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CLOSING LEGISLATION: DO THEY MATTER?

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ABSTRACT

This paper evaluates the cases for and against plant closing legislation. In spite of the growth of legislative efforts in the area, there has been surprisingly little effort devoted to analyzing what the effects are of existing plant closing legislation, of provisions in privately negotiated collective bargaining agreements that provide for advance notice in case of plant shutdowns and/or layoffs, and of voluntary employer provision of advance notice. The paper summarizes the results of previous research, and our own empirical analyses that used the January 1984 Bureau of Labor Statistics Survey of Displaced Workers, on the effects of advance notice on displaced workers' durations of nonemployment and post-displacement earnings. Based upon these findings, implications for public policy are drawn.

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1. Introduction

Most European nations have some form of legislation relating to plant closings or large scale layoffs.¹ Typically they call for advance notice by employers and for employer negotiations with employees and government over whether the closing can be averted. Often they require severance pay for displaced workers and some, for example Sweden, have detailed programs of labor market services (retraining, placement, public works, wage subsidies) to facilitate adjustments. In Canada, both federal and provincial legislation similarly require advance notice. In many of these countries small establishments with less than one hundred employees are exempt from the requirements, perhaps due to the greater failure rate of small businesses or the belief that a shutdown of a small business does not have a substantial effect on a community.

Plant closing legislation in the United States is much more modest. As of early 1988, there is no federal law and only a few state laws. Three states, Maine, Wisconsin and Hawaii, require advance notice of plant shutdowns or large scale layoffs (with size class exemptions), and Maine also requires one week's severance pay per year of service for workers with greater than three years' tenure. The penalties for noncompliance are low in Maine (\$500 per establishment) and Wisconsin (\$50 per employee), but high in Hawaii (three months wages and benefits per laid off worker). Connecticut does not require advance notice, but does require nonbankrupt firms to maintain health insurance and other benefits for workers unemployed by plant shutdowns for up to 120 days. Massachusetts, Maryland and Michigan all have voluntary programs in which firms are urged to provide advance notice and/or continue benefits. Finally, South Carolina requires employers to give workers two weeks

notice before shutting down, but only in situations where employees are required to give similar notice prior to quitting.

Interest in plant closing legislation in the United States has grown since the deep recession of the mid-1970s and the relatively large number of plant closings and permanent layoffs in major manufacturing industries since then, undoubtedly stimulated this interest. During the 1975-83 period over 125 bills relating to plant closings were introduced in 30 states; the majority in the northeast and midwest. More than 90 percent of these bills had provisions requiring advance notice of shutdowns, while substantially smaller percentages required severance pay or economic assistance to either workers, employers, local governments, or potential buyers.

At the federal level, over 40 bills have been introduced into Congress since 1979. In April of 1988, Congress voted to include an amendment in the omnibus trade bill that would have required employers of 100 or more workers to give 60 days advance notice to workers and local government officials of a plant closing, or a layoff that was planned to last at least six months that involved at least 500 workers or one-third of the employer's workforce. Numerous exemptions were included in this bill that was vetoed by President Reagan.

Proponents of advance notice legislation argue that advance notice provisions will ease displaced workers' shock and facilitate their search for alternative sources of employment or training. Such notice also allows employers, workers and the community to see if ways exist to save the jobs, such as wage concessions, tax concessions, or seeking new ownership, including the possibility of employee ownership.²

Opponents of the legislation argue that, in addition to restricting the free mobility of capital, advance notice legislation would have a number of other adverse effects on firms. They claim it would increase worker turnover and decrease productivity, as those productive workers with the best opportunities elsewhere would leave and the morale of remaining workers would suffer. It also would decrease the likelihood that buyers of the plant's product would place new orders, that banks would supply new credit, that suppliers would continue to provide services, and that the firm could sell the plant to potential buyers. Finally, it would depress corporate stock prices. Such a provision, as well as others that directly increase the costs of plant shutdowns, effectively increase the cost of reducing employment and thus should encourage firms not to expand operation or to substitute overtime hours for additional employment in states where such laws are in effect.

In evaluating the case for advance notice legislation, it is useful to stress the divergence between private and social costs. Employers currently do not bear the full social costs of plant shutdowns, both because unemployment insurance is imperfectly experience rated and because the costs these actions impose on communities are not taken into account by them. As such, imposing a "tax" on plant closings, or large scale layoffs, either in the form of advance notice provisions, severance pay requirements, or maintenance of benefits requirements would offset the difference between the social and private costs of plant closings.³ These efficiency considerations suggest the need for federal, rather than state-by-state rules, to reduce the possibility that locational decisions by firms would

be influenced by "tax price" differences. Critics, however, would stress that such legislation might encourage the flight of jobs overseas.

