ELSEVIER

European Economic Review 42 (1998) 459–490

EUROPEAN ECONOMIC REVIEW

Alfred Marshall Lecture

Why not cut pay?

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Abstract

I interviewed over 300 business people, labor leaders, business consultants, and counselors of unemployed people, all in the Northeast of the United States, during the recession of the early 1990's in order to learn why wages and salaries declined in only a few firms. Employers were reluctant to cut pay because they believed doing so would hurt employee morale, leading to lower productivity and current or future difficulties with hiring and retention. It was thought that these effects would in the end cost more than the savings from lower pay. There were few indications that unemployed people had excessive wage expectations. On the contrary, many unemployed were too flexible and found themselves rejected by firms as overqualified. In most companies, pay cuts were not a useful alternative to layoffs, because pay cuts would not make it worthwhile to retain many employees and because layoffs harmed morale less than would pay cuts. The findings support none of the theories of wage rigidity except those of Solow and Akerlof that emphasize morale. © 1998 Elsevier Science B.V. All rights reserved.

JEL classification: E32; J64; J65

Keywords: Wage rigidity; Wage stickiness; Unemployment; Layoffs; Wages; Salaries; Recession; Labor; Business cycles

1. Introduction

Why have money wages and salaries seldom declined during post World War II recessions in the US and abroad, despite high unemployment and intense

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PII S0014-2921(98)00002-6

competition for jobs? Why do not labor markets behave like competitive commodity markets, where prices fall or even plunge when supply exceeds demand? Why do so few firms avoid layoffs by cutting pay, lowering the prices of their products, and selling more? How can the frequency of layoffs be reconciled with the movement within business emphasizing humane treatment of workers? Instead of plummeting, the price of labor normally continues to rise during downturns, albeit at a slower rate than during economic booms. The failure of pay rates to fall is termed wage stickiness, downward wage rigidity, or simply wage rigidity, and has puzzled economists for years.

I have sought answers by interviewing more than 300 business people, labor leaders, advisers of the unemployed, and business consultants in the Northeast of the United States during the recession of the early 1990's. From these discussions, I conclude that wage rigidity stems from the very interest in humane values that seems so incompatible with layoffs. My findings support none of the existing economic theories of wage rigidity, except those that emphasize the impact of pay cuts on morale. The other theories fail in part because they are based on psychological assumptions of neoclassical economics that do not correspond to reality. In the neoclassical view, people are rational, which means that they maximize purely egotistical utility or profit objectives and that their abilities do not depend on their state of mind. Wage rigidity cannot be derived from these assumptions, for it is the product of more complicated employee behavior. In the face of this behavior, manager reluctance to cut pay seemed rational, but workers' reactions were not always rational in the neoclassical sense, though they were reasonable and understandable. The neoclassical model does not take into account the ability of employees to identify with and internalize the objectives of their firm, the impact of this internalization and of mood on job performance, and the fact that the internalization requires material, moral and symbolic reciprocation from the leadership of the firm.

1.1. Clarification of the question

The issue of wage rigidity should not be confused with the questions of why unemployment exists at all and why it increases during recessions. All students of the labor market accept as normal a minimal frictional level of unemployment resulting from job changing, job search by new entrants, and from fluctuations in individual firms' needs for labor. What is hard to understand is why unemployment surges during recessions and, the topic discussed here, why the surges have so little impact on compensation. Wage rigidity does not necessarily help explain unemployment increases, for it is not clear that wage flexibility would prevent or even diminish them. Though a single firm might employ more workers if it cut wages, it does not follow that the same is true for all firms together. This conclusion would involve the fallacy of composition, for, as Keynes (1936, chapter 19) pointed out, wage cuts in response to unemployment

would occur as a sustained process causing deflation that would increase real interest rates, thereby depressing aggregate demand and perhaps increasing unemployment. Fisher (1932, 1933) argued that U.S. wage deflation in the 1930's worsened the Great Depression, in part by shifting wealth from debtors to creditors, who have a lower propensity to spend than debtors.[1]

1.2. The topic is controversial

It is hard to take a detached view of wage rigidity, because it is central to intense controversy between Keynesian and neoclassical macroeconomists over whether government economic policy should be used to stabilize aggregate income and employment. The debate is related to politics and creates a highly charged atmosphere that colors thinking about wage formation and unemployment. Economists on the Keynesian side of the dispute claim that wage rigidity is confirmed by statistical evidence that pay rates almost never fall. They say that labor markets do not automatically adjust to eliminate excess unemployment and that joblessness is a grave misfortune forced on people, most of whom want to work, even at wages lower than those earned previously. Keynesians think recessions are caused by declines in aggregate demand and should be cured by expansionary economic policy.[2]

Those on the neoclassical side of the controversy believe that wage rigidity is an illusion, that wages and salaries are flexible, and that labor markets always clear. Central tenets of those beliefs are that the existing rate of unemployment is the optimal outcome of market forces and should not or cannot be affected by government policy. The view is that during recessions pay rates fall below reservation levels, or the minimum at which people are willing to work. This decline causes workers to leave their jobs and become unemployed. Neoclassicists also assert that anyone can find some job quickly and that people remain unemployed because they want higher pay than is available to them.[3] Explanations vary as to why they behave this way. According to the intertemporal substitution theory of Lucas and Rapping (1969), workers stop working because they want to enjoy leisure while it is unusually cheap in terms of foregone wage income. The market misperceptions theory of the same authors and of Lucas (1972) asserts that people leave their jobs to have more time to look for better paying ones at other firms, believing incorrectly that pay is low only where they work. Another idea associated with the names of Lilien (1982) and Davis et al. (1996) is that recessions bring waves of shocks, including productivity declines,

[1] Keynes's and Fisher's arguments are explained in Tobin (1975).

[2] The Keynesian point of view is articulated in Tobin (1972).

[3] The belief that workers can always find some job at once is stated by Lucas (1978, p. 354).

to particular firms or industrial sectors. A neoclassical argument is that workers may quit to enjoy leisure or to seek better pay elsewhere if these shocks cause pay to be disappointingly low. Some neoclassical economists argue that recessions are not caused by decreases in aggregate demand, but by changes in workers' wage demands or willingness to work, by general decline in productivity, or by the shocks to individual firms or sectors just mentioned. Some say that predictable macroeconomic policy cannot influence employment, but that only surprise changes in aggregate demand do so, and then just temporarily by producing unexpected fluctuations in pay rates that confuse workers about the relation of their pay to what is normal. According to the neoclassical view, wage rates appear to be rigid downward only because workers prevent wages from declining noticeably by withdrawing labor as soon as pay rates fall below reservation levels.[4]

Neoclassical economists describe unemployment as voluntary, whereas Keynesians claim it is involuntary. Though this difference is the core of the debate, I avoid applying the word voluntary to joblessness, for doing so leads to a logical ambiguity. If someone points a gun at you and says 'Give me your money', you surrender it voluntarily, but only because the alternative is dreadful. In the same sense, people are voluntarily unemployed if they would rather look for jobs paying what they think they deserve than take a lower-paying one. Keynesians have tried to avoid this difficulty by labeling as involuntarily unemployed people who cannot find work at the prevailing wage at jobs they are willing and qualified to take. This definition involves a distracting difficulty; usually there is no such thing as a prevailing wage, because pay rates for the same kind of work vary widely among employers. This fiction is, however, irrelevant to the discussion, for in recessions most jobless have difficulty locating any opening at the level of their qualifications, even one that pays little for the kind of work, and they gladly accept any position they find. They are likely to be rejected for positions at a level somewhat lower than that for which they are qualified, for reasons I will explain. They might have less difficulty finding and being accepted for very low level positions, but they would probably be ill-advised to take such jobs, unless faced with penury. Nevertheless, many do offer to take positions at a much lower level than they held previously. Those who refuse to do so could be said to be voluntarily unemployed because greater flexibility might enable them to find work more quickly. Nevertheless, they are involuntarily unemployed according to the everyday meaning of these words and according to the spirit of Keynes' usage. Judging from historical experience and what I learned of the labor market, it seems very probable that if aggregate demand for labor increased during a recession, fewer people would be jobless, and this is the heart of what Keynes meant by 'involuntary unemployment'.

