THE DEMAND FOR TERTIARY EDUCATION –
AN AUSTRALIAN STUDY

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ABSTRACT

In this article the demand for tertiary education by successful Higher School Certificate Candidates in Victoria is modelled along the lines of Handa and Skolnik (1975). This particular component of the overall demand is studied because of the particularly plentiful and accurate information available. The estimated effect of youth unemployment on demand raises a number of interesting hypotheses related to the traditional human capital variables of opportunity cost of education and expected future returns. These hypotheses are evaluated using the developed demand model.

Introduction

Research into the demand for tertiary education has been prolific in the United States and Canada. From the initial study of Campbell and Siegel (1967), investigations have developed into the more detailed and sophisticated models as characterised by Handa and Skolnik (1975). These models are classified as aggregate demand studies according to the taxonomy of Jackson and Weatherby (1975).

Typical of these models is the level of aggregation at which the estimation takes place and the measure of demand used. The smallest level of aggregation used is the undergraduate and graduate categories at colleges or universities. These categories are far from homogeneous with respect to the sources of demand. High levels of aggregation usually lead to the elimination of individual trends and patterns of each of these sources, thereby reducing the amount of information and interpretation obtainable.

The usual measure of demand is the enrolments in the first, second, third and fourth years. If this measure is used, the current year’s new demand and the current year’s continuing demand are treated identically. This implies that the
same determinants of demand in the same time periods are applicable to the new and continuing categories in exactly the same way. Galper and Dunn (1969) attempted to overcome this problem by the use of distributed lags. However, distributed lags do not normally lend themselves to easy estimation or very meaningful interpretation. Embodied in these demand models is the assumption that there exists and operates a free (at least a non-excess demand) market for tertiary education. This implies that market forces primarily determine the demand and supply for tertiary education.

In Australia demand models as discussed above have not, until now, been undertaken due to the lack of adequate data and a belief that the tertiary education market exhibited excess demand. The establishment of the necessary data for 1971 to 1981 inclusive, and the demonstration of substantial support for the operation of a market in which demand does not exceed supply in Victoria, led to a demand model being formulated and estimated. The demand for tertiary education (excluding Technical and Further Education) as measured by commencing enrolments (i.e., new enrolments) is split into three divisions, Colleges of Advanced Education—General (CAEG's), Colleges of Advanced Education—Primarily Teacher Training (CAET's) and Universities. The sum of all these divisions forms the aggregate demand for which results are presented in this article. Analysis of full and part-time as well as total demand (i.e., full plus part-time) was undertaken for the aggregate demand.

The Nature and Structure of the Successful Higher School Certificate Candidates Market in Victoria

There are three distinct classes of demand in this category (or market): Previous Year (Lag 1), One Year Ago (Lag 2) and More Than One Year Ago (Lag 3). As implied, the Previous Year class of demand relates to the High School Certificate (HSC) candidates who after fully passing (i.e., passing in four subjects including English Expression) the exams in November–December the previous year, enrol in a course of tertiary study in the current academic year. Thus the three classes of demand relate to the lag between qualifying to undertake tertiary education and actually demanding it. These three lags are interdependent, i.e., the Lag 1 demand in year \( t \) will affect the demand for Lag 2 \( (t + 1) \), which in turn will have a direct bearing on the Lag 3 demand in year \( (t + 2) \). The largest (numerical) class of demand is Lag 1 (see Table I) and this article is restricted to considerations of this lag.

The assumption that the HSC "market" has no excess demand is found to have some support. This may be demonstrated as follows: let the number of successful HSC candidates at the end of year \( (t - 1) \) be the Eligibles, who may demand tertiary education in the future. Some of the Eligibles will demand in year \( t \), and thus be classed as Lag 1 demand, others will demand in year \( (t + 1) \).