



## State dependence in youth labor market experiences, and the evaluation of policy interventions

Denise Doiron<sup>a,\*</sup>, Tue Gørgens<sup>b</sup>

<sup>a</sup> School of Economics, University of New South Wales, Sydney NSW 2052, Australia

<sup>b</sup> SPEAR Centre RSSS, Australian National University, Canberra ACT 0200, Australia

### ARTICLE INFO

#### Article history:

Available online 19 June 2008

#### JEL classification:

C33  
C41  
J64  
J68

#### Keywords:

Transition data  
Event history analysis  
State dependence  
Unobserved heterogeneity  
Policy evaluation

### ABSTRACT

We investigate the extent and type of state dependence in labor market outcomes for young low-skilled Australians. Our model allows for three labor force states, employment, unemployment and out of the labor force, and for observed and unobserved heterogeneity. We find evidence of occurrence dependence, but no lagged duration dependence. A past employment spell increases the probability of employment in the future, but the length of the spell does not matter. A past spell of unemployment undoes the positive benefits from a spell in employment. Interpretations of these effects and implications for labor market policies are discussed.

© 2008 Elsevier B.V. All rights reserved.

### Executive summary

This paper analyses the magnitude and form of state dependence in labour force outcomes for young low-skilled Australians. The presence of causal relationships between past labour market experiences and future outcomes has serious implications for the design of policies aimed at reducing youth unemployment. Existing program evaluations have concentrated on before-and-after comparisons, and longer term effects have been mostly ignored.

There are still very few studies that characterize the form of state dependence across labor market states and these mostly deal with the “scarring” effects of unemployment. We look at general forms of state dependence across three labour force states: employment, unemployment and out of the labor force. Also contrary to most papers in the area, this study uses an event history framework. The resulting model is more general in the type of state dependence allowed and more precise in the measurement of the timing and duration of labour force spells.

Results suggest that the form of state dependence is complex. For youths without post-secondary education, estimates suggest significant occurrence dependence, but no lagged duration dependence is found. Having experienced an employment spell in the

past increases the probability of future employment, and similarly, unemployment spells raise the probability of future unemployment; however the duration of past spells does not matter. For example, simulations suggest that one additional spell of unemployment raises the future unemployment rate for this group by 13 to 16 percentage points. Also, the magnitude of the effects of past employment and unemployment spells is similar, which means that the beneficial effects of an employment spell can be easily undone if the spell is followed by unemployment.

The presence of occurrence dependence suggests that keeping an attachment to the labor market is valuable in terms of future outcomes; young people who hold jobs can more easily find jobs in the future. This could be interpreted as benefits accruing from networking, or other skills in finding employment. Alternatively, employers could be more willing to hire people who have held previous jobs regardless, of the length of the employment spells. The lack of lagged duration dependence suggests that on-the-job human capital acquisition is limited, or that it is not transferable across employment experiences.

Although men and women experience significant differences in some aspects of their labour market histories, the form and magnitude of state dependence are similar, and overall results apply to both groups. Preliminary results for youths with post-secondary education suggest different forms of state dependence for this group. There is evidence of lagged duration dependence; that is, the length of employment and unemployment spells matters in determining future outcomes.

\* Corresponding author.

E-mail addresses: [D.Doiron@unsw.edu.au](mailto:D.Doiron@unsw.edu.au) (D. Doiron), [Tue.Gorgens@anu.edu.au](mailto:Tue.Gorgens@anu.edu.au) (T. Gørgens).

Overall, our results suggest that employment spells, even short ones, are beneficial for future employment probabilities and ignoring these effects can lead to an underestimation of labour market policies. Unfortunately, previous spells of unemployment are also important, and can easily undo the beneficial effects of job spells. Finally, the effects are complex, and flexible modelling of state dependence is needed to isolate and measure the causal relationships between past and future labour market experiences.

## 1. Introduction

Joblessness occurs more frequently among young people than in the rest of the labor force, and youth unemployment has received much attention among researchers, as well as in public debate. The higher unemployment rates are partly explained by the learning processes faced by both sides of the labor market. New entrants to the labor market need to discover their own skills and preferences, as well as the opportunities available to them, and employers need to assess the potential productivity of new entrants. This results in “job-shopping” (e.g. Topel and Ward (1992)) and higher mobility among young people. Moreover, temporary jobs and spells of unemployment often accompany investments in education or training (e.g. Wolpin (1987)).

Recently trends in youth unemployment have been the cause of renewed concern. Youth employment is believed to be particularly sensitive to the state of the economy; yet, youth unemployment has remained at twice or more the adult rate of unemployment in most OECD countries despite the continued period of expansion (e.g. OECD, 2002). Increased levels of education, and the aging of the workforce have also failed to solve the problem.

