ance pay affect the displaced workers' search in a minimal way."

Similar arguments were made concerning the role of the variable "other weekly income." Again the regression model showed that "[w]hen combined with other variables, other weekly income loses all its force." Still, Lipsky argued, it is clear that other weekly income and duration of unemployment are positively related. This clearly demonstrates the influence of a working spouse on the labor market experience of the terminated workers.*

From the author's discussion of the impact of severance pay and other weekly income, one gets the impression that he did not really comprehend the results of his regression equation. When the age variable is separated from the zero-order correlations between the duration of unemployment and the independent variables of severance pay and other weekly income, the earlier associations break down. This suggests that age was acting as an intervening variable between the other independent variables and the dependent measure. It is unfortunate that Lipsky did not report any partial correlation coefficients for these variables to test for this alternative explanation of his data.

The substantive issues outlined above lead one to believe that Lipsky's conclusions cannot be justified solely on the basis of his analysis. Hopefully, some of the questions raised will stimulate more careful consideration of the complexities involved in evaluating the effectiveness of interplant-transfer schemes. Until these issues can be adequately incorporated into such studies, the real contributions of programs designed to assist workers involved in a plant closing will not be understood clearly.

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**Reply**

The design of policies intended to aid workers who are threatened with displacement involves issues of a complex and difficult nature. The need for careful analysis of the issues is emphasized by Thomas Kochan's comment on my recent article. In that article I tried to point out the limitations of my analysis, the difficulties of generalizing on the basis of a case study, and the tentative nature of my conclusions. Space did not allow a full elaboration of these problems; now Kochan has performed a useful service by heightening our awareness of them. However, I cannot believe he has done any real damage to my central argument and conclusions.

It is noteworthy that Kochan begins his comment with a straightforward factual error. He says, "the sample of terminated workers used in the analysis was drawn from among 230 workers who were still employed at one of the four plants..." (italics added). Kochan has misinterpreted my explanation of the selection of the sample. At the time the sample was selected, all the workers...
chosen for interviewing had been terminated.²

Kochan is concerned because the sample was confined to only one of the four labor markets in which workers were displaced. It might have been a worthwhile exercise to interview workers displaced at the other three plant sites, but as the sole field investigator, I was limited in the amount of time and money at my disposal. I therefore concentrated on the workers who were terminated at the Walter Baker Company in Dorchester, Massachusetts, which was by far the largest of the four affected plants. Of the 1,800 workers affected, 825 had been employed at this plant. Although I was unable to reach workers terminated at the other three plants, I was able to interview almost all of the workers who were transferred to General Foods' new plant at Dover, Delaware from the Jell-O plant at LeRoy, New York. Comparing the characteristics, experiences, and attitudes of the transferred LeRoy workers with the transferred Walter Baker workers, I discovered no systematic differences. Of course, this does not imply necessarily that the experiences of the displaced LeRoy workers were identical to the experiences of the terminated Walter Baker workers. Nevertheless, the state of the economy in 1964 and 1965, the common characteristics and work experiences of the workers involved, as well as the identical company policies which affected them, lead me to conclude that generalizations for all 1,800 affected workers based on a study of more than 800 in one labor market are not completely invalid.

The real question is whether one can make generalizations about the experiences of other workers caught in circumstances similar to those in this case study. Hopefully, I was cautious about any generalizations offered on the basis of this one small study. However, it can be pointed out that using case studies in an effort to try to generalize about larger groups of workers is a time-honored tradition in labor market economics. Through repetition and replication of related experiments, labor economists have been able to overcome the idiosyncratic complexion of individual case studies and to arrive at some truths about how workers behave in the labor market. It is a little late in the day for Kochan to question a method which apparently has served the ends of labor market research so well.

Kochan also shows concern for what he calls "systematic differences in the timing and circumstances of the exposure to the labor market" of the terminated workers. One might worry about this problem if a relatively large number of Walter Baker workers had been entering a relatively small, isolated labor market. Obviously when a large and constant stream of workers is entering such a market, the timing and "exposure" of a single worker's entry can affect significantly his ability to gain employment. But this was not the case with the Walter Baker workers; they were entering a large, metropolitan labor market containing more than a million jobs of every conceivable nature. Further, every meaningful index—unemployment rate, employment level, etc.—showed no significant change over the period the Walter Baker workers were reentering the Boston area labor market. The timing of entry of this relative handful of workers into a vast labor market could alter only negligibly the experience of any one of them.

