

Local Taxes, Schooling, and Jobs in Illinois

William Sander

The following is an abbreviated version of ORER Paper # 75, "Local Taxes, Schooling, and Jobs in Illinois." A copy of the longer paper will be provided to any reader who makes a written or telephoned request to the Office of Real Estate Research. The longer paper contains specific citations on the many earlier studies of education and employment to which Dr. Sander refers in this shortened version of his work.

tion of effective rates of interest, which will differ from quoted rates. An article in the August 1989 *Illinois Business Review* explains these computations.

Two of the most important policy issues facing Illinois (and many other states) are jobs and the quality of education. For the past several decades, increases in the rate of private non-farm employment in Illinois have been below the U.S. average. During the same period, the quality of education in the state has been a cause for concern. Both employment and education can be affected by another public policy matter, the level of taxes.

Employment

During the 1950s and 1960s, the rate of increase in employment in the U.S. exceeded that of Illinois by 5%. A difference between the state and national rates has continued into the 1980s. Since 1980, the rate of private nonfarm employment growth in the nation has been 12% higher than the rate of growth in Illinois. To some extent, this result is expected, because job increases have favored other parts of the country.

The net change in private nonfarm employment in Illinois was, in fact, negative over the 1980 to 1986 period. In the same period, Illinois lost thousands of farms, and a significant number of farm jobs. Of course, the period over which data are measured can cause the employment picture to appear more optimistic

or less so. The Illinois economy and the state's employment situation performed relatively poorly during the 1970s and the early 1980s, but have improved since 1983. Thus, while during the entire 1980 to 1986 period the rate of job growth was negative, from 1983 to 1986 the rate was positive, almost at the national average.

To some extent, employment changes have been the product of the industry mix. The Illinois economic base is comprised disproportionately of industries, such as metals and machinery, that have

Local taxes have a negative impact on employment growth. School quality has a positive impact on employment. However, expenditures per pupil do not affect either employment growth or school quality.

performed poorly at the national level. Thus, it would not be unreasonable to attribute a substantial portion of the decline in industrial employment in Illinois to external factors. However, all of the industries in the manufacturing sector in Illinois performed more poorly than national averages. Even some manufacturing industries that performed relatively well at the national level performed relatively poorly in Illinois.

Education

Education is even more worrisome than the employment situation. Although schools outside Chicago perform relatively well (with some exceptions), the Chicago public school system has a dismal record. Students in about half the schools in Chicago score in the lowest percentile on the American College Test, or ACT (a standardized exam used by universities in evaluating students for admissions purposes). Dropout rates in the Chicago public schools are exceedingly high. Former U.S. Secretary of Education William Bennett has called the Chicago public school system the "worst in the nation."

The Tax Question

One concern raised by the state's employment problem is that high taxes might adversely affect the business climate and, in turn, the level of employment. Data indicate that property taxes (which account for more than 75% of local tax revenues) per capita in Illinois have historically been above the national average. However, since 1960 the property tax burden in Illinois has declined relative to that of the U.S. In 1960, property taxes per capita in Illinois were 29% above the U.S.

average; in 1980, the state was only 13% above the national average. If cost of living differences are taken into account, 1980 Illinois property tax per capita was only 3% above the U.S. average. Taxes levied at the state

level (sales and income taxes) tend to be below national averages. Thus, while local taxes are high in Illinois, combined state and local taxes are not particularly high, relative to those of other states.

State and local taxes bear on education as well as on employment. As noted above, high taxes may discourage industrial development and result in less employment. However, tax revenues support schools. If increased education spending results in a more qualified labor force in a local area, because workers are better trained and families are attracted to the area, the business climate might improve. Some studies have indicated, in fact, that increased spending on education, which requires higher taxes, has positive effects on state and local employment growth. Yet other studies have shown that taxes impede state and local economic and employment growth. It therefore seems unclear whether our policy makers should strive for higher or lower taxes.

Research Findings

This study examines effects of local taxes and schooling on private nonfarm employment growth in Illinois since 1980.

The study also evaluates factors that determine educational outcomes (ACT scores, school attendance rates, and drop-out rates). There are two particularly important findings. First, property taxes and other local taxes have a negative impact on employment growth. Second, school quality, as measured by ACT scores, has a positive impact on the level of employment. However, expenditures per pupil do not affect either employment growth or school quality.

