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The Promise of Profit Sharing

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I want to talk about the nature and significance of some recent trends toward making part of the pay of a firm's workers more automatically responsive to the economic well-being of the firm. These trends have received some attention for a variety of reasons, not least because they may perhaps help to reduce unemployment or improve productivity.

Lately there has been a significant interest throughout many countries of the world in gain sharing labor payment arrangements, which tie some part of a worker's pay to a measure of how well his or her company is doing. Profit sharing is perhaps the most familiar form. Profit sharing itself is an old idea with, I think, a venerable history. There are surely a number of reasons for the rekindled interest of late in profit sharing. A major direct spur is undoubtedly coming from the fierce pressure for containing costs, or at least making them somewhat more responsive to performance, that many industries, which were previously quasi protected, are now subjected to in a deregulated, internationally competitive environment. Another rationale stems from the more general idea that a properly instituted gain sharing plan can motivate workers to cooperate more fully with management in raising productivity and increasing profitability by giving them a direct stake in the outcome. And there is the idea that if society as a whole were to move toward profit sharing, it would help to soften the wicked unemployment-inflation tradeoff, which, especially in some European countries, bedevils current attempts of traditional macroeconomic policy to reconcile reasonably low unemployment with reasonably low inflation. It is this macroeconomic promise of profit sharing on which I will concentrate here by attempting to set forth the general case briefly and informally. I will present the case for profit sharing as an open advocate, not as a dispassionate observer. In that sense, this is an "essay in persuasion."

I want to begin by emphasizing one centrally important fact. Even leaving aside the important moral and social consequences, unemploy-

ment is extraordinarily expensive. Every percentage point of extra employment translates into about a 2 percent increase in national income. Any scheme that would result in a meaningful reduction of unemployment would translate into very large increases in the value of goods and services being produced.

Let me digress for a few moments to talk about the Japanese experience. By any reckoning, Japan possesses a singularly outstanding employment record. Even after correcting for the inevitable international differences in official reporting methods, Japanese unemployment rates are regularly the lowest among the major capitalist economies. This achievement is all the more remarkable considering that the Japanese have suffered as much as any other nation, and probably more so, from the effects of economic shocks beyond their control, including the two oil crises of the 1970s and the current depressed demand for exports caused by the rapid appreciation of the yen. While the debilitated European economies allowed serious long-term unemployment to develop and have remained mired in rates that would have been considered astronomical by standards of little more than a decade ago, Japan's unemployment rate has never exceeded 3 percent.

How do the Japanese keep unemployment so low? Are there lessons here for other countries?

To find answers, it is instructive to examine how Japan is now coping with its latest economic crisis. During the past couple of years, the yen has soared 50 percent above the trade-weighted value of the currencies of Japan's major partners. That represents a catastrophe for Japan's vaunted export industries, including such mighty pillars of national pride as steel, electronics, and automobiles. For these manufacturing industries, it is as if their products were subjected to a 50 percent export tariff. In any other country that would be a sure recipe for mass layoffs and the beginning of a wicked snowball effect on the rest of the economy as the loss of purchasing power from unemployed workers feeds back into further layoffs. A key ingredient in the Japanese success story is that they seem able to contain the unemployment damage initially, when it first threatens, before it explodes and then becomes entrenched. The European experience teaches a clear alternative lesson about how much more difficult it is to eradicate unemployment after

it settles in. Japan has the will, backed by an appropriate microeconomic structure, to deal vigorously, pragmatically, and automatically with the unemployment problems on the level of the firm, right from the beginning. An ounce of microeconomic prevention is worth a pound of macroeconomic cure.