In spite of the growth of legislative efforts, there has been surprisingly little effort devoted to analyzing what the effects are of existing plant closing legislation, of provisions in privately negotiated collective bargaining agreements that provide for advance notice in case of plant shutdowns and/or layoffs, and of voluntary employer provision of advance notice. The next section summarizes what previous studies have found, while section III briefly discusses our own research. Some concluding remarks appear in section IV.

II. Do Advance Notice Provisions Matter?

Lazear (1987) used annual aggregate data for twenty-three countries over a 29 year period (1956 to 1984) to estimate what the affects of legally mandated severance pay and advance notice provisions for blue-collar workers were on the aggregate employment/population ratio, unemployment rate, and average weekly hours in manufacturing. Simple fixed-effects models (to control for country-specific omitted variables) were estimated and a small set of control variables (e.g., a linear time trend, cyclical factors, demographic factors) were included in the analysis. He found that instituting an advance notice requirement of 60 days (2 months), *ceteris paribus*, would decrease the employment/population ratio by about .003 (the U.S. average was .40 during the period), and increase average weekly hours by about 0.7, although these effects were not statistically significantly different from zero. He argued that apparently advance notice requirements encourage employers to substitute

additional hours for additional employment; they act like a quasi-fixed cost of expanding employment. One must caution, however, that in most countries in Lazear's sample, changes occurred in these requirements only once or twice during the period. Hence, the effects he attributed to advance notice legislation may in actuality reflect only nonlinear trends.

Folbre, Leighton and Roderick (1984) is the only study of U.S. data that examined the effects of advance notice of plant closings on local area unemployment rates and labor force size. They examined the effects of major plant closings (those involving more than 100 workers) in Maine in the period prior to advance notice becoming mandatory in the state, and found that voluntary provision by a firm of at least one month's advance notice to displaced workers significantly diminished the closing's impact on the local area unemployment rate in the month of closing. While this may reflect more rapid reemployment of displaced workers in the presence of advance notice, their results also suggest that advance notice was associated with a significant reduction in the size of the local labor force in the month of the closing. The latter reflects either labor force withdrawal or outmigration (and possible reemployment elsewhere); they are unable to ascertain which occurred.

Another study, Weber and Taylor (1963), focused on 32 plant closings in the late 1950s and early 1960s and found that voluntarily provided advance notice rarely led to increased quit rates or decreased productivity of workers. Still a third study, Holen, Jehn, and Trost (1981) studied the experiences of 9,500 displaced workers from 42 plants that closed and found that provision of advance notice was associated with

larger earnings losses for the displaced workers; at first glance a somewhat paradoxical result.

In each of the latter three studies (and most of those discussed below) provision of advance notice was treated as exogenous and this may bias the authors' estimates of the policy's effects. For example, those employers who perceive they would face increased quit rates prior to the shutdown date if they provide their workers with advance notice, may not provide notice, while those employers who perceive they would not face increased turnover may do so. To the extent that these perceptions are correct, only low "expected increase in turnover" firms would provide notice and one would not observe increased turnover in these firms after notice was provided (Weber and Taylor's finding). However, this would not tell us anything about the affects of mandated advance notice. Similarly, if advance notice were to arise primarily in situations in which the employment prospects faced by displaced workers were the worst, a comparison of the earnings losses suffered by workers with notice to the losses incurred by those who failed to receive notice would show that the former lost more (Holen, et al.'s results). However, this would not imply that legally mandated advance notice would make workers worse off.

Recently several studies have analyzed data from the Bureau of Labor Statistics January 1984 Survey of Displaced Workers (SDW), a supplement to the Current Population Survey (see Flaim and Sehgal (1985)). The SDW is a special supplement to a national probability sample of households that was administered to workers permanently displaced during the 1979-84 period due to a plant shutdown or layoff and it contains information on whether the individuals received advance notice or expected their displacement.

It contains no information on whether the notice was formal or how far in advance it was given. This is a crucial omission, since the effectiveness of advance notice policies presumably depend at least partially on how far in advance notice is given.

