individualized assets versus collectivized assets, concludes that mixed assets are the optimum solution, making cooperatives less attractive to lenders than capitalist firms, and thereby demonstrating that the market itself discriminates against certain preferences, requiring a fiat solution to the collective dilemma of transition. Miller cites the enclave of (voluntary) Mondragon as an example of the resolved dilemma. Miller does not mention Ellerman's solution of internal capital accounts, inspired by Mondragon, which vitiates his bold assault on market neutrality. Gintis (1989) makes preferences of the capital market the collective obstacle.

Putterman (1982), portrays it as a problem of externalities, that participatory cooperatives produce the positive externality of democratic and entrepreneurial members with better dynamic results for society:

While static economizing on scarce decision-making capabilities, which characterizes hierarchical organizations, may be advantageous in the short run, this same characteristic may have an associated property of retarding such multiplication of capabilities as might be brought about by a more participatory system, and which might, in fact, prove widely beneficial. . . . (149)

. . . To forbid persons from entering into employment contracts which forfeit their rights to a say in enterprise decision-making may some day be seen as analogous to prohibiting the sale of one's vote in an election, voiding even voluntarily entered contracts of

slavery or indentured servitude, or outlawing prostitution. (159)

Ben-Ner (1988a) analyzed available quantitative information on worker-owned and capitalist firms in France, Italy, Sweden and Great Britain, the Netherlands, and the U.S. The worker-owned sector is small, generally less than one percent, but growing; for example, in five of the countries both firm and employment growth in the worker-owned sector exceed the same in the capitalist sector from 1970 to 1983 (with a possible relationship to increasing unemployment in those economies). In addition to finding that worker-owned firms are heterogeneous, smaller, and concentrated in a few industries, Ben-Ner found that the dissolution rates of worker-owned firms are at least as low as that for capitalist firms, with the qualification that firm age distribution differs between the sectors (worker-owned firms tend to be younger, and would thus suffer an increased mortality rate from the "liability of newness"). In the case of Great Britain, data were available to disentangle the effect of differing age distributions, with the result that worker-owned firms were at much less hazard of demise than capitalist firms. These findings are plausible, but surprising. If reliable, they suggest that a cooperative sector could grow through piecemeal encouragement rather than global command.

Problems of Formation

Next, what is the relationship between cooperative form and firm formation? According to Ben-Ner's review (1988b),

The formation of a new firm requires premeditation and planning by entrepreneurs, the assumption of the risk of losses, the provision of capital, and the bearing of set up costs. . . . For a firm to be formed as a worker-owned firm workers must be active in all four areas. . . . However, workers are at a disadvantage in all four areas. (289)

Scarce entrepreneurial skill, if self-interested, will not form a democratic firm to the extent that the capitalist form permits larger capture of entrepreneurial profits. Workers are short on capital, and will prefer a certain lower wage to the risky higher wage attendant on firm formation. As well, workers are denied the safety of asset diversification if they invest in the same firm where they work. Democratic enterprises will form only when such disadvantages are reduced, or when advantages from formation exceed the enumerated disadvantages.

To supplement Ben-Ner's review, "the costs of organization are an increasing function of the number of individuals in the group" (Olson 1965, 46). In the abstract, a single founder faces only $(1^2 - 1)/2 = 0$

founding agreements, two founders $(2^2 - 2)/2 = 2$ agreements, four founders $(4^2 - 4)/2 = 6$ agreements, and n founders $(n^2 - n)/2$ founding agreements. The larger the group, the more difficult its escape from latency.¹⁷ This applies only to the key problem of formation of the enterprise. Thereafter, even a sole proprietorship will contain $n - 1$ employees and $(n^2 - 1)/2$ possible relationships. The difficulty of organizing larger groups may explain the casual observation that worker cooperatives are more obviously formed as worker buyouts of ailing firms, where the workforce is already present, incipiently organized, and faces simple collective choices. (Failing firms are not easily rescued, and the high failure rate of desperation buyouts prejudices the success record of worker cooperatives.)

Finally, what is the relationship between the larger environment and firm formation? Again, following Ben-Ner (1988b), (1) acquisition of information about rare worker-controlled firms is costlier than for common capitalist firms, (2) organizational, legal, and financial expertise particular to democratic enterprise is more scarce and therefore more expensive than for capitalist

¹⁷Krouse and McPherson (1986) report a similar argument by Roemer, without a precise citation.

enterprises, (3) the complex and hazardous legal environment is tailored to the capitalist firm, and (4) the unfamiliarity of democratic enterprise adds a risk premium to credit. Successful cooperative enterprises seem to occur in sectoral clusters, such as legal and medical partnerships, taxi cooperatives, or the Bay area scavenger companies. Russell's (1985) explanation for such clustering is that cooperatives succeed where conventional enterprise fails, that is, where metering of work is very costly, and where there is an further advantage of association over self-employment. A supplemental explanation, or a competing explanation in the case of geographical clusters such as Mondragon, not mentioned by Russell, is that the initial costs of information, expertise, legislation, and credit reputation are roughly the same whether for one firm or many, a public good. Once a successful pioneer clears the way, cooperative imitators can follow (a cluster of cooperatives can also learn from one another's operational experiments). Imitation is cheaper than innovation. With the example of Mondragon firmly in mind, a number of analysts have come to emphasize the special need for an overall support organization (Gunn 1984).

The presence of some cooperative clusters suggests a new conjecture. The prevalence of a certain form of

enterprise could follow merely from a slight change in initial conditions. Conventional economic theory is based on the idea of diminishing returns, which is the case for resource-based production. However, there may be increasing returns elsewhere in the economy, especially in knowledge (Arthur 1990), and organizational form is more a matter of knowledge than resources. Admission of increasing returns, says Arthur, destroys,

the world of unique, predictable equilibria and the notion that the market's choice was always best. . . . In the real world, if several similar-size firms entered a market at the same time, small fortuitous events . . . would help determine which ones achieved early sales and, over time, which firm dominated. Economic activity is quantized by individual transactions that are too small to observe, and these small "random" events can accumulate and become magnified by positive feedbacks so as to determine the eventual outcome. (94)

Arthur applies the model to the contest between Beta and VHS video cassette standard, to the adoption of regional rail gauges, to choice of civilian nuclear-reactor technology, and to the locational clustering of similar firms, in each case arguing the possibility of multiple equilibria. Accidental standards become locked in by positive feedback. The Qwerty typewriter keyboard is technically inferior to Dvorak for example, but absent extra-market change, Qwerty will remain standard.

The cooperative form of enterprise does not seem peculiarly appropriate to the process of plywood

production. The cultural accident of cooperative formation in an isolated region with new technology in 1921 led to a cluster of cooperative firms, which ceased expanding in the 1950s as the national economy grew to surround the cluster. Our immensely productive economic system is only a few lifetimes old, and arose against a feudal system of coercive personal authority (up to a few years ago the law of the employment relationship was known by its ancient title, the law of master and servant). The prevalence of autocracy in the firm may be merely an accident of origin. Machiavelli's account of the city's luck in the genius of its founder is echoed in accounts of the genius of Mondragon's founder. Maybe the ideas of a simple priest in a backwater Basque vocational school were like the flapping of the butterfly's wings which set off a tornado on the other side of the world.

CHAPTER IV

THE RISE OF THE HOEDADS

Introduction

The forest workers' cooperative movement in the Pacific Northwest was recently considered one of the more promising such new efforts in America. Christopher Gunn, an economist with an interest in self-management, whose comparative study of cooperative enterprises included scholarly study of the forest workers (1984a), had this to say of the movement's flagship firm:

Hoedads Co-op, Inc., a reforestation cooperative of approximately 300 members based in Eugene, Oregon, holds a significant place in the history of American worker cooperatives. In its internal decision-making process it sets high standards of commitment to egalitarianism and democracy. In its external relations, it has shown a willingness to devote energy and resources to progressive social, environmental, and political causes in the Northwest. . . . It has not only demonstrated the ability to survive and prosper but it has also served as fertile ground for the formation of other co-ops. (Gunn 1984b, 141)

The movement gained in strength from its origins around 1970 to a peak of some dozen cooperatives with around 700 members in 1980.¹ Total membership began to

¹Membership figures vary widely, according to assumptions. These are the writer's most conservative estimates of working members, based on imperfect data.

decline in 1981, and plunged after 1983. Two cooperatives with some 80 members between them survived the collapse. Thus, there is a record of considerable success, considerable failure, and apparent instability.

TABLE 1. Annual Working Membership, 1972-1989

Year	Hoedads	All Coops
1972	30	30
1973	125	125
1974	200	200
1975	250	300
1976	300	400
1977	350	500
1978	325	575
1979	300	650
1980	250	675
1981	200	650
1982	150	600
1983	100	500
1984	30	350
1985	25	225
1986	15	70
1987	30	85
1988	30	85
1989	30	85

I was a member or fellow-traveler of this cooperative movement for fourteen consecutive years (1972-1986), and for seven of those years held top leadership positions, in Hoedads (1975-1977) and in the league of cooperatives, the Northwest Forest Workers

Association (1982-1986) which I helped found in 1976. The movement was reported by Gunn (1984, 1986), and the origins of the Hoedads are recounted in Hartzell (1987).² The present essay will not repeat at length the descriptive features of those earlier publications, but instead offers new analysis informed by theoretical concerns over incentives, institutional design, and viability of workers' cooperatives.

Early Market and Social Environment

The first firms in this movement were the Hoedads (Eugene, Oregon), and two smaller cooperatives, Green Side Up³ (Takilma, Oregon) and Marmot (Seattle, Washington). The three firms were founded independently in the early 1970s, without knowledge of one another's existence, and were more or less spontaneous in not being the product of any specifically ideological agenda nor of any interventionist project. At the same time, reforestation cooperatives spontaneously formed in the Canadian province

²I reviewed Gunn's manuscript (1984), was the primary source for Gunn (1986), and assisted in researching the Hartzell (1987) book.

