

Public capital investment and private capital productivity

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Abstract

The focus of the thesis is on the relationship between the long-term benefits of public infrastructure investment and regional development under conditions of political transition and trade liberalization in Romania. In this excerpt, a formal model is presented to interpret the interaction between structural change and policy reactions in terms of infrastructure provision. The proposed political economy model was built by estimating the aggregate production function of the economy, calculating public infrastructure productivity and by assuming different objective functions of policy makers when deciding upon infrastructure investments. We hypothesize that in contrast with a smooth transformation, sudden structural shift to open economy impacts negatively on the expected long-term returns on the public infrastructure that already existed at the start of the transition. Under these conditions, the existing infrastructure becomes oversized and/or misplaced. At the same time, however, in the longer run the systematic under- or miss-investment in infrastructure could become a hindering factor of local firms' productivity under conditions of free trade. To verify this hypothesis, we use a time series data set for Romania for the period 1990-2003. The preliminary theoretical and empirical findings of the model suggest that: (1) in the Romanian post-socialist transition economy a significant share of the existing infrastructure stock became underused; (2) the low investment in infrastructure in the early period of transition resulted in infrastructure bottlenecks; (3) the policy responses to infrastructure bottlenecks have had a significant impact on the productivity improvements in the new economy.