To combat youth unemployment, many countries have implemented a wide range of policies targeted at unemployed and disadvantaged youth. There is now a large and growing literature estimating the effects of employment policies and training programs on the subsequent employment experience of the participants. For recent surveys on the evaluation of active labor market policies (ALMP) in general see Heckman et al. (1999), Kluge and Schmidt (2002) and Kluge (2006), and for policies targeted at the youth labor market specifically see Blanchflower and Freeman (2000). The findings for ALMP aimed at young people are not encouraging; in many if not most cases, these programs lead to a reduction in employment probabilities.<sup>1</sup> Kluge (2006, page 28) concludes: “It might also be the case that active labor market policies are not at all the appropriate policy for this group, and public policy should therefore focus on measures that prevent the very young from becoming disadvantaged in the labor market in the first place”.

With few exceptions, the existing literature on evaluations of ALMP has two major shortcomings: the equilibria are partial and only short-term effects are considered (Kluge, 2006). A few recent studies of social and labor market policies consider general equilibrium effects such as spillovers, crowding-out and responses in prices (Blundell et al., 2003; Lise et al., 2005; Angelucci and De Giorgi, 2007); an earlier example is Davidson and Woodbury (1993). Although tentative, the results suggest that general equilibrium effects could be considerable (e.g. Lise et al. (2005)). Also, see Bloom et al. (1997) for a more extensive welfare analysis of the costs and benefits of a job training program.

Researchers recognize that the short-term horizons used in most of the policy evaluations can lead to an underestimation

of the policy impacts, and to misleading conclusions about the relative effectiveness of programs (e.g. Hotz et al. (2006)). However, data limitations have generally led to comparisons of outcomes before and after intervention with horizons of less than a year for the post-intervention outcomes. Exceptions to this are few (e.g. Card and Sullivan (1988), Bloom et al. (1997), Lechner and Wunsch (2005) and Hotz et al. (2006)). One finding to emerge from these studies is that extended training programs can have substantially larger effects on employment than policies aimed at placing people in jobs in a short period of time.

It is surprising that the employment spells experienced as part of ALMP do not have stronger impacts on future employment probabilities, even in the short time horizons considered. This suggests that state dependence from past employment spells is weak, at least in the case of subsidized jobs. To date, the policy impacts have either been measured at a specific point in time in the future, or cumulated over time, with limited attempts to separate direct effects of policies (finding people a job placement), from the effects of employment on future labor force transitions (state dependence).<sup>2</sup> In addition, existing results on longer term policy effects are based on samples spanning all age groups. Stronger effects from state dependence are expected for young people who can benefit more from job shopping and on-the-job human capital acquisition; hence they should be treated separately in the analysis.

In this paper, the presence and form of state dependence are estimated in a general and flexible model of labor force transitions for young people. The estimates are based on observed histories of up to six years after the person leaves secondary school. Various employment and unemployment interventions are simulated, based on the parameter estimates and the immediate or direct impact of the shock is distinguished from future state dependence effects. We do not analyze a specific policy, and our simulation results can be interpreted as best case scenarios. For example, a finding of limited state dependence in the case of a “real” job suggests that such effects are unlikely to be important in the case of subsidized employment (e.g. Gerfin et al. (2004)) and lends validity to existing before-and-after comparisons of policy effects.

Early papers on the estimation of state dependence include, for example Heckman and Borjas (1980) and Ellwood (1982). Recent contributions focus on the scarring effects of unemployment and the implications for policy interventions (e.g. Arulampalam et al. (2000), Gregg (2001) and Mroz and Savage (2006)).<sup>3</sup> Most studies, with Heckman and Borjas (1980) as a notable exception, have approached the problem using autoregressive models for panel data. That is, they have compared either labour force status at distinct points in time or the proportion of time within given periods spent in each state. State dependence is represented by lagged dependent variables in this framework.

In contrast, this paper applies event history methods (e.g. Heckman et al. (1999)). The event history approach emphasizes the timing of transitions between distinct states such as employment and unemployment, and is particularly well suited for this kind of research, given the availability of high-quality longitudinal data and the delicate econometric issues involved such as missing data

<sup>2</sup> Histories of labor market experiences have been used to construct better counterfactuals in policy evaluations following Card and Sullivan (1988) and Heckman and Smith (1999), who argue that labor force dynamics play a central role in the selection process into ALMP. For recent examples see Heckman and Smith (2004) and Kluge et al. (2005).

<sup>3</sup> Like the present paper, these studies do not evaluate particular programmes but estimate state dependence relative to the policy environment in place during the analysis period.

<sup>1</sup> There is however substantial heterogeneity in the impacts of policies; and recent findings concerning the New Deal for Young People suggest that the multistage approach adopted in the UK has generated positive employment effects (e.g. Blundell et al. (2004) and De Giorgi (2005)).

متن کامل مقاله

دریافت فوری ←

**ISI**Articles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات