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ECB/CEPR LABOUR MARKET WORKSHOP ON WAGE AND LABOUR COST DYNAMICS

WORKING PAPER SERIES

NO 776 / JULY 2007

INSIGHTS GAINED FROM CONVERSATIONS WITH LABOR MARKET DECISION MAKERS

by Truman F. Bewley

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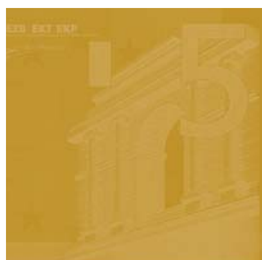

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1 This paper was the basis for a keynote speech at the CEPR Labour Market Workshop in Frankfurt am Main on December 14, 2006.

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"Wage and Labour Cost Dynamics"

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Abstract

I describe insights into wage dynamics and downward wage rigidity obtained from more than two hundred interviews with businesspeople, labor leaders, and various labor market intermediaries and made in the early 1990s in the Northeast of the United States. I explain the morale explanation for downward rigidity of the pay of existing employees and discuss what morale is, why businesspeople care about it, and why pay cuts damage it. I discuss the origin and nature of pay structures internal to an establishment, the relation between pay at different establishments, and why firms tend to lay off workers rather than cut pay. The findings of the study to be discussed are reported in detail in Truman Bewley, Why Wages Don't Fall during a Recession. Cambridge, MA: Harvard University Press (1999).

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Key Words: "wage rigidity" and "wage determination".

Non-Technical Summary

I describe insights into wage dynamics and downward wage rigidity obtained from more than two hundred interviews with businesspeople, labor leaders, and various labor market intermediaries and made in the early 1990s in the Northeast of the United States. I begin by discussing briefly the method and purpose of the study. I then turn to the morale explanation for downward rigidity of the pay of existing employees and discuss what morale is, why businesspeople care about it, and why pay cuts damage it. After that, I discuss the origin and nature of pay structures internal to an establishment. These structures maintain strict relationships between the relative pay of employees. I distinguish primary from secondary labor forces and point out that internal structures are more useful and restrictive in the primary than in the secondary sectors. Tight internal structures tend to tie the pay of new hires to that of existing employees and hence to make the pay of new hires rigid downward. As a result, the pay of new hires is flexible downward in the secondary sector, but hardly so in the primary sector. Another consequence of internal structure is that when pay is cut, the reductions apply to all employees, so as to preserve pay differentials. I then take up the role of pay raises and distinguish increases resulting from individual advancement through the internal pay structure from those resulting from changes in the level of the internal structure. Raises due to advancement through the structure may lead to no increase in the average pay of all employees, because workers who quit or retire tend to be higher in the structure and hence better paid than the new hires who replace them. The topic of raises leads naturally to that of the relation of pay to general inflation, for one of the purposes of increases is to protect employees' living standards. If the raises that occur because of advancement through the internal structure are large enough, there may be no need for additional pay increases to compensate for inflation. Because the primary purpose of internal structures is to maintain pay differentials within a company work force, it is not always necessary for structures to advance as fast as the general price level. The need to protect living standards creates a downward rigidity of real wages. Since nominal pay cuts are resented, there is also a downward rigidity in nominal pay. Even if the general price level were to decline, it would probably be difficult to reduce nominal wages or salaries. The next topic is external pay structure, which is the relation between pay at different work establishments. These differentials are maintained primarily by the market forces of supply and demand, which are far weaker than the influence of morale, which is the main factor that creates the need for internal pay structures. Structures tend to move as a whole, with internal pay differentials maintained. Structures can move up quickly in response to labor shortages, which manifest themselves as high labor turnover and difficulties in hiring. In times of labor surplus, internal structures may be allowed to creep downward, if the normal raises resulting from advancement through the structure are sufficient to maintain employee living standards. Another relevant topic is why firms tend to lay off workers rather than cut pay. The main reason is that layoffs "get the misery out the door," whereas pay cuts dishearten all employees. Employers recognize that layoffs are painful and even dangerous for those let go. The main advantage of layoffs is that those who suffer from them are not in the work place. The negative impact of layoffs on the morale of the remaining employees tends to be temporary, whereas it might be long before they forgave a pay cut. The factors that make nominal pay cuts difficult limit their size to 15 or 20 percent, and employers claim that because of the fixed costs of employment, a small number of layoffs can save as much money as such a pay cut. An important consideration is that normally pay cuts save few jobs, so that if the response to labor redundancy were to cut pay, there would still be too many employees for the amount of work. Employers worry that such a situation encourages idleness; they prefer that workers have too much to do rather than too little. Similar arguments apply to work sharing arrangements that reduce the hours on the job. These tend to be used only in firms that have workers whose skills would be hard to replace if the workers found new jobs after layoff and so could not be rehired when good times returned. Another topic is why employers seldom replace existing employees with cheaper unemployed workers. The main reasons are the desire to protect internal pay structures and morale and the fear of the loss of the skills of the workers replaced. An important point is that pay can be cut with little negative impact on morale, if the pay cuts would save a large number of jobs. Pay cuts do occur in such circumstances and are unusual, only because they normally would not save many jobs. The findings of the study discussed are reported in detail in Truman Bewley, Why Wages Don't Fall during a Recession. Cambridge, MA: Harvard University Press (1999).