Japan's first line of defense against layoffs is the world's most flexible labor payment system. Fully one-fourth of an average Japanese worker's total pay comes in the form of a semiannual bonus with strong profit-sharing overtones. Studies show that bonus payments are significantly correlated with profits. The bonus represents an automatic shock absorbing cushion that helps save jobs during times of severe economic stress. Last year's reaction has been especially notable. For the first time since the 1950s, bonuses were cut from the previous year's level by all major auto makers. The total of summer and winter bonuses at Nissan, for example, was down by 2.6 percent from the previous year's amount and further reductions are probably coming. Manufacturing as a whole endured the only absolute decline of bonus payments in the postwar period. The automatic ability of Japanese companies to cut labor costs rapidly in the face of severe economic adversity comes across very clearly during times of stress like now and during the oil crises of the 1970s. Its job-saving potential is the envy of policymakers throughout the rigid European economies, whose unresponsive pay systems have ultimately proved their undoing in the face of contractionary shocks that have left a nasty residue of enduring European unemployment.

If the bonus system facilitates a Japanese company's retaining workers when times are bad, what does the company do with the extra workers when there is weak demand for its products? Herein lies Japan's second, and complementary, line of defense against layoffs: a strong acceptance of intrafirm work mobility based on the principle of flexible job assignments. Instead of being laid off outright, automobile production workers have been shifted to the sales arm of their company, or to a dealership to help clear inventories, or to repair jobs within the plant such as painting and renovation.

Although about 40 percent of factories in Japan are reportedly planning "labor force adjustments," this is not merely a euphemism for

layoffs, as it would be in most other countries. Japanese "adjustments" mostly take the form of a reduction in bonuses and overtime, the encouragement of early retirements, and the shifting of workers to alternative tasks. Companies feel obligated to find other jobs for their idle workers, if not within the firm then among subsidiaries and affiliated companies. Although workers sometimes have to accept a different job, and only after considerable retraining, this is viewed as a welcome tradeoff during a time of economywide contraction. Indeed, the famed Japanese "lifetime employment system" is contingent upon a high degree of pay flexibility and a discretionary right by the firm to alter job assignments. Some outright layoffs do occur, but only as a last resort, and principally among "temporary" workers not covered by the lifetime employment commitment. Even during very hard economic times, the total number of layoffs is sufficiently limited to keep the national unemployment rate from rising above 3 percent.

Are there lessons here for the rest of the world? I think so. The battle for full employment can be won. But success will likely require a more flexible labor payment system and a less rigid attitude toward work rules than are present in most Western countries today. I do not think it is just a coincidence that Japan, Korea, and Taiwan all have significant bonus systems with strong profit-sharing overtones.

Let me restate that last comment about lack of coincidence somewhat more carefully. As was noted, Japan has an unusual labor payment system, where about one-fourth of an average worker's total compensation comes in the form of a twice-yearly bonus supplement added onto base wages. It has by now been pretty firmly established that the Japanese bonus system can be viewed as a form of profit sharing, even though only about 15 percent of Japanese firms explicitly link the bonus to profitability via a prescribed formula. What I mean by saying that Japanese bonuses can be viewed as a form of profit sharing is simply the statistical statement that the ratio of bonus payments to base wages varies positively with business condition indicators, including profitability per employee.

Japan has enjoyed the lowest average unemployment rate among the major industrialized capitalist economies over the last quarter century or so. This comparatively outstanding employment record survives corrections for discouraged workers, relatively flexible hours, definitional

differences, and so forth. Does the existence of a profit-sharing component of pay help in any way to account for the comparatively low, stable unemployment rate in Japan?

This is an easy question to ask but a very hard one to answer. The whole Japanese system seems to be employment promoting, so it is not possible to isolate cleanly the pure role of the bonus system. I think it is a fair statement to say that it would be more difficult for Japanese firms to maintain the full employment commitment without the automatic cushion that the bonus system provides. The Japanese experience is definitely suggestive or supportive of the proposition that a profit-sharing system can be used to help promote full employment, although it would be naive to try to go far beyond such a statement at this stage.

Turning now to other countries, I want to inquire briefly why unemployment has moved up so persistently to such stubbornly high levels, especially in Europe. This is a subject of dispute. Some say real wages are too high, others that there is insufficient aggregate demand. Some blame what they see as an overly generous welfare and unemployment system. And some focus on European wage rigidities and malfunctioning labor markets, especially the high costs of hiring and firing workers. Perhaps there is some truth in all of these views.