³From the instructions to the mythically stupid treeplanter: green side up, brown side down.

of British Columbia, under different national conditions.⁴ Therefore, conditions of the particular market, the production process, and the larger social environment which contributed to the independent and spontaneous formation of the cooperative enterprises deserve attention.

The first, and always central, work of the cooperatives was tree planting for the timber industry of the Pacific Northwest. This is usually done under short-term (two weeks to two months) contract with the U.S. Forest Service and the federal Bureau of Land Management, which own the majority of productive timber land in the region, and with private timber-owning and -harvesting companies such as Weyerhaeuser and International Paper. These are competitive contracts, usually let to the lowest bidder. For any given microclimate, there are only a few weeks or few months of the year it is feasible to plant surviving trees. Thus a typical reforestation firm, cooperative or privately-owned, seeks to assemble a steady flow of work from a large number of small, overlapping contracts; a typical work season would involve the Oregon Coast Range and the low Cascades in the Winter, the higher Cascades in the early Spring, and more remote

⁴Data on the Canadian cooperatives would allow for richer comparisons, but would require prohibitively costly research effort.

high-elevation work in the Great Basin and Rockies in the late Spring (a bonanza paying far more than Winter work due to decreased competition and premiums on mobility and risk), followed by miscellaneous and more optional forestry work such as firefighting, trail building, seed collection, and precommercial forest thinning in the Summer and Fall. In the bitter Winter, crews prefer to work from their homes, but later end up hitting the road, camping out as comfortably as possible or staying in motels.⁵ This work pattern presents a considerable problem of social coordination and individual motivation. There are obvious economies of scale, not only in administration, but especially in being able to assemble steady rather than sporadic work.

Such reforestation contract activities have been a busy little sector of the regional economy since the late 1960s; in the 1970s, probably 3,000 workers in Oregon relied primarily on reforestation for their basic livelihoods, and 5,000 altogether in the larger region. The work had noncommercial beginnings. In the 1930s, some primitive reforestation was done by New Deal agencies for conservation and work-relief purposes. In Oregon in the

⁵There are large variations from the ideal pattern described.

1940s and 50s, schoolchildren helped replant the gigantic Tillamook Burn. As the timber harvest relentlessly proceeded in supplying the post-war housing boom, the huge timber resources of the region began to appear meaningfully finite. By the late 1960s large forest landowners and the federal land management agencies calculated that replanting and other intensified management of cutover lands was more economically rational and thus worthy of investment than the previous dependence on natural regeneration (later, reforestation of cutover land and other standardized forestry practices were mandated by state law as an industry-sought public-good). There had been two or three small commercial reforestation contractors, but now the business began to grow. Thus, the first reforestation cooperatives formed in an essentially new line of work.

In the 1960s, agricultural work in Oregon was done by students, housewives, remaining dust-bowl emigrants, skid road transients, and some Mexican-Americans from California and Texas.⁶ The use of labor from Mexico was rare and controversial, and limited to former Bracero overlords in the pear orchards around Medford, Oregon, and to a small colony working cannery crops in Woodburn, Oregon

⁶I, like other schoolchildren in those days, worked picking green beans, strawberries and raspberries for spending money.

in the north Willamette Valley. The first reforestation contractors in the late 1960s resembled the agricultural-labor contractors of the day, and recruited among college-age youth, skid-road transients, and other elements of the agricultural labor pool. There were few barriers to business entry. Contractors recruited on street corners and by classified advertisement. The work was more physically demanding than most agricultural labor, but paid better too. Youth from the flourishing new counterculture began to enter the work because it was outdoors, casual, and high-paying; such workers were less desperate but also more healthy than their usual predecessors, the skid-roaders. Personnel turnover was enormous, working conditions were ugly, and wage promises were frequently violated.

The science of silviculture was undeveloped. The early objective was to plant large numbers of tree seedlings at high density with no quality considerations, on the bet that quantity would make up for future mortality. Landowners offered contracts on a quantity basis; contractors were paid on a piece-rate basis, supposedly by the number of trees planted. This initial incentive system was irrational from the outset, but persisted for many years. What happened in reality was

that landowners were paying contractors to make tree seedlings disappear, and the successful contractors obliged. "Tree-stashing" was universal. When outside the supervision of the landowner, the contractor would clandestinely dispose of thousands of trees. When under landowner supervision, the contractor relied on incentives to establish silent collusion with the crew. To satisfy the landowners' interest in getting the trees planted, the contractor would maintain and enforce work rules against stashing trees (a properly skilled treeplanter can "stash" --secretly bury safe from detection--as many or more trees as he plants in a day). When the landowner's agent would discover such activity, the contractor would fire the culpable workers (perhaps only to rehire them on the next job); but meanwhile the contractor paid his crew on a piece-rate basis and enforced daily production quotas impossible to satisfy except through heavy stashing. Generally, by one's second day on the job came the realization of the real work requirement: stash but don't get caught. Some workers hated the unfair double bind. Entry barriers were low, and contract competition was fluid, so that the system quickly selected the most dishonest contractors for survival. Dishonesty is usually indivisible, and, naturally, personalities willing to cheat

forest landowners were just as willing to cheat their workers whenever calculation permitted. A few contractors in niches traded on good reputation.

Tree planters (and presumably other economic actors) are highly alert to incentives. Production and pay are daily topics of conversation, market conditions and contractor reputations the stuff of barroom gossip, pleasant social exchange includes economic information. In the early days newly experienced forestry workers came to face a problem and an opportunity. The problem was that many contractors were dishonest, and wage contracts were relatively unenforceable, because work occurred at rapidly changing remote sites and wage judgments are costly to obtain and difficult to collect against elusive low-capital enterprises. In reforestation, there was an especially strong incentive for the worker to find a more reliable work arrangement. Most employment contracts are unenforceable to varying degrees, but the greater the hazard of loss from employer opportunism and the lower the cost of an alternative, the more likely is it that a novel solution could occur.

The opportunity in reforestation was that, once the work crew is trained and organized, there was little barrier to setting up as a contractor rather than for a

contractor. The germ of one cooperative, for example, was a few friends who had been working for an employer so unreliable that for the last month of the season the crew worked without a foreman (and later didn't get paid). Said one, "It became obvious we could do the work ourselves when we were working without a foreman . . . It seemed like we could do the job without some contractor" (Hartzell 1987, 35). The only services a contractor provided to a functioning crew, other than a propensity to run off with the cash, was liquidity to front pay, ability to post performance bonds, minor capital equipment, and access to work; in short, capital and established supply relationships. Additionally, the bearing of set up costs and the accumulation of initial capital, in the form of reduced and greatly delayed compensation, was tolerable for cooperative forest workers, oddly enough because workers were accustomed to sporadic pay.

A number of occupations come to mind (farm labor, domestic service) where there is a high hazard of employer opportunism and low barrier to business entry, but where cooperatives are not prominent, so additional explanations must be sought. As already noted, reforestation was a new line of work. A special condition which contributed to spontaneous cooperative formation was the fact that more

than half the reforestation work was with federal agencies on a strict low-bid basis, so a new firm could compete on pure price considerations rather than having to penetrate the web of personal connections attendant to many private contracting relationships. (In later years, a number of corporate landowners tacitly refused to do business with cooperatives for political reasons; such was Weyerhaeuser's open and official policy.) Other special conditions were the simple desire to make a living as the baby-boom labor-glut choked off customary routes of mobility, and the spillover of relatively educated workers into a primitive labor market; similar youth could be found following Northwest orchard work at the time.⁷ There was also the experimental and egalitarian spirit of the counterculture, with the aspiration to build alternative institutions rather than become individual entrepreneurs. Also, in early reforestation, a new individual entrepreneur would be at a formation disadvantage over a new cooperative, because suspicious workers would have no reason on earth to trust him.

Ben-Ner (1988b) observes that democratic enterprises will form only when advantages of formation

⁷A group very similar in form to the Hoedads emerged in New England apple work in the early 1970s, but was harassed by threatened competitors on payroll-tax issues and disappeared.

exceed the disadvantages a collection of workers face in comparison to an entrepreneur: planning, assumption of risk of losses, provision of capital and bearing of set up costs. Also, the rarity of the cooperative form puts it at an information disadvantage, in discovering how to organize as a democratic firm, in obtaining support professionals with cooperative expertise, in adjusting to the legal environment, and in obtaining credit. These were problems for the reforestation cooperatives.⁸ For the reforestation cooperatives, the advantages of formation were high, and the capital barrier low. Russell (1985) says that cooperatives have an advantage when metering of work is very costly and where there is a further advantage of association over self-employment. In most reforestation activity team work is required, requiring association over individual self-employment, but metering is not especially costly; however, the peculiar production process may have otherwise contributed to the spontaneous formation of cooperative enterprises.

⁸For example, when Hoedads needed to obtain crucial new performance-bonding, I recall an interview where the agent from one insurance company was enthusiastic about winning such a safe account, but his superiors could not understand the company and thus declined coverage.

Production Process

The following notice on treeplanting referrals was long posted in the Eugene, Oregon office of the Job Service:

It is the hardest physical work known to this office. The most comparative physical requirement is that of a five-mile cross-mountain run, daily. If all body joints are in very good condition, a person has excellent persistence and at four-and-a-half miles of your self-trial run, you know you can do it, and persuade the foreman, you may make it the three weeks it takes to really learn how to be a team member on a planting crew. . . . Of those who adequately persist to get on the two-hour crummy ride for a trial, one person in fifty succeeds for the three week training period. It actually is a good job for some. (Hartzell 1987, 27)

The extreme physical challenge of the work quickly reveals personality, and shared misery can lead to affective solidarity. The bond of hard work is akin to that observed of occupations such as premechanized longshoring (the major difference is that longshoring is fixed at one port, while forestry and logging work is mobile and remote). By the end of a season for a contractor one well knows one's randomly drawn coworkers, and if lucky might like some of them. Small accidental solidarity formations from contractor employment and town and country counterculture life became small working partnerships.