During the recession in the early 1990s, I carried out an interview study of the labor market in the Northeast of the United States with the intention of learning why excess supply does not cause the price of labor to plunge, as it would for products such as lettuce or fish. I did not know which of the many theories of downward wage rigidity to believe or whether I believed any of them and hoped to come upon the explanation through contact with the labor market. In the course of my study, I gathered qualitative information about firms, job search, and labor markets that may be of use in understanding wage and labor cost dynamics. What was especially interesting was the chance to catch glimpses of what goes on inside firms and see how personnel management works. My conclusions and supporting evidence are presented in Bewley (1999). Here I describe briefly the study and those findings relevant to labor cost dynamics.

Method

I interviewed company owners and managers, labor leaders, labor market intermediaries, such as professional recruiters and managers of temporary help agencies, and people who dealt regularly with the unemployed, such as counselors in unemployment agencies and outplacement companies. In choosing people to interview, I sought to learn about widely varied experiences in the world of labor. I interviewed in companies of many sizes and in many lines of business. I talked to counselors at unemployment agencies in economically depressed regions and in prosperous ones. I spoke with labor leaders in a variety of industries. I also sought key informants, who had a reputation for being knowledgeable, articulate, and intelligent. I obtained many of the names of people to interview through referrals from people I knew or interviewed. Such referrals proved useful in gaining cooperation. It seemed pointless to select informants randomly, since I sought especially interesting ones and did not intend to test hypotheses statistically. Rather I was looking for hypotheses. I had no fixed list of questions, but explained my project and then let informants talk. I posed questions only when necessary to guide the conversation in interesting directions. I did as many interviews as I could (336 in all) to broaden my experience and assure myself that the patterns I saw were probably real.

The method has the advantages that it can be replicated, despite its flexibility, and that it makes it easy to learn new and unexpected things, to exploit unanticipated directions of investigation, and to obtain a broad vision of what goes on in the labor market. The method also has clear disadvantages. One is that the data cannot be used to give unbiased estimates of the incidence of various behaviors. Another is the possibility that informants might give misleading information. A check on the latter problem is to see if what people say they think and do makes sense given what is known about their circumstances and interests. My conclusions should all be thought of as tentative. Confirmation could be obtained by a series of studies of a narrower scope that produced data appropriate for statistical analysis.

In evaluating my findings, one should keep in mind that a much smaller fraction of the work force is unionized in the United States than in Europe. In the period in which I was interviewing, only about 11% of the labor force in the U.S. belonged to unions. In the region I studied, these were concentrated in old large manufacturing companies and in public service jobs. Unions also represented some workers in construction and retail trade.

Morale

The central feature of the explanation of downward wage rigidity is employee morale. When employers and labor leaders speak of good morale, they can mean simply a good mood, but usually they mean internalization of the objectives of the firm and a willingness to make sacrifices for it. Like many human relationships, that between a firm and its employees is based on reciprocation, and good morale is in part a belief that the firm gives an appropriate return to employees for their efforts. Employers care about morale because it affects productivity, labor turnover, and the ability to hire good quality employees. A good mood helps productivity because it facilitates cooperation among workers and makes them more gracious with customers. Some work is so disagreeable that employers cannot expect moods to be good, but the zest for work that goes with good morale can make the unpleasantness easier to bear and less distracting. When employers speak of the impact of morale on productivity, they do not have in mind the speed with which routine jobs are performed, but rather doing the extra thing, making useful suggestions, working well without supervision, and helping coworkers with their tasks. Good morale reduces

turnover, because disgruntled workers are likely to quit. Employers wish to limit quitting because hiring and training costs are high. Good morale makes recruitment easier, because a large proportion of people hired are brought to a company's attention by employees, who consequently are usually its most effective recruiters. For all these reasons, management is preoccupied with morale.

Resistance to Pay Cuts for Existing Employees

The opposition to pay reduction comes in the first instance from the owners and top management of a firm. In understanding the reasons for this resistance, it is important to distinguish existing employees from new hires. Employers are reluctant to cut the pay of existing employees because of the anticipated damage to employee morale. In explaining why pay cuts could hurt morale, employers and labor leaders distinguish between what I call an insult effect and a standard of living effect. The insult effect arises because employees interpret a pay cut as an affront or slap in the face. They are used to receiving regular raises as a reward for good work, and the replacement of a raise with a cut is almost automatically interpreted as a lack of appreciation of employee effort. It ruptures the reciprocation that is central to employee partnership with the employer. This is so even if everyone's pay is cut. Workers might initially be less insulted by a general pay cut than one applying to one or a few individuals, but when the entire work force receives such a setback, employees feed each other's resentment by complaining to each other. The standard of living effect is the discontent generated by the hardship brought on by income reduction, adversity that workers naturally blame on their employer.

Definition of a Pay Cut

I should be clear about what I mean by a pay cut. By this, I mean a reduction in nominal regular pay for an employee in the same job, working under the same conditions and for the same employer as before the reduction. The reduction is in salary for a salaried worker, in the hourly rate for someone paid by the hour, or in piece rates. A reduction in bonuses does not count as a pay cut, unless the bonuses have historically fluctuated little and been paid at the same time of year. A decrease in benefits may or may not count as a pay cut, depending on whether the reduction is caused by an increase in the cost of the benefits to the employer. For instance, increases in the costs of medical insurance are usually shared between a firm and its employees. The resulting increases in employee insurance premia do not count as a pay cut, though they reduce take home pay.

