

## LSAY Research Report 35

# A ‘Causal’ Estimate of the Effect of Schooling on Full-time Employment among Young Australians

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### EXECUTIVE SUMMARY

This paper exploits a policy change that occurred in South Australia in the mid-1980s to generate a ‘causal’ estimate of the effect of schooling on full-time employment outcomes.

The *Early Years of School* policy changed the way that an identifiable subset of students progressed through junior primary school, causing them to obtain an additional year of schooling for any completed Grade or level compared with their predecessors. The policy affected individuals born in specific months of the year (most of those born in October to February inclusive and some of those born in July to September inclusive). Those born at other times (March to June inclusive) were unaffected by it and provide a natural comparison group for assessing its impact.

The impact of the policy change on the age-grade structure of student cohorts in South Australia is captured in two waves of longitudinal data. The Youth in Transition 1975 cohort captures the environment before the policy change, the Longitudinal Surveys of Australian Youth 1995 cohort the post-policy change environment. Analysis of the observed background characteristics of individuals affected by the policy change and the identified ‘comparison’ group indicated that the major substantive change between them was the increased education obtained by the affected group because of the policy change.

Based on the analysis of the impact of this policy change, it appears that an additional year of junior primary school generates an increase in the probability of being employed full-time of about 11 percentage points in school leavers’ first year out from school. In addition, there was an offsetting effect of about 8 percentage points on that probability because individuals were older when they left school, presumably because wages are institutionally age-based in the Australian youth labour market. These estimates apply only to those students who leave school and do not undertake full-time post-school studies immediately. The results provide evidence that the process of schooling itself has a considerable effect on labour market outcomes. The results also indicate that education reform can have complex outcomes, all of which need to be identified and analysed.

The policy implications of these results are not that all school students should undergo another year of school to improve their likelihood of obtaining full-time employment. The policy change analysed here increased the schooling of a group whose initial experiences may not have provided adequate grounding for their subsequent studies, and rectification of this situation improved their later full-time employment outcomes. The results provide encouragement for other policies designed to redress the disadvantage of students early in their schooling – interventions in junior primary school can have a substantial impact on the employment outcomes of individuals, but all of the effects of education reforms need to be identified carefully to assess their potential impact.

The policy induced ‘natural experiment’ exploited and the methodological approaches adopted in this paper are well suited to analyses of other phenomena thought to be influenced by education. Potential topics are identified in the conclusion. They include:

- the effect of schooling on other labour market outcomes; and
- the effect on educational achievement and attainment outcomes of slowing the progress of students through school.

Where possible, technical details about the data and methodology used here have been placed in Appendices to the report. Following the introduction, Chapter 2 contains a preliminary analysis of the data and the issues addressed here intended to motivate much of the remainder of the paper. Readers interested only in a broad discussion of the issues and the empirical results might read the introduction and Chapter 2, along with Chapters 6 and 7, which contain the empirical results and concluding remarks, respectively. Those readers who want to place the empirical results and the methodology employed in the context of the existing literature might also read Chapter 3, which summarises the literature on the association between schooling and labour market outcomes and how the causal effect of schooling can be isolated. Those interested in the policy change that forms the basis of the ‘natural’ experiment used here should read Chapter 4, where the *Early Years of School* policy change is described. Readers interested in the detail of the data and methodology used in this paper should read the descriptions contained in Chapter 5 and Appendices 2, 3 and 4.