Let me start my own analysis by asking a general question. Generally speaking, what causes unemployment or slack labor markets? There is really only one basic answer, but, like a coin, the answer has two sides. Side one is that unemployment is caused when firms face insufficient demand for their products relative to their marginal costs of production. Side two is that unemployment is caused when firms have too-high marginal costs of production relative to the demand for their products. Sometimes it is useful to stress one side of the coin; sometimes the other. But it is always the same coin.

In either case, the key to noninflationary full employment is an economic expansion that holds down the marginal cost to the firm of acquiring more labor. Macroeconomic policy alone, the purposeful manipulation of financial aggregates, can be very powerful in achieving full employment or price stability, but cannot be depended upon to reconcile both simultaneously. Why? Because of the two-headed monster—stagflation. Illusions of being able to fine tune aside, we know

how to get unemployment down and output up by the usual expansionary monetary and fiscal measures. We also know how to break inflation by policy-induced recessions. What we do *not* know—and this is the central economic dilemma of our time—is how *simultaneously* to reconcile reasonably full employment with reasonable price stability. Expansionary policies dissipate themselves, to an excessive degree, in too-large wage and price increases rather than expanded employment and output.

I think it is important to realize the following point. There is a sense in which the major macroeconomic problems of our day trace back, ultimately, to the wage system of paying labor. We try to award every employed worker a predetermined piece of the income pie before it is out of the oven, before the size of the pie is even known. Our "social contract" promises workers a fixed wage independent of the health of their company, while the company chooses the employment level. This stabilizes the money income of whomever is hired, but only at the considerable cost of loading unemployment on low-seniority workers and inflation on everybody, a socially inferior risk-sharing arrangement that both diminishes and makes more variable the real income of workers as a whole. An inflexible money wage system throws the entire burden of economic adjustment on employment and the price level. Then macroeconomic policy is called upon to do the impossible—reconcile full employment with low inflation.

A profit-sharing system, where some part of a worker's pay is tied to the firm's profitability per employee, puts in place exactly the right incentives to resist unemployment and inflation. If workers were to allow some part of their pay to be more flexible by sharing profits with their company, that would improve macroeconomic performance by directly attacking the economy's central structural rigidity. The superiority of a profit-sharing system is that it has enough built-in flexibility to maintain full employment even when the economy is out of balance from some shock to the system. When part of a worker's pay is a share of profits, the company has an automatic inducement to take on more employees in good times and, what is probably more significant, to lay off fewer workers during bad times. A profit-sharing system is not antilabor and does not rely for its beneficial effects on lowering workers' pay. The key thing is not to get total worker pay down—it could even go up within reason—but to lower the base wage component relative to the profit-sharing component. The marginal cost of labor is approximately the base wage, more or less independent of the profit-sharing component.

Here is how the British Chancellor of the Exchequer Nigel Lawson stated the case for profit sharing in his 1986 annual budget speech before the House of Commons:

> The problem we face in this country is not just the level of pay in relation to productivity, but also the rigidity of the pay system. . . . This constitutes the Achilles heel of the British economy. . . . If the only element of flexibility is in the numbers of people employed, then redundancies are inevitably more likely to occur. One way out of this might be to move to a system in which a significant proportion of an employee's remuneration depends directly on the company's profitability per person employed. This would not only give the workforce a more direct personal interest in their company's success, as existing employee share schemes do. It would also mean that, when business is slack, companies would be under less pressure to lay men off; and by the same token they would in general be keener to take them on.

Chancellor Lawson in his 1987 budget speech proposed granting fairly substantial tax concessions to profit-related pay, and challenged British business to take up the offer in the hopes that this might help to improve national economic performance on the employment and output side. These proposals were enacted into law in August of 1987. Fully one-half of a British worker's profit-related pay is now tax exempt up to three thousand pounds or 20 percent of total pay, whichever is smaller. It will be interesting to follow the British experience for the empirical insights it should give us.