Internal Pay Structure

Central to an understanding of the labor market are the pay structures internal to firms. It is important to realize that firms do not offer just one wage or salary, but a complex array of pay rates. It is possible that every employee of even a fairly large firm is paid at a different rate. The purpose of internal pay structures is to make pay rates orderly by determining them according to acceptable rules. In large companies, the structure is normally described in a formal document. In small companies, it is usually an informal understanding preserved by custom. Internal structures place employees in categories that are based on one or more factors, such as job description, responsibility, or the employee's work experience, time on the job, time with the company, education, or skills. The categories may be assigned grades, which convey employee rank and prestige. A common practice is to associate with each category a pay range or sometimes a series of pay steps. The pay of each employee is supposed to be within the range or at one of the steps. The ranges are usually quite wide with the maximum being about 150 percent of the minimum. The place within the range is determined by employee performance and by the same factors that determine the employee's category or grade. There are structures that do not fit this description. For instance, piece rates depend on the task performed and make pay proportional to output. There are floating progressions, according to which the structure only specifies a schedule of raises

given at regular time intervals to employees whose performance meets some minimum standard. Such a structure does not specify the level of pay, which is determined by pay when hired plus intervening raises. Floating progressions are used when the pay of new hires is market determined and can move up and down as conditions change. Such systems are often used for the floor crews of supermarkets. For low level jobs, structures tend to apply to one work place or establishment or to a local geographic area within a company. The higher the job level, the wider the scope of the structure, and in large corporations top management has one structure that applies nationally or even internationally. The structure at a given level applies to those employees who have enough contact with each other that disparities would be noticed and give rise to complaints.

The main reason for having internal structure is to achieve a sense of internal equity or fairness by creating appropriate differentials among individuals' pay. Companies usually do not reveal information about the pay of particular employees and discourage exchange of pay information among them. Nevertheless, employees do sometimes share pay information, and any perceived inequities can cause an uproar and be demoralizing. Equity does not mean that all employees receive nearly equal pay. The increase in pay with rank can be quite steep, both to provide incentives and because employees themselves find it just that skill, talent, responsibility, and performance be acknowledged and rewarded. Managers and labor leaders recognize that the definition of fairness is ambiguous. Because of the vagueness, standards of equity depend to some extent on company tradition. The potential tensions over pay comparisons are so powerful that internal pay structures are usually rigidly respected, difficult to alter, and considered vital to the health of an organization.

There are other reasons for internal pay structure. An important one is to create status that adds to the incentive to gain promotion by working hard. Another is to make clear the avenues of promotion. Still another function is to control the abuse of management authority by having pay be specified by clear rules.

Normal Fluctuations in Pay

It is important to realize that the internal pay structure does not necessarily guarantee employees income stability, especially for those in lower level jobs. As a firm's needs fluctuate, its

assignments of tasks, work shifts, and hours worked change. The internal structure may assign different rates of pay to different shifts and tasks, and changes in hours lead to fluctuations in the pay of workers paid on an hourly or piece rate basis. Piece rate workers can be shifted among tasks that differ in lucrativeness, and even if they stay on the same task, their productivity can vary from day to day. Reductions in pay resulting from such adjustments are commonplace and do not constitute pay cuts, since pay continues to be according to the same standard. The loss of income can, nevertheless upset employees, and when reassignments are permanent there is tension between the demoralizing effects of income loss and the violation of the internal pay structure that occurs if workers retain from an earlier position a level of pay higher than that appropriate for their new post. Sometimes management allows demoted employees to keep their old pay and sometimes it obliges them to accept the lower pay of the new position.

The Primary and Secondary Sectors

In understanding the impact of internal structure, it is helpful to distinguish the primary and secondary sectors of the labor market. Primary sector employment is long-term and full-time, and that of the secondary sector is just the opposite. Jobs are more likely to be considered a career in the primary than the secondary sector. Primary sector workers include most managers and professional people, non-retail sales representatives, factory, clerical, technical, and construction workers, and truck drivers. Secondary sector workers include temporary or contract help of all kinds, night watchmen, security guards, and janitors, taxi drivers, waiters and waitresses but usually not restaurant cooks, and most of the salespeople, clerks, cashiers, and stockers who work in retail trade. The sector categories apply to employees, not firms; all companies that employee secondary sector help also have primary sector workers, such as managers. Most workers in the secondary sector are poorly paid, but there are exceptions. For instance, some high-priced engineers and managers work on a temporary basis. A consequence of part-time employment and short job tenure is that workers in the secondary sector have less contact with colleagues in the same work place than do employees in the primary sector. For this reason, workers in the secondary sector are less likely than those in the primary sector to share pay information with coworkers or to care

about pay disparities. As a result, internal pay structures tend to be looser in the secondary than in the primary sector.

Pay of New Hires

I begin the discussion of pay determination with the wages and salaries of new hires. In the primary sector, the pay of new employees is closely tied to the internal structure. The recruiter tries to understand how they fit into the structure, given their training, experience, skills, and job. Though there may be some room for discretion and negotiation, the structure dominates the decision. If the pay of new hires declines, it does so by only a small amount, unless a firm has a general pay cut. The small decreases are arranged by taking advantage of ambiguities in the internal structure and are not acknowledged officially. In the 1980s, there was a vogue for what were called two-tier wage and salary systems, according to which a firm could react to financial distress or a weak labor market by having everyone hired after a certain date be paid according to a lower structure than those hired earlier. Such systems led to so much resentment and tension among primary sector workers that they were seldom applied to them by the time I interviewed in the early 1990s. Although new employees might at first be glad to have their job, they become disgruntled when they discover that they are paid according to a lower schedule than coworkers hired earlier.

The internal structure also places upper limits on the pay of new hires. Paying new employees more than existing ones in the same job can cause even more trouble than paying them less, because the higher pay arouses the jealousy and resentment of all existing employees.

For many, employment begins with a probationary period meant for mutual assessment by worker and firm. The legal restrictions on dismissals are weaker for those occurring during the trial period than later, and it is not unusual for workers to quit or be let go during this time. At its end, pay may be adjusted up or down as a result of better knowledge of workers' skills and where they belong in the internal structure.