Team production, generally, is a collective dilemma. Under the quantity emphasis of early tree

planting, piece-rate pay was optimal for promoting actual production and for generating fraudulent proceeds to the contractor, but suboptimal for the landowner. Landowners became aware of their fraud losses, and some (especially the U.S. Forest Service) began to develop contracts which paid the contractor on a per-acre basis rather than a per-tree basis, removing the perverse incentive for making trees disappear. Conventional dishonest contractors, sunk in routine, were at an immediate disadvantage on per-acre contracts. They did not or could not adjust crew operations and incentives between per-tree and per-acre jobs. On a per-tree contract, the more trees that the contractor and workers made disappear, the better the reward to effort. On a per-acre contract it is just the opposite, the fewer trees the crew plants, the better the reward to effort. The early partnerships quickly came to prefer and specialize in this new kind of contract, engaging only experienced partners and typically paying by equal daily share, with enormous efficiency and pay advantages over piece-rate contractors. A strong norm against the despised practice of tree-stashing carried over onto piece-rate jobs where the partnerships hoped to gain by reputation. A new market niche was opened, and the first cooperatives were there to exploit it. The

accidental advantage from gradual landowner changeover to per-acre contracts rewarded preexisting cultural preference for cooperative enterprise.

Tree planting requires a crew of six to twenty (because of joint savings on transportation and work location; smaller and it's not worthwhile for the landowner to deliver trees to the site, larger and coordination fails). In early morning darkness one meets the "crummy" (an old Northwest logging term for crew-carrying vehicle) and then rides together with the crew for one to three hours to the work site (and back again at night). For longer distances from home, one will camp or rent together with one's crew; even when on the road, one will have a crummy-commute to frequently changing work sites. As the mist lightens in the early dawn one catches glimpses of a 10 to 400 acre clearcut, blackened because burned to remove brush. One meets the representative of the landowner, who delivers trees and inspects completed production for contract compliance.

Each planter loads up special waist bags with 20 to 50 pounds of trees and grabs a planting tool called a hoedad, and together the crew will walk off the landing onto the bare steep hillside. Every ten feet or so (depending on the contract specifications), the planter

will clear ground, punch a one-foot hole, place the seedling without tangled roots, close the hole and move on. The crew works in a line, as if each planter were a bead on an elastic string. This string stretches, shrinks, zigzags, and squiggles through the day in the manner most conducive to covering the particular ground so that one is always planting rather than wasting time walking, and so that one neatly plants back to the crummy for lunch. One follows the line of planted trees left by the planter ahead, the line can be left so that it's easy or hard for the follower. Experienced workers can plant back and forth on the line together so as to minimize crew motion over the microterrain; an outsider sees apparently uncoordinated wandering rather than any "line," but the insiders are following tacit rules of motion, sometimes signalled by brief shouts of jargon.

The purpose of the description is to elucidate the collective dilemmas inherent in a particular production process, and how those dilemmas are resolved under different methods of organization. The conventional argument from the economics of the firm is that the sovereignty of the contractor over his employee-subjects, his ability to make and enforce rules and make side-payments, coercion in short, is the best or only

escape from suboptimality. Tree planting is unusually hard, and so the incentive to shirk is high. On the government-hired fixed-wage crew productivity is probably two to ten times lower than industry standards, and that form is extremely rare. On a per-tree contract, a contractor paying piece-rate to his crew has little pecuniary incentive to encourage team production and does so only to the extent he finds morale useful or humanly desirable. A fast planter is put in the lead to pull the crew, the foreman gives orders for attacking the geography and enforces production quotas and other driving work rules, while the individual worker's quest for production creates an incentive to make externalities for coworkers (say, cutting off the line so one's neighbor has to walk to new ground). Minimal remaining sociality helps a little, but such work is as miserable as it sounds. The worker is motivated by piece-rate quantity incentives and by additional coercion from the boss.

A cooperative crew working under a per-tree contract is subject to minor advantages and disadvantages in comparison to the employee crew. If the crew chooses to pay piece-rate compensation (so many cents for each tree planted), then quantity incentives are equivalent. (If the crew chooses to pay equal daily share compensation, raw

production can decline or improve, as will be discussed below.) The advantages of swift dictatorial coercion are lost, but the advantages of natural sociality are gained. Production coordination can actually improve with an experienced cooperative crew because the latent work team is no longer wholly devoted to material and moral war with one another and the boss, and further is free to develop and operate as a natural team. Freed communications allow social pressure to reduce the generation of externalities by individual planters. The release of natural sociality provides advantages, such as mild to moderate informal rebuke of individual deviance, but also some disadvantages, such as intermittent loss of operational unity and consequent resort to expensive formal democracy, and the comparative inability to collectively impose harsh discipline. Production is roughly the same on a cooperative crew working a per-tree contract, or lower per person because of newly satisfied preference for unpaid leisure available under more flexible work routines, or lower overall because of the elimination of driving production quotas. Depending on one's viewpoint, the cooperative might be at a disadvantage in that members have greater power to avoid dangerous work-pace or situations. In the early reforestation market, the cooperative offered

the clear advantage of reliable pay, and slightly better piece-rate compensation through collective capture of the residual.

Tree-stashing was out, in that it is difficult for larger groups to resolve on dishonesty or illegality, if for no other reason than the old saying that two people can keep a secret only so long as one of them is dead. The refusal to cheat was often a disadvantage, sometimes countered by reputation advantage in market niches. Nowhere in the industrial-democracy literature, so far as I have been able to discover, is this special consequence of open democratic deliberation, the difficulty in openly resolving on deception, mentioned. A cooperative work group relies on trust, so members advocating systematic deception of outsiders immediately throw themselves into suspicion (this does not imply angelic virtue). This may be a comparative competitive burden but socially useful externality of the cooperative form of enterprise.

In the early market, a contractor working a crew on a per-acre contract was at a large disadvantage. On a per-acre contract, the landowner requires that trees be planted at a certain spacing, typically on a ten foot by ten foot grid, but pays not by the number of trees that have disappeared but per acre actually planted, based on

inspection samples verifying that trees are planted at the required spacing. A contractor crew working under a per-tree piece-rate pay system (because of the team production process and measurement costs it is infeasible to pay individual planters by the acre) will both stash trees and overplant the site. In addition, per-acre contracts would also usually assign a penalty to the contractor for heavy overplanting. So the contractor got paid for a fixed number of trees, but rewarded his crew for making the maximum number of trees disappear. The contractor, who before had imposed discipline only through the simple methods of piece-rate pay and termination for falling below quantity quotas, attempted to solve this incentive disparity through supervision. The planter was paid for planting more, but the foreman would cajole him to plant fewer (it takes less effort to plant trees closer rather than farther apart). This was worsened in that the contractor would be moving the crew between per-acre and per-tree jobs, continually confusing incentive signals. The contractor crew cares about its own pay incentives, not about the contract incentives determining the contractor's residuals.

The first partnerships, operating only with experienced workers, often worked by share compensation.

Even when the share pay system resulted in less quantity production (and this was not always the case), the cooperative crew could more efficiently obtain the production objective on per-acre contracts. This was because of the superiority of social supervision over external supervision in the particular production circumstances; and because of the economic incentive structure. One autocratic and alien supervisor set over a work team of twelve dispersed over the slope can only watch the work of two or three planters at once. Following after into a planted-over area, it is difficult to identify who planted which trees. The individual's response is predictable: when the foreman is watching, one benefits by working to his rule; when the foreman is busy elsewhere, one benefits by stashing and overplanting. Supervision can be strengthened by forcing the crew to work very close together, but that considerably slows production, to their unhappiness.

Social supervision on a cooperative crew is more efficient. Here, each worker on the line (except the lead and tail planters) has two supervisors, the planter to the left and the planter to the right. It is nearly costless to observe the work of one's neighbors on the line, and if their planting is too close or otherwise unsatisfactory, it

can be declared to the group. Also, when an inspection sample reveals poor quality, cooperative planters, lacking incentives for team shirking against the boss, are more willing to remember and identify who planted the sampled trees (although the task is inherently problematic). In the later 1980s, when a much smaller Hoedads went to employing potential new members, it was discovered that interspersing employees on a member crew (up to half the crew as employees) worked much better than setting a member as supervisor over an all-employee crew.

Elster and Moene (1989) observe that "not all production processes lend themselves easily to the workers' monitoring of one another that may be a condition for a viable cooperative," arguing further that such constraints need not be fixed in the long run, as a strong and stable cooperative sector "would have incentive to channel technical change and factory design to overcome these difficulties" (27).

What Downs (1965, 60) calls small-group social incentives (acceptance, disapproval, prestige, self-esteem, status) are also at play on the cooperative work crew. For example, when working under a piece-rate pay system, a cooperative crew finds that the summed tree totals each individual reports to the crew for the day exceed the

number of trees that the landowner has delivered. This is handled by one or two individuals ostentatiously comparing crew and landowner totals at the end of the day, along with probing looks, or more aggressively by observations on how the discrepancy varies according to the presence or absence of certain members. Most adjustments come from frequent informal exchange on the job, but serious deviance can only be dealt with in a formal democratic meeting.

The cooperative crew working on a per-acre contract also has superior economic incentives, but not in the conventional sense. The contractor must keep up production with individual piece-rates, but then faces a sort of shirking (stashing and overplanting) that is supposedly solved, due to his superior motivation in capturing the residual, by intensified (but ineffective) supervision and side-payments. The cooperative crew collectively captures the residual, diluted through distribution to each member. But the sum total of dollars is the same, only in one case concentrated in a distant individual, in the other case distributed among members of the close work team. Although the total surplus is diluted if distributed among the work team, workers' lower incomes would mean that each dollar is worth more to them than to the boss, which increases the team incentive.