It is not surprising that taxes are found to have a negative impact on state and local economies; such a finding is consistent with the results of several studies that have found taxes to hinder economic activity. These results do not support the findings of earlier studies that have found taxes to be unrelated to economic growth at the county level, or earlier findings that high property taxes have a positive effect on a state's industrial growth.

The results of this study also indicate that the quantifiable characteristics of schools and teachers, which include school size, teacher salaries, teachers' levels of schooling and years of experience, and pupil-teacher ratios, have no impact on ACT scores. The most important predictors of ACT scores are found to be family background characteristics, including family income and parents' levels of schooling. There is also evidence that children from single-parent families score lower on the ACT test.

School attendance rates also provide evidence that spending does not increase school quality. Experienced teachers are found to enhance attendance, while students from larger cities or larger schools, or from female-headed households, are less likely to attend. Students in large cities or schools are also found more likely to drop out of school, while those whose parents are better educated or earn higher incomes are less likely to be dropouts.

Another interesting result is that educational attainment, measured as the percentage of adults holding college degrees or the median number of years of school completed, has no effect on employment growth. Earlier studies had indicated that higher levels of educational attainment in states and urban counties increase em-

ployment growth. In addition, at least two earlier studies had indicated that higher levels of education spending increase employment growth. The finding in the current study that educational attainment and spending have no effect on employment growth is consistent with an earlier study that focused on the U.S. as a whole and certain areas in Massachusetts.

The determination that spending on education has no effect on employment is not surprising, since most studies have found no relationship between education expenditures and education quality. The ACT score data seem to confirm the hypothesis that the quantifiable characteristics of schools, notably expenditure per pupil and teacher salaries, are not closely linked with educational outcomes.

The lack of a relationship between educational attainment and employment is more of a puzzle, since the prevailing wisdom is that U.S. firms increasingly value workers who possess skills useful in the modern industrial workplace (referred to by economists as human capital). Some of these skills are acquired through schooling. A possible explanation is that industries increasingly value human capital in more urbanized areas, since the growth in human capital intensive industries is concentrated in metropolitan areas. Most observations in this study are for non-metropolitan areas.

The finding that family background is an important determinant of educational outcomes is consistent with previous research results. Children of parents endowed with stronger educational backgrounds tend to have greater success in school. The current study also supports earlier findings that children from single parent households are not as successful in their educational pursuits.

Conclusion

The results of research such as the current study should be reported with caution. The finding that teacher salaries and expenditure per pupil did not affect educational outcomes in Illinois during the p

William Sander is a Professor in the Department of Economics at De Paul University in Chicago.

U of I Faculty, Alumni Participate in Iowa Conference

The College of Business Administration at the University of Northern Iowa sponsored a November 30 - December 1 conference, *Emerging Issues in Real Estate Education, Practice, and Research*. Prominent members of the academic and professional real estate communities were asked to participate. The conference addressed a variety of issues relating to real estate, ranging from investment and development to real estate education.

Two University of Illinois faculty members were invited to make presentations. Professor Roger Cannaday discussed the history and activities of the Office of Real Estate Research in a session entitled, "Issues in Real Estate Education and Professionalization." ORER Professor Peter Colwell was a discussant of papers presented in a session on "Issues in Real Estate Finance."

Two Ph. D. graduates of the University of Illinois real estate program, Austin Jaffe of The Pennsylvania State University and James Webb of Cleveland State University, were presenters at the conference. Paul Uselding, a former chairman of the University of Illinois Department of Economics who now serves as Dean of the University of Northern Iowa College of Business Administration, organized the event and was also a conference participant.

New ORER Papers Available

Two papers have been added to the ORER *Working Paper* series. The first, "Collateralized Mortgage Obligations (CMOs): Mortgage Money Cheaper By the Slice?" by Yoon Dokko of the University of Illinois and Robert H. Edelstein and Kenneth T. Rosen of the University of California at Berkeley, is Number 74 in the series. A short version of the paper was featured as the ORER Paper Series entry in the Summer 1989

(continued on page 13)