The case for widespread profit sharing is like the case for widespread free trade. It is not true that free trade benefits every individual. It is not even true, in a realistic world of increasing returns to scale and imperfect competition, that free trade must benefit the community as a whole. Yet, when all is said and done, when the possible costs and

benefits of alternative trade policies have been calculated, weighted by the relevant probabilities, and added up, most economists agree that free trade is the best policy. The argument for profit sharing is of this same form. It is possible to dream up unlikely counterexamples and to interpret the existing evidence perversely. But the bulk of economic theory, empirical evidence, and common sense argue that widespread profit sharing will help to improve macroeconomic performance. The bottom line is that it is easy to envision situations where profit sharing helps economic performance while it is difficult to imgine scenarios where profit sharing damages an economy, which is as much as can be claimed for any economic idea.

It is no mystery why profit sharing makes the employer view things fundamentally differently. In a profit-sharing system, the young school graduate looking for work comes with an implicit message to the employer saying: "Hire me. I am reasonable. Your only absolute commitment is to pay me the base wage. That is my marginal cost to you. The profit-sharing bonus is like a variable cost, depending to some extent on how well the company is doing. So you have a built-in cushion or shock absorber if something should go wrong. You won't be under such pressure to lay off me or other workers during downswings." By contrast, the young British or French school-leaver looking for work in a wage system now comes to a potential employer with the implicit message: "Think very carefully before you hire me. I am expensive and inflexible. You will have to pay me a fixed wage independent of whether your company is doing well or poorly." Is it difficult to deduce in which situation companies might be expected to more eagerly recruit new hires and to retain them, and in which situation new hiring commitments are likely to be avoided when possible? What is killing European employment is the extreme wage rigidity compared with the U.S. or Japan, the extreme independence of workers' pay from how well or poorly their company is doing.

The essence of the case for profit sharing is the basic idea that on the margin the profit-sharing firm is more willing than the wage firm to hire new workers during good times and, more importantly, to lay off fewer workers during bad times. From a social point of view, a wage system is poorly designed because it is inherently so rigid. There

has to be a precise relation between the wage level and the level of aggregate demand to just exactly hit the full employment target without causing inflation. By contrast, a profit-sharing system is inherently much more forgiving. Full employment will be maintained even if base wages and profit-sharing parameters are somewhat "too high" relative to aggregate demand or, equivalently, aggregate demand is "too low" relative to pay parameters.

Let me state the basic idea why a profit-sharing economy is likely to have a better employment record than a wage economy as a kind of parable. Suppose there are two kingdoms, Old Lakeland and New Lakeland, which are physically identical in every way. The economies of both identical twin kingdoms consist exclusively of fishing from the numerous privately-owned lakes and exporting all of the fish at given world prices.

In Old Lakeland, the monarch has decreed that the money wages to be paid throughout the year at each lake are to be posted on January 1 of that year and cannot be altered until January 1 of the next year. In New Lakeland, the monarch has decreed that payment at each lake shall consist of a share of the value of the fish caught per worker; the share fraction applying throughout the year is to be posted on January 1 of that year and cannot be altered until January 1 of the next year. In both economies, once the pay parameters (wages or share fractions) are posted, workers are free to migrate to that highest-paying lake which will employ them.

Suppose that the world price of fish has been steady for as long as anyone cares to remember. Then Old Lakeland and New Lakeland will settle into a (long-run) competitive equilibrium that is exactly identical in every respect except that pay is called "wages" in Old Lakeland and "shares" in New Lakeland.

Suppose next that, suddenly and without warning, in the middle of one year the world price of fish drops. By royal decree, pay parameters cannot be changed to reflect the new situation until January 1. What happens in this (short-run) disequilibrium? Lake owners in Old Lakeland will choose to lay off workers, but New Lakeland will remain at full employment. Lake owners in New Lakeland will have no desire to lay

off workers because it would diminish the total size of their fixed share of the fish catch.

This basic parable can be amended in various ways, including alternative labor supply assumptions, without destroying its essential message. A share economy will have a tendency to remain at full employment after contractionary shocks, because employers want to retain workers, while a wage economy will likely exhibit unemployment, because firms wish to shed labor.