In the secondary sector, the pay of new hires tends to be market determined and to fall readily in a slack labor market, though the pay of existing employees is just as rigid downward as the pay of primary sector workers and for the same reasons. The relative isolation of workers in the secondary sector and their lack of interest in pay comparisons means that two- or even multiple-tier

systems have little negative impact. Supermarkets routinely have many-tiered pay systems that arise automatically when the pay of new hires declines in response to slack labor market conditions. For this reason, many food retailers use floating progressions to organize pay. Union contracts with floating progressions do not specify the pay of new hires, but only schedules of raises. One supermarket corporation had tried multiple-tiered systems in its distribution centers and found that they caused turmoil there, even though they caused no trouble in the stores. The reason was that warehouse employees worked full-time and viewed their jobs as careers; they belonged to the primary sector.

Despite the lack of contact among secondary sector workers, their employers are careful not to pay new hires more than equivalent existing employees. This observation does not apply to temporary labor. The market for temporary labor is nearly an auction market for labor, and I never heard that internal equity was a consideration in setting pay for such labor, except when temporary help was hired from several sources into one work place. Temporary labor companies tried to avoid trouble by arranging that workers from different agencies doing similar work at the same location receive similar pay.

A conceivable explanation of downward rigidity of the pay of new hires is that job seekers refuse pay below a certain level. With this possibility in mind, I asked employers whether they thought they could hire enough good quality workers at pay rates lower than those currently offered. This question was especially relevant, because I interviewed during a period of fairly high unemployment. In the secondary sector, employers felt they could not reduce starting pay, because they kept it as low as labor market conditions permitted. In contrast, most recruiters filling positions in the primary sector believed their task would not be hindered by reducing the pay of new hires. Many of them were flooded with applications from unemployed job seekers, and it was the internal structure that sustained the pay of new hires at its current level. There were some exceptions among employers hiring specialties that were in short supply, such as physical therapists, organic chemists, and certain types of engineers working on defense projects, and the pay for these groups was rising.

Raises

Once employees are hired, the evolution of their pay is determined by increases, (or cuts, though these are rare). Raises normally occur at regular intervals, usually annually or semiannually and are administered either as general or as merit increases. General increases are usually by a uniform percentage, and merit increases depend on an evaluation of a worker's performance. Merit increases were the most common at the time and in the region where I interviewed. They applied to all management or supervisory personnel. General increases were most common for unionized employees or for employees who were vulnerable to unionization, because merit increases were thought to breed suspicion or give the impression that management had too much power. Even general increases, however, were sometimes denied to employees whose performance had clearly been below standard. Piece rate increases were always general and applied to all workers, good and bad. Raises are not allowed to bring an employees' pay above the top end of the range applying to their job grade. Employees at this upper bound are said to have "maxed out" and cannot receive more pay until they have been promoted to a job with a higher range or until the ranges have been increased.

It is important to distinguish between raises due to an increase in the level of the internal pay structure and raises associated with advancement within the structure. The structure itself is increased by raising piece rates, pay ranges, or the steps applying to each job or grade. Increases within the structure bring pay higher within the ranges or steps associated with the employee's labor category.

Raises have many important functions besides simply keeping average pay rates at market levels. The main reason for giving raises is to provide incentives for hard work. Raises are considered to be normal rewards for good work. They also serve to discourage quitting by generating loyalty and by keeping the pay of individuals in line with their market worth as they gain skill and experience. Raises are important for morale, because people expect them and are offended if they don't receive them. Raises are also used to protect employees' living standards by assuring that pay rates grow at least as fast as the cost of living. Managers believe that declines in the purchasing power of pay are demoralizing, especially if they occur over long periods of time. During the period in which I was interviewing, the increase in the cost of living was not an important consideration at many firms, because most of the increases given for other reasons exceeded it.

Because raises are used to create work incentives, they may eventually bring pay above a worker's marginal product. For this reason, companies count on a certain amount of labor turnover to remove high priced employees. One of the negative impacts of economic recession on companies is that by discouraging quitting it increases the proportion of employees with long job tenure and hence high pay. I heard the most complaints about this effect from managers of retail companies with floating progressions that gave floor employees nearly automatic increases at regular time intervals. In the secondary sector, it was not unusual for employers to reduce the hours of high-priced, part-time workers to induce them to quit. It may seem strange that companies sometimes encourage quitting, but they seek to manage labor turnover, not to minimize it.

In deciding on the average level of raises, personnel managers use labor market surveys and also forecast future market wage and salary levels. The surveys are of pay rates for certain key positions that are common to many companies. Forecasts are based on the recent history of indices of the market price of labor and the cost of living and on information gathered about the pay increases planned by competitors in the labor market. Wage and salary surveys typically contain questions about these plans.

A firm's current profitability strongly influences the decision on how much to budget for raises. Managers want employees to share somewhat in the financial successes and setbacks of the company in order to encourage workers to identify their interests with it. Another consideration is that the benefits to the company of raises tend to be felt in the long-run, and long-run gains are typically sacrificed for short-run savings when a company is under financial stress.