Team production is a collective dilemma. The cooperative work team collectively suffers arguably the same dollar loss as would an owner when its performance is suboptimal, but the loss, even though diluted, is felt by each individual who is working rather than mostly by the sovereign owner, who because of his thirst for monopolizing the surplus, has less than the total surplus to reward for optimal performance. The contractor's residual must come from his ability to impose extra-market discipline. When the cooperative crew's performance is suboptimal, through low effort, or wasted effort and contract penalty for overplanting, or low quality requiring that the site be reworked for no new compensation, the cost is borne by the crew and by its individual members (according to whatever pay system the crew has in effect).

Beyond the significant advantage of social supervision, any member of the cooperative crew can engage in some undetectable shirking to his individual benefit, and when he does collective pay goes down, sometimes dramatically. A collective dilemma still remains. The cooperative crews somehow resolved the dilemma (those that did not failed on the slopes), although it is not possible from the data to isolate which mechanisms were decisive in winning optimal outcomes. Many initial groups seemed to

hit the ground cooperating, while a few seemed doomed from the first day. Crews had very strong identities, and clearly differed in collective personality; stronger crews had stronger identities. Because of the democratic form and spirit, discussion, informal and formal, was frequent. Promises were common, but mostly in the task of committing to certain spans of work. Social incentives operated, but were not ubiquitous. Individuals definitely carried reputations as more cooperative or less cooperative, affecting their ability to work with other crews as conditions shifted, or even whether they stayed on their home crew. The longer the same people stayed together on a crew, the better their cooperative performance. Sometimes the remainder of an old successful crew would add new individuals, but never recover the cooperative spirit. Towards the end of the season, defection did sometimes crop up, especially among individuals planning on leaving, suggesting that iteration played a role, but was not universal.

Rothschild and Whitt (1986), reporting on American countercultural institutions of the 1970s, pose a contrast between collectivist-democratic organization and the bureaucratic organization. The collectivist-democratic organization relies on limited rules and delegation of

authority, consensus, absence of division of labor and hierarchy, egalitarian pay with normative incentives, and so on. Such organizations proved small and unstable. The Rothschild-Whitt model does not apply to the reforestation cooperatives. Mansbridge (1980), in a study of a New England town governed by direct democracy and of a socially-engaged work collective, came to contrast large-scale adversary democracy to small-scale unitary democracy. Unitary democracy is characterized by qualitative equality, consensus, face-to-face contact, and common interests, that is, some individual identification with the group interest.

Mansbridge declares her recent collection (1990) a manifesto for amending the dominant self-interest model to include "pro-social" motivations in social-science analysis:

The seemingly cautious strategy of designing institutions to work only on self-interest, so that if there is little or no public spirit the institutions will work anyway, will in some conditions erode whatever public spirit might otherwise exist. But the alternative strategy of assuming a high level of public spirit may not survive when it is too strongly at odds with self-interest. Observation and experimentation should make it clearer which conditions are likely to generate each of these patterns . . . (xii)

The question for the reforestation work-process is whether optimality is more closely approached by less-than-perfect dominance by an owner or by less-than-perfect reliance on a

democratic work team. The cooperative crews generally worked better than the contract crews, especially on the problem of undetectable shirking. Perhaps natural sociality is the explanation, and a main source of the cooperatives' advantage.⁹ If so, it is important not to eschew the benefits of such an advantage in institutional design. The cooperative crews always talked of a "public interest," but, unlike the Rothschild-Whitt collectives individual self-interest was recognized, and acknowledged as primary by most survivors. The mix of individual and group interests in the reforestation cooperatives better resembles Mansbridge's more realistic conceptions.

As stated, cooperative crews gained a windfall advantage as landowners went to per-acre contracts. An even larger advantage was delivered a bit later as some large landowners, particularly the U.S. Forest Service, came to demand quality in place of quantity. In the early 1970s, a few years following the first large-scale commercial reforestation efforts, silviculturalists had observed numerous plantation failures and had made progress in understanding conditions of seedling survival. It was

⁹This is an application of the provocative notion of "natural sociality," not a demonstration of it. See Dawes, van de Kragt and Orbell (1990), and other essays in Mansbridge (1990).

also recognized, as timber values appreciated, that plantation failure was hugely expensive, first in that several years of valuable growth could be lost, and second in that the entire site could be lost to brush and become prohibitively costly to rehabilitate if tree seedlings were not established on the first effort. Also, overdense planting of the early years sometimes created deleterious seedling competition and increased future thinning costs. And, as it turned out, tree seedlings were quite delicate and required gentler handling, better clearing, and improved root placement. Contracts were rewritten so as to impose harsh pay penalties for failure to meet new quality requirements; to satisfy quality requirements meant a half to a third as much quantity production per day. The new attention to long-term seedling survival also resulted in a startling new variability among contracts. The days of "stuff and stomp" were ending.

The greater quality requirements made the cooperative advantage of social supervision even more salient. The harshest new quality requirement was emphasis on straight placement of the roots, an operation which a foreman could observe only of a single individual at a time, among his other duties, raising supervision costs, and increasing the opportunity for quality shirking. Nor

was root placement amenable to social supervision, intensifying the collective dilemma. Poor performance on this one costly-to-meter requirement could lead to drastic pay loss and expensive rework.¹⁰ The temptation to save greatly on individual effort in the invisible act of root placement is high. Cooperative crews developed strong norms against "j-rooting," a daily problem, but one which the cooperative structure was probably more successful in handling.

Cooperative crews, because they based their pay on proceeds from the particular contract, were also highly attuned to variability in contract specifications, and became adept at changing work routines; while contractors typically maintained one pay formula, one routine, with no pecuniary incentives for the crew to adapt to variable contract specifications. The development of these changes in the contracts of a large and growing portion of the reforestation market coincided with the birth and growth of the first reforestation cooperatives from 1970 to 1976; and the cooperatives, in retrospect, prospered from and preferred per-acre and high-quality contracts where their

¹⁰Russell (1985a) finds costly metering a common trait of the work of spontaneously-formed cooperatives, but this was only a minor factor in the early development of the reforestation cooperatives.

natural advantage was strongest. Cultural preference, pay reliability, easy firm entry, and fortuitous exploitation of changes in larger market incentives help explain the spontaneous emergence of the first reforestation cooperatives.

Federation of Work Teams

The Hoedads, until 1984 the largest and leading firm of this cooperative cluster, began as a partnership of three experienced planters in 1970. Its first contract was miserable, although later sporadic subcontracting from contractors led to the formation of a core encouraged by occasional good pay, a few direct contracts, and then the addition of experienced planters in 1971. In 1972 and 1973 the group grew to a dozen or two, operating in an even more informal fashion than the typical contractor of the day, if that was possible. The group paid piece-rate or share, experimentally, the important point being that the group decided on the pay system. Organization was haphazard to nonexistent, but small-group social incentives and charismatic leadership made it work, and pay, although very late, was good and did not disappear. The successful group began to attract potential entrants, but experience had already taught that coordination fails on larger crews;

volunteer administration was inefficient; and, the group was limited in its ability to win a steady volume of work because it lacked the assets to win underwriting of the performance bonds increasingly required by landowners for any but the smallest jobs. So, in the summer of 1973 several of the leaders decided on a bold but vague plan for expansion. The impetus was pragmatic for some, gaining economies of scale, stability, and market power; idealistic for others, expanding alternative organization or building a political base. Discussions were held with two other minor partnerships, and a federation of work teams proposed.

In the early Fall, amidst high local unemployment, a job advertisement was placed in the local countercultural newspaper, and respondents encouraged to attend training sessions at a rural site. One did not join the larger organization, but had to sign up with a crew. Nine groups formed out of the process, and were sent out to the first Fall work into utter confusion. Natural selection was rampant in that only individuals and groups who rapidly solved the problems of camp life, hard work, and crew coordination survived. Many individuals selected out, and seven groups went on, forging an on-the-fly partnership agreement on November 23 and scraping up enough pledges of

meager individual assets to justify performance-bond underwriting, barely. Deep Winter of 1974 brought further work, further chaos, further selection, and further group extinctions or mergers. This also happened to be the year of the first oil shock, when long gas lines and strenuous finagling for fuel made it seem as if civilization was coming to an end. Hard labor, hard living, no pay, and dreadful organizational confusion led surviving crews to resent the founders (who were of course more democratic than it seemed to newcomers at the time) and the more organized and rebellious new crews led in devising a cooperative constitution ratified on February 21, 1974. Those who lasted the long season enjoyed high-pay Spring work and after long frustration were finally rewarded by their greatly delayed pay. Then, feelings of solidarity were immense, and individual identification with both crew and cooperative overwhelmingly strong. The anomalous successes of the cooperative form in a capitalist environment is sometimes explained by member self-selection (Elster and Moene 1989). In the case of the emergence of the reforestation cooperatives, strong selection pressures operated, but not so much for individual traits of cooperation, as from the peculiar mixture of difficulty and casualness in the work itself.

In that formative season, the founding crew of experienced workers paid themselves by the share, and so, initially, did new crews. More successful new crews, generally made up of a minority of experienced workers and a majority of inexperienced workers shifted to piece-rate pay over the season, in order to keep from losing their direly needed experienced members to contractor crews. Piece-rate pay eliminates burdensome collective supervision over quantity production, and permits workers to choose their own pace or select out if their production is low.¹¹ Developing cooperation, social incentives, and norms regulating quality performance allowed for piece-rate quantity incentives without the perverse consequence of quality shirking that contractors suffered. Piece-rate became the norm on most crews, but well-experienced and cohesive crews over the years would sometimes choose to work by the share with better results. If talent is roughly equal and the individuals know and trust one another, paying by the share gets better production-per-effort results because the last externalities of the piece-rate system are internalized. But such conditions of equality and trust are precarious.