In analyzing the impact of displace-
ment on workers electing termination, I concentrated on duration of unemployment as the dependent variable. It is beyond me how Kochan concludes from this that I assumed "the need for economic security was the major criterion influencing the workers' decisions." Nowhere in my article is there inference or suggestion that I made such an assumption. As a matter of fact, I was concerned only indirectly with uncovering the factors which may have motivated worker decisions and their general behavior. The research was undertaken to discover patterns of an experiential, rather than volitional nature. Indeed, as far as I could determine, workers seemed to decide to terminate or relocate with the company on the basis of a complex and varied set of factors, some revolving around the notion of economic security, others centering on factors such as "tastes" and family and community ties. Kochan clearly misses an unstated implication of my findings: if the workers had based their decisions wholly on the objective of maximizing their economic security (in the sense of minimizing their duration of unemployment) then most made the "wrong" decision about staying. If workers truly had sought to insure their economic security, then the rational decision would have been to transfer with the company—the only route that guaranteed continued employment. One can infer from their behavior that workers had other objectives in mind in addition to economic security.

It is true, however, that my central conclusion related solely to the criterion of minimization of unemployment for the workers involved. When I concluded that "corporate relocation expenditures tended to benefit those workers who would have been affected least adversely by displacement," I was speaking only in terms of the expected duration of their unemployment. Had the relocated workers elected to terminate rather than transfer, the duration of their unemployment would have been significantly lower than that actually endured (on the average) by the workers who did elect termination.

While individual workers probably weighed other factors equally or more heavily than expected duration of unemployment in making their decisions, I do not think Kochan is correct in arguing that this invalidates the use of the criterion. Whatever motivated their decisions, it is an indisputable fact that for a great many of them the consequences of staying included a protracted period of unemployment. In deciding to terminate, a worker may have discounted the impact of the decision on his future economic welfare. However, after eighteen weeks of unemployment (the average endured by the persons in the sample), he was likely to place a different weight on economic security.

In this connection I have no quarrel with the March and Simon model. It is a useful way of thinking about why individuals may stay or leave organizations. The major point, however, is that "the real importance of job security in the eyes of the workers" at the time of their decisions to move or stay may bear little relation to the importance they place on job security after a period of time has elapsed and they come to recognize the consequences of their decision.

The usefulness of duration of unemployment as a measure of the adverse effects of displacement depends partly on the perspective one assumes. Certainly, from society's point of view, duration of unemployment is an extremely
significant measure of adverse effects. Workers may have made their decision on the basis of any number of factors—community loyalties, family ties, perceptions of limited upward mobility within the organization, as well as calculations of expected unemployment. The most immediate cost to society, however, is the unemployment which results from the plant shutdown. Admittedly, severing family ties may create social problems, but their costs are not nearly as immediate nor easy to calculate as the costs generated by men without work. These costs include not only unemployment compensation and welfare benefits but also, as I pointed out in my article, "the waste of productive resources, which result[s] from real unemployment among those terminated, from the movement out of the labor market by discouraged job seekers, and from movement into inferior positions which [do] not tap the full productive potential of a few workers. . . ."3

Thus, when Kochan says "the real importance of job security in the eyes of the workers cannot be determined," he is raising an issue I never intended to discuss. It is not necessary to raise the issue if one principally is concerned not with why workers leave organizations, but what happens to them after they do. Kochan also objects to length of unemployment as a criterion because "it fails to measure the quality of the jobs accepted by the terminated workers." I clearly stated, however, "that the longer a man had been unemployed, the more likely it was that he would be forced to take a lower wage and/or lower-skilled job."4 No data were supplied to substantiate the relation because it did not seem worth elaboration given the length of

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Table 7. Relationship Between Length of Unemployment and Wage Change for Walter Baker Terminated Workers.

