THE ECONOMIC RETURNS TO INVESTMENT IN WOMEN'S EDUCATION

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ABSTRACT

The paper discusses the problems of measuring the rate of return to women's education, and evidence is presented for nine countries which shows that the returns to secondary and higher education are on average two percentage points lower for women than for men, but in some countries they are actually higher. Education increases the earning capacity of women, and also increases their propensity to remain in the labour market. But some allowance must be made for the value of women's non-market work, for indirect benefits of education, and for psychic income. Various methods are suggested for measuring the non-monetary benefits of education, such as the intergeneration effect of a mother's education on the future achievement of her children, or the non-pecuniary benefits of employment for women in the labour force. The effects of discrimination on women's earnings and job prospects are discussed, and it is shown that a large part of the observed differential between male and female earnings is due to the concentration of women in low-income occupations. The paper concludes that the difference between the returns to education for men and women is less than is often suggested, particularly if some attempt is made to measure non-monetary benefits. But the returns to women's education would be increased if there were a change in traditional attitudes leading to a more equal occupational distribution and better utilisation of women in the labour force.

A cursory examination of the literature on the economic returns to education and training might suggest that "human capital" can be equated with "investment in man." Schultz has observed that "if one were to judge from the work that is being done, the conclusion would be that human capital is the unique property of the male population" (1970, p. 302). A few studies of the rate of return to investment in education include estimates of the returns to women, but there has been very little analysis of the investment aspects of female education, despite the current wave of interest in the employment of women, sex-based wage and job discrimination, and equality of opportunity for women, stimulated by the women's liberation movement. Most of the literature on cost-benefit
analysis of education suggests that the monetary returns to female education are low, because of the lower earnings, lower labour force participation, and shorter working hours of women, compared with men; the education of women must be justified either on non-economic grounds of social justice, or by appeals to the indirect benefits of education, which are not measured in conventional rate of return studies.

But this raises a number of important questions. If it is really true that the rate of return to women’s education is very much lower than for men, it would appear to support the view of many parents that the higher education of their daughters is a waste of money and the similar belief among employers, that investment in on-the-job training yields low returns in the case of women workers. If the education of men is an investment, whereas female education is largely consumption, this suggests either that there should be a re-allocation of resources, and greater discrimination against women in higher education, or it reduces the relevance of rate of return analysis for public policy in education. If the lower returns to female education are chiefly due to wage discrimination then this would strongly support the case for equal pay. If, on the other hand, the lower returns are due mainly to the lower labour force participation of women, then it raises some doubts about the validity of conventional rate of return measures, which calculate benefits of education solely in terms of earnings differentials and ignore non-market work. Thus it is important to find out whether the social and private returns to women’s education really are significantly lower for women than for men, and if so, what are the main causes of the lower rate of return and what are the implications for educational and social policy.

The Difference between Male and Female Rates of Return

At first sight it would appear obvious that the returns to women’s education will be lower than the returns for men, since the average earnings of women are about half the male average. A recent attempt to calculate the contribution of education to the growth of national income in the U.K. between 1951 and 1961 — using Denison’s method of measuring the contribution of education to economic growth in terms of the earnings differentials of educated labour — assumed that since average earnings of women are about half the male average, then the returns to their education are half those of men with an equal amount of education (Moreh, 1971, p. 83). According to Moreh’s calculations the average returns to higher education for men in 1961 were £1490 and for women