Let me turn to the issue of how a share economy might affect the so-called "noninflationary rate of unemployment," or NAIRU. In a highly idealized frictionless world of perfect information, long-run equilibrium is the same under wage and share systems. In an idealized long run, Old Lakeland and New Lakeland are isomorphic and both have zero rates of unemployment. But what about somewhat more realistic situations. Is the "share natural rate" of unemployment lower than the "wage natural rate?" The formal analysis of unemployment comparisons between Old Lakeland and New Lakeland in my story was based on short-run disequilibrium considerations, when pay parameters are quasi-fixed. But might widespread sharing also lower the natural rate under a more realistic concept of long-run equilibrium than was treated in the Lakeland example?

The answer is: yes, it presumably would. Furthermore, the short-run and long-run unemployment problems are probably related.

In order to talk meaningfully about the effects of profit sharing on the natural rate of unemployment, one has first to have some idea about what is causing a positive natural rate in the first place. There are several theories. Some are more persuasive than others, and they are not mutually exclusive.

A leading theory contends that long-term unemployment is largely inertial or hysteresis-like. Whatever initial disequilibrium caused the increased unemployment in the first place, once unemployment continues long enough it almost gets built into the system—perhaps because the long-term unemployed outsiders cannot or do not act effectively as a disciplining force in wage setting, perhaps because working skills atrophy without work, perhaps because the plight of the long-term unemployed gets forgotten by the electorate, perhaps for other reasons. In this view

the rate of change of unemployment typically has a more powerful effect on wage settlements than the absolute level of unemployment.

If this kind of inertial effect lies behind the too-high natural rate, then presumably widespread profit sharing would lower or eliminate it. The long-term unemployment would have difficulty developing in the first place out of an initial contractionary shock because profit-sharing firms are reluctant to let go of workers. Taking as given this kind of natural rate unemployment, leaving aside how it got started in the past, the ingrained expansionary bias of a profit-sharing system should act as a built-in counterforce to help absorb the unemployed. The absorption process could of course be speeded by traditional expansionary macroeconomic policies which, under profit sharing, presumably pose less danger of causing prices to accelerate because the employment-inflation tradeoff has been improved. So any way you look at it, profit sharing looks as if it ought to help diminish long-term inertial unemployment.

Another theory of why the natural rate is so high is that labor has too much bargaining power. Whether a switch from a wage system to profit sharing would lower this kind of NAIRU depends on what it is that labor and management bargain over. If they bargain over pay parameters, but management controlls the employment decision, a switch to profit sharing would lower the NAIRU. If labor and management bargain over both pay parameters and employment levels, the NAIRU would be the same under either system. In-between bargaining would yield in-between results, with the NAIRU then being somewhat lower under profit sharing than under a wage system.

A third class of theories, based on the so-called "efficiency wage hypothesis," holds that long-term unemployment is caused by companies themselves choosing to pay above market-clearing wages because otherwise workers would shirk too much on the job. Within this kind of model the natural rate would be the same under a wage or profit-sharing system.

To the extent that too-high unemployment in some economies is aided by "overly generous" unemployment and welfare benefits, which creates some voluntary unemployment, presumably the labor payment mechanism per se makes little or no difference. So "the revenge of the welfare state" kind of unemployment should not be affected by a switch to profit sharing.

Finally, there is the longstanding identification of the "natural rate" with semipermanent frictional or structural unemployment, due to continuously occurring microeconomic changes. This kind of unemployment, it is usually said, cannot be reduced by pure macroeconomic policies except temporarily and at the cost of increasing inflation. As with inertial unemployment, however, the wage system is heavily implicated in frictional or structural concepts of the NAIRU. After all, both wage and profit-sharing systems respond to shifts in relative demands by sending a signal that eventually transfers workers out of a losing firm or sector and over to a winner. With a wage system, the signal to workers that their firm is a loser in the game of capitalist roulette and that it is time to look for a new job with a winning firm is the boot—the worker is laid off and must suffer through an unemployment spell of some duration while searching for the new job. Under a profit-sharing system, the firm does not voluntarily let go of a worker because of weak demand. Instead it is the worker who chooses to leave because pay is too low relative to what is available elsewhere at relatively more successful firms.