[4] The neoclassical point of view is explained in Friedman (1968).

However, I do not discuss the probable impact of changes in aggregate demand, for this question has to do with how the whole economic system functions and I gathered information only on certain microeconomic details. Among these were the flexibility of the unemployed and the difficulty they experienced finding work.

1.3. The unsatisfactory state of knowledge

Neoclassicists espouse a set of closely related logical explanations of why unemployment increases during recessions and why wages seem rigid downward, while actually being flexible. Keynesians, on the other hand, embrace no single theory of wage rigidity. Moreover, the lack of any accepted explanation is one of the neoclassicists' most persuasive arguments. They assert that labor markets must clear, because there is no compelling reason for them not to do so. A convincing theory ought at least to explain why workers and employers do not exploit the gains from trade that would exist were there excess unemployment. Neoclassicists argue that if workers were willing to work at wages at which employers could profitably employ them, then the two sides should be able to agree on terms for exchanging labor for money.

Despite intense interest in wage rigidity, current understanding of the subject is highly unsatisfactory. Many explanations have been proposed, any or all of which could be valid, since they are not mutually contradictory. Little is known about which theories are correct or under what conditions. Such an abundance of competing, unrefuted theories indicates ignorance, not knowledge.

1.4. Examples of explanations

Some examples should give an idea of the variety of explanations that have been proposed. The theories of Lucas and Rapping (1969) and Lucas (1972) described above are among those most widely accepted by economists. These theories are inconsistent with the fact that during recessions layoffs increase and quits decline, but McLaughlin (1990, 1991) has suggested a way of resolving the discrepancy regarding layoffs. He assumes that firms offer workers a choice between layoff and continued work at lower pay, layoff occurring only when the lower pay is refused. Layoffs are compatible with the Lucas–Rapping theory, because they are regarded as quits following refusal of pay cuts.

Search models start from the realistic observation that buyers and sellers of labor have imperfect knowledge of trading opportunities, so that both sides must spend time and money to find or fill jobs. In these models, unemployment is a natural consequence of delays in the matching of people to jobs. In most of the models, wage rates are the outcome either of bargaining between employers and employees or are set unilaterally by employers and adjusted so as to assure an adequate supply of labor. There are two types of job search models, those

which attribute downward wage rigidity to job hunters' misperceptions of market wages, and those of the transactions type that include no misperceptions, but emphasize the market interaction process and the stocks and flows of job seekers and job vacancies.[5] The Lucas–Rapping misperceptions model is of the first type. Recent examples of the second type include Mortensen and Pissarides (1994) and Pissarides (1994).

Another theory is that of Keynes (1936, chapter 2), who suggested that workers are so concerned about the relation of their wages to those of workers at other firms that no company dares cut wages. Resistance to wage cuts can be avoided only if all firms in an economy cut wages simultaneously so as to preserve traditional wage differentials. Since such reductions would be difficult to coordinate, nominal wages are rigid downward. Real wages can fall without meeting the same opposition however, for inflation affects all workers in the same way, preserving wage differentials.

In contrast, the implicit contract theory of Baily (1974), Gordon (1974), and Azariadis (1975) implies that real rather than nominal wages are rigid downward. Firms obtain labor most cheaply by offering workers implicit income insurance agreements that guarantee that real wages never decline. Employers act in this way, because if they did allow real pay to fall they would have to pay more in the future than they would have had to otherwise in order to obtain or retain labor. If firms are assumed to be risk neutral, then wages are rigid downward with respect to labor market conditions and the profitability of the firm. If firms are risk averse, then, according to the theory, workers share the risk of profit fluctuations, so that real wages are depressed by low profits, though they are not diminished by a poor labor market. The theory explains rigidity of the pay of existing employees, but not of new ones, for hiring pay is assumed to be determined by current labor market conditions.

In the shirking theory of Shapiro and Stiglitz (1984), firms monitor workers randomly, firing those whose performance does not meet some standard. The more a firm pays, the greater is the cost to workers of job loss, and the greater is their incentive to meet the standard. Hence, increased pay makes discipline more effective, raises productivity, and reduces labor monitoring costs. The theory implies that there must be some unemployment when the economy is in equilibrium, for if there were none any worker could find another job immediately after being dismissed, so that firms could control their workers only by paying them more than they would receive elsewhere. However, every firm cannot pay more than every other firm. Very low unemployment would lead to rapid wage inflation as each firm tried to pay more than its labor market competitors. This theory does not necessarily imply downward wage rigidity,

[5] The term 'transactions' is borrowed from Mortensen (1989, p. 350).

since higher unemployment increases the cost to workers of dismissal and so makes it possible to reduce pay. This effect could be small, however. The theory is interesting mainly because it typifies economic thinking about how managers control workers.

According to the insider–outsider theory of Lindbeck and Snower (1988), the resistance of an inner group of workers within each firm is responsible for wage rigidity. This group, the insiders, is formed of employees who are well-protected from layoff because of high seniority or special skills. They do not have any interest in giving up pay in order to save the jobs of other employees or in order to encourage the hiring of unemployed workers, and insiders are able to prevent the firm from replacing employees with cheaper unemployed workers, the outsiders. Proponents of this theory claim that even unorganized workers bargain collectively with the employer, if only implicitly, so that the theory applies to non-union as well as union companies.

A completely different explanation of wage rigidity is provided by the morale model due to Solow (1979) and espoused and elaborated by Akerlof (1982) and Akerlof and Yellen (1988, 1990). They assume that pay rates have a positive effect on productivity through their impact on morale. When setting pay, companies weigh the benefits to productivity against labor costs, and each company has profit maximizing wages that are independent of labor market conditions. The models of Solow, Akerlof, and Yellen allow morale to depend on the level of wages or changes in them. If morale depends on the level, then the model can explain downward wage rigidity only if profit maximizing wages exceed what the firm must pay in order to recruit and retain workers. If morale depends on wage changes, then the theory can explain downward rigidity at any level of pay.

1.5. The need for more information

All theories of wage rigidity are based on specific assumptions about the motives and behavior of workers or employers. Some of these suppositions may seem to conflict with common sense or to stem from the natural human tendency to blame the less fortunate for their suffering, yet to reject the theories on these grounds alone would be to base conclusions on opinion rather than on careful observation. Unfortunately, there are almost no published sources that give information detailed enough for verification of the assumptions in question. For instance, I found no reference showing whether McLaughlin is correct in asserting that firms offer employees the alternative of a pay cut before laying them off, though it is perhaps revealing that accounts of layoff procedures and surveys of unemployed people contain no reference to such offers. The economics literature contains a great many tests of models of wage rigidity and unemployment, but most of these rely on indirect evidence, for economists typically obtain information only from introspection and from surveys made by

public institutions that provide data on easily quantifiable variables. Surveys relevant to labor economics report wages, salaries, employment status, and perhaps the size and profitability of firms and the age, sex, and race of workers – insufficient information for discriminating among theories of wage rigidity. The feature that stands out in these data is that recessions increase unemployment and retard but do not stop the rate of growth of nominal wage averages. This is the pattern expressed by the Phillips curve, which shows the historical negative relation between unemployment and wage inflation (Phillips, 1958). This relation is roughly consistent with all well-known theories, since they were designed to explain it. Often it is the main evidence cited in support of theories. Neoclassical theories are consistent with the fact that the rate of inflation declines as unemployment rises. Keynesian theories are consistent with the fact that the rate of inflation is insensitive to the unemployment rate when it is high. The usual surveys contain other information, but every facet of the data appears to be consistent with several theories.

