This dissertation consists of three distinct topics within labor macroeconomics, applied microeconomics, and applied time-series econometrics. The first essay extends the standard methodology used in analyzing unemployment duration. The extension is applied on empirical data for the Czech Republic and France. Furthermore, unemployment dynamics are examined in terms of unemployment incidence and duration for the Czech Republic, 1992–2007. The second essay belongs to the field of the economics of education. It contributes to the discussion on the equal access to higher education. The theoretical (structural) model of an individual schooling decision is set up and the implied reduced form is estimated on a unique data set of all secondary school graduates in the Czech Republic in 1998. Finally, the third essay deals with the inflation dynamics. It draws on extensive research in the modeling of the inflation process in developed countries. Nevertheless, the focus is on developing countries where specific economic and consequently econometric issues have to be considered.