The various studies yield somewhat mixed findings. Howland (forthcoming, 1988) limited her analyses to a small subsample of the displaced workers located in SMSA's who had been displaced from manufacturing jobs due to a plant shutdown. She found that on average displaced workers who received advance notice did not benefit from the advance notice, although white-collar workers did appear to have shorter durations of nonemployment. In addition, the approximately 10 percent of workers who received advance notice who then quit prior to displacement appeared to suffer smaller wage losses and fewer weeks of nonemployment.

Addison and Pedro (1986; 1987a) concentrated their attention on workers displaced due to plant shutdowns and found that, *ceteris paribus*, the presence of advance notice was associated with durations of nonemployment that were some 35 percent shorter. For workers who received unemployment insurance (UI) after displacement (which meant, given UI rules in most states, those with more than one week of unemployment) the negative association of advance notice and duration was found only for white-collar employees. For both white and blue-collar workers who failed to receive UI after displacement, a negative association between advance notice and duration of nonemployment was found. This latter result is not surprising; if advance notice helps some workers to find employment without an intervening spell of unemployment, these workers will never be eligible for UI benefits. Put another way, the presence of advance notice

may increase the probability that displaced workers fail to receive UI. While Addison and Pedro (1986) treated the receipt of UI as endogenous they did not allow advance notice to influence it.

Podgursky and Swalm (1987a) restricted their attention to those workers displaced during the 1979-81 period. Using a slightly different set of control variables than Addison and Pedro (1987a) they found that advance notice significantly reduced nonemployment durations only for white-collar females. Podgursky and Swalm (1987b) studied the determinants of post-displacement earnings for workers who were subsequently employed full-time at the survey date. They found no effects of advance notice, suggesting that such policies have, at best, transitional effects.

Finally, Addison and Portugal (1987b) found that a 10 percent increase in duration of unemployment decreased post-displacement wages by about 1 percent. Since their results in this paper (which focused on laid off displaced workers, as well as those displaced by plant closings) also indicate that advance notice reduced duration of unemployment by about 25 percent, one can infer that advance notice increases post-displacement wages by about 2.5 percent. One must caution, however, that their estimated duration-wage relationship is conditional on a displaced worker's having remained in the same industry and occupation and they did not permit advance notice to have a direct effect on post-displacement wages.

III. Our Own Research

Our own research, to be reported in detail in a forthcoming Upjohn Institute monograph, reanalyzes the SDW data making a number of methodological innovations. First, in the absence of formal legislation requiring advance notice, one can view advance notice as an explicit or implicit contract provision and ask if workers must pay for this provision in the form of lower predisplacement wages? That is, we ask if compensating wage differentials exist for advance notice provisions? If the answer is yes, it is straightforward to show that people who receive advance notice will appear, *ceteris paribus*, to suffer smaller earnings losses, even if advance notice has no true effect on post-displacement wages.

Second, as noted above, the presence of an advance notice provision is likely endogenous and depends upon both employers' willingness to supply and employee demand for such provisions. We attempt to formally model the determinants of advance notice, including the magnitude of the compensating wage differential, and then test if treating advance notice as endogenous influences subsequent results.

Third, previous researchers have not stressed that about 10 percent of the males and over 15 percent of the females in the SDW suffered no spell of nonemployment after displacement. We estimate separately what the effect of advance notice was on the probability of a displaced worker's finding a job without any spell of nonemployment and what it was on the duration of nonemployment (conditional on a spell existing). We also estimate what the effects of advance notice were on survey date wages.

Fourth, since the SDW contains data on whether workers who received advance notice quit prior to displacement, we estimate the determinants of predisplacement turnover and ascertain if there is any evidence that turnover among firms' most productive workers occurs. Finally, all of our analyses are done separately for four groups (male/shutdown, female/shutdown, male/layoff, female/layoff) to see if such policies have differential affects across groups.

Our results indicate that there is very little evidence that workers who receive advance notice pay for it in the form of lower predisplacement wages. They also suggest that it is difficult to explain which displaced workers receive advance notice prior to displacement using data on characteristics of the individuals, data on characteristics of the workforce in the industries in which they were employed, and data on employment growth and unemployment in the areas and areas/industries in which they were employed. While some variables prove significant in formal probit models of the probability of receiving advance notice (and the equations do have some predictive power), in the main few consistent patterns are observed across the four groups. These results, together with the results of exogeneity tests we performed, suggest that analyses of the effects of advance notice provisions that use the SDW can legitimately treat the existence of advance notice as exogenous.