Outside Offers

Although raises are in part a response to market forces, these influences are seldom permitted to affect pay increases directly through matching outside offers. Employers normally do not meet such offers, because they do not want to encourage employees to solicit them and matching could violate and call into question the internal pay structure. It is advisable for most employees to keep secret an outside offer until they accept it, because the employer is likely to take revenge on an employee who receives one by looking for a replacement and dismissing the worker as soon as one is found. A few employers told me stories of having summarily fired employees for

considering such offers. One owner of a construction company fired an estimator simply for coming to work in a nice suit, thereby revealing that he was going to interview for a new job during his lunch break. Employers act in this way, because they interpret the consideration of outside offers as a sign of disloyalty. Employers react especially badly to outside offers made to employees in sensitive positions, such as the estimator, who knew company secrets, or salespeople, who can take their network of customer contacts with them when they leave. Employers are likely to fire immediately a salesperson they suspect of infidelity, walk them to the door, and impound their records. Employers are less likely to take revenge for outside offers made to employees at low levels in the company hierarchy, though they frown on the offers. There is almost no reluctance to match outside offers to employees with skills and knowledge that are important to a company and difficult to replace. When I was interviewing, examples of such people were key scientists at pharmaceutical and chemical companies and even some computer programmers. Not only did such people have their company over a barrel, so to speak, but their market value and value to the company were understood to be ambiguous, so that dramatic changes in their pay were not likely to cause resentment or to strain the internal pay structure. Such specialists are similar to American academics in that they can seek outside offers with impunity. Normally no one except employees in these categories can bargain effectively as individuals over pay, even when they are being hired. Bargaining is conducted almost exclusively by labor unions or by the people with scarce or unusual skills.

Pay Increases for Particular Skills

Upward adjustments made in response to shortages of particular skills can put a strain on the internal pay structure and normally require a great deal of explanation in order to avert resentment by employees not benefiting from them. Nevertheless, such adjustments can be large and rapid. I never heard of downward adjustments applied to particular types of labor in excess supply.

Bonuses

Bonuses fall outside the internal structure and are normally made to reward groups of employees or all of them for company successes and to reward individuals for special contributions. Employers explained that they must be careful not to award bonuses on such a regular basis that they come to be expected, for otherwise workers react to a decrease in bonuses as they would to a pay cut. Some employers strove to administer bonuses so that they always came as a surprise. Similar remarks apply to profit sharing arrangements, because decreases in pay brought on by profit decline can have the same bad effects as a pay cut.

Pay and the Marginal Product of Labor

I mention in passing that the pay of individuals can differ markedly from the value of their marginal product. This value plays no direct role in the determination of wages and salaries, though it does play a role in the determination of the number employed in each of the various job categories. The average marginal product for workers in each category is kept roughly equal to the average total cost of compensation for the category by decisions about hiring, layoffs, and internal reassignments of labor. Layoff decisions often involve comparison of labor costs for both individuals and groups with estimates of the value of their marginal product. The usual interpretations of internal equity call for having pay within job categories rise less steeply than employees' contribution to revenue. For this reason, the most productive workers make the greatest contribution to profits.

External Pay Structure

External structures are relations among the pay of workers at different firms or even among widely separated work sites of the same company. These structures are far less rigid and clearly defined than internal structures, because they are determined by market forces, which are much weaker than the forces of envy and morale that make internal structures necessary. Market forces manifest themselves through the difficulty of hiring and retaining employees. Although these pressures do respond to pay levels, the response is not so sensitive as to define narrowly the appropriate levels of pay. These depend in part on management opinion and policy and on

perceptions of such imponderables as the trade-offs between the cost of pay, on the one hand, and hiring costs and the quality of the work force, on the other hand.

Morale is fairly insensitive to the overall level of a company's pay structure, though morale can be badly damaged by pay reduction. Sometimes firms make mistakes and pay certain classes of labor significantly less than market rates. I heard a few accounts of such errors, and the consequence was high labor turnover, not poor morale. The main explanation of why morale is insensitive to pay levels is that most workers do not have a clear idea of what alternative employers pay people like themselves. Because internal pay structures are complicated and somewhat unique to each firm, it is often difficult to compare pay in different companies, and only workers belonging to well-organized labor unions or professional societies have access to systematic wage and salary surveys that organize information about pay. Firms are careful not to share such surveys with their own employees. Workers can learn about pay levels at other companies from friends and neighbors, but this information is truly revealing only in local labor markets in tight communities, such as small town labor markets for local stores and construction contractors. One might imagine that generous pay raises improve morale, but this is usually not so. Although morale can be hurt if raises are viewed as too small, the experience of employers is that the generosity of large raises is soon forgotten and workers quickly grow to believe they are entitled to them. The weakness of external pay structure permits a remarkable variation in pay for similar jobs in nearby firms producing similar products. Differences of 20 to 30 percent are not uncommon.

Although pay levels have little impact on morale, their influence on the quality of the work force can strongly affect productivity. The trade-off between pay and productivity through this mechanism is a major determinant of pay, but has little to do with downward wage rigidity.

Adjustment of the Level of the Internal Structure

In the primary sector, firms adjust the overall level of their internal structure by making coordinated changes in the pay of new hires, the ranges or steps associated with each labor grade, and the pay of existing employees or, in the case of piece rate structures, by changing all the rates by the same proportion. When choosing the level, upper management considers recent experience with hiring and quits plus the same information used in choosing the average level of raises,

namely, wage and salary surveys, current inflation rates, information about other firms' planned pay increases, and the firm's profitability. The use of surveys of planned pay increases may build inflationary momentum into the economy wide system determining wages and salaries. Although adjustments in internal structure levels are nearly always upward, pay structures sometimes move slowly downward. Declines can be arranged in range or step structures without reducing anyone's pay, by making modest reductions in hiring pay and the ranges or steps while giving raises to existing employees that increase their position within the structure. Employers, of course, resist upward adjustment, especially because it is not easily reversed. Nevertheless, they sometimes increase structures rapidly when it becomes difficult to recruit and retain labor.

