

## ABSTRACT

This dissertation is a sample of my research on macroeconomic aspects of the transition process in the Central European countries. During my doctoral studies, I have been especially interested in two issues: (1) environmental regulation and policy and (2) macroeconomic convergence.

The first paper The decomposition and econometric analysis of air emissions in a transition country: the case of the Czech Republic is from the field of environmental economics and is empirically oriented. It analyzes air emissions of four classical pollutants in the Czech Republic during the transition period. The next three papers are macroeconomic papers based on theoretical modeling. The paper Real Exchange Rate in Emerging Economies: The Role of Different Investment Margins (written jointly with Jiří Podpiera) inquires about the mechanism of the strong pace of the real exchange rate appreciation observed in Central European transition economies. The paper introduces a quality investment margin and shows that the margin is needed for replicating the observed pace of the real exchange rate appreciation. The paper basically compares the steady state of the model for various levels of development of a converging country. The next paper The Dynamics of Economic Convergence: The Role of Alternative Investment Decisions (written jointly with Jiří Podpiera) evaluates how various investment decisions explain the macroeconomic dynamics of European transition countries. Therefore, contrary to the previous paper, the transition dynamics is computed and compared to data for Central European economies. Finally, the last paper, The convergence dynamics of a transition economy: The case of the Czech Republic (written jointly with Jiří Podpiera and Stanislav Polák), aims at explaining the long-run trend in key macroeconomic variables in the Czech Republic using the framework introduced in the previous two papers.

The first paper has been rejected from Ecological Economics. Referees of Ecological Economics expressed similar concerns about the paper as the two referees of the thesis. I hope that I have learnt from these comments and a new submission to another journal is being planned.

The second paper was published in *Economics of Transition*, vol. 18 (3), July 2010, pp. 599-628. The third paper was published in *Journal of Economic Dynamics and Control*, vol. 35 (7), July 2011, pp. 1032-1044. The last paper appeared in *Economic Modelling*, vol. 27 (1), January 2010, pp. 116-124.