Our analyses do suggest that having advance notice does significantly increase the probability that a displaced worker will experience no spell of nonemployment. The largest increase is for males displaced due to a shutdown and the major beneficiaries within this group are white-collar workers. In contrast, once an individual experiences any nonemployment,

the presence of advance notice has no effect on the ultimate total duration of nonemployment.⁴ Advance notice thus seems to help displaced workers in the SDW sample only if the individuals can find employment prior to displacement.⁵

Analyses of the effects of advance notice on survey data earnings echo the findings of Podursky and Swaim (1987b) that, on average, receipt of advance notice has no effect on subsequent earnings once reemployed. Only for white-collar females who had been displaced due to a layoff was there any evidence that advance notice leads to higher survey data weekly earnings and this group makes up less than 15 percent of the SDW sample. The major effect of advance notice on workers in the SDW sample then is through decreasing the probability of observing positive nonemployment spell lengths.

Finally, for the people in the SDW sample who receive advance notice, we find no systematic evidence that observed variables that might be proxies for productivity (job tenure, age, education, previous earnings) systematically are associated with the probability that a worker will quit prior to displacement. Thus, we find no evidence that advance notice will lead a firm's most productive workers to quit, thereby disrupting a firm's operations in its final weeks.

IV. Concluding Remarks

A number of studies suggest that there are large private costs of displacement to displaced workers but that these costs are often transitory in nature. While some fraction of these costs may represent the dissipation of rents, a substantial part represents true social costs

(Hamermesh (1987)). Often these costs are transitory in nature -- witness the fact that earnings of displaced workers in the SDW who were reemployed at the survey date were, on average within 5 percent of their predisplacement earnings. However, some costs are long-lasting; many people in the SDW were not reemployed at the survey date.

Our own research and the literature surveyed above suggests that advance notice may well facilitate labor market adjustments by allowing displaced workers to find employment prior to their date of displacement. Advance notice appears to reduce the probability that displaced workers suffer any spell of nonemployment and thus also may well moderate temporary increases in area unemployment rates. In both a number of the surveyed studies, and our own, "advance notice" included notice of very short duration and thus their results may understate the effects of mandated notice of longer duration. The individual worker based data used in all of the underlying studies also did not permit analyses of whether advance notice of pending displacements can lead to actions (e.g., reorganization, wage concessions, employee ownership) that help avert displacements.

Although opponents of advance notice cite potential costs of such policies, empirical studies have found no evidence that advance notice causes firms' most productive workers to leave and that the productivity of the remaining workers suffers. Moreover, save for Lazear (1987), which we have criticized above, no systematic empirical evidence has been provided on the other potential adverse effects of advance notice that opponents have enumerated.

While at first glance, this discussion suggests that federally mandated advance notice for displaced workers may be an idea whose time has come, several cautions are in order. First, the effects of voluntary provision of advance notice in situations where workers expect impending displacement anyway may be very different from the effects of mandated advance notice in situations where the impending displacement is completely unexpected by workers.⁶ Indeed, one should recall that the SDW, which our research and most of the research we surveyed was based upon, asked only if workers received advance notice or expected their displacement.

Future researchers will have access to the January 1988 Survey of Displaced Workers which specifically asks displaced workers if they received formal advance notice and, if so, how long the notice was. However, even with these data, to adequately estimate the effects of advance notice per se will require researchers to try to model what displaced workers' expectations of displacement would have been in the absence of advance notice. Put another way, researchers need to estimate if formal advance notice actually communicates new information to workers.

Second, the observation that the voluntary provision of advance notice appears to reduce the probability a displaced worker will suffer any spell of nonemployment does not necessarily imply that mandated advance notice will increase employment and decrease unemployment rates. Indeed, one can conceive of situations in which displaced workers compete for a fixed number of vacant positions that only a fraction of them can obtain. Advance notice gives those workers who receive notice an advantage; it increases their probability of finding one of these jobs

prior to displacement. However, if the number of vacant positions is truly fixed, by necessity the probability that workers who failed to receive notice find jobs would have to go down. In this case, the gains to those workers who received notice would come solely at the expense of those workers who failed to receive notice. There would be no social gains from advance notice in the sense that, on average, it would not influence aggregate employment levels and/or unemployment rates.

