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Funding competition in higher education

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Abstract

In a heterogeneous OLG model where individuals have random innate ability, the accumulation of human capital via education occurs in two stages: compulsory schooling (free for all) and higher education where students have to bear the cost. Individuals obtain a signal correlated to their true ability after the first stage. In this work we allow students to choose their optimal funding of higher education cost by using one of the following two funding schedules: (a) guaranteed access to the credit market (say, 'market plan'), and (b) loans under some risk-sharing : the repayments of the costs depend on the level of the (unknown) future income (say, 'risk-sharing plan'). In case (b), a higher realization of future income will imply higher repayments. In both cases the government needs to guarantee implementation of these arrangements but it bears no cost. Suppose that each student can choose either option. Under some conditions there exists an equilibrium where both plans co-exist (to be called "mixed regime"). Moreover, this equilibrium "dominates" the equilibrium where only the credit market option is available (which is prevalent in most countries).

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Funding Competition in Higher Education

By: **Bernhard Eckwert and Itzhak Zilcha**

Abstract Submitted to PET 11

The economic implications of government intervention in organizing markets to fund students loans has been studied earlier by Eckwert and Zilcha (2010). It has been demonstrated that the most efficient arrangement contains some risk-sharing elements. However, this study has been carried out under the restrictive condition that all students must use **the same** given funding schedule.

In a heterogeneous OLG model where individuals have random innate ability, the accumulation of human capital via education occurs in two stages: compulsory schooling (free for all) and higher education where students have to bear the cost. Individuals obtain a signal correlated to their true ability after the first stage. In this work we allow students to choose their optimal funding of higher education cost by using one of the following two funding schedules:

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In case (b), a higher realization of future income will imply higher repayments. In both cases the government needs to guarantee implementation of these arrangements but it bears no cost. Suppose that each student can choose either option. Under some conditions there exists an equilibrium where both plans co-exist (to be called "mixed regime"). Moreover, this equilibrium "dominates" the equilibrium where only the credit market option is available (which is prevalent in most countries).

Starting from some initial conditions we compare the equilibrium under the ' access to capital markets only' regime and the other equilibrium under the "mixed regime". The comparison is carried out in terms of accumulation of human capital and income inequality along the equilibrium paths. We demonstrate that under some plausible conditions the equilibrium under the "mixed regime" dominates the equilibrium under the "access to capital market only" regime in the following sense: it generates higher stocks of human capital at each date and the (lifetime) income inequality is lower at each date.