UNIVERSITÀ DEGLI STUDI DI CAGLIARI

Economics Seminars

Friday 29 October 2026 at 12:00

Aula Sotgiu (ex Aula Magna SPol)

Facoltà di Scienze Economiche Giuridiche e Politiche - Viale Sant'Ignazio 78

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Growth Promotion Policies when Taxes Cannot be Raised (with K. Minami)

Abstract. This paper examines growth promotion policies in an R&D-based endogenous growth model, assuming that political constraints do not allow the government to increase its revenue. Under such constraints, expenses must be financed by perpetually rolled-over debt. These policies are sustainable only when the growth rate (g) is higher than the interest rate on government bonds (r). Indeed, the data from OECD countries suggest that g > r has tended to hold in the last 60 years. To explain this phenomenon, we incorporate an overlapping generation model where agents have life-cycle saving motives into a variety-expansion R&D growth model and show that g > r is achieved in the steady state if the saving motives and R&D productivity are reasonably high. If g > r holds, debt-financed R&D subsidies always increase short-term economic growth. However, long-term outcomes depend on R&D productivity. If it is higher than a threshold (or when the g−r gap is large enough), the policy can increase long-term growth. Our estimates of R&D productivity suggest that this condition holds for most advanced countries, including the United States, but does not hold for low-growth countries such as Japan, Italy, and Greece. We then extend the model so that private R&D productivity depends on the amount of publicly funded basic research. We find that expanding basic research by issuing perpetually rolled-over debt increases long-term growth even in low-growth economies. Nevertheless, growth-enhancing policies are not without costs. They reduce the upper bound on the debt-GDP ratio, beyond which the economy cannot recover to a steady state.