Macroeconomic Convergence in Transition Countries

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Non-technical Summary

The transition process in the Central and Eastern European (CEE) countries offers a unique opportunity to investigate whether these economies tend to eliminate economic disparities during the transition process.

Theoretically, there are two principal reasons to expect the convergence of macroeconomic fundamentals of CEE countries. First, all CEE countries engage quite heavily in international trade with each other. Because it involves the flow of capital and goods, international trade, if bilateral, serves as a natural means of coordinating the economic development of the parties involved. Literature provides evidence that income convergence among countries, while far from being a worldwide phenomenon, seems to be a prevailing feature among countries that trade extensively with one another.

The second factor that might induce a certain degree of convergence between CEE countries is of an institutional nature. Due to the prospect of their accession to the European Union (EU), these countries have been confronted with the list of criteria upon which EU conditioned the acceptance of new member countries since the middle of the 1990s. These criteria are common for all applicants for EU membership. Thus, the conception of adequate institutional arrangements along with adjustments in monetary and fiscal policies that are motivated by the attempt to fulfill the criteria might generate similar trends of macroeconomic fundamentals.

We conduct a quantitative analysis to test for convergence in selected macroeconomic variables from January 1991 to December 1998. The analysis is carried out within distinctive groups of countries to reflect different institutional and geographical aspects of transition. The groups' construction is motivated mainly by the above reasoning. The countries in question are the Czech Republic, Slovakia, Hungary, Poland, Slovenia, Romania, Bulgaria, Albania, Estonia, Latvia, and Lithuania.

We extend a growth convergence methodology to a set of selected macroeconomic fundamentals, namely to the real industrial output, money aggregate (M1), producer and consumer prices, and nominal and real interest rate spreads, in order to obtain a broader picture of one aspect of the economics of transition. The convergence measure adopted is based on the relationship that describes the dynamics of the differentials of the respective variables in a panel setting. In order to make the speed of convergence much

more readily interpretable we compute the half-life of convergence process, which is the number of time periods that it takes for the gap to be cut in half.

When testing for convergence we found evidence of convergence in macroeconomic fundamentals among the CEE countries in general. However, the strength of the results differs for particular variables as well as for groups of countries. Regarding the macroeconomic variables, the greatest degree of convergence was achieved in growth rates of real output across all groups of economies. The growth rates of producer and consumer prices converged at the slowest pace. However, these rates did tend to converge towards the low inflation region in most countries.

Comparing convergence across groups of countries, the Baltic states achieved the highest degree of convergence in basic macroeconomic fundamentals. Thus, the Baltic states represent the most homogenous group of countries in the region in terms of the degree of convergence of basic macroeconomic fundamentals. The high degree of convergence, specifically in the growth rates of prices and money, as well as in interest rate spreads, i.e. the monetary variables, is due to the relative absence of independent monetary policies caused by the adoption of very tight exchange regimes in the Baltic states.

The five countries that signed the original CEFTA agreement and the five countries that were selected as prospective candidates to join the European Union in the first round display similar and relatively high degrees of convergence in most variables. Since four countries appear in both of these groups, we attribute convergence to two important factors. First, international trade within the CEFTA framework serves as a natural means of coordinating economic development. Second, the prospective accession to the EU serves as an institutional means of coordination in order to satisfy a set of pre-accession criteria.

We have shown that common institutional features and economic policies tend to correlate with this higher degree of convergence. This finding is in line with the neoclassical growth theory that supports the occurrence of convergence among similar countries. Such a process can be taken as a positive sign of the ongoing transition towards a market economic system.