In the secondary sector, adjustments in the level of the internal structure occur primarily as a result of changes in the pay of new hires, which may move downward substantially as well as upward. In the year before I began my study, the pay of new hires for floor crews in fast food restaurants in my neighborhood had fallen from about $6.50 an hour to the minimum wage of $4.27. Since the pay of individuals is their wage at the time of hiring plus raises received since then, changes in the pay of new hires eventually shift the level of the entire pay structure. This shift occurs fairly quickly in the secondary sector because turnover is high there.

A common reaction to economic recession, even in the primary sector, is to allow the level of the internal structure to drift downward in real terms by not increasing it in step with the cost of living. Except in the case of piece rates, such declines can occur without the real value of anyone's pay falling, if employees continue to receive increases. If the raises are large enough, the decline in the real level of the structure has no negative impact on morale, because few employees suffer a decline in the purchasing power of their pay and the internal structure continues to serve its purpose of maintaining appropriate differentials between the pay of the various employees. I never heard that there is an association between labor grades and real, as opposed to nominal, levels of pay, though I suppose a strong union could create such a link.

Turnover Savings

In order to understand the inflation process, it is important to realize that if a firm does not pay piece rates, then the rate of inflation of its average wage costs can be less than the average

rate of increase of the wage paid to an existing worker. This is so because of what are termed turnover savings. Employees who leave a firm as a result of quits, firings, retirement, or layoff usually earn more than new hires, and the difference creates the savings. These are a natural consequence of the fact that employees' pay grows as they rise though the internal structure.

The effect of turnover savings may be visualized by imagining a column of water held in a transparent glass tube that is open at the top and has a narrow hose attached at the bottom. Air entering through the hose forms bubbles that rise through the tube. The bubbles are the wage rates of individual workers, and the tube is the internal pay structure. The average cost of labor is the average height of the bubbles, which is the same as the height of the middle of the tube. The bubbles rise, though the tube remains stationary. If the tube is lowered sufficiently slowly, the bubbles still rise relative to the ground, so that the average cost of labor declines even though each worker enjoys increasing income.

The point may be seen in another way by considering a simple example in which there are two levels in the internal structure, the same number are hired each period, all employees advance to the next pay level in the following period and then leave at the end of that period. Suppose that advancement to level two brings a 20 percent pay increase. The following table shows that though average raises are always positive, average wage costs may follow the pay of new hires downward.

The Impact of Turnover Savings

Period	A New Hire's Pay	An Old Worker's Pay	Average Pay Increases	Average Wage Costs	Change in Average Wage Costs
1	1.0	1.2	–	1.1	–
2	1.0	1.2	0.2	1.1	0
3	1.0	1.2	0.2	1.1	0
4	0.9	1.2	0.2	1.05	–0.05
5	0.9	1.08	0.18	0.99	–0.06
6	0.9	1.08	0.18	0.99	0

Is Downward Wage Rigidity Real or Nominal?

A question of interest to macroeconomists is whether downward wage rigidity is real or nominal. The answer is that it is both; management does not like to see either the real or nominal value of pay decline. This distaste for declines stems, of course, from the expected reaction of the work force. Recall that the impact on morale of pay cuts is due to an insult effect and a standard of living effect. The insult effect is linked to the shock of a sudden reduction in nominal pay, and the standard of living effect results from the decline in the purchasing power of pay. The standard of living effect is felt only slowly as workers realize they must do without things because of the reduced value of earnings. For this reason, there is some tolerance of slow declines in living standards, provided they do not last a long time. Pay freezes lasting two or more years, however, can have a terrible effect on morale, after inflation makes them painful. It is possible to reduce nominal wages in a time of price deflation without decreasing living standards, but companies would probably be reluctant to do so because of the insult effect. This is only a guess, however, because my interviews occurred during a period of gradual inflation and none of my informants had experienced a period of significant deflation.

Pay Cuts Do Occur

It is important to realize that pay can be cut without seriously damaging morale provided management can argue convincingly that the cut will save lots of jobs. A cut would do so if it would prevent a company or work establishment from closing or if it would prevent lots of layoffs. Most employers were confident that they could convince employees that pay cuts would save jobs, provided it were true that they would do so. Most employers believed that workers would be mature enough to tolerate the cuts if they would benefit from them. Of course, no one likes to hear bad news, and employees are as prone as anyone else to resist and deny it. For this reason, when announcing pay cuts, management normally holds meetings with employees where it offers detailed explanations of why reductions are necessary and what their impact will be on employment. Pay cuts are unusual precisely because they normally would preserve few jobs. Pay reductions that occurred in firms where I interviewed did save lots of jobs, because they enabled the companies to avoid closing or the firms were in businesses, such as construction, that had highly price elastic product demand. Actual pay cuts caused little harm to morale, because firms reduced pay only

when management was fairly sure that the damage would be minimal. Nevertheless, quite a few managers I talked to told stories of past pay cuts they had experienced or heard about that went awry because they were not needed to prevent job loss.

When pay cuts do occur, they are usually across the board or apply only to the higher levels of employees. The reductions are made in this way in order to preserve the pay differentials required by the internal structure and to create a sense of fairness. The cuts never apply just to those employees whose jobs are threatened by a decrease in demand for what they produce.

The Small Impact of Wage Cuts on Labor Demand

One reason that pay cuts typically would save few jobs is that the elasticity of demand for labor at individual firms is normally small. This is so because labor costs are a small fraction of marginal costs and because the price elasticity of product demand is not large. Although about 70 percent of costs are paid to labor at a national level, at the level of an individual firm most costs are for inputs purchased from other firms. In many firms, labor costs are as little as 5 to 10 percent of revenue and are probably an even smaller percentage of marginal cost, since in most firms a significant fraction of labor costs are paid to overhead personnel and so are fixed.

