

Family Expenditure on Children's Education in Japan and the United States¹

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Introduction

This study examined the variations in family backgrounds associated with family expenditures on children's education among families with children in the high school level or younger in Japan and the U.S., two of among only a few OECD countries that place a burden of paying for a higher proportion of education cost on families. This financial burden creates an unequal opportunity to attain education as long as there are differences in household income, assets, other demographic characteristics, values and preferences, and passion for education among families (Kirchsteiger & Sebald, 2006; Kozakai, Asai, Kobayashi, Yamaguchi, & Wada, 2006; Lin, 2004; Mauldin, Mimura, & Lino, 2001; Tsumura, 2006).

Data and Methods

The data came from the 2004 Japanese Panel Survey of Consumers and the 2004 Consumer Expenditure Survey from the United States. Families included in the sample for this study all had children younger than 18 years of age, but not older, and mothers aged between 30 and 44. The criteria yielded 822 respondents in Japan and 5,658 in the United States. The response variable was the expenditure on children's education, including nursery school, preschool, school tuition, cost of extra curriculum activities, and purchased goods related to learning. The explanatory variables considered were characteristics of the households and mothers. The method used was the double-hurdle model which simultaneously assessed the differences in family background between those that had educational expenditure and those that did not (first hurdle, probit). Among those that did, the model assessed the determinants of the differences in the expenditure (second hurdle, truncated regression). A separate model was utilized for each country.

Results and Implications

Families in Japan spent more when children were older, while families in the U.S. tended to spend more when children were younger. Household income, number of children, and mother's employment were positively associated with the probability of having the expenditure in both countries. Household income, having the youngest child in preschool age, and mother's age were positively associated with the amount spent on children's education. The difference was that in Japan more children meant higher expenditure, while in the U.S. no statistical significance was found. The families in the U.S. spend less as the child grows, but not in Japan. While married couple families spent more than female-headed families in Japan, there was no such difference in the United States. The policy implications include the difficulty of improving the declining total fertility rate in Japan. In addition, although this study examined the demand side of the education for children, it strengthened the argument to improve the quality of public investment in human capital both in Japan and the United States if we want to see narrowing of the achievement gaps among children from varying family backgrounds.

References

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