The Paradox of Unemployment and Job Vacancies: Comment

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In a recent paper in this journal Skolnik and Siddiqui attempt to explain the paradox that in 1974 the Ontario labour market was characterized by high rates of both unemployment (u) and job vacancies (v). It is a paradox in the sense that normally there is an inverse relation between unemployment and vacancy rates — recessions being characterized by high unemployment rates and low vacancy rates, and boom periods the converse. 2

The general approach taken by Skolnik and Siddiqui in analyzing the paradox is commentable — several hypotheses are considered as possible explanations and the alternative hypotheses are systematically subjected to empirical testing. In this note, however, I wish to take issue with the conclusions drawn by Skolnik and Siddiqui because of the specific way in which the hypotheses were tested.

The four hypotheses which Skolnik and Siddiqui consider are:

1. High vacancy rates exist only in a few labour markets and on this basis it has incorrectly been concluded that the labour market as a whole is characterized by a high vacancy rate.

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2 See, for example, HANSEN (1970) for a discussion of the economic theory of the relation between unemployment and vacancy rates.
2. High unemployment rates have resulted from the 1971 revision of the Unemployment Insurance Act which, because of the increased level of benefits, caused the unemployed to become more choosy about the kind of jobs they would be willing to accept.

3. Frictional unemployment has increased, i.e. there is an increased rate of voluntary turnover in the labour market. They note that this could also be caused by a change in the unemployment insurance legislation, so that this hypothesis is closely related to the previous one.

4. The paradox has resulted from an increased level of structural unemployment in the economy, i.e. an increase in the amount of mismatching of jobs and workers by geographical location, skills, experience requirements, etc.

The first hypothesis is rejected on the basis of data from Statistics Canada’s Job Vacancy Survey which shows that vacancies are unusually high for the labour market as a whole.

As a test of the third hypothesis Skolnik and Siddiqui argue that if the cause were purely an increase in frictional unemployment we would expect to observe an increase in vacancies, but not an increase in the duration for which jobs stayed vacant. This is contradicted by data which shows that, in the first quarter of 1974, there was a substantial rise in longterm full-time vacancies as a fraction of all full-time vacancies.

The second hypothesis, which attributes the increase to changes in the Unemployment Insurance Act, is rejected by Skolnik and Siddiqui on the basis of two pieces of evidence. The first piece of evidence is that (as of the second quarter of 1974) persons under 21 years of age comprise 32% of total unemployment but they account for only 13% of Unemployment Insurance claimants.

It is my contention that the idea that youth will comprise a very high fraction of Unemployment Insurance claimants is, for several reasons, not a valid implication of the hypothesis. It is not surprising that many of the unemployed youth do not draw benefits — the reason simply is (as Skolnik and Siddiqui acknowledge) that a high fraction of youth do not have sufficient work experience to make them eligible for benefits. This is not inconsistent with the hypothesis that changes in the U.I. Act induced some secondary workers to enter the labour force and search for a job who would not otherwise have done so. It may be that their behaviour is influenced by the possibility of drawing benefits in the future when they are eligible.

A somewhat stronger test of the U.I. hypothesis could be devised if one assumed that youth were more affected by the U.I. change than other groups. That would imply an increase in youth claimants as a fraction of total claimants after the U.I. change. But even this would not be a strong test because if no increase in the fraction was observed it could be because other demographic groups also showed a significant response to U.I. legislation with the result that there would be no change implied in youth as a fraction of total claimants.
The second piece of evidence which Skolnik and Siddiqui present against the Unemployment Insurance hypothesis is that there was an increase in «the rate of rejection by employers of persons referred by Canada Manpower Centres». But the data which they present refer to a reduced fraction of placements of referred applicants. This piece of evidence is not inconsistent with the U.I. hypothesis — it could simply reflect a greater tendency for employees to refuse job offers as a result of the higher unemployment benefits. Although Skolnik and Siddiqui refer to this possibility they do not, in my view, make a convincing argument that the reduced placement rate is a result of the former cause rather than the latter.

One additional point which is relevant to an assessment of the U.I. hypothesis is Skolnik and Siddiqui’s contention that 1974 is the year in which the «paradox» was first observed. Figure 1 plots annual unemployment and vacancy rates for Ontario for the period 1953-1975. The data prior to 1970 are from a data series recently constructed by Denton et. al. (1975) in which they linked three different data series: National Employment Service data, the Department of Finance’s Help-Wanted Index, and the Job Vacancy Survey data. An examination of Figure 1 indicates that the unemployment-vacancy relationship has shifted away from the origin over the past two decades, and that a pronounced shift in the relationship occurred in 1971-72.