The low wage elasticity of labor demand explains why pay reduction prevents few layoffs among those production workers whose jobs are threatened by reduced product demand or by technical progress. A different explanation applies to the many layoffs made simply to save money needed to meet company financial crises. The reason why pay cuts do not prevent such layoffs is that firms can save much more money by shedding employees than by decreasing pay. Because of the high fixed costs of employment, layoffs of relatively few employees typically save as much money as would a general pay reduction of feasible size. Managers believe that pay cannot be reduced by more than 15 or 20 percent without having a devastating impact on morale, and pay cuts apply only to the variable part of pay and usually not to benefits and certainly not to all the other fixed costs associated with employment.

Why Management Usually Prefers Layoffs to Pay Cuts

The low elasticity of demand for labor is the main explanation of why management usually prefers layoffs to pay cuts; a pay cut would save so few jobs that it is not really an alternative to

layoffs. Production workers would have too little to do if, after a decline in the need for them, their pay were cut and there were no layoffs. Employers worry that such a lax situation would lead to bad work habits and damage the company's culture. They prefer that employees have too much to do, not too little.

Another important consideration is that layoffs "get the misery out the door." Those who suffer from layoffs leave the work place and so do not depress its atmosphere. Employers argue that there is no reason to antagonize all employees with a pay cut when they could make just a fraction of them unhappy through layoffs, and those few would be out of the work place and probably happy to return if recalled. Employers recognize that layoffs cause hardship and can even be dangerous to those let go, but believe they can do little about the suffering, except to offer some severance benefits. Because the fear of future layoffs depresses the spirits of employees, employers try to have layoffs only infrequently. It is considered good practice to save them up, let many people go at once, and then announce that there will be no more dismissals for some time. Employees worry about the welfare of coworkers who had to leave, and a major reason for paying severance benefits is to reduce these anxieties among the employees who remain after layoffs. Managers say that the future of their company depends on its core employees and that to survive hard times it is essential to retain them and their enthusiasm and loyalty. Employees not in the core who are not needed should be dismissed quickly and those retained should be given pay increases to encourage them to help pull the company out of trouble. Some layoffs are made in order to pay for such raises.

Still another consideration is that pay cuts can damage productivity because they hurt morale and the best employees are typically those who leave first after pay is cut, since they are the ones who can find other jobs most easily. Layoffs, on the other hand, usually improve productivity after the initial reorganization made to reassign tasks among a smaller labor force. The increase in productivity occurs because firms try to lay off their least productive employees first and because people try to look good to avoid being let go in the next round of layoffs. Within job categories, workers are selected for layoff on the basis of seniority or performance, criteria that have to be used consistently to avoid suits for discriminatory dismissal. Whatever the system used, employers are usually able to arrange layoffs so that the least productive go first. Only in some settings do layoffs

hurt productivity. For instance, a unionized work force may try to protect jobs by slowing work down so as to make it last, and too frequent layoffs can so discourage workers as to make them apathetic.

Worksharing

An obvious question is why so few firms avoid layoffs by means of worksharing, which is an arrangement by which employees work less than full time or have rotating furloughs i.e., short periods of layoff. When asked about worksharing, employers explain, when speaking of hourly workers, that it has the same bad effects as a pay cut; reduced earnings impinge on living standards and for this reason are greatly resented if they last too long. Rotating furloughs have the advantage over hours reduction that workers can collect unemployment benefits when on furlough. In the United States, the collection of such benefits has the disadvantage that it increases the unemployment insurance tax paid by the employer. Worksharing through hours reduction is expensive for another reason. Because of the fixed costs of employment, labor costs per hour are often lowest when employees work more than 40 hours a week, despite the overtime premium. For this reason, employing people part-time who are normally full-time can increase hourly labor costs substantially. Worksharing is typically used only for workers, such as expert machinists, who have skills that would be difficult to replace if they were laid off and then found work elsewhere and did not return when recalled.

Worksharing makes little sense in the context of salaried overhead employees who are overtime exempt. ("Overtime exempt" is a term that applies to the American labor force and describes employees who are exempt from the federal statutes that require that workers be paid time and a half for hours worked per week above 40.) It is standard practice for employers to save money during economic downturns by laying off a fraction of exempt employees and giving their work to those who remain. The total overhead workload typically does not decrease during a downturn and may even increase because of all the adjustments the company must make, especially in its product markets. Whatever the case, the remaining employees must work more hours per week after the layoffs. They are not paid more for the additional time, because they are salaried and overtime exempt. They normally tolerate such treatment, because it is hard to find

alternative employment during a recession and it is expected that overtime exempt employees make extra efforts to help their company through crises. Thus worksharing is inappropriate in the context of overhead people, because slowdowns do not necessarily entail a reduction in the total amount of work to be done and avoidance of layoffs would burden a firm with unnecessary costs at a time when it should be reducing them.

Replacement

A natural question for an economist is why during periods of high unemployment a firm does not make a deal with unemployed workers to hire them for less than what it pays its current employees. One possibility would be to replace some or all employees with cheaper unemployed ones. (I have never heard of a company doing this, except to break a strike or rid itself of a union.) The main answer as to why firms do not take advantage of unemployment in this way is that they do not want to lose the skills, knowledge, and training of their work force; it has valuable specific human capital. Another important reason is that such a move would deal a terrible blow to company morale. Even if all employees were replaced, it would give an example of treacherous behavior that the new workers might well imitate. Still another consideration is that partial replacement of employees would violate the internal pay structure.