Summing up, in none of the standard scenarios does a profit-sharing system cause a higher NAIRU than a wage system, and in most of the more reasonable descriptions a profit-sharing system generates a lower NAIRU than a wage system. In addition, of course, the profit-sharing system has better disequilibrium properties when pay parameters are sticky in the neighborhood of the NAIRU unemployment rate.

It should be noted that not all forms of share systems bring about equally desirable macroeconomic benefits. For example, such widely disparate systems as employee ownership, or piece-rate formulas, or Swedish style economywide workers' fund schemes, unlike profit sharing do not necessarily alter the employer's attitude about hiring or laying off workers.

I do not have nearly enough time here to deal fully with objections that are traditionally raised against profit sharing. Some of these objections raise legitimate issues. But some seem to me a bit wide of the mark. Many of them involve a fallacy of composition—a fallacious generalization from what is ostensibly good for the tenured high-seniority insider worker, who already has job security, to the level of what is good

for the community of all would-be workers, which is quite a different matter. Perhaps the most egregious example of this kind of fallacious compositional reasoning is the argument that profit sharing allegedly exposes workers to unnecessary risk.

This risk argument, so widely parroted and seemingly so plausible, embodies, at least in its crude form, a classical fallacy of composition. What is a correct statement for the individual high-seniority worker who already has job tenure is patently false for the aggregate of all would-be workers. The problem of unemployment is in fact the largest income risk that labor as a whole, as opposed to the median tenured worker, faces, and it is concentrated entirely on the marginal or outsider worker. If more variable pay for the individual helps to preserve full employment for the group, while fixed pay for the individual tends to contribute to unemployment, it is not the least bit clear why overall welfare is improved by having the median worker paid a fixed wage. Actually, the correct presumption runs the other way around.

What is true for the individual tenured worker is not true for labor as a whole. When a more complete analysis is performed, which considers the situation not as seen by a tenured, high-seniority worker who already has job security, but by a neutral observer representing the entire population, it becomes abundantly clear that the welfare advantages of a profit-sharing system (which tends to deliver full employment) are enormously greater than a wage system (which permits unemployment). The basic reason is not difficult to understand. A wage system allows huge first-order losses of output and welfare to open up when a significant slice of the national income pie evaporates with unemployment. A profit-sharing system helps to stabilize aggregate output at the full employment level, creating the biggest possible national income pie, while permitting only small second-order losses to arise because of relatively limited random redistributions from a worker in one firm to a worker in another. It is extremely difficult to cook up an empirical real-world scenario, with reasonable numbers and specifications, where a profit-sharing system with a moderate amount of profit sharing (say 20 percent of a worker's total pay) does not deliver significantly greater social welfare than a wage system.

Any economy is full of uncertainty. There are no absolute guarantees, and if the uncertainty does not come out in one place, it will show up in another. I am saying that it is much better, much healthier, if everyone shares just a little bit of that uncertainty right at the beginning rather than letting it all fall on an unfortunate minority of unemployed workers who are drafted to serve as unpaid soldiers in the war against inflation. It is much fairer if people will agree that only 80 percent of their pay is going to be tied directly to the funny looking green pieces of paper (which are themselves an illusion, although a very useful illusion) and 20 percent will be tied to company profits per employee. Then the economy can be much more easily controlled to have full employment *and* stable prices. Society will be producing, and hence consuming, at its full potential. If people will face up to the uncertainty, and if everyone accepts some small part of it, then society as a whole will end up with higher income and less uncertainty overall.

Another fallacy of composition is often involved when opponents of profit sharing argue that additional hired workers dilute the profits per worker which the previously hired workers receive, thereby possibly causing resentment by the already existing labor force against newly hired workers which, in extreme cases, might lead to restrictions against new hires. The fallacy of composition here lies in failing to account for the fact that under widespread profit sharing and relatively free hiring there would also be a tight labor market, and hence an employer cannot so easily pick up jobless people off the streets, because they are just not there.