<table>
<thead>
<tr>
<th>Weeks of Unemployment</th>
<th>Number of Workers Obtaining Jobs</th>
<th>Mean Wage on Walter Baker Job (1)</th>
<th>Mean Wage on First Job After Leaving Walter Baker (2)</th>
<th>Ratio of (2) to (1) x 100</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>11</td>
<td>$102</td>
<td>$119</td>
<td>117</td>
</tr>
<tr>
<td>1-5</td>
<td>12</td>
<td>106</td>
<td>105</td>
<td>99</td>
</tr>
<tr>
<td>6-10</td>
<td>14</td>
<td>101</td>
<td>96</td>
<td>95</td>
</tr>
<tr>
<td>11-15</td>
<td>12</td>
<td>104</td>
<td>102</td>
<td>98</td>
</tr>
<tr>
<td>16-20</td>
<td>10</td>
<td>101</td>
<td>92</td>
<td>91</td>
</tr>
<tr>
<td>21-25</td>
<td>14</td>
<td>109</td>
<td>86</td>
<td>79</td>
</tr>
<tr>
<td>26 or more</td>
<td>9</td>
<td>101</td>
<td>75</td>
<td>74</td>
</tr>
<tr>
<td>Sample</td>
<td>82</td>
<td>104</td>
<td>97</td>
<td>93</td>
</tr>
</tbody>
</table>

generalize about the relationship between duration of unemployment and quality of jobs accepted, for this group it seems valid to say that duration of unemployment is a good proxy for deterioration in wages accepted by workers on their new jobs.

Kochan appears to fault my study because I did not simply ask the workers what factors entered into their decisions. He could not know that I conducted in-depth interviews with all workers in the sample and did indeed ask them why they had made their decisions. All workers interviewed had an opportunity to express freely their attitudes, opinions, and reactions to the shutdown and relocation of the Walter Baker plant’s operations.

Displaced Walter Baker workers gave a variety of reasons for not relocating to Dover. Principally, they included dissatisfaction with the Dover job, particularly because of anticipated pay reductions but also because of a somewhat illogical anxiety about security of employment in Dover; dislike of the Dover area as a place to live; family and community ties in the Boston area; age, for those nearing retirement; and finally, the belief (often mistaken) that it would be easy to obtain a new job in the Boston area.

Kochan claims that one only need know that salaried workers accounted for a high proportion of the transferred workers and a low proportion of the terminated workers to be able to predict that “terminators were likely to experience longer periods of unemployment than the transferees.” He bases this assertion on the fact that blue-collar workers have consistently higher rates of unemployment than white-collar workers. However, Kochan has constructed an invalid syllogism.

The first premise in the syllogism Kochan himself acknowledges to be incorrect: that a salaried/hourly occupational dichotomy, appropriate to my data, is the same as a blue-collar/white-collar dichotomy. The second incorrect premise is that national rates of unemployment for white- and blue-collar workers can be used to predict the duration of unemployment for a sample of salaried and hourly terminated workers. There is no necessary relation between the rate of unemployment and the dura-
tion of unemployment for particular occupational groups.

The difficulty of predicting the duration of unemployment on the basis of the rate of unemployment for a given occupational group can be seen by examining the experience of managers, officials, and proprietors. In 1969 the unemployment rate for this occupational group was a mere 0.9 percent. Yet over 19 percent of those unemployed in the group went fifteen weeks or more without work. By comparison, among all those unemployed, 13 percent were unemployed fifteen weeks or more. The probability that a manager will suffer a long-term period of joblessness, given that he is unemployed, is higher than for all other occupations, even though the jobless rate among managers is very low.

The regression analysis used in my article did not support the notion that occupational status acted as a moderator variable. I did not enter occupational status directly in the analysis (it would have required a dummy variable, possibly of more than two levels) but instead relied on the variable “weekly wage before termination.” This, in fact, served as an excellent proxy for occupation and/or skill level. The results showed no significant relationship between unemployment duration and weekly wage. Further, the variable served to reduce the unexplained variance in the dependent variable by only .0021. One can argue that threshold effects might be important here, but bivariate analyses of unemployment duration and either weekly wage or occupational status did not show this to be the case.

Therefore I think Kochan is clearly wrong about the role of the occupational variable, and the need to disaggregate the data by occupational status.