Another way to use unemployed workers would be to fill open positions at pay rates lower than those of existing employees. I have already mentioned that employers do precisely this in the secondary sector and that employers in the primary sector feel constrained not to do so by the internal pay structure and the need for internal equity.

Undercutting

Solow (1990, p. 37) asked why unemployed workers do not try to take jobs away from the employed by offering to do their work for less than they are paid, a move he termed undercutting. One answer to this query is that in hard times workers do sometimes offer to work for very little and that employers normally do not accept these offers. If these workers are hired, they are paid at normal rates, except perhaps during the probationary period. The offers are refused because of concern about internal equity. This is so even in the secondary sector, where employers feel obliged to pay equitably all equally qualified new hires, for the new workers find it easier to compare

their pay with that of other current hires than with that of people hired earlier. Employers deny that the low offers reflect badly on the applicants. Some recruiters even admire the implied eagerness to work.

Another answer to Solow's question is that it is difficult, from a practical point of view, for job searchers to offer to work for less than existing employees, because job applicants seldom apply for particular jobs and if they do they almost certainly do not know what existing job holders are paid. They obtain precise information only about their own pay and only when they receive a job offer. Before then, they merely have vague impressions of pay levels at the firm.

The Unemployed

Because the market behavior of the unemployed is critical to some well-known explanations of downward wage rigidity in the literature, I devoted a good deal of time to learning as much as I could about the behavior of unemployed job seekers. I was especially interested in the question of whether job hunters could count on finding a job quickly if they were sufficiently flexible about working conditions and pay. The answer was definitely not, though some flexibility certainly improved the chances of finding work. Except in a few special skills, there was a shortage of jobs, even at low levels. Furthermore, job hunters risked being rejected as overqualified, if they applied for work at too low a level relative to their qualifications and their previous employment. Job seekers were very likely to be labeled as overqualified if the job they applied for paid 80% or less than their previous job. Primary sector employers were especially likely to shun the overqualified because of worry that they would quit as soon as they found a better position. There was less worry about overqualification in the secondary sector, because labor turnover is high there in any case. Overqualification was not an issue at all for taxi drivers or for temporary labor. There was concern, however, about overqualification among employers of secondary sector personnel who dealt with the public, for it was believed that workers coming from better jobs would be so disgruntled that they might be impatient and unpleasant with customers. Because of the overqualification problem, the wisest job hunting strategy was said to be first to look hard for the type of work for which one was precisely qualified and with pay that was close to that earned before

layoff. If no such job were found, it was best to look next for positions similar to those for which one was exactly qualified.

For a few weeks after layoff, many unemployed people suffered from shock and retreated into denial of their circumstances. During this period, they were likely to be inflexible about the kind of job and the pay they were seeking and they were not likely to be energetic about job search. After recovering, most unemployed job hunters were fairly energetic and flexible and many were too flexible and encountered the overqualification problem, which came as a frustrating surprise. Job search counselors spent a good deal of time explaining how to avoid this obstacle. Some even recommended removing qualifications from resumes and reducing the pay claimed there on previous jobs - a dangerous practice since any lie during the hiring process can later be grounds for firing. I heard many complaints from employers who suspected that job applicants were hiding qualifications and deflating past pay. Some job seekers were unrealistically stubborn and insisted on having the same sort of job and the same pay as they had had before layoff. Such obstinacy was especially common among workers who had been laid off from jobs where they had been protected by a strong union.

I also inquired about employers' reactions to the jobless. There was little prejudice against them, though employers wanted to know how applicants had become unemployed and what they had done while out of work. If they had been laid off, recruiters wanted to know why. They suspected that those laid off might have been selected as the least productive and that those who had not looked actively for work might be depressive or lack initiative. On the other hand, it was understood that there had been numerous massive layoffs and that jobs were in such short supply that it often took many months to find work. Hence, employers believed that good people could be found among those who had been laid off and even among those who had remained unemployed for a long time. Many employers were furious about the flood of overqualified job applicants, who "just want to get their foot in the door" and then would be disruptive, demand promotion, or soon quit. I heard few complaints from employers about inflexible and passive job applicants, except from those offering positions at the bottom end of the job spectrum, such as employment as laborers in laundries and candy factories, where work was in competition with the welfare system.

The job hunting experience of the unemployed was that for a great many job search took a long time, simply because jobs were scarce. The best way to find work was through friends and acquaintances - the term used by job search counselors was "networking." This was so because employers prefer to hire through personal contacts, since these enable recruiters to learn things about applicants that they could not know otherwise. People who worked regularly with job searchers said that many unemployed put a great deal of effort into job hunting and that some eventually became desperate. Such people were the ones most likely to look too low and be rejected as overqualified. Others who could afford to do so just gave up.

Conclusion

Wage and salary dynamics result from a complicated interaction of labor market pressures, pay structures internal to firms, and the need to maintain good morale. People use as reference points their own past pay and, especially if they are part of a close-knit company work force, the pay of coworkers. They easily take offense if they perceive their pay as inadequate relative to these benchmarks. Employer efforts to avoid such resentment explain nominal downward wage rigidity. The real value of pay is downwardly rigid, because employers wish to avoid the discouragement caused by declines in living standards. Close contact among employees within a firm gives rise to a need for elaborate pay gradations that create incentives and a sense of justice. The movement of workers upward through the resulting internal hierarchy gives rise to a confusing disjunction between the rate of change of average company labor costs and the average rate of change of employees' pay. Personnel management gives rise to many difficult problems, especially during economic downturns, for which there are probably no good solutions. Actual practices are pragmatic measures that are part of business culture and are often rediscovered independently by businesspeople as they react to experience.

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