The problem of "human capital mismatch" in Central European transition economies, i.e., the fact that the composition of the human capital stock inherited from socialism is not well matched with the requirements of a modern market economy, is well-documented (e.g., Campos & Coricelli 2002, especially section 2.4) We know of no model that addresses the question of how exactly the problem of human capital mismatch can be overcome. Specifically, we know of no model that addresses the important bootstrapping problem that transition economies face by their very nature: In order to overcome the skills mismatch, new skills have to be taught by someone. However, teachers who are qualified to do the job typically do not exist locally. Hence, local teachers first have to learn the requisite skills before they can teach them. Intuitively, bootstrapping (because it takes time to
build superior knowledge) makes it very unlikely that transition economies can 
catch up with the frontier of knowledge.

It is here where e-learning, through its universal and quick accessibility -- an 
important issue in particular in postsecondary and continuing education -- as well 
as potential cost savings in time and direct travel costs, promises to come to the 
rescue.

Its basic function and scope in the current context is well illustrated by the recent 
announcement (Businesswire, June 20, 2002) of Czech Telecom -- the principal 
provider of the Czech Republic's telecommunications services -- that it would use 
US-based Click2learn's learning management system to allow its 15,000 
employees to train online. The announcement claims that, in addition to providing 
quick response to its employees' training needs, 60% cost savings compared to 
standard classroom training (with these savings being overwhelmingly savings in 
time and direct travel costs).

Within a general equilibrium model of endogenous growth in which human capital 
investment is the engine of growth we analyze the potential role of e-learning in 
the elimination of the human capital bootstrapping problem so typical for
transition economies. We find that e-learning can indeed speed up convergence to the frontier of knowledge. The intuitive idea behind this result is the ability of a transition economy to access external knowledge sources that do not require local teachers to first learn the requisite skills before they can teach them. Our results are derived in an economy with two education sectors -- traditional public classroom education and private e-learning. We show that there are multiple equilibria: 'bad' or 'passive parents' equilibrium, 'good' or 'active parents' equilibrium, and corner 'zero e-learning trap'; and as a consequence there are typically two transitions: 'catch-up transition' along good equilibria to balanced growth path equilibrium with sustained growth, and 'stagnation transition' along bad equilibria to autarchic zero e-learning equilibrium. Our analysis also suggests the importance of government policies for the growth prospects of the economy.