Note must be taken of Kochan’s effort to question my conclusion that “individuals who transferred possessed nearly opposite characteristics in comparison to those who suffered difficult reemployment experiences.” First, of course, I was speaking of tendencies—the two groups were not mutually exclusive. Kochan claims that what I “really found was that within the group of terminated workers, those who experienced longer durations of unemployment varied from the mean characteristics of the transferred group as a whole.” If this was all I did, Kochan might be correct. However, Kochan ignores a significant intermediate step used to support the conclusion. I first showed that terminated workers as a whole possessed several significantly different characteristics from transferred workers. Only then did I look within the terminated group to examine the characteristics of workers with difficult reemployment experiences. Thus, terminated workers differed significantly from relocated workers on such factors as number of dependents, sex, education, and family status. Terminated workers with difficult reemployment experiences differed even more significantly from relocated workers on those same factors.

Finally, Kochan criticizes my interpretation of the role of severance pay and other weekly income in the reemployment experience of the terminated workers.

I really do not understand the basis of Kochan’s disagreement with me on
the issue of severance pay. It is true that a simple cross-tabular analysis of the relation between severance pay and weeks of unemployment seemed to show a somewhat positive relation between the two variables. But Kochan is mistaken in stating that this was the evidence I used to conclude that "large amounts of severance pay affect the displaced workers' search in a minimal way." Rather, it was the evidence in the regression analysis showing severance pay to be an insignificant determinant of length of unemployment which led me to that conclusion. My dictionary tells me that "minimal" means "smallest possible," and that was exactly what I meant to say. I could have said that severance pay did not affect reemployment success at all—a statement Kochan would no doubt prefer. But it seemed to me that, given the limitations of my study, the qualified conclusion was the preferred alternative.

Perhaps it was a little rash of me to say that the relationship between other weekly income and duration of unemployment "clearly demonstrates the influence of a working spouse on the labor market experience of the terminated workers." Nevertheless, the regression analysis indicated other weekly income to be significantly and positively related to length of unemployment, even when the effects of age and number of dependents were accounted for.

Kochan suggests, "When the age variable is separated from the zero-order correlations between the duration of unemployment and the independent variables of severance pay and other weekly income, the earlier associations break down." He suspects that partial correlation coefficients would cast some light on the question.

In Table 2 the simple (product-moment) correlation coefficients between the dependent variable (weeks of unemployment) and the independent variables are shown. In addition, the partial correlation coefficients between the dependent and independent variables with age (X2) held constant are presented. The square of the partial correlation coefficient measures the proportion of the variation of the dependent variable unaccounted for by age, X2, which has been explained by the addition of another independent variable.

| Table 2: Simple and Partial Correlation Coefficients Between Weeks of Unemployment (X1) and the Independent Variables (i = 2, 3, 4, ..., 9). |
|---|---|---|
| \( r_{i1} \) | \( r_{i1-2} \) | \( r_{i1-2}^2 \) |
| \( X_2 \) | .348 | - | - |
| \( X_3 \) | -.310 | -.267 | .071 |
| \( X_4 \) | .317 | .241 | .058 |
| \( X_5 \) | .302 | .263 | .080 |
| \( X_6 \) | -.189 | -.182 | .033 |
| \( X_7 \) | -.115 | -.003 | 0.00001 |
| \( X_8 \) | .081 | -.155 | .024 |
| \( X_9 \) | .059 | -.216 | .047 |

Table 2 indicates that Kochan is correct about the effect of age on the relationship between severance pay, X8, and duration of unemployment. But a contrary claim never was made in the original article. However, Kochan has guessed incorrectly about the effect of

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9The regression coefficient was significant at the 10 percent level. Ibid., p. 204.
age on the relation between duration of unemployment and other weekly income, $X_4$. Even when the effect of age is accounted for, there is still a significant correlation between the dependent variable and other weekly income ($r_{14:2} = .241$). The square of the partial correlation coefficient indicates that given the proportion of the variance of $X_1$ explained by age, $X_2$ (about 12 percent), the addition of other weekly income, $X_4$, explains nearly 6 percent more ($r^2_{14:2} = .058$). This hardly represents to me the "breakdown" of the association. Similarly, age modifies (but hardly destroys) the relationship between number of dependents, $X_3$, and sex, $X_5$, and the dependent variable. It seems to me that age acts truly as an intervening variable only in the case of severance pay, $X_8$, and seniority, $X_9$.

In conclusion, I only can reiterate my belief in the essential validity of my analysis and conclusions. I would join with Kochan in hoping that other researchers will enter the arena to help us evaluate the effectiveness of schemes designed to help the worker affected by plant shutdowns.

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