Studies that use individual-based data sets, such as our own and the others that used the SDW, can not test for the possibility of such displacement effects. The only study of U.S. data that addressed this issue, Folbre, Leighton and Roderick (1984) did find evidence that voluntary provision of advance notice led to smaller temporary increases in area unemployment rates. However, Lazear's (1987) cross-country study found no significant effects of mandated advance notice on national employment levels and unemployment rates. Clearly more studies that focus on the affects of advance notice on area economic outcomes are needed.

Suppose for a moment, however, that all voluntarily provided advance notice actually does is "reshuffle" jobs among displaced workers from those people who fail to receive notice to those people who do receive it. In fact, evidence of this might strengthen the case for government mandated advance notice if the people who receive notice voluntarily are the ones least in need of such assistance. For example, if high wage unionized workers were more likely to receive notice than comparably skilled lower wage nonunion workers, implementation of federal legislation would allow the latter a "better shot" at competing with the former for the available jobs when they are displaced.⁷ One thus might be in favor

of advance notice legislation because of its potential redistributive affects, even if one believes it will have no net affect on employment or unemployment.

Ultimately, given all the evidence presented and cited above, the position one takes towards advance notice legislation will depend heavily on one's preconceptions as to how labor markets function. If one believes labor markets in the main are competitive and operate primarily in an efficient manner, one might argue that the onus is on those who propose government intervention to document empirically what the benefits of the proposed legislation are and to document that its adverse side effects will be small. Given such a view, one might argue that the evidence presented here does not support government intervention; there are too many results whose implications are ambiguous and too many yet unanswered questions.

If, on the other hand, one believes that labor markets in the main are not competitive and/or that important externalities exist when workers are displaced, one will find the results presented here very supportive of some form of intervention, perhaps in the form of advance notice legislation. Such individuals may claim that we have documented at least some private benefits that advance notice seems to produce, without uncovering any evidence of its costs.

It is important when designing an intervention, however, to be clear about the source of public concern. If the major concern is the externality imposed on a local community due to a plant closing or large scale layoff, then public policy should specifically address this concern. Such a concern may argue for advance notice legislation. However, in this

case, exemptions based on absolute size, including current proposals, do not address this problem as well as exemptions based on size relative to the local labor market. In contrast, if the source of concern is the private costs workers suffer from displacement, then severance pay provisions may be a viable alternative and/or addition to advance notice legislation.

We conclude from the existing evidence that the social costs of worker displacement would be substantially reduced by a federal policy relating to advance notice. There are several policy options. The federal government could reduce the costs to firms of providing such notice by funding a share of the unemployment benefits received by notified workers and/or by reducing the firms' income tax rates.

Another alternative is experimental adoption of federal legislation that provides for advance notice of plant closings or permanent layoffs. Well-designed research during the experimental period could be used to more adequately address issues relating to the macro labor market effects of the legislation, including whether advance notice of impending displacement can serve to help prevent displacement from occurring, as proponents of the legislation often assert. Since so much of prior research has focused on the potential benefits of advance notice legislation, studies during the experimental period might also profitably seriously research issues that opponents have been concerned about, relating to the costs of the legislation.

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Footnotes

1. In what follows often we use "plant closing" as a shorthand for "plant closing and/or large scale layoff". During the 1979-1983 period, approximately 49 percent of permanently displaced workers were displaced due to plant closings (see Flaim and Sehgal (1985) for example).

2. If workers are displaced, the maintenance of health insurance provide needed service for individuals during a period when stress leads to increased incidence of physical and mental ailments. Payments by firms to the communities in which shut plants were located would help alleviate the extra demands placed on these communities for social services that the shutdowns cause; demands that would arise at the same time that local property and sales tax revenue were being reduced.

3. This line of reasoning suggests that the case for mandated advance notice is stronger when the displaced workers represent a large share of the local labor force. The displacement of 100 workers in a relatively small community is likely to represent much more of an externality than a similar size displacement in a large city. Somewhat surprisingly, neither existing nor proposed legislation takes this into account.

4. The SDW data do not permit us to differentiate multiple spells of nonemployment, nor to distinguish between unemployment and nonparticipation. Our conclusions therefore apply to total nonemployment time from the date of displacement to the survey date.

5. Swaim and Podgursky (1988) reach a similar conclusion in recent research that uses data from both the SDW and a similar supplement that was part of the January 1986 Current Population Survey. Their paper cites

an earlier version of our paper.

6. We are grateful to Sherwin Rosen for stressing this point to us.

7. See Ehrenberg and Jakubson (forthcoming) for evidence that displaced unionized workers are more likely to receive advance notice than displaced nonunion workers.