Skolnik and Siddiqui conclude that 1974 is the year in which the upward shift occurred on the grounds that it is the only year in the period of their analysis (1971-1974) during which both unemployment and vacancies increased from the previous year. Their analysis, however, confuses a shift of the u-v relation with a movement along the relation. The observation for 1972 indicates a substantial outward shift of the relation (i.e. unemployment is higher for any given vacancy rate) but it also indicates that a substantial increase in aggregate demand occurred, moving the economy along the u-v curve and resulting in a slight net reduction in the unemployment rate. Thus it is not valid to conclude, as did Skolnik and Siddiqui, that because u and v moved in opposite directions a shift did not occur. For 1974 the data do indicate a further upward shift, but of substantially smaller magnitude than the shift during 1971-72. This is an important point because the fact that a substantial shift in the u-v relation occurred immediately following the revision of the Unemployment Insurance Act in July 1971 and the extension of coverage of the Act in January 1972 casts some doubt on Skolnik and Siddiqui’s conclusion that changes in the U.I. Act were not one of the main causes of the paradox.

The fourth hypothesis, and the one which Skolnik and Siddiqui favour, is an increase in structural unemployment. The explanation which they offer for the increase in structural unemployment is a «broken manpower-pipeline» theory. Their argument is that the period 1967-72 was a «slow-growth» period during which unemployment increased and new labour force entrants were not able to acquire or upgrade skills through on-the-job training. Consequently, when the sudden expansion began in 1973 the workers did not have the ap-
appropriate skills to fill the available job vacancies. «Thus the ‘manpower pipeline’ was broken; and when broken, it cannot be repaired overnight. »

I am highly sceptical of the broken pipeline theory for two reasons. First, the economy has experienced equally pronounced business cycles at other times in the past twenty years and yet they did not produce the dramatic shift in the relation between unemployment and vacancies. Why was it only in the 1972 expansion that the pipeline was broken?

Second, and more importantly, the broken pipeline theory implies that the paradox is only a temporary phenomenon — unemployment and vacancies will return to their old relationship when labour force members have time to acquire the needed job experience. But the data in Figure 1 give no indication that the shift is only a temporary one. The shift appears to be a permanent one, which casts very serious doubt on the validity of the broken-pipeline theory.

In conclusion let me emphasize that I am not making the argument that an increase in structural unemployment did not occur, nor am I making the argument that changes in Unemployment Insurance legislation are a primary cause of the paradox. The implication of the argument made in this note are simply that, on the basis of the evidence presented by Skolnik and Siddiqui, we cannot be confident in rejecting the U.I. hypothesis nor can we be confident in accepting the broken-pipeline hypothesis. The explanation must remain open as a matter for further research.

Figure 1.
Unemployment rate and vacancy rate, Ontario, 1953-75

![Graph showing unemployment rate and vacancy rate, Ontario, 1953-75]
REFERENCES


THE PARADOX OF UNEMPLOYMENT AND JOB VACANCIES: A REPLY

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We couldn’t agree more with Professor Reid that there is a need for additional research on the paradox of simultaneous unemployment and job vacancies. Indeed we emphasized that ‘the data presently available are not adequate’ (p. 35) and accordingly that any conclusions must be quite tentative.

In emphasizing the inadequacies of the existing data base for drawing definitive conclusions, we were reacting somewhat to the widespread tendency to assume that unemployment insurance was the whole cause of the problem. In our view that is an overly simplistic and certainly unproven explanation for a very complex problem. However we did not deny that unemployment insurance was a contributing factor. We merely stressed that other factors were involved also, and that over-emphasis on unemployment insurance was apt to result in neglect of other (primarily structural) factors which need attention. In particular, we did not, as Professor Reid states, present an hypothesis that unemployment insurance was the sole cause of the paradox, and then reject that hypothesis. Professor Reid’s restatement of the second of our four possible explanations of the paradox is not accurate. We called the second explanation ‘ambiguous measurement of unemployment’, not ‘1971 revisions of the Unemployment Insurance Act’.

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