¹¹The quick shift from share to piece-rate systems recalls Mill's similar observations of the utopian-founded cooperatives in France of the 1850s.

The success of the Hoedads' new constitution lay in its recognition of individual, crew, and cooperative goals. Here is the first and lasting statement of purpose.

The Hoedads is a cooperative organized to provide economic sustenance to its members by executing contract labor jobs and any other lawful activity agreed upon by the membership. (Hartzell 1987, 186)

Contrary to the several small and sputtering social change collectives in the vicinity, the Hoedads' collective goal was the individual welfare of its members. The new cooperative was a federation of autonomous work crews, each of which controlled its own membership, method of work, division of labor, and pay system. This preserved the advantages of small-group cooperation, which were proven over and over again by the disasters which occurred whenever foolish choice or the force of events led the cooperative to work large numbers of people together on the same site. Each crew sent a representative to a federal council, which met weekly, and was charged with ultimate responsibility for administration, central budget, and work acquisition and allocation. This was supplemented by the direct democracy of at least one general membership meeting every year. Officers, elected by the general membership and supervised by the representative council, were responsible for daily administration of central affairs. The early cooperative had suffered from unpaid

administration, and a major demand of the new crews was for an office and a telephone, to begin with. The bylaws permitted the council to dedicate a percentage of gross proceeds to pay for central administration, and to direct the dedication of up to eight percent of each individual's revenues to a "cash reserve fund," to satisfy the prescribed individual membership fee. This capital contribution was refundable to the individual within one year of resignation, and was used to increase bonding power and to finance timely pay for work completed. Members had heard of the degeneration of the plywood cooperatives, through the hiring of nonmembers, and so established the rule that all workers were members, each with one vote.

The new constitution was ratified with little final controversy and almost unanimously. The ratification was unanimous in another sense, in that only those who survived the harsh formative phase were around to endorse it. The general assembly and the council were to operate by majority rule. The semi-autonomous crews usually operated by majority rule, although with small-group attention to strong minorities, and informal tradeoffs from meeting to meeting. Crew democracy was mostly informal. The crew rode together in the crummy every day with plenty of time to talk over problems or triumphs, could communicate all

day on the job, and often camped together as well. Formal meetings were reserved for matters that could not be settled spontaneously, such as changing the pay system, chastising intractable members, extracting and recording future work commitments, voting on cooperative-wide issues, and so on. There were plenty of crew and cooperative meetings, much more so in the beginning, but after years of experience older members came to prefer fewer meetings and could be quite swift and orderly in dispatching business. It was recognized that a reasonable person has more important things to do in life than attend meetings. Greater experience and trust also created a greater preference for delegation of decisions. Through sheer learning, experienced groups and esteemed leaders could manage to become both efficient and democratic.

In the later 1970s, some new members imported a belief popular on the liberal-left, that democracy requires consensus.¹² Consensus groups could function, but were unstable and usually the first to fail. There are several problems. Those with the least to do elsewhere in life have the greatest power in the interminable consensus process. Trust, ironically, is absent, in that no

¹²I recall one meeting where a crew solved the matter by consensually deciding that it would in the future work by majority rule.

delegation of decision is permitted. The thought of a meeting then becomes so horrifying that a larger and larger scope of decisions is left to informal leadership and clandestine process, an undemocratic outcome. Consensus is always biased to the status quo, but problems usually originate in the status quo; rapid external change worsens the conservative bias. Further, consensus invades the individual personality and demands conformity; dissenters may acquiesce but in doing so are implicitly judged to have compromised the moral ideal. The healthy legitimacy of openly holding different views becomes suspect. Finally, rational unanimity is impossible for a large class of goals. Just to illustrate with a trivial example, suppose it is time to decide where the crew works this Spring. Six people want to work in Montana because they have friends there. Two people want to work in California because they have friends there. Three people don't care. Under majority rule, the crew goes to Montana, and those in the minority might feel they are owed a little deference in some future decision (known to political science as "logrolling"). Under consensus, the different sides are denied the legitimacy of their individual interests, because there is only one rational goal for the group, which one side or another must adopt, or the group disband.

Under majority rule one is subordinate to shifting impersonal majorities, but under consensus one is permanently subordinated to every other member of the group.

CHAPTER V

TRIUMPH AND FALL

Middle Market and Environment

Green Side Up and Marmot were two partnerships which independently stabilized as workers' cooperatives similar to Hoedads, and succeeded under the new market incentives explored above. Green Side Up chose mostly to work around its rural home in southern Oregon, and did not develop a federal crew structure. Marmot, in Seattle, chose consciously to remain one crew, was mobile, and committed to full-time work. In 1976, the three cooperatives formed a letterhead organization, the Northwest Forest Workers Association, which gradually added a few similar small enterprises discovered elsewhere in the region and held annual conferences.

Also in 1976, an association of reforestation contractors formed, whose primary concern and activity was the threat posed by the growth of worker cooperatives. The contractors believed that the cooperatives were taking away their workers, their contracts, and were inflating wages. One of their documents (in 1979) was a chart showing dramatic annual wage growth, linked to the growth of the

cooperatives. This material was distributed to forest landowners, with the argument that the cooperatives would soon monopolize the business and further inflate wages, unless they were stopped. This association spent the next six years hounding, harassing, suing, and defaming the Hoedads.¹ The Hoedads had originally formed as and always operated like a partnership, meaning it was subject to tax and labor laws in the same manner as business partners. The contractors' association argued that Hoedads' members were employees and thus faced huge technical liabilities under various tax and labor laws (Hoedads' policy was always to comply with the law). The contractors launched an accusation campaign with every conceivable federal and state politician and agency and among private landowners. In February, 1977, the cooperative was hit with notice of a dozen or so regulatory investigations, the trailing consequences of which, along with numerous other legal uncertainties attendant to the workers' cooperative form, came to consume all its surplus managerial talent from then through 1982.

Hoedads members were reluctant to become subject to wage, workers' compensation, and unemployment laws, and

¹The Hoedads brought a defamation action, which, delayed to 1982, eventually was settled out of court for \$1,000 and an admission of wrongdoing by the reforestation contractors.

employee-tax treatment, because many knew from personal experience that contractors evaded such requirements by cash under the table and double books. Because of their open nature, cooperatives can avoid, but not evade. The self-serving nature of the contractors' claims of impropriety was demonstrated in the careful rule they devised to define membership in their association: members must be subject to employment laws (not that members must comply with such laws). Many of Hoedads' members took great pride in their self-employed status. Employee subjectivity was estimated to be a net long-term benefit, due to the boon of seasonal workers becoming eligible for Oregon's generous unemployment-insurance system. The cooperative's position was self-serving in preferring certain immediate cash to uncertain deferred benefits, and short-sighted in underestimating the obvious legal, liability and political burden of resisting the contractors' campaign. Indeed, many of the more experienced and long-term members wanted to concede the question, but were outnumbered by newer and younger members.

In 1975, an insurgent slate captured cooperative offices from founding members, with little tension. Organizational experience and some administrative

sophistication developed. In 1976, the cooperative, by then 300 members, doubled its gross income over the previous year, to the considerable satisfaction of members. It also helped elect one of its founders to a highly-visible post on the local Board of County Commissioners. By 1977 the cooperative contained 350 members in 15 crews. This was thought large enough, because it felt a little beyond the natural limit for coordination; and also because the cooperative was approaching an artificial limit on size imposed by the fact that all its federal contracts were small-business set-asides, with a specific limit on gross receipts which the cooperative was approaching. The cash-reserve fund, or internal capital accounts, reached a substantial level. Work supply increased every year, reaching a peak in 1978, but remaining high in 1979 and 1980. Wage returns increased every year, and by 1980 top cooperative forest workers were hitting \$25 an hour and \$25,000 a year and more (in 1980 dollars).

In the later 1970s, the U.S. Forest Service and other forest landowners cut back on planting in the Fall season. This was because of reduced seedling survival on many types of sites, attributed to planting in the Fall rather than the Winter and Spring. So, what had been a

fairly steady nine-month tree planting season became a six-month planting season. This was considered a major impact at the time. Those wanting steadier work had to diversify their skills or exit the occupation. The change increased the distance between more skilled and resourceful members and the more casual members.

In retrospect, several of the rules and routines established in Hoedads' formative period proved unstable. Turnover in reforestation is high, because of the punishing difficulty of the work and the concomitant youth of the workforce. For a good contractor it is roughly a 100 percent a year, for a bad contractor 300 or 400 percent. Hoedads' turnover was around 50 percent a year, at worst, so always a majority had less than two years' membership experience. The rule that every worker is immediately a member meant that someone with a one-week commitment had the same vote as someone with a five-year commitment; those with initial or short-term commitments would vote for policies maximizing return in the short-term and were often a majority. This problem became obvious shortly after formation, but could not be escaped, because any proposal to reduce the influence of short-term members could be defeated by short-term members. Conversely, those with long-term interests would fail in enacting long-range

policies, and, thwarted, would tend to exit the cooperative, frustrating accumulation of a long-term majority. Such a trap can only be avoided in the constitutional phase, through some quite reasonable provision such as one year's probation before admission to membership.

Perhaps through the sheer pressures of operational need, the Hoedads were more friendly to centralized and specialized administrative roles than their countercultural peers. With so many members there was always an abundance of raw managerial talent able to take the central reins. The trauma of formation built sentiment for sound administration, but at the same time, to break the overfeared monopoly of the founders, annual rotation of office was established as the formal and informal rule. The substantial fear of bureaucracy was rational in so far as it kept political parasites from staying warm and dry at the office trough, but failed in the long run. The youthful members improperly extrapolated from their work in the woods, where substitutability of personnel was high, to the content of the cooperative's managerial offices. Talent aside, it takes anyone a few months to learn a new position, and the minimal function of administrative work is as a cheap reservoir of tacit knowledge. Good

management's avoidance of error is invisible, while tiny errors can have huge costs. Conversely, Hoedads' administration was based on an annual percentage rakeoff, giving office workers a constant incentive to oppose operational reductions, even when called for (it was politically easier to run wrongly too large than to increase the percentage take).

