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How to cite this article:
R. A. Carr-Hill and N. H. Stern (1983). Unemployment and Crime: a comment.
Journal of Social Policy, 12, pp 387-392 doi:10.1017/S0047279400012915

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Comment

Unemployment and Crime: a comment

R. A. CARR-HILL* and N. H. STERN**

In a recent article in this journal Catherine Hakim (1982) deals, among other social conditions, with crime and delinquency. She acknowledges that 'As unemployment and crime are both closely associated with age and social class (or poverty), it is difficult to identify and measure the specific impact of unemployment on crime and delinquency' (p. 450). But, after a brief review of recent studies she appears (pp. 452–3) to come to the conclusion that unemployment does cause crime. We do not believe that the evidence provided could justify the claim. It is possible that unemployment does cause crime, on the other hand in some respects it may reduce it, and it is quite wrong to pretend we know the answer.

She concentrates her review of the British evidence on our earlier study, *Crime, the Police and Criminal Statistics*, because it 'is often quoted as evidence that the connection between unemployment and crime is *not* proven for Britain' (p. 452). She claims that 'a careful reading of this study shows that the authors of this study never carried out the test in question (that is, testing for the inclusion of the unemployment variable in the first equation only versus in none or all of the three equations)', She goes on to say that 'the authors reject the hypothesis about unemployment contributing to crime on theoretical (or subjective) grounds, but they imply that they tested it fully' and further that 'The authors clearly approach their research with the type of bias observed by Hindelang et al. (1977, p. 1009) and Braithwaite (1981, pp. 46–53) with reference to the quality of self-report studies and of official recorded crime data'. We suppose this means that we placed undue reliance on poor quality self-report studies which show little or no relationship between social class and delinquency. It seems that the 'careful reading' did not extend to chapters 5 and 6 where the relevant procedures and tests are set out at some length. Further, we object to the charge of bias. The purpose of this note is to explain our procedures and conclusions relating to unemployment, which have obviously been

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misunderstood, and report briefly on our examination of more recent evidence which again suggests that the causal link between unemployment and crime is, at best, tenuous.

The method of approach to testing hypotheses used in our book is standard in the social sciences. However, the examination of the apparently simple proposition that unemployment causes crime is not straightforward and it is important to summarize the structure of our argument. Given that the relationships between, crime, the society, the police and the statistics are complex, one should not examine the determinants of one variable in isolation. This consideration led us eventually to a model where three variables are determined together: the recorded number of offences per capita; the clear-up or conviction rate; and the number of policemen per capita. The three equations of the model represent in order the processes generating these three variables. The model was estimated for a cross-section of police districts in England and Wales for each of the years 1961, 1966 and 1971.

Our first task was to examine the theoretical and empirical evidence to establish candidates for inclusion as possible explanatory variables for the three equations (see chapters 2 and 3). The model was assembled in chapter 4 and the techniques for estimating and testing it were described in chapter 5. The results of the estimation and tests were presented in chapter 6 and interpreted in chapter 7. There were chapters on the implications of our approach and results for criminology and sociology and for economic policy towards crime.

Hakim questions our testing procedures yet it is remarkable that her quotes come only from chapters 2 and 7 (with a few correlation coefficients from the appendix to chapter 6) and she says nothing about the chapters (5 and 6) explicitly concerned with testing, other than the (confused) assertion that we should have done something different.

On p. 56 in the appendix to chapter 2 of our book, we indeed said that we would 'test for the inclusion of the unemployment rate on the explanation of the recorded offence rate'. And we examined in that discussion and in chapter 2, the arguments for introducing unemployment into the equation determining the recorded offence rate. The economic arguments about the relationship between unemployment and crime are ambiguous. For example, where there is high unemployment those who are in work may be cautious about incurring any further risk to their job. Similarly the unemployed may be anxious to preserve their chances of obtaining a job. And there are economic arguments the other way; if crime takes time then those who have more time may be more prone to commit. If unemployment is taken as a sociological measure of anomie then it overlaps not only

with poverty but also with the social class composition of the area. Further, it must not be forgotten that the first equation of the estimated model represents the determination of the *recorded* offence rate and those effects which operate through the 'true' number of offences are conflated with recording effects. It is possible that offences committed by the unemployed are more visible and hence more likely to be recorded. The arguments from theory about the role of unemployment are many and varied and the upshot hard to judge. Notwithstanding our doubts as to its theoretical status, when we discussed the construction of the model (chapter 4, pp. 108–15) we *did* include unemployment in the first equation. But, in that same chapter, we also concluded that there were strong – perhaps stronger because clearer – arguments for including unemployment as a determinant of the number of policemen per capita (pp. 110–12).

Thus, when we go on to *test* the role of unemployment in the first equation it is in the context of a complete model where it has already been included in other relationships. In chapter 5, we explicitly discuss (e.g. p. 153) the problem of testing different hypothesis about (the way in) which variables should be included in the model. We explain that the tests in question require hypotheses to be nested in the sense that the null hypothesis is a special case of the alternative, more general hypothesis (pp. 150–5). With unemployment this means that we have tested the complete exclusion of unemployment from the model against its inclusion in the most plausible equation, that is the determination of the number of policemen,[1] before testing for its inclusion in other equations (see below).

With three equations there are eight possible ways of treating unemployment in the model (since it may be included or excluded in any equation). Thus for any given method of including it one may test against all the more general methods. For example excluding unemployment completely is a special case of all the seven other cases in the sense that an exclusion corresponds to the particular value of a coefficient of zero. Including unemployment in one equation only is a special case of 3 other cases and including it in two equations is a special case of the model which includes it in all equations. Hence there are $(7+3+3+3+2+2+2)$ 22 possible logically distinct nested tests that could be carried out. It would have been overwhelming for our readers to inflict all 22 on them. However, we gave some examples of some of the important ones and provided the information for a variety of others with explicit instructions on how they should be carried out.

For the reasons outlined above we chose to concentrate on the hypothesis that unemployment should be included in the third equation (for the number of police per capita) only. This is, generally for our data sets,

accepted against the null hypothesis that unemployment should be excluded altogether and is accepted as the null hypothesis against the alternative that it be included in all three.

Should unemployment be included in the first equation? The hypothesis that it should be excluded may be examined by testing the null hypothesis that it be included in the second and third equations only against its inclusion in all three. Generally the null hypothesis is accepted. We can go on to test the null hypothesis of its inclusion in the third only against its inclusion in the second and third. Generally the null hypothesis is accepted giving us our conclusion on p. 168. 'The general conclusion is against that "3rd only" is acceptable'. This is the procedure embodied in Table 6, p. 167 of our book. The procedures were carefully set out and it is extraordinary that Hakin has ignored them.

Her suggestion that one should examine the role of unemployment in the first equation by examining the hypothesis (either as the null or the alternative) that it be included in the first equation *only* is clearly not a sensible way of addressing the question, given that there are powerful theoretical and empirical grounds, which we tested, for its appearances elsewhere in the model.

The charge of bias is apparently based on chapter 8, p. 264 where the application of legal rules is discussed in the context of a social structure and the way in which police effort and time is allocated between different functions. We have re-read this page but we fail to see how it can support Hakim's statement that we were biased. Much of it is concerned with what we cannot say, the positive statements are tentative and it contains nothing on self-report or victimization studies. However, on the substantive point at issue, we would dispute that the relationship between class and crime has been re-established by Hindelang *et al.* (1979) and Braithwaite (1981). We do not have the space to go over what is a very extended discussion but refer the reader, for example, to the recent controversies surrounding *inter alia* the Hindelang *et al.* article in the June 1982 issue of *The American Sociological Review*. On the whole we find apposite the conclusion by Tittle *et al.* in the contribution to the discussion:

Finally, we do not know what the 'true' relationship between socio economic status and criminality is... [and] we do not believe he [Kleck], Braithwaite, or anybody else knows either... Our review of the comparable empirical literature suggests that our disciplinary faith in a negative relationship may be false and that we therefore ought to make sure our theoretical eggs are not all in one basket (p. 437).

More important to us, and Hakim's is just one example of a common assertion, is the substantive claim that high levels of unemployment pro-

duce crime. Our work was based on data from 1961, 1966 and 1971. Clearly, given the growth of unemployment over the last decade, one would like to bring the analysis up to date. However, the progressive amalgamation, centralization and unification of police forces in England and Wales, means that it is no longer possible to conduct another parallel analysis since the cross-section of police districts is now too small in number.

It is for this reason that it is difficult to counteract facile analyses based upon the observation that both unemployment and the official rate of recorded crime have risen sharply over the last decade. We have recently developed this argument (Carr-Hill and Stern, 1983) to show that it is effectively impossible to draw serious inferences from apparent trends in these data. But if one must insist on simple correlations of increases then the clearest association is that between changes in the level of unemployment and changes in the number of policemen. We reiterate some of the findings of that article in relation to the aggregate statistics for the years 1970 to 1981.

(i)   There is no significant relationship between increases in recorded crime and and increases in unemployment

(ii) A major part, possibly most, of the increase in recorded crime may be due to the increase in the proportion of offences recorded rather than in the number of offences which occur (p. 8).

We concluded:

This puts increases in crime and their possible relation with increases in unemployment in a very different perspective ... It is quite wrong to pretend that there is a well-attested relationship. Similarly, it is absurd to lay great emphasis on increases in total serious offences when most of that increase is due to a change in the proportion that is recorded. The issues involved are too serious to be treated in the casual way invoked in recent utterances. In particular, given that unemployment is likely to remain high for several years it is grossly unfair on those who may be or become unemployed to associate them with an increase in criminality when the link is not established and the increase itself may be spurious. The case against the high levels of unemployment we are seeing is surely overwhelming for a whole host of reasons. In arguing against these high levels of unemployment, is it therefore both unnecessary and unhelpful to taint the unemployed with criminality (pp. 8–9).

NOTE

1   From a statistically naive view, this is in any case the most plausible relationship to test as the raw correlation coefficient between the unemployment rate and the number of policemen per capita is higher than that between the unemployment rate and the recorded offence rate in six cases out of seven (see Carr-Hill and Stern, 1979, table 6.A.2, and pp. 217–20).

REFERENCES

J. Braithwaite (1981), 'The myth of social class and criminality reconsidered', *American Sociological Review*, 46:1, 36–57.

R. A. Carr-Hill and N. H. Stern (1979), *Crime, The Police and Criminal Statistics*, Academic Press, London.

R. A. Carr-Hill and N. H. Stern (1983), 'Crime, unemployment and the police', Research Note no. 2, SSRC Programme on Taxation, Incentives and the Distribution of Income, International Centre for Economics and Related Disciplines, London School of Economics and Political Science.

C. Hakim (1982), 'The social consequences of high unemployment', *Journal of Social Policy*, 11:4, 433–67.

M. J. Hindelang, T. Hirschi and J. G. Weis (1979), 'Correlates of delinquency: the illusion of discrepancy between self-report and official measures', *American Sociological Review*, 44:0, 995–1014.

C. R. Tittle, W. J. Villemez and D. A. Smith (1982), 'One step forward, two steps back: more on the class/criminality controversy', *American Sociological Review*, 47:3, 435–8.