LABOUR MARKET FORECASTING IN AUSTRALIA: 
THE SCIENCE OF THE ART*

E.M. Webster 
Bureau of Immigration Research 
PO Box 659 
Carlton South, Victoria 3053

Since 1987 nearly 50 labour market forecasts have been undertaken in Australia to assist decisions relating to government policy and budget, investment and career planning. More than 20 of these forecasts have been disaggregated by age, occupation, industry or regional labour markets. One of the chief aims of disaggregated forecasts is to help policy makers avoid future shortages or surpluses of skilled labour. A survey encompassing government departments, private research institutes and banks was undertaken to overview recent labour market forecasting exercises in Australia. This paper, which attempts to summarize these efforts, also discusses the main advantages and disadvantages of each major type of forecasting technique. Methods employed have ranged from anticipatory surveys to data-intensive input-output models.

Formal evaluation of labour market forecasts requires considerable resources and no known assessments have been conducted in Australia to date. It is unclear how significant disaggregated labour market forecasts have been in guiding the allocation of funds between competing education and training courses. Nevertheless, governments eager to avoid future shortages and surpluses of skilled labour, but less enthusiastic about forecasting, could aim to make the labour market more flexible and responsive instead. Like forecasting, however, the effectiveness of this approach has yet to be scrutinized.

‘It is always difficult to forecast, especially about the future’

Introduction

Since 1987 nearly 50 labour market forecasting projects have been undertaken in Australia. This article, which is written for the non-economist, overviews recent attempts at labour market forecasting in Australia and summarizes contemporary views on their contribution towards enhancing the efficiency of the Australian labour market. Current methods of forecasting are described and assessed purely from a theoretical perspective. The paper does not attempt to assess the accuracy or otherwise of Australian labour market forecasts as this would be a major undertaking in itself; indeed I do not know of any systematic attempt to do this to date.

Labour market forecasts, and any other forecasts for that matter, are not undertaken because it is believed that the future is predictable. Instead forecasts are undertaken because it is believed that by methodically controlling for

* Thanks are due to Dick Gross, Vance Martin, Beatrice Derody, Martin Bell, Lynne Williams and the anonymous referees for comments on early drafts. Needless to say all responsibility for the content herein rests with the author.
major factors known to affect the forecast variable (and subsequently reducing some degree of uncertainty, eliminating forces which cancel each other out and resolving forces which are contradictory), one can systematically analyse probable outcomes of a particular course of action and plan accordingly (DEET 1991). Forecasts, then, are part of an attempt to assist decision-makers to develop long-run strategies, rather than relying on a sequence of short-run tactics.

Inevitably, decision-makers are forced to rely on some notion of a probable course of events, whether they explicitly realize it or not. The use of formal forecasts is partly an attempt to make this process transparent. Whilst the repeated use of forecasts implies that forecasts of some kind are better than either random guessing or anticipating no change from the present, few forecasters or end-users in Australia systematically evaluate the value of the forecasts. This should not necessarily be counted as a criticism of forecasts, especially highly disaggregated ones. It is a major task to assess properly each round of forecasting, because of the sheer volume of resources required and the complexity of identifying whether inaccuracies were due to model failure or differences in the predicted values of exogenous variables.

Australian forecasts differ according to their regularity and whether they forecast the aggregate labour market or markets disaggregated by age, sex, occupation, industry or region. Labour market indices forecast include employment, labour force growth, wage rates and labour demand. Labour-market forecasts are predominantly used to assist decisions about government and enterprise policy: mainly education, training, immigration, welfare, superannuation, transport and town planning; budgets, in both the government and non-government sectors: tax and sales receipts, expenditures; investment; and personal career choice, especially at schools.

Functions relating to policy decisions in education, training, immigration and to a lesser extent welfare, superannuation, transport and town planning are active uses since their raison d’être is to develop further courses of action which in turn affect the future course of the labour market. Functions relating to budgets, investment and career choice imply a passive acceptance of the probable course of the labour market and only require forecasts of the labour market as inputs into the decision-maker’s main focus of attention.

Naturally the assumptions adopted differ according to the end use of the forecast. Forecasts for budgetary and investment decisions are usually concerned with producing the most likely outcome, regardless of assumptions used to achieve it. On the other hand, forecasts for government planning are primarily concerned either with what will happen if present trends continue (compared with the likely outcome following some specified policy change or occurrence), or with calculating the size of measures needed to ensure a given end (see Bandy 1980).

Although more than 20 aggregate labour market forecasting projects have been undertaken for use in decisions relating to budgeting and investment, the primary focus of this paper is on disaggregated forecasts which are undertaken mainly for government policy decisions on education and training and for career guidance.