Neither is it possible to choose among the theories by appealing to introspection, which is used to justify both irrational forms of behavior and the assumption that economic behavior is rational. Many theories of wage rigidity assume that behavior is rational, so that they cannot be distinguished on these grounds. In any case, the rationality assumption is too general to be much help. It is a useful unifying principle in economics, but all implications of rationality depend on the conditions constraining decision makers, and often this knowledge is precisely what is lacking. Furthermore, it may be naive to presume that all important forms of behavior are rational. Introspection does not necessarily give insight into the behavior of workers and employers, since they react to complex and stressful circumstances at work that may be unfamiliar to academic economists, as they were to me. Since standard sources of information do not provide a sound basis for choosing among explanations of wage rigidity, these will remain speculative until more enlightening sources of information are found.

It is important to know the precise mechanism generating wage rigidity, both for scientific understanding and because of the potential impact on economic policy. For instance, there is less need to take measures to reduce unemployment if labor markets always clear than if the unemployed are anxious to work and have trouble finding jobs at any wage. Even if it is accepted that labor markets do not clear, it is useful to know what mechanisms are at work within firms and the labor market. For example, Keynes's model implies that decreases in real wages can be engineered through inflation, whereas the implicit contract model implies that wages increase in step with prices. Keynes's model implies that wages would be flexible if the government coordinated general wage deflations during recessions, whereas most of the other models imply that such an effort would meet resistance from business or labor. The shirking model implies that laws making it easier to fire or discipline workers would increase productivity, lower pay, and make it more flexible.

1.6. Problems with surveys

A few economists have sought a way out of the impasse just described by interviewing employers, and I have done the same, going further than previous investigators by conducting a more extensive investigation. Surveys involve serious difficulties, which perhaps make it understandable that few economists undertake them.[6] It can be extremely hard to get business people to cooperate, and this obstacle makes random sampling of companies nearly infeasible. The 15–35% of a randomly selected group who agree to participate is probably a very biased sample, for I learned from experience that those who agree most readily are often the least interesting, striving to make a good impression and revealing little. Another major difficulty is that it is hard to judge the validity of information obtained from questionnaires and interviews, since respondents may hide or falsify information, may not understand their own intentions, and may have little incentive to give accurate answers, points stressed by Machlup (1946). Consequently, the data collected are often thought of as 'touchy-feely' rather than 'hard'.

I tried to avoid bias through my methods of sampling and interviewing, which I will describe presently. I believe this study could be repeated, and is therefore scientifically valid in the sense of being approximately replicable. In this spirit, I have checked results by comparing my observations with other information, including US statistics on wages and employment, econometric studies, surveys of various sorts, and experimental work. Some of the more important work has been done by researchers in fields other than economics, especially in psychology. I have been impressed that other surveys of business people and of the unemployed are consistent with my own, as are experimental results. Those who take the trouble to look see similar things. Some variation is to be expected, however. My conclusions are, no doubt, influenced by the time and place of the interviews, and by fashions in management and in counseling. Nevertheless, there is reason to believe the basic results will apply for some time, if only because wage rigidity seems to be an enduring phenomenon. What is universal in the findings can be detected only by more field work in other regions.

There remains the question of whether the statements of business people should be taken seriously, even if all say the same things to all investigators. Though probably few people lie systematically, it would be reassuring to be able to check up on what they said. One check on statements about motives is to compare what people say with what they do, but I could not rely on this method, since I had few ways to verify whether people reported accurately what they did. A control I did use was the relation between circumstances and claimed

[6] Important field research has recently been done in development economics. Examples include Townsend (1995) and Udry (1994, 1995).

motivation. For instance, suppose that employers say that a condition, such as high labor turnover, causes a certain action. If it occurs in companies with high turnover and not in companies with low turnover, then the conclusion that turnover causes the action is more convincing.

1.7. The value of surveys

Even if controls were not available, it would be presumptuous to ignore the testimony of people who make economic decisions and observe and participate in economic life. To do so would be to make economics a religion rather than the analysis of experience. Good instincts about a subject can be developed only by contact with the phenomena studied.

Unfortunately, attitudes in the economics profession discourage the use of anything but data from the usual public sources. Usually, the goal of the science is assumed to be explanation of these data, and by a testable hypothesis is meant one that these data could contradict, not one that could be contradicted by new data collected by an economist. Similarly, a theory is said to be scientifically interesting if it makes new predictions about the standard data, not if it stimulates the search for new data likely to contradict it. Friedman (1953) has gone so far as to suggest that assumptions about microeconomic mechanisms need not be accurate, as long as they are useful for prediction. I could not disagree more, if he means all microeconomic assumptions and prediction of standard data. In my opinion, Friedman's argument is valid only for assumptions that are approximately true and are made to allow a mathematical idealization. For instance, it may be appropriate to assume perfect competition, even if markets are not quite competitive, an example cited by Friedman. In any case, his priorities should be reversed. Fundamental microeconomic processes should be the focus of attention, and the publicly available data should be of only secondary interest as economic indicators or because of what they reveal about microeconomic mechanisms. It is these mechanisms that describe what happens to people and what they do, as well as the economy's causal links that are vital to reliable prediction. By Friedman's criterion, as I have interpreted it, nearly all theories of wage rigidity are equally good, for they make similar predictions about standard data. However, some theories predict that unemployment is of little consequence to the jobless, whereas others predict that it causes great suffering and that the jobless can do little to escape it, differences which are extremely significant.[7]

Another attitude that deters investigation of the microeconomy is belief that nothing is seen if one looks too closely, that the forest is missed for the trees. It is

[7] A good discussion of the methodological issues alluded to has been written by Caldwell (1982).

true that remote views are useful. For example, aerial photographs disclose crop or forest diseases. But it is also true that to understand forests, you should know something about trees.

A third attitude discouraging surveys is the belief that people do not know their own motives. An analogy often used to express this view is that with ball players, who catch a ball without mathematically calculating its trajectory, though they act as if they did so. This statement is valid and may justify assuming that people act unconsciously as if in conformity with some complicated model. However, it is also true that if you want to learn how to play soccer, you would do better consulting a Roberto Baggio or a Franz Beckenbauer than a mathematician. The business people I talked to were articulate, had obviously thought a great deal about management problems, were able to analyze them clearly, and said they learned a lot of what they knew from others like themselves. It seems reasonable that an outsider could also learn from them.

Skeptical attitudes lead some economists to treat economic life as almost unknowable, like distant galaxies, though it goes on all around us. In economics, variables not appearing in well-known data sets are often labeled as unobservable, even when they could be observed in principle. For instance, Heckman and MaCurdy (1988) argue that the assumption of labor market clearance cannot be contradicted because standard data sets do not contain key variables applying to unemployed job seekers, such as non-market opportunities and job offers received and refused.[8] Though Heckman and MaCurdy admit the possibility of observing these variables, they stress that the unobservables make labor market equilibrium an irrefutable tautology. They do not point out that observation, difficult as it might be, is the obvious way to dispel the ambiguities. Someone just has to do it. Why should economics differ from other sciences, where researchers spend much of their time collecting data? It is not healthy for a science to isolate itself from its subject of study, especially for a field like economics which is highly political and where reality is constantly changing. In economics, it is all too easy to believe what one wants to believe, since theories become intertwined with opinion and truly pertinent information is hard to obtain. There is much to be learned by getting out of the office and facing economic reality rather than inventing it.

The utility of making a survey is illustrated by my own experience. Since first studying economics, I had wondered about wage rigidity and had been skeptical of theories explaining it. I was puzzled that firms and workers do not reach agreements to cut wages when sales decline and I believed that such arrangements would benefit both sides, since they would reduce costs and layoffs.

[8] Though Heckman and MaCurdy speak of these variables as unobserved, data exists on them, as in the surveys of British unemployed organized by Daniel (1974, 1990).

I thought that perhaps the agreements are too difficult to negotiate, because business and labor do not have the same information or opinions about the prospects of the company and the effects of cutting pay. I initially discounted the results of surveys reporting that employers avoid cutting pay because of bad effects on morale, for this explanation seemed too easy and left too many questions unanswered. Why would not the obvious benefits of fewer layoffs overcome the bad effects on morale? Would not layoffs also hurt morale? Could not the impact on morale be diminished by having pay cuts occur automatically as the result of tying wages and salaries to company sales or general economic conditions? Why do employers care about morale? Cannot employers gain cooperation by threatening to fire workers if they do not perform? Why not reduce average pay during recessions by hiring new workers at a reduced pay scale? My prejudices were shaken in the first interview, where I learned from an officer of a medium sized non-union manufacturing firm that pay cuts would have almost no impact on company employment, that hiring new workers at reduced pay would antagonize them, that cutting the pay of existing employees was nearly unthinkable because of the impact on worker attitudes, and that the advantage of layoffs over pay reduction was that they 'get the misery out the door'. Furthermore, attitudes were important for performance, and by attending to them the company was able to maintain a loyal and productive work force despite paying considerably less than its main competitors in the labor market. Only gradually, after hearing similar things many times, did I concede that what was said should be taken at face value. The origin of my puzzlement had been mistaken intuition. For instance, I believed that an individual firm could save a significant number of jobs by cutting pay, which is seldom true. The firms for which it is true are the most likely to cut pay.

1.8. The scope of the study

This inquiry is intended to be exploratory, touching on many issues in order to test the assumptions and implications of existing theories, to seek new hypotheses, and to see the overall shape of phenomena associated with wage rigidity and unemployment. I use an inductive approach, rather than testing specific models deduced from assumptions based on introspection or economic intuition, the usual strategy in economic research. The advantage of the approach was that I could detect unsuspected phenomena and relationships. However, the resulting breadth of the study increased the difficulty of analyzing the data and of obtaining interviews, and consequently many of my conclusions are tentative, though I am confident of the main ones. The data were hard to organize and interpret, because interviews covered varying topics and did not contain answers to precisely worded questions asked of all respondents. Partly for this reason, I do not use statistical methods. Some business people refused to be interviewed because they felt that in loose conversation they might

inadvertently divulge confidential information, a fear that was justified because some respondents did disclose matters that I thought it best not to record. The difficulty of getting interviews made it hard to sample randomly, for I was often obliged to arrange interviews through personal contacts. There is, I believe, a trade-off in field work between the randomness of a sample and the quality of the interviews. Respondents were most informative when they talked freely and the discussion wandered, but business people were reluctant to grant such interviews. I found that many of my best interviews were those arranged through intermediaries, who put respondents at ease.

1.9. Implications for future research

Surveys need not be as unstructured as this one. Narrowly focused inquiries could use a fixed list of specific questions, so that statistical methods could be applied to the responses. Business people would probably be more willing to cooperate with such studies, perhaps making possible random sampling. My hope is that economists will eventually make many narrow studies, which would yield clearer and firmer conclusions than herewith offered.

The survey method could be used to shed light on urgent current issues tangentially related to this inquiry, such as why large firms pay more than small ones, why inter-industry pay differentials are so large, why the distribution of earned income is becoming more unequal in many wealthy countries, whether higher unemployment in Europe than America is due to institutional differences or to more expansionary macroeconomic policies in the United States, whether wages are more flexible in Japan than in America, and if so why and does Japan's greater flexibility explain its lower unemployment rate. This study does not contain enough information pertaining directly to these topics to allow me to contribute to their discussion.

1.10. Findings

The main result of this inquiry is a common sense explanation of downward wage rigidity in the private sector. The investigation also yielded knowledge of the wage setting process that may prove useful in thinking about macroeconomic policy. Unfortunately, it is not possible to go far in analyzing policy, because its effects depend on the interaction of wages and prices and little is known about price determination. Finally, I came upon hypotheses and phenomena that seem worthy of further exploration.

Of the many theories of wage rigidity, my findings support only those of Solow (1979) and Akerlof (1982) stressing the impact of pay cuts on morale. The contradiction is not absolute, however, for each theory probably applies at any time to certain individuals or situations. Field work makes it obvious that a great deal of variety exists in the world, for important decisions often depend

on imponderables and personal judgement and so have no single correct resolution. I interpret theories to be valid only if they apply frequently.

The results indicate that labor is in excess supply during recessions, so that the Keynesian side of the macroeconomic debate is the more accurate view, a view that contradicts the principle widely used in macroeconomics that economic equilibria maximize a social welfare function and so solve a dynamic optimization problem. This principle cannot apply even approximately if large amounts of labor are wasted. My observations are consistent with the Keynesian view that recessions are caused by declines in aggregate demand, though I did not focus on this question. Firms had layoffs because of declines in product demand, financial setbacks, or technical improvements, never because of declines in productivity. Increased wage demands were not a cause of unemployment. On the contrary, many unemployed workers became excessively flexible, in the eyes both of people who counseled them and of employers. As are all explanations of wage rigidity, mine is consistent with the Phillips curve mentioned earlier.

A common neoclassical assumption is that firms are perfect competitors in their product markets, and this postulate is incompatible with the explanations I heard of wage rigidity. By definition, perfectly competitive firms can greatly expand sales by lowering prices slightly, so that small wage and price reductions would avert layoffs. Judging from what I learned, such firms would very likely cut pay, and workers would accept this action because of the jobs saved.

2. Sampling

My objective in selecting respondents was to achieve as much variety as possible, for I hoped to see relations between what was said and the respondents' circumstances. I was looking for mechanisms governing labor relations and pay determination rather than conducting an opinion poll. For instance, among businesses, I sought companies that were expanding rapidly during the recession, since such firms would benefit most from reducing hiring pay and I wanted to know whether companies cut hiring pay in response to a weak labor market, and if not why not. I looked for companies that had laid off a great many workers, since I wanted to know why firms typically lay off workers rather than cut pay. I went to great lengths to locate businesses that had cut or frozen pay or had reduced the pay of new hires, while continuing to give raises to existing employees. I tried to conduct interviews in as many kinds of firms as possible, companies in manufacturing, construction, service, or retail industries, businesses of all sizes, and ones that were publicly or privately owned. I looked for both union and non-union companies and for both progressive reform-minded management and managements that were known to be rough on their employees. Similarly, I tried to talk to labor leaders from as great a variety of industries as possible and I interviewed counselors of the unemployed in both prosperous

and depressed areas. Because of my sampling method, I cannot give accurate estimates of the incidence of pay cuts or layoffs, but I believe I do have an idea of their consequences.