Hoedads' managers made roughly the same annual pay as good tree planters, but had to work two or three times as many days out of the year.² Managerial undervaluation encouraged exhausted voluntary exit from positions after a year's service. Good managers would have been retained if they could make as much in the office as they could in the field. Such arguments, conveyed by nearly every departing inhabitant of the managerial roles, were almost successful in establishing more effective tenures, but the initial precedent of undervaluation tilted the outcome. Also, rotation worked well enough in the many years of market growth, through 1980; management errors during subsequent market decline were disastrously irreversible. Success is a tightrope.

²I could have been reelected as President of Hoedads in 1977, breaking the routine of rotation, but withdrew at the last minute because the work was too hard for the money.

The Hoedads had properly structured their capital system so that the perversities of collective capital would be avoided. Capital was individually contributed and attributed, and refunded within one year of resignation.³ But a new perversity appeared, that would have better been avoided in the constitutional phase. Formally, if all members resigned, the cooperative would have to distribute all its capital within one year. Although the large cash reserves were impressive to bankers and bonders, they also noticed the one-year capital horizon, and so did Hoedad financial planners, and eventually the membership. Investment in real assets that would be required for new lines of work was limited by the high liquidity requirement imposed by the cooperative's bylaws. Allowing up to five years for the cooperative to refund capital contributions would have made the debt sufficiently long-term to serve as equity, and also would permit orderly productive investment. When bank-suggested proposals to extend the refund period a year or two were informally and formally defeated in the later 1970s, the events revealed the true time horizon (or at least short-sightedness) of a majority of the membership to any more committed minorities.

³Mondragon also permits rapid refund of individual capital, which Gui (1984) noted as a possible dissolution hazard it would be better to avoid through delayed refund.

The crew structure worked very well for operations. Crews were represented on the general council for general policy, and on a subsidiary bidding council for work acquisition and allocation. Crews were precommitted to work when possible, and otherwise subject to complex allocation schemes. There was always a problem in keeping individuals and crews from shifting from poor-paying jobs to well-paying jobs, but promises and equity deliberations usually worked to solve it. The crew system was healthily competitive in the beginning. Good crews, where production, or cooperation, or both, were high, would attract productive or cooperative (the two qualities do not predictably coincide) workers from other crews. In the long run, this self-selection resulted in a range of crew quality far greater than random sorting. Whether this was a net aggregate loss or gain is difficult to determine. Good crews were very good, and bad crews were very bad. Bad crews then became a drain on the cooperative as a whole, which as a whole lacked authority to rectify the situation. Good crews then felt they were subsidizing the bad, for example, in being called in to rescue a failing contract. The crew system did not build cooperative-wide loyalty, which diminished as members from the formative season drifted away.

It was a slight shock in 1978 when one of the founding members, president of the cooperative during the contractors' attack of 1977, split off with many of the remaining founding members and other older and more productive workers to form a new cooperative known as Second Growth. The new cooperative would be launched on refund of those individuals' substantial capital accounts, due within one year of notice. But since capital reserves were high and Hoedads too large, concern turned into congratulations. Second Growth selectively recruited productive new members from contractor crews. The remainder of the crew it left behind in the Hoedads later fell apart, leaving the cooperative with undone work and unbacked debt. The members of Second Growth were on average significantly older and more experienced than members of Hoedads.

This happened again in 1979, as the Mudsharks, a very good crew, exited to form its own cooperative. Several more clusters of productive and committed members publicly or quietly split off from 1979 to 1982 to form temporary or permanent enterprises in the initially booming market. The departures were not too worrisome, because the Hoedads remained large in members and capital. Indeed, Hoedads took on a crew from rural Douglas County, with the

altruistic aim of helping get them established as an independent competitor. But overall the virtual costlessness of exit allowed above-average members to substitute market relations for democratic relations so as to capture greater short-run returns, but in the process creating vulnerably small institutions.⁴ Such firms enjoyed immediate net gains, at the costs of economies of scale, especially in work scheduling. The perverse self-selection left the Hoedads with comparatively less qualified and committed members, not noticed at the outset because of the momentum of earlier success, but invisibly growing on positive feedback. Furthermore, Hoedads bore as a public good the heavy managerial and financial costs of the contractors' sustained legal and political assault. By 1980, some sixteen cooperatives were apparent, many rather flimsy, most of them spinoffs from the Hoedads. The Northwest Forest Workers Association was then funded and staffed to spread the costs of cooperative defense and promotion, although Hoedads paid the largest dues.

Late Market and Environment

The supply of reforestation work grew annually from

⁴Some theoretical economic analysis suggests that cooperatives should heighten exit costs. One way is through delay of the member's capital refund.

its beginnings in the late 1960s to a peak in 1978. There is room for everyone in an expanding market. The market power of the cooperatives in Oregon exerted a steady upward wage pressure, which attracted new workers to the cooperatives and to the contractors. The contractors had an edge with private landowners (because cooperatives publicly contested some forestry practices affecting occupational safety and health, and because of indemnification of landowner liability through nominal workers' compensation coverage of contractors), and a number of large operations succeeded, each running a few to a dozen crews. Changes in the production process, increasing wages due to expanding work supply, and competition from the worker-oriented cooperatives, selected for contractors who were more reliable in pay and operations, more sophisticated in supervision, recruitment, and retention, and more flexible as to pay systems (moving towards per-hour pay with levels). These contractor adaptations reduced, but did not entirely eliminate, the natural cooperative advantage. Also, because of entry ease, a plethora of shifty small outfits remained, here today, gone tomorrow.

There had also always been a few operators, veterans of the Bracero "temporary" farmworker program

which up to 1965 had imported a few hundred Mexicans for agricultural work around Medford, Oregon , who worked crews of smuggled illegal aliens in agriculture and at the margins of forestry (Eugene, Oregon, was until 1982 the regional center of reforestation, Medford is south on I-5 near the California border). In the moral climate of the early 1970s such practice was generally considered illegitimate. In 1974, one of these operators was sent to federal prison on charges arising from exploitation of illegal aliens on a federal reforestation contract, which had a certain deterrent effect (United States v. Gonzalez 1974). In 1978, a related operator was under concerted federal enforcement scrutiny, but the key witness was murdered with a chainsaw and buried in the woods ("A crew of seven treeplanters went into the mountains and only six came down," Baker 1979, 26) and the investigation was later unaccountably ended by the Carter administration.⁵ A third related party became quite large and notorious in reforestation, his outrageous success and wealth creating a precedent and example for others to follow in the 1980s.

Sojourning illegal Mexican aliens became increasingly common and then dominant in Oregon agriculture

⁵Personal interview with cognizant and freshly retired Department of Justice investigator, Washington, D.C., 1989. The contractor was represented by the Mexican-American Legal Defense and Educational Fund.

through the 1970s. Woodburn, Oregon, between Eugene and Portland to the north, became the center for such activity, where wintering-over workers would seek out reforestation work from contractors as unreliable, but less abusive and ambitious than the Medford group of smuggling contractors. In 1978, as part of a much larger national and international project, the National Immigration Project of the National Lawyers Guild established an immigration defense office in Woodburn. These activists proselytized the reforestation cooperatives and various local cadre organizations, who all adopted resolutions "in defense of the undocumented worker." In the boom year of 1978, contractors knowingly importing and employing illegal aliens in reforestation became obvious, and cooperatives felt natural solidarity in detesting the harsh exploitation of such employers.

Wages were the best ever in 1979, even as a regional recession began, stemming from a major downturn in the dominant timber industry. In 1980, the regional economy collapsed, and Eugene and surrounding southwest Oregon were particularly hard-hit. Eugene (a Standard Metropolitan Statistical Area) had an unemployment rate of nine percent even after five percent of its population moved out that year, indicating the extraordinarily high

level of economic distress. Because reforestation follows harvest by one or two years, reforestation work supply was only barely down, but the general labor supply was up and the general wage level down. Reforestation work and wages became tight, but the situation was not initially disastrous, because of the nonsubstitutability of untrained local labor in the strenuous occupation.

Later in 1980, President Carter directed the Immigration and Naturalization Service and other federal enforcement agencies to refrain from disturbing knowing employers of illegal aliens, for purposes of the Census. That sector of contractors in reforestation then went from marginal and growing to bold and dominant, in only a few months. These employers, in actuality a handful of interrelated criminal enterprises, were immune to market conditions. Even as local reforestation wage levels fell by half and more over the next three years, these contractors imported or knowingly hired illegal aliens at wages one-fourth to one-tenth local standard, thus vitiating any productivity advantage that experienced and organized workers would otherwise retain. These contractors were also generally immune to civil and criminal regulation, because of a disturbing lack of forthcoming witnesses to their violations, and because

their hyperprofits permitted the purchase of political, professional and informal protections. Thus, they enjoyed the added advantage of being practically exempt from tax, labor and social-insurance laws, and their bids showed it.

By the Fall of 1980, upon the start of the new season, the phenomenon had attracted thorough journalistic notice and editorial denunciations in the region, not to mention panic among local tree planters and contractors. A demonstration of 300 workers was held at the federal courthouse in Eugene, although without the formal participation of cooperative reforestation workers, whose leaders were too influenced by the organized left to admit that more than ignorant xenophobia was at issue. The gangster problem worsened through 1981 and 1982 to the point of utter despair, when collapse of international oil prices sent the Mexican standard of living into a tailspin, and new millions came surging north on their own. A harsh national recession further burdened the labor market in 1982 and 1983. There was vigorous collusion in the new situation by landowners and some federal agencies delighted by their fantastic savings in the new era. In 1982, the largest landowner, the U.S. Forest Service (FS) reported to the House Appropriations Committee that,

the FS in recent years has generally met or exceeded their [reforestation] goals. This has been

accomplished by . . . the adoption of sound business practices, such as taking advantage of the present depressed labor market. (U.S. Congress, House, Committee on Appropriations, 1982, 735)

"Depressed" was a euphemism. In 1983 (with David Stockman heading the Office of Management and Budget) the Forest Service returned \$80 million of unspent reforestation funds to the Treasury.

