

Measuring an Option Value of Investment in Education: A Lifetime Labour Income Approach

ABSTRACT *Heckman, Lochner and Todd (2006) draw attention to the concept of option value in estimating returns to education. Using the framework of Jorgenson and Fraumeni (1989, 1992) lifetime labour income approach, this paper develops a method to estimate an option value as the difference between alternative lifetime labour incomes associated with the corresponding schooling choices upon completing a lower level education.*

Using secondary education in Australia as a case study, this paper demonstrates how the total return to investment in secondary education can be decomposed into the direct return and an option value, which accrued from the opportunities for undertaking tertiary study programs. The empirical results shows that the option values make up significant proportions of total returns to secondary education, ranging from 24.5% to 39.3% for men, and from 32.6% to 51.6% for women over the period 1986–2006. In particular, option values have become increasingly prominent in recent yeas, which have witnessed strong demand for more educated workers.