Initially, I hoped to use newspapers and reference books to group companies into categories, from each of which I intended to sample randomly. Such a program turned out to be impossible, for many business people refused to be interviewed and public sources gave too little information about companies for a fine enough classification. The best source of information was word of mouth or gossip, and a nearly sure way to obtain an interview was a personal contact who was trusted by the respondent and could affirm that I would not embarrass the company. I therefore arranged as many interviews as possible through family, friends, and acquaintances, including people I had interviewed, always targeting the categories of firms I had in mind. I also used interviews to obtain information about other companies, such as names of ones that had cut pay. Though I obtained many interviews directly with no introduction, I often learned about the companies I approached from respondents themselves. I strove to avoid bias by exploring disparate avenues of approach into companies in each category and by seeking respondents who might contradict any pattern I thought I discerned. This second task was arduous, for atypical respondents usually worked for businesses that were in difficulty or had unsavory reputations and managers of troubled companies were usually too busy to have time for me while firms with bad reputations normally instruct employees not to grant interviews. I stopped contacting companies in a given category or asking particular questions when responses became boringly repetitive.

3. Interviewing

Interviews took place in the respondent's office or over a meal, lasted from one to five hours, and were informal discussions in which I tried to stay out of the way. Before interviews, I informed respondents by telephone and fax or mail of the purpose of the study and the topics that interested me and I promised full confidentiality. I made it clear that I did not have a set list of questions, but wanted to hear what they thought was important for the study. Early in an interview, I said little, trying to have people express a stream of consciousness, which proved more informative than answers to questions. Many of the topics aroused strong emotions, and respondents talked more coherently after they had voiced their feelings. When they had finished doing so, I sought clarification, pointed out inconsistencies, came at subjects from a new viewpoint, or raised new topics. When I asked questions, I kept them concrete and made it clear that I wanted people to explain things in their own words. For instance, I was careful not to ask for reactions to economic theories until the end of interviews, for otherwise I forced respondents to think in my way and risked threatening their

ego. Furthermore, some of the theories seemed so farfetched that they made me look foolish. I recorded interviews by taking notes, thinking that a tape recorder might be upsetting.

A constant problem was that respondents tried at first to impress me. The best way to stop this was to interest people in the problem I was studying. I tried to show respect for them and their knowledge, and many respondents, being extremely intelligent, were delighted, when thus reassured, to turn their attention to the topic at hand, which many claimed they had often wondered about.

4. The sample

Table 1 gives an idea of the variety of interviews. Temporary labor services are companies that provide contract labor. Headhunters are professional recruiters. Counselors of the unemployed include professional advisers working for state job services and for outplacement companies and volunteers running support groups for the unemployed. Outplacement companies advise workers on how to handle unemployment and job search, a service that is a severance benefit provided by companies laying off workers. Management consultants were informative because they made wage and salary surveys, designed compensation schemes, and advised companies on how to manage layoffs.

Table 2 shows the types of businesses studied.[9] The sample included the full range of company sizes (Table 3). Most respondents in large companies were human resource executives or managers, whereas in smaller companies I interviewed the owner or an operations manager (Table 4).

In the next three sections, I summarize my major conclusions. Because of space limitations, I present no supporting evidence. This is described in a book I am currently writing.

5. The explanation of wage rigidity

Resistance to pay reduction came primarily from employers, not from workers or their representatives, though it was anticipation of negative employee reactions that made employers oppose pay cutting. The claim that wage rigidity gives rise to unexploited gains from trade is not valid, because a firm would lose more money from the adverse effects of cutting pay than it would gain from lower wages and salaries.

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[9] The number of interviews in businesses, 245, exceeds the number of businesses, 223, because I had more than one interview in some companies.

Table 1
Types of interview

Type	Number of interviews
Companies, exclusive of temporary labor	245
Temporary labor services	13
Headhunters	15
Counselors of the unemployed	26
Labor leaders	19
Labor lawyers	4
Management consultants	13
Total	335

Table 2
Types of businesses

Type	Number of businesses	Number with a union
Manufacturing	100	26
Services	63	4
Retail trade	35	5
Construction	15	4
Professional services	8	0
Wholesale trade	2	0
Total	223	39

Table 3
Size distribution of sampled businesses

Number of employees in business	Percent of businesses in this range
1 to 9	4
10 to 49	26
50 to 99	13
100 to 499	26
500 to 999	7
1000 or more	24

What restrained employers from cutting pay was the belief that doing so hurts morale and increases labor turnover. The increase in turnover occurs both because pay is lower relative to competing employers and because of bad

Table 4
Business people interviewed according to position

Position	Number of people
Owner	81
Partner	7
President	9
Human resource manager or executive	120
Manager	43
Store or hotel manager	17
Total	277

morale. Morale is acceptance of and willingness to contribute to organizational objectives and is important because people tend to benefit those who help them and to hurt those who harm them. The impact of mood is also a significant aspect of morale, for people work better when in a good mood. However, employers do not require that workers enjoy their work, for it is recognized that many jobs are boring and unpleasant and because good morale implies willingness to make personal sacrifices for the good of the organization. Nevertheless, it is thought to be highly desirable that workers be happy in some general sense.

Good morale is valued because it fosters high productivity, low turnover, and a good company reputation, which in turn is valued because it makes firms more attractive to good quality job applicants. Reputation affects hiring, because a great deal of it is done through employee referrals. Firms use referrals, because employees enjoy working with people they know well and because friends provide information that is difficult to obtain otherwise. Bad morale affects turnover, because people try to leave a job they dislike and may quit to retaliate against the employer, even when the job market is bad and they probably will have difficulty finding work. Turnover among the better workers is especially feared, because they are more valuable and can find new jobs more easily.

Pay cuts damage morale because adjustment to a sudden decline in living standards distracts, depresses, and antagonizes people and because pay cuts are resented as slights or insults. Declines in living standards disrupt people's lives and cause much more damage to well-being than corresponding increases improve it. Such declines are especially disruptive for people used to stable incomes. Workers interpret pay cuts as insults, even if everyone's pay is cut, because the practice of rewarding effort and loyalty through pay increases leads people to associate them with appreciation of their worth to the company. Furthermore, they feel that employers owe them their regular pay and even raises.

Many macroeconomists attach importance to the distinction between real and nominal wage rigidity, asserting that if real wages alone were rigid, then

changes in aggregate demand could not affect employment and excessive real wages would cause unemployment that could be eliminated only by reducing them.[10] Actual wage policies seemed to contain elements of both real and nominal rigidity, though low inflation at the time of the interviews made it difficult to distinguish real from nominal effects. The standard of living effect of pay cuts gives rise to real rigidity, for it is real wages that affect well-being. The insult effect might be able to cause purely nominal rigidity, for workers could feel insulted by a nominal pay cut, even if consumer prices were falling. There was some evidence of modest real wage flexibility. Gradual reductions in real wages were feasible, for the slow decline in living standards caused by pay freezes was less noticeable and more tolerable than abrupt nominal pay cuts. Some managers mentioned that they had sometimes allowed pay to fall behind rapid inflation, catching up later. Finally, the pay of low-performing workers was often allowed to fall behind inflation.

It is possible that employers could reduce labor costs during a recession by replacing workers with cheaper unemployed people, but few firms did so, because they needed to retain the skills of the existing employees and feared damage to morale and their reputation as good employers. Firms continued to hire during the recession, though seldom using new recruits to replace existing workers. Typically new hires replaced workers lost through normal attrition. Though hiring and layoffs often occurred simultaneously as firms reorganized operations, new hires usually had different skills from the people laid off.

Downward rigidity of the pay of new hires derives from that of existing employees, because all pay rates within a firm are tied together. Reduced hiring pay increases differentials between existing and new employees in each job, unless the pay of existing employees is cut as well. The higher differentials violate established standards of equity incorporated in a company's internal pay structure, angering new employees when they discover they are underpaid. Internal pay structure is a set of rules relating pay to position, skill, seniority or contribution. This structure is created in large part to achieve internal equity, which is both uniformity in the application of the rules setting pay and a set of beliefs about fair relations between pay and its determinants.

Managers regarded any violation of internal equity as potentially disruptive. Lack of equity spawns jealousies, resentments, and perceptions of unjust treatment. Fairness is complicated and difficult to achieve, because of conflict between the goals of equality and of rewarding productivity and because an employee's productivity or contribution can be hard to evaluate. Internal equity does not necessarily conflict with financial incentives, but to some extent requires them, for employees expect to be rewarded for loyalty and good work.

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[10] Grandmont (1989) states the first argument.

On the other hand, equity may restrain management from paying the best performers the full value of their contribution, so that good performers are more valuable to a firm than poor ones.[11]

The need for internal equity limits management's ability to cut pay, since it requires that pay cuts apply to everyone in a company. It is almost unthinkable to cut the pay of only the poorest workers in the hopes of retaining the best. Similarly, managers did not offer workers a choice between layoff and a pay cut applying only to those selected for layoff. Partial pay cuts did occur sometimes, but these applied only to management or to groups that were clearly overpaid.

In considering the impact of pay, it is important to specify the frame of reference, which may be pay at other firms, pay of other workers at the same firm, job performance, or past wages and salaries. The relation of a firm's pay to that at other companies usually has little effect on morale or work effort, because workers know little about pay levels outside their own company. This relation has a big impact, however, on the supply of labor to the firm, which in practical terms means turnover and the quality of workers the business can attract and retain. Work force quality does, of course, affect productivity. The relation of employees' pay to that of others at the same work site has a major impact on morale and effort, as does the relation of pay to performance. The relation of current to past pay has asymmetric effects, for pay cuts can hurt morale and productivity, whereas pay increases normally give only a small and temporary lift to morale.

Most employers did not view pay cuts as a feasible alternative to layoffs, mainly because the cuts would have little impact on a firm's need for labor, particularly in the short-run. Nearly the same number of workers would be lost whether or not pay was cut. If pay were cut in exchange for no layoffs and no hours reductions, then workers might be standing around with little to do, and idleness itself has a bad effect on morale. The elasticity of demand for labor was said to be low because labor costs were a small fraction of marginal variable costs and because companies had market power, so that price elasticities of product demand were not high. Even very small companies usually had market power. Many had market niches, sometimes at a national or international level. Others selling products locally had only a few competitors. It was hard to find companies that faced stiff price competition, except those in construction and related manufacturing, and these were precisely the lines of business where wage cutting was most common. Another argument in favor of layoffs was that they save much more money than pay cuts, since the latter apply only to wages, salaries, and a few benefits, whereas there are important fixed costs of employment, such as most benefits and the expense of work space, materials, and

[11] Romer (1992) has made this last point.

supplies. In an office environment, layoffs save on telephone, lighting, paper, and administrative costs and on heating and rent, if offices are given up. In manufacturing, work areas were often shutdown or vacated after layoffs. Employers said that a pay cut would have to be unacceptably large to save as much money as was saved by a typical important layoff. Fixed employment costs were deemed so important that for many employers hourly labor costs were minimized when everyone worked overtime, for the overtime premium was small compared to the fixed costs, which in this calculation include all benefits.

Though layoffs, especially permanent ones, may damage morale, their effects were deemed less serious than those of pay cuts. It was commonly said that the impact of layoffs on morale is slight and brief. Those laid off may suffer terribly, but once they are gone they cannot disrupt the work place. Those who remain may fear further layoffs or worry about friends who were dismissed, but skilled management can relieve the tensions quickly, if it can convincingly reassure those in a work group that they are valued and will experience no more layoffs for six months or more. On the other hand, pay cuts hurt everyone, pushing those with debt into financial difficulty, and causing resentment that may fester for a long time, unless management can persuade employees that the cuts avert heavy layoffs or a shutdown. Many layoffs were made in part to improve productivity and were even thought to have a rejuvenating effect on company operations, whereas pay cuts were viewed as dragging down company spirit. Firms often used layoffs to rid themselves of their least competent workers, whereas a pay cut might cause the best producers to leave.

A pertinent, though gruesome, analogy is with people adrift on an overloaded life raft. A few are pushed over the side or even eaten to save the rest, who may be horrified at first, but cheer up once they think they are going to survive. All might be willing to reduce rations and keep everyone on board, if doing so increased the total food supply (corresponding to a high elasticity of demand for labor), but since the supply is fixed some are forced off the raft. Despite or even because of the inequity of sacrificing a few for the good of the whole, it is vital to be equitable when distributing food, though this might mean giving more to the strongest who can do most to save the others. Equity and a sense of justice helps maintain commitment to the group, though the situation may become almost unbearable as more and more people are lost.

Similar arguments apply against worksharing or short-time, which is avoiding layoffs by reducing substantially the hours that all employees work, with proportionate reductions in the pay of salaried workers. During the recession, it was common to reduce the amount of overtime for wage earners and even to reduce their regular weekly hours somewhat, though the hours of salaried employees often increased. Worksharing involves much larger reductions, usually from five to four day work weeks. There is a trade-off between retention of valued employees and damage to morale from reduced incomes. Firms used worksharing, when a slowdown was thought to be temporary and they

employed highly skilled workers, who might be lost to other companies if laid off. Work was seldom shared for long periods.

It might seem that employees would prefer worksharing because it spreads risk. If workers do not know who is likely to be laid off, then everyone should prefer to sacrifice a little rather than have a few suffer severely. This mutual insurance argument may apply to workers before layoffs occur and may explain why there are few stories of cannibalism among shipwrecked sailors. However, this calculation has little relevance to the business context, since management is in charge and is concerned chiefly about the state of mind of the continuing work force. Returning to the raft analogy, management prefers all those on board to be strong paddlers, even if few in number. A full load of feeble and disheartened survivors is of little use.

A theme recurring frequently in my interviews was that business people and labor leaders were preoccupied with the defense of civilized values, for they depended on these to hold their organizations together. Though there were obvious scoundrels among business and labor leaders, as among all groups of people, I had the impression that most believed that success required decency and trust. This belief contrasts sharply with the standard model of man in economics, according to which people are completely self-interested and ready to lie, cheat, or steal for their own advantage. The standard economic model of man is a product of neoclassical economics in which firms pursue profits, consumers and workers maximize their own welfare, and market interaction coordinates all their activities for the common good. Furthermore, firms obtain work effort and loyalty through financial incentives, which workers respond to out of self-interest. Much of this vision is accurate. Companies use financial incentives and try to maximize profits, and workers want as much money as possible. What is missing from neoclassical economics is an appropriate theory of the firm as a community, because more than financial incentives are needed to make companies function well. It is expensive to police people, there may be no punishments available severe enough to deter misconduct, and rewards and punishments alone may bring only the appearance of cooperation. Leaders strive to capture enthusiasm and trust, so that subordinates do the right thing of their own volition. Trust is also vital for the free flow of information within a company. I had the impression that many business people believed that moral commitment was all that stood between them and chaos. The community within a firm seemed to be fragile and constantly threatened by waves of suspicion, many caused by individual managers' treating people inequitably or abusing authority. It is this fragility that makes employers sensitive to morale, and the main drawback of pay cuts is that they fill the air with disappointment and an impression of breached promise, which dissolve the glue holding the organization together.

The above is based on my interviews, though it is supported by other surveys, published experimental work, and the findings of industrial psychologists.

Labor leaders and employers agreed in their accounts of the bad effects of pay cuts and claimed that their opinions were based on stories they had heard about unsuccessful cuts and sometimes on personal experience. Curiously, pay cuts were successful in many of the companies that had had them. I believe this was so because employers reduced pay only when they believed cuts would be accepted. Pay is usually reduced in distressed companies when cuts will clearly save jobs. It is recognized that workers often go along with pay reduction in such circumstances. Pay cuts are rare only because these conditions are not common, except during disastrous depressions.

6. Some novel results

Two phenomena I observed have not previously been well documented, as far as I know, though they are commonplace in the business world. These were the shunning of overqualified job applicants and behavioral differences between the primary and secondary sectors of the labor market.

6.1. Overqualification

Job applicants are said to be overqualified if they are suitable for substantially better jobs than the one applied for, where better means better paid, more interesting, or with more responsibility. Unemployed overqualified applicants were common in the Northeast during the recession. The label applies to semi-skilled and skilled manual workers as well as to technicians, professionals, and managers. Many employers were reluctant to hire overqualified applicants, because of fear they would soon quit to take better positions and because they might be unhappy or a threat to their supervisors. There are similarities between the reluctance to hire the overqualified and the reluctance to cut pay. In both cases, employers worry about poor morale and high turnover among those who have suffered an income reduction. The overqualification phenomenon is important because it helps explain why unemployed job seekers could not find work easily by being sufficiently flexible about pay and working conditions. It does not explain why there was so much unemployment during the recession. Despite the overqualification problem, the highly qualified probably had an easier time finding work than the less qualified. Also, if the overqualified had been favored rather than shunned, they would have taken the jobs of less qualified applicants, who would in turn have had to wait for work because of the shortage of jobs. Another reason shunning the overqualified is important is that it is one reason why firms do not collectively reduce pay by dismissing employees and replacing them with cheaper new hires let go by other firms, thereby decreasing hourly labor expense by cutting the wages of workers from other companies, while

never cutting the pay of their own people. This exchange system is doubly blocked, for not only do firms not want to replace employees, for reasons stated earlier, but they do not want to hire at reduced pay other firms' workers. The lower pay would make them overqualified.

6.2. The primary and secondary sectors

I find it helpful to distinguish between primary and secondary sector jobs. The latter are short-term positions that are often part-time, whereas primary sector jobs tend to be long-term and full-time.[12] Examples of secondary sector workers are waiters and waitresses, floor crews in fast food restaurants, sales clerks in most stores, taxi drivers, security guards, janitors, temporary, interim, or contract workers, and consultants. Examples of primary sector personnel are most factory, clerical, and secretarial workers, technical, professional, and managerial employees with permanent positions, and sales people in stores and restaurants with regular customers whom the staff should know on a first name basis. Secondary sector positions have high turnover because hiring and training costs are too low to make it worthwhile for firms to pay high enough wages to reduce quitting. Though pay is usually lower in the secondary than the primary sector, this is not always so. For instance, consultants are sometimes very well paid and some clerks and factory workers are poorly paid.

I found that the pay of new hires was more flexible downward in the secondary than in the primary sector and that employers were more willing to hire overqualified workers for secondary than for primary sector positions, an attitude that made the secondary sector a refuge for unemployed workers ready to take stopgap jobs. High turnover and low hiring and training costs in the secondary sector reduced concern about turnover among the overqualified. The greater flexibility of secondary sector hiring pay derived from the lesser need for internal pay equity. In both sectors, the pay of existing employees was rigid downward, but in the secondary sector the pay of new hires was not so closely tied to that of existing employees. In contract labor, there are no comparable existing employees, for temporary workers usually do not relate their pay to that of the permanent employees they work with. In other secondary sector jobs, confusion caused by part-time schedules and high turnover makes it difficult for workers to get to know each other and learn each other's pay. Also, there is less resentment of pay inequities in the secondary sector, because jobs are not often taken seriously as careers.

[12] This distinction differs slightly from that of Doeringer and Piore (1971), who emphasize differences between the two sectors in pay, status, and possibilities for promotion.

7. Critique of some existing theories

As was mentioned earlier, my findings contradict all of the theories of wage rigidity, except those of Solow (1979) and Akerlof (1982). Because of space limitations, I neglect some well-known theories in the discussion that follows.

7.1. The Lucas–Rapping theory

This theory does not describe what happens in the labor market during a recession. Lucas and Rapping assert that quits into unemployment increase during recessions, whereas historically quits have decreased sharply. During the recession I studied, people were afraid even to change jobs for fear new ones would prove unstable and lead to unemployment. Joblessness is too frightening, depressing, and economically damaging to be a reasonable choice for most people, particularly for those with heavy financial responsibilities. Consumption falls during unemployment, especially consumption associated with leisure, such as restaurant meals. This decline contradicts the idea that people choose unemployment in order to enjoy leisure. Though the theory asserts that people quit their jobs because wages fall below reservation levels, wage cuts were rare during the recession, and counselors of the unemployed hardly knew of anyone who had quit because of a pay cut. If pay was disappointing, it must have been so because raises were smaller than expected, not because pay rates fell. The theory asserts that the jobless are willing to work only for pay higher than that available, whereas during the recession many firms were overwhelmed with job applicants, few of whom insisted on more money than they were offered. On the contrary, many were overqualified, and most unemployed job seekers adopted realistic pay expectations once they had recovered from the shock of layoff. Only employers of very low-paid labor complained that job applicants wanted too much money and preferred living on welfare or unemployment insurance benefits to working. It was not true, as the theory assumes, that anyone could find some job quickly if they were sufficiently flexible and energetic. The overqualification problem and the shortage of jobs made it hard to find even low-paying jobs.

7.2. McLaughlin's theory

This theory does not seem to be correct, for no employer I asked about the subject had ever offered a worker a pay cut as an alternative to layoff for lack of work. Doing so would call into question the moral and legal basis for layoff and might demoralize the work force. There did exist arrangements by which workers could avoid layoff by taking lower paying jobs. For instance, companies occasionally transferred workers to open positions within the company rather than let them go, and bumping arrangements applied to some production

workers. Bumping permits workers designated for layoff to take the jobs of lower seniority workers. Workers bumped out of their jobs in this way either bump other workers or leave. Transfers and bumping were often accepted, even if the new jobs paid substantially less than the old ones. Furthermore, bumping does not prevent layoffs, but simply shifts the identity of the person laid off. Few who were laid off were offered an escape from dismissal.

7.3. Search theory

Recall that there are two sorts of search theories of unemployment, market misperceptions theories and transactions theories. Most of what was said about the Lucas–Rapping intertemporal substitution theory applies also to the misperception theories. In addition, these theories exaggerate the importance of misperceptions. Advisers of the unemployed asserted that most job hunters were quite realistic about job and pay opportunities except right after layoff, and statistical data support these observations. Though models of the transactions type describe unemployment, they do not explain downward wage rigidity, for in the models wages are the outcome of bargaining or are set by the employer so as to obtain adequate labor and hence should fall when job hunters have a hard time finding work and when firms are swamped with job applications.

Both types of search theory emphasize the reservation wage. Judging from what advisers of the unemployed said, this concept was nearly irrelevant for most jobless people during the recession, for the reservation wage was below the range in which they could expect job offers. Job hunters seemed to have two ranges of jobs available to them, one being jobs for which they were nearly exactly qualified, and the other being stopgap jobs, such as consulting jobs for unemployed managers, temporary assignments for secretaries or engineers, or low-paying jobs in stores, with janitorial or guard services, or with taxi companies. The main difficulty faced was finding some appropriate job opening that was not a stopgap. The reservation wage seemed to be relevant only for those people considering low-paying stopgap jobs or for the lucky few desired by many employers. The world of regular permanent jobs for ordinary people was quite different. There most job offers to unemployed people were accepted, and when there was bargaining over pay rates, it usually had only a marginal impact. People could expect to get regular jobs only of a sort and at pay rates closely matching their qualifications, because of the overqualification problem and because employers were not likely to hire the underqualified during a recession.