Incidentally, this kind of profit-dilution argument may be a bit of a red herring on other grounds as well. Even a one-sided, worst-case scenario where profit sharing "merely" dampens economic downturns by encouraging employers to lay off fewer workers during recessions still represents an economic benefit to the community of potentially enormous magnitude. In periods of recession and other kinds of squeeze, the "insiders" risk becoming "outsiders" and they may well be glad of a system which, without painful renegotiations, will enable an automatic adjustment in pay to be made to preserve jobs, which would be self-reversing in recovery. Remember, also, that even in periods of normal growth there will always be firms under pressure to reduce

employment and anything which lessens that pressure will help overall employment. To ratchet an economy toward a tight labor market and improve the employment-inflation tradeoff so that macroeconomic policies can be used more effectively requires only that, on the margin, during downswings a few less old workers are laid off and during upswings no fewer new workers are hired.

So far as internal labor relations are concerned, in comparing alternative payment mechanisms let us not forget that the wage system is hardly a bed of roses. Younger, untenured workers are pitted against older high-seniority workers in the jobs vs. wages decision. Featherbedding is widespread. Workers resist the introduction of new labor-saving technology, resist job reassignments, and, more generally, take relatively little interest in the fortunes of the company because they do not have any direct stake in its profitability. Worker alienation is widespread in an environment where the employer is essentially indifferent on the margin to whether the worker stays or goes.

Arguments about profit sharing causing underinvestment strike me as basically wrong, in theory and in practice. The critics have in mind a situation where pay parameters are more or less permanently frozen. In that case, profit sharing would, indeed, cause underinvestment for the well-publicized reason that any incremental profits would have to be shared with labor. (Incidentally, this should make workers proinvestment, so the critics cannot have it both ways in any case.) But over the longer time horizon relevant to decisions about durable capital investments, where either base wages or profit-sharing coefficients (or both) respond to the invisible hand of the market and the visible hand of collective bargaining, both wage and profit-sharing systems stimulate equal efforts toward output-increasing improvements to the point where the marginal value of capital equals the interest rate. Even if this theoretical isomorphism between investment in wage and share systems, which is well understood in modern economic theory, did not exist, the cost of capital is only one side of the picture, and probably the less important side. The more dominant consideration is the demand side. If profit sharing results in a macroeconomic environment where output is being stabilized at or near the full-employment, full-capacity level, while a wage economy results in erratic, fluctuation-prone output and

capacity utilization levels, there is bound to be more investment in a profit-sharing economy. And, as if these two arguments were not enough, interest rates, investment tax credits, and the like could be used to influence investment decisions in any system. The really important distinction concerns the average level of unemployed resources.

I have concentrated mostly on the favorable macroeconomic effects of profit sharing. But the microeconomic properties, the effects on motivation and productivity, may also be significant. This is of special interest in a world where international competitiveness is so crucially important. The two biggest economic tasks of our time are to resolve the unemployment-inflation dilemma and to increase productivity growth. It is just possible that a well-designed profit-sharing economy has a big advantage in both of these important areas.

The few formal studies that have been done tend to show that greater profit sharing in firms is positively related to increased productivity. One of the problems in interpreting this result is that it is not clear whether the profit sharing is causing the higher productivity or whether some hidden third factor, call it superior management, tends to cause the more progressive firms to have both profit sharing and high productivity.

Most economists would say that there are no grounds for subsidizing profit sharing on its possible productivity-enhancing merits because these are strictly internal to the firm. Firms do not need to be subsidized to take other productivity-enhancing measures, so why should they be especially subsidized for profit sharing? I mostly agree with this interpretation, but I am not entirely sure because in practice a labor payment mechanism may have large demonstration effects.

As for the employment stabilizing effects of profit sharing on the level of the individual firm, these have only just begun to be studied in a formal way. There are some preliminary indications that profit-sharing firms are more resistant to layoffs during downswings. My distinct impression from talking with representatives from a fair number of profit-sharing firms is that the built-in profit-sharing shock absorber protects jobs during bad times and that both labor and management understand this feature quite well, to the point of regarding it as self-evident.