Backlog work was cancelled, while "current" work was based on the nil harvests of 1980, 1981 and 1982, so by 1983 the supply of work had dropped by half from 1980. In the shakeout, the gangster operations easily held ground and even thrived, while legal contractors and cooperatives fought over the scraps. By 1984 all but a handful of the surviving mainstream contractors went to Mexican crews, much of them supplied on a peonage basis through the Medford smuggling network.⁶ The composition of the state reforestation workforce had gone from ninety percent U.S. resident in 1979 to thirty percent U.S. resident in 1984, amidst persistent local economic depression. This recalls

⁶Workers "cost" the employer about \$500. Interestingly, smugglers charge twice as much for monolingual Mixtec Indians, because they are more powerless than Spanish-speaking illegals, and so worth more to the employer. This observation is independently confirmed in Browning (1990). Such economic valuation of powerlessness, and the accompanying failure to specify the employment contract, challenge the assumptions of the economic theory of the firm.

Mill's prediction that where more workers joined cooperatives, capitalists would gradually be induced to abandon control, with the twist that capital instead imported numerous extranationals to replace the cooperating local workers.

The members of the reforestation cooperatives held a wide range of political opinions. Overall, the memberships were countercultural and vaguely leftist. A disciplined Marxist-Leninist group was active among the leadership of the dominant Hoedads, but did not wholly control the organization. This was not much of a problem until 1980, when the issue of competitors exploiting illegal aliens came to the fore. The communists' line, linked to priority national and international campaigns, was that illegal aliens do not displace local workers or depress wages, even as this was a painful daily reality to the workaday tree planter.

The cooperatives enjoyed considerable local political power, and could have undertaken an effective campaign against the abuses, but practical steps were blocked by the communists, whose goal was to neutralize the cooperatives on the question. They publicly suggested, for example, only wage enforcement against exploiting contractors, which was impossible because of the lack of

willing witnesses. Privately, the Willamette Valley Immigration Project of the National Lawyers Guild opposed enforcing wage and hour laws, because if effective that would "keep undocumented workers from getting jobs." Except for a lingering presence, the hard left abandoned the Hoedads to its fate in 1982.

From late 1983 to late 1986, the league of cooperatives, Northwest Forest Workers Association, came to focus entirely on industry standards in place of cooperative promotion, and undertook increasingly aggressive actions against unscrupulous contractors, but by then it was too late to dislodge the criminal enterprises. Some details are reported in Mackie (1986). In January, 1985, the same contractor who had been sent to federal prison in 1974 for labor crimes on reforestation contracts reappeared and won half the early federal work in Western Oregon. This contractor had a continuing record of violent criminal and labor law convictions and judgments stretching into 1984, but without credible explanation the federal land management agencies and the U.S. Small Business Administration rejected proper and valid formal protests (a normal procedure defined by federal contracting regulations) of his bids which would have prevailed in any

impartial tribunal. Something was seriously askew.⁷ The play-out of this irregular and inexplicable event through 1985 extinguished the last guttering flame of morale in the cooperative movement. The association "suspended" in late 1986, there being less than a hundred cooperative reforestation workers left in the region. Labor market conditions did not gain a semblance of normality until 1988, when the deterrent provisions of the Immigration Reform and Control Act of 1986 became effective, and also as Oregon's nine-year recession began to come to an end.

Meanwhile, the Hoedads began losing grip on its legal posture in 1981 and 1982. Although Hoedads' average pay probably doubled the minimums required on federal contracts by the Service Contract Act (similar to the Davis-Bacon Act covering federal construction contracts), the U.S. Department of Labor (which always "lacked resources" to pursue the slippery and witness-free criminal operations) audited and ordered strict future compliance, which meant that the cooperative could no longer rely on piece-rate to shape worker self-selection,

⁷Federal criminal authorities then warned me to guard my life. In 1983, an officer of the U.S. Small Business Administration warned us to cease filing protests against such contractors on pain of improper retaliation against our cooperatives, so we did; and later that year the gangster network sent an armed professional enforcer to my office with a more comprehensive message.

but instead had to institute novel methods of entry control, supervision, and artificial pay subsidizations, to universal worker complaint. The Hoedads invented new pay systems, but decisions were cursed by cycling (no strong majority supported any one pay system, so pay systems frequently changed), which introduced uncertainty in incentives and pay, one of the faults that the early cooperative had formed to avoid.⁸

Next, the cooperative voluntarily subscribed to workers' compensation insurance, in order to eliminate the uncertain chance of huge premium liabilities should the contractors succeed in pending litigation; the smaller cooperatives did not have to make this early defensive move. Cooperative members, then and now, consider the workers' compensation system in Oregon as infested by parasitical formations of lawyers, doctors and bureaucrats, and, just as bad, ridiculously prone to abuse by fraudulent claimants. For reforestation in the 1980s, a standard price was near \$35 per \$100 of payroll, higher when one has higher claims. The unscrupulous contractors had little to

⁸In the late 1980s, the Hoedads found a politically stable pay system, a pay range (before annual surplus distribution) with five grades between \$11 an hour and \$18 an hour, where the member chooses her own rate of pay for the job. The average of choices is below the nominal median. This is constrained by the particular job boss having authority to refuse to admit the member to the job.

no workers' compensation costs; they subscribed to coverage but reported nominal payroll, and injured workers were simply abandoned or more benevolently sent back to their home villages. The Hoedads made the mistake of granting too many dubious claims at the outset. Any determined claimant can succeed in beating the system, and as market wages continued to dive, individual defectors turned it into a retirement program, at the cost to the cooperative of huge premium increases in future years.

The Hoedads had been big and strong for so long that most participants and outsiders considered it an invulnerable institution, although to the oldest leaders and veterans its gathering frailty was apparent. The sense of invulnerability was itself a dangerous weakness. With a collapsing marketplace, declining membership quality, and sudden and severe changes in the legal environment requiring sophisticated adaptations, the crew system and the routine of managerial rotation in Hoedads broke down. In 1983, the Hoedads incurred operational losses against their capital reserve near ten percent of revenues, increasing their handicaps. Only then were long-term changes instituted, such as delayed refund of resigning members' capital, less frenzied rotation of office, and probationary employment of nonmembers, but it was too late

to rectify past errors. The crew system was abandoned, and from 100 in 1983, the Hoedads' membership fell to 30 in 1984, although with little reduction in annual receipts, illustrating the severity of its organizational problems. In February 1986, a member was tragically killed in an on-the-job crummy accident, with attendant insurance premium increases. The cooperative fell to 15 members, and almost dissolved. Even so, the few members later made capital investment in a headquarters, and turned happy operational surpluses in 1989 and 1990. Hoedads survives in 1990 with a membership of 30.

In 1982, as the reforestation market was headed into wilder outlawry, all of the cooperatives came into unambiguous and strict compliance as subject employees under various payroll laws due to the contractors' earlier harassment campaign; such a posture need not increase operating costs, but technical liability and transition costs were very heavy. From 1983 to 1985, the smaller cooperatives, rurally located with few options for diversification, died off as average reforestation prices persisted below the cost of legal operation and below the lowest reservation wages even in depression conditions. People did not exit the cooperatives for contractor employment; they exited forestry, and even the region.

Interestingly, although shielded by the limited liability of the corporate form, all of the closed cooperatives dissolved voluntarily. None went bankrupt or abandoned debt.

The sustained collapse of market supply and of legal standards laid bare any hidden weaknesses of the reforestation cooperatives. Only the most wicked or the most able reforestation firms survived. The cooperatives sometimes showed superior business sophistication and sometimes short-sightedness and confusion, but these qualities are not unique to the cooperative form. The adversity was as harsh for the relatively honest contractors, who went down by the dozen, even those backed by outside investment. The cooperatives did face one deadly "disadvantage" in the radically changing labor market, inherent to the worker-owned form, the inability to replace themselves with oppressed peons. Contractors could, and did, fire their "American" crews of long standing in order to survive in the market.⁹ This cooperative disadvantage could be an advantage if cooperatives existed on a large scale, in softening the

⁹One federal "minority" contractor told desperate job applicants in 1984 that it was against company policy to hire "Americans." Elsewhere, citizens of Mexican heritage had to represent themselves as illegal aliens in order to be hired.

assault of wanton market forces on human communities. Labor-controlled firms, just as outmoded capital-controlled firms, should change or fail as markets change, but they do not throw away their members.

Second Growth: Unqualified Success

Second Growth was the cooperative distinguished by the greatest average age and work experience of its members. There is an atypical problem of mobility in forestry. Any avenue of advancement through developing skill is blocked by the norms of the forestry profession. With Gifford Pinchot's Forest Service as the main pattern, even the large landowners conform to the progressive-era rational-bureaucratic model of a scientific elite of forestry-school graduates overseeing the utilitarian administration of nonpersonal inputs and outputs. The segregation is quite acute; forestry-school graduates begin at age 22 with more responsibility than noncredentialed veterans are ever able to attain, even in the simplest matters, except by contract. The aging forestry worker has to find alternatives to superathletic treeplanting, and they are not easily found in forestry. The problem can be solved individually or collectively.