7.4. Keynes's relative wage theory

This specific theory does not reflect the circumstances of wage determination, though Keynes was accurate in portraying wages as rigid and many of the

unemployed as nearly helpless. Non-union companies seemed to be isolated islands, with most workers having little systematic knowledge of pay rates at other firms. Pay rates in different non-union companies were loosely linked by the forces of supply and demand, but these allowed a good deal of latitude in setting pay. Though concern about worker reaction and morale curbed pay cutting, the reaction was to reduction in pay relative to its former level. The fall relative to levels at other firms was believed to have little impact on morale, though it might increase turnover. Keynes's theory implies that workers should react to raises smaller than those given by other firms as they would to pay cuts. However, no one made this comparison, and managers did not expect small raises to cause outrage, which was the anticipated consequence of pay cuts.

The situation differed somewhat in unionized companies, for labor unions fostered awareness of pay rates in the labor market in order to stimulate member interest in wage gains. But no labor leader mentioned wage relativities when arguing against pay cuts. Union leaders' main concern was whether pay reduction was necessary to save jobs. Some leaders were also concerned about maintaining uniform industry wage standards, but the ability to do so sometimes implied sufficient control to coordinate industry-wide pay reductions.

7.5. The implicit contract theory

This theory is not so obviously incorrect as the previous ones. The theory predicts that employers do not allow real wages to fall, that recessions may have a negative influence on the wages of new hires, and that wages may be positively related to the employer's profits. These predictions are approximately valid, but probably not for the reasons stated in the theory. Managers rejected the insurance contract argument underlying the implicit contract model and did not agree that pay cuts increase future labor costs, though they did believe that pay cuts increase the difficulty of future hiring. They associated this increased difficulty with greater managerial recruiting efforts, not with a need to pay more. The theory predicts that companies should pay generous severance benefits to laid off workers, unless problems of moral hazard make the benefits impractical. However, no concerns were expressed about moral hazard in connection with severance pay, and yet many companies offered little or no severance benefits, and the benefits were usually generous only for high executives. Some firms offered reasonable benefits, providing additional evidence against the idea that moral hazard prevents their payment. The theory predicts that firms are more reluctant to lay off employees when unemployment is high than when it is low, yet labor market conditions seemed to have little or no impact on layoff decisions. If anything, higher unemployment increased the propensity to lay off since it reduced the chances that dismissed workers would find jobs at other firms and be unavailable for recall.

7.6. The shirking model

This is the one theory I asked a great many managers about, and it received little support. Managers did not believe that higher pay brings greater work effort, though they thought pay cuts diminish effort and they did say that higher pay brings greater productivity by attracting better quality workers. Managers almost universally thought that negative incentives and threats were harmful, for they invited revenge. Workers were rarely fired, and when they were dismissed they were usually let go for gross misconduct rather than for underperformance.[13] Managers said that the best way to obtain high productivity was to interest employees in their work, to explain to them what to do, to make friends with them, and to show that their achievements were noticed and appreciated. These views confirmed the attitudes toward morale and reciprocity that lay behind management opposition to pay cuts.

7.7. The insider–outsider model

This theory found some support in the context of unionized companies, for a few union leaders mentioned that older members were unwilling to accept pay cuts to protect the jobs of younger members. The support was scant, however, for some labor leaders mentioned that pay cuts would be accepted if they were seen to be necessary to save jobs. In addition, seniority rights did not always protect workers against layoff. Union leaders typically did not believe that pay cuts significantly increased the demand for members' labor, and this belief is probably the main explanation for unions' reluctance to cut pay.

The theory did not apply to non-union firms. Non-union workers did not engage in any kind of collective bargaining, even implicitly. Pay rates were set by management, taking into account mainly competition for labor and incentives. Though employee reactions and morale played some role, these were not the same as participation in bargaining. I heard nothing in non-union firms indicating a division in attitudes toward pay cuts between new and old employees, high and low performers, the highly skilled and less skilled, or any other groupings that might be interpreted as insiders and outsiders.

The main problem with the theory is that it assumes conflicts where there are none. There is no conflict between insiders and outsiders over pay cutting, because pay reduction is not thought of as saving jobs. There is no conflict between employees and the unemployed over jobs, because firms do not normally replace employees with unemployed workers. Furthermore, this policy has nothing to do with dissension between new and old workers.

[13] In the United States, there is a legal distinction between layoff, which is dismissal for lack of work, and firing for cause or misconduct.

7.8. *The morale model*

This theory is correct in emphasizing morale, and errs only if importance is attached to wage levels rather than to changes in them. As was mentioned earlier, pay cuts hurt morale, but the pay level by itself has little impact on it.

7.9. *Information theoretic models*

An idea circulating informally within the economics profession is that firms are not able to cut pay because they cannot convince employees that cuts are needed to save jobs or to protect a company's income. It is said that workers distrust employers' arguments, because management has an interest in cutting pay. Also, the information needed to persuade workers may be too confidential to be shared. A version of these ideas has been expressed formally by Grossman and Hart (1981, 1983), who argue that layoffs are a way of proving to employees that pay cuts are required, the pay cuts being part of an implicit risk sharing agreement between workers and the employer according to which pay is reduced when profits decline.

The Grossman–Hart model seems not to describe reality, for pay cuts almost never accompany layoffs and no employer mentioned that layoffs were used to demonstrate distress. No such signal was needed, for when a firm is in a crisis, almost everyone working there knows about it. However, even if the crisis is clear, top management may have trouble getting employees to face reality or to convince them of the need for pay reduction. It is easier to do so, if pay cuts will save a large number of jobs. Once persuaded, workers accept reduced living standards, though acquiescence requires a clear and convincing explanation, the credibility of which depends on the strength of the case, management's skill, and its reputation for honesty. It also helps a great deal if the cuts apply to managers as well as to lower level workers. Most pay cuts I heard of occurred when companies were in danger of going out of business or sold products in markets where price cuts had an important impact on sales.

8. Other surveys

There have been several surveys of business people concentrating on the issue of wage rigidity, in particular, those of Kaufman (1984), Blinder and Choi (1990), Levine (1993), Agell and Lundborg (1995), and Campbell and Kamlani (1997). Early investigators, such as Lester (1948) and Reynolds (1951), dealt with wage formation, but did not focus on wage rigidity. There have also been a great many surveys of unemployed people. One especially useful study is that of Heady and Smyth (1989), because it concentrates on the standard of living of the unemployed. Particularly thorough studies are those of Daniel (1974, 1990). As was

said earlier, the surveys listed above and similar ones support the main findings of this study.

Acknowledgements

The work reported on here began as a joint project with my colleague, William Brainard, who did some of the initial interviews with me and has advised me and patiently reviewed chapters of my book since then, making many important suggestions. I would like to thank Chris Avery, William Brainard, Ray Fair, Ernst Fehr, Werner Hildenbrand, Morton Kamien, Stanley Reiter, and James Tobin for reading and criticizing various versions of this paper and making helpful suggestions. I gratefully acknowledge support from NSF grant number SES-9110139, from the Max-Planck-Forschungspreis, from the Deutsche Forschungsgemeinschaft (Sonderforschungsbereich 303), and from the Cowles Foundation of Yale University.

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