Let me address the following question, which economists are naturally fond of asking. If profit sharing represents such a good idea for operating a market economy, why don't we see more examples of it arising spontaneously?

First of all, as was previously indicated, there are some significant examples of profit sharing. In Japan, Korea, and Taiwan, it can be argued, steps have been taken in this direction. The performance of these economies hardly supports the view that widespread profit sharing is likely to prove harmful to economic health. In the U.S. economy, about 15 percent to 20 percent of firms have what they call profit-sharing plans. Although the issue has not been carefully studied in a rigorous way, it is clear that many of these profit-sharing firms are among the most progressive, advanced companies in the economy. As just one informal indication, in a well-known book called *The 100 Best Companies to Work for in America,* over half of the cited companies have profit-sharing plans of some kind.

The reason profit sharing is not more widespread despite its benefits involves an externality or market failure of possibly enormous magnitude. In choosing a particular contract form, the firm and its workers only calculate the effects on themselves. They take no account whatsoever of the possible effects on the rest of the economy. When a firm and its workers select a labor contract with a strong profit-sharing component, they are contributing to an atmosphere of full employment and brisk aggregate demand without inflation because the firm is then more willing to hire new "outsider" workers and to expand output by riding down its demand curve, lowering its price. But these macroeconomic advantages to the outsiders do not properly accrue to those insiders who make the decision. Like clean air, the benefits are spread throughout the community. The wage firm and its workers do not have the proper incentives to cease polluting the macroeconomic environment by converting to a share contract. The essence of the public good aspect of the problem is that, in choosing between contract forms, the firm and its workers do not take into account the employment effects on the labor market as a whole and the consequent spending implications for aggregate demand. The macroeconomic externality of a tight labor market is helped by a share contract and hurt by a wage contract, but the difference is uncompensated. In such situations there can be no presumption that the economy is optimally organized and society-

wide reform may be needed to nudge firms and workers towards increased profit sharing.

Perhaps it is appropriate to end by commenting on one important difference between how someone with an economist's perspective is likely to view labor payment systems and how someone coming from a pure industrial relations background is likely to see things. The economist tends to regard narrowly defined industrial relations as essentially concerned with the interests of two parties at the workplace: management, and the already employed, in-place, existing core labor force, or "insider" workers in the economist's jargon. Relatively little attention is paid to third party "outsiders," the unemployed and those who, when they have jobs, constitute the low-seniority, untenured, last-hired and first-fired. Yet industrial relations generally, and pay policies in particular, have profound effects on unemployment and inflation. And unemployment is extraordinarily expensive, not to mention immoral. Surely it is possible to craft an industrial relations system that preserves most of the traditional desiderata which insiders value but builds in stronger incentives to employ more outsiders and to keep them employed through thick and thin.

The industrial relations side of what I am proposing is far from trivial. There are genuine, legitimate, tough issues involved in reconciling the many, already inherently conflictual, goals of traditional industrial relations with the additional burden of creating incentives to retain more workers during bad times and to take on more of them during good times. Any industrial relations system is a complicated package, of which pay is only one element. Trust between management and labor is an important part of most successful profit-sharing schemes. I do not pretend to know exactly how to design a socially optimal industrial relations pay system under the real world constraints that are out there. What I am saying is that we should be placing much more emphasis on the employment consequences of industrial relations than we are now doing, and that it seems to me that anything resembling a socially optimal solution is very likely to involve some form of profit related pay to help stabilize employment at higher levels.

Let me conclude with a final message in this attempted persuasion. Government encouragement of widespread profit sharing, through moral

suasion and tax incentives for profit-sharing income, represents a decentralized, market-oriented way of improving national economic performance which is well worth pursuing.

Suggested Reading

Weitzman, M.L., "Some Macroeconomic Implications of Alternative Compensation Systems," *Economic Journal,* XCIII (1983), 763–783.

———, "The Simple Macroeconomics of Profit Sharing," *American Economic Review,* LXXV (1985), 937–953.

———, "Steady State Unemployment Under Profit Sharing," *Economic Journal,* XCVII (1987), 86–105.