Second Growth initially imitated the informal aspects of the Hoedads, indeed exaggerating them in its

early years, as it sought to avoid perceived bureaucratic shortcomings of the Hoedads model. Part of that was a disinclination for becoming a huge, multi-crew operation, although Second Growth was strong at 50 to 100 members. It brought in some good workers from contractor crews. Second Growth also agreed to dues which made it the second biggest funder of the Northwest Forest Workers Association at its first staffing in 1980, addressing the public-good complaint of the Hoedads (the other cooperatives largely paid nominal dues). As the market collapsed in the early 1980s, the bulk of Second Growth members had greater personal investments in the enterprise than the more "political," even more social, Hoedads, and because of their established urban location, more personal investment and work options than the stay-at-home rural cooperatives. Niche work, distance work, and alternative work in construction were more aggressively probed.

Perhaps because it was smaller and more stable than Hoedads but older as a group than the other smaller cooperatives, or perhaps just through various accidents, Second Growth became more effectively concerned with long-range issues even as the market situation became impossibly bleak. It was lucky and meritorious in winning an experimental three-year contract of commuting

reforestation work from the Eugene Bureau of Land Management in 1982. A revolution had been brewing from the onset of the downturn in 1980, and in 1983, a majority of Second Growth members coalesced to demand professional management, probationary membership, greater capital commitment, and rapid adaptation to the new legal environment. This was accomplished at the troublesome loss of one-third of the membership, but also established formative renewal. Second Growth was vigilant in avoiding fraudulent workers' compensation claims, and became fanatical over safety. As the reforestation market continued sour in 1984, Second Growth cleverly bid into well-funded Mt. St. Helens volcano-eruption replanting, successfully diversified into the equally depressed but relatively protected local construction market, and bought and remodelled a headquarters. Since then, it has done very well in forestry and construction.

Upon leaving, a Second Growth member receives a three-year promissory note for individual capital contributions, limited by any external or agreed internal claims on the funds. Additionally, the cooperative, for complex tax and bond-underwriting reasons, maintains some collective capital, but makes it also individually recoverable through a negotiation process. Accumulation is

to the point in 1990 where each member has a \$2,000 to \$30,000 interest in the firm, which has interesting motivational effects. With that stake of a loss, particular job problems or cooperative-wide problems are of strong practical interest to every member, and the more diffuse organizational shirkings have become that much more self-regulated. It does not seem to be the case, as suggested by abstract economic theories of the firm, that members are worried that their capital lacks diversified placement; quite the contrary, members feel that they would own no capital at all save for the cooperative form which has rewarded them with it.

The cooperative employs a good number of individuals, but constitutionally requires retained employees to become members after a year of work. Among the few problems that have resulted are one employee whom the cooperative could not tolerate as a member, resulting in termination, and one employee who did not want to become a member. The forestry arm has so far been successful in integrating some recently legalized Mexican-American workers, some monolingual, as members. Officers are annually elected, but in fact successful officers are retained and rewarded; the president and chief is finishing an eight-year tenure. The fifty or so cooperative members

are making \$15,000 to \$40,000 a year (above local norms for the work), and full-time officers make as much or more a day than field workers. The cooperative is so successful that in 1990 it must divide its construction and forestry arms so as to satisfy irrelevant but unavoidable small-business size limitations.

Second Growth is clearly more vigorous to the observer than its conventional competitors in reforestation and construction, both in economic efficiency and, through the cooperative form, in furtherance of additional values. Self-selection is not the explanation, because all firms select their personnel. Setting aside the several suggested structural explanations, their success might be due to the simple happenstance of making the right choices in difficult situations. These choices were based on the ancient virtues of working hard, saving, planning for tomorrow, and choosing good leaders. The failed cooperatives were victims of circumstances, but the values of Second Growth members allowed them to master their fate. The ants lived through the winter, but the grasshoppers are nowhere to be found.

CHAPTER VI

CONCLUSION

Intellectual integrity demands that one avoid concocting apologetics for cooperative failure, but neither should quite ordinary failure be asserted as support for theories predicting degeneration. The forest workers' cooperative movement failed, but not because of any degenerative tendencies inherent to the cooperative form. It failed because its main market collapsed, which equally extinguished its conventionally-owned competitors. The cooperatives may have even showed greater robustness of survival when compared with the honest reforestation contractors in the impossible situation.¹ A regional depression from 1979 to 1987, the sudden collapse of work supply by half and wage levels by as much, and invasion by a cunning and violent network of gangsters with bottomless competitive advantage, eliminated all but a few of the legal enterprises, cooperative or privately-owned. At the same time, led and paid for by the dishonest contractors, conventional enterprises won a disingenuous campaign

¹This impression is supported by State of Oregon Bureau of Labor and Industries records on licensing of forestry contractors.

against the cooperatives on the issue of employee-tax subjectivity. This stunning but temporary burden came just as the market and illegality were at the nadir. The concatenation of blows was too much.

The cooperatives were enormously successful in the late 1970s, and there was a feeling by 1980 that the movement was poised for broad diversification, along the lines of Mondragon. But that did not come about.

The reforestation cooperatives failed to adapt to radical market changes. They were ruined by their short-sightedness. Is this a quality inherent to the cooperative form? Obviously not. The cooperatives spontaneously emerged in the first place because of the low capital barrier to entering the reforestation business. But also the peculiarly athletic nature of reforestation meant that the cooperatives' members were very young on average, with short time-horizons. Formative structures worsened this bias. A normal progression of maturity might have resulted in the gradual reaggregation of individual preferences into longer collective time-horizons. Indeed, this happened with the most aged grouping in the cluster, Second Growth; which led to arresting success under the most unfavorable conditions. It happened with the Hoedads too, although some years too late, and with too many trailing burdens for confirming reward.

The initial conditions which permitted formation and early growth of the forestry cooperatives are now absent. Reforestation is no longer a new industry, the early cooperative advantage as landowners changed contract incentives is dissipated, and the surrounding culture is indifferent to cooperative ideals. Moreover, the timber industry is in terminal decline. The movement cannot be reborn.

It is true that in a modern market economy, with its many advantages, that firms must come and go. A major fallacy in the evaluation of the viability of workers' cooperatives is an obsession with firm failure. The question is comparative. Conventional enterprises fail as frequently (Ben-Ner 1988b), only without the dramatic obituaries. Intrinsic forces of cooperative failure have been confidently identified in recent years. The real barriers to growth of a cooperative sector, I believe, are not arcane transformation dilemmas, but the relative lack of capital among workers who might form such enterprises, and the lack of cheap information in the form of models to imitate. Such barriers could be lowered with minimal social and economic intervention.

The Hoedads and their kin were admired by some outsiders not only for their democratic commitment but also

for the purity of their allegiance to some of the assumed ancillary cooperative ideals. But Putterman is correct to insist on a minimal definition of the worker-managed firm:

The procedure is to call a firm worker-managed when the workforce of the firm, in a politically egalitarian and democratic manner, has ultimate authority over the decisions of the enterprise, including the right to delegate some or all decisions to managerial organs. This approach will be controversial, for both traditional proponents of "work-place democracy," and their detractors, have tended to assume that workers' control might mean additional things, such as egalitarianism in income distribution, direct democracy in decision-making, and anti-specialization within the workforce. (Putterman 1984, 171)

The issue is not just definitional. Unthinking adherence to those "additional things" has doomed many a fledgling cooperative. Overcommitment to community can prevent its occurrence.

The reforestation cooperatives thrived to the extent that they were practical about such ancillary ideals, and languished to the extent that they were dogmatic about them. By thoroughly democratic decision, the Hoedads generally avoided mechanical egalitarianism of income, direct democracy and consensus in all things, and anti-specialization. This made them more affluent and ongoing than the ephemeral collectives of the day, while not sacrificing the ambience of liberation. At the same time, the Hoedads may have been so devoted to external social, political and environmental causes as to make for

both the neglect of internal affairs and the accumulation of too many powerful enemies. Failure to retain and reward managers was in the end more of a real menace than the imaginary threat of bureaucratization.

Hoedads' biggest defect was its practice of instantaneous membership, but this was academically celebrated as evidence of the cooperative's purity of form. It was a defect because it prevented the accumulation and enactment of long-term interests and goals. Employment of nonmembers can be a sign of cooperative degeneration. But it can also be a sign of serious commitment to the cooperative community. It is simply unfair to grant transient or new and unproven individuals the same voice in the enterprise as those who have committed their lives to it. Temporary employment or probationary membership can build community as well as undermine it. Any realistic system of workers' cooperatives would have to permit some employment. Imagine an economic system which wholly forbade employment at "full employment" (no one involuntarily without a job). What would prevent opportunistic individuals from flitting from one cooperative to another, hijacking collective resources, just as some of the renowned financiers of today?

An unsung advantage of workers' cooperatives is their practical utopianism. The undeniable urge for

community can be dangerous, but is continually denied under the pleasant but atomized and bureaucratic circumstances of present-day life. That the urge can be dangerous is shown in the totalitarian fevers that have killed hundreds of millions and gripped much of the earth in dictatorship. Workers' cooperatives are good in rebuilding face-to-face community at the primary level of modern association, the workplace. If proposals can't carry one's workgroup how can they be advocated for 250 million people? If twelve people won't vote for mechanical income equality, then how can a nation? Conversely, who can imagine a system of cooperatives where the norm is to expel members who need four weeks' unpaid leave to care for a new baby? Such issues are best dealt with on the personal level, if possible, where people can be told that they deserve less pay or that they deserve time off for their family. The transformative value of having to solve democratically one's own local collective problems is as much a social benefit as the more vaunted virtues of participation.

Many of the participants, including myself, feel a glaring absence of community on either side of our experience in the cooperative movement. Martin Buber (1949), then criticizing Leninism, wrote:

Community should not be made into a principle; it, too, should always satisfy a situation rather than an

abstraction. The realization of community, like the realization of any idea, cannot occur once and for all time; always it must be the moment's answer to the moment's question, and nothing more. (134)

Buber was right, but there is more to it, too. Contrary to public choice theory, institutions are more than mechanisms for the mere aggregation of individual preferences.

Institutions form preferences too, as has been commonly observed, and one may deliberately choose those institutions which bring out one's best, and regret their passage.

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