Chapter 7

Concluding remarks

The starting point of this thesis is that countries with adequate political institutions, (i.e., countries with democratic institutions, that are politically stable, and have low levels of corruption, and bureaucracy), outperform countries with poor political institutions. However, the empirical evidence on the relationship between political institutions and economic performance is mixed. But some studies point out that political institutions may have an indirect effect on growth through their impact on factors that drive economic growth. Therefore we focus in this thesis on the effect of political variables on a number of factors that may affect cross-country differences in economic performance.

One of the difficulties involved in incorporating political variables into an econometric analysis is how to measure various types of political events, systems, or concepts. While some political events are of a discrete nature (e.g., a coup d’état) other concepts (e.g., democracy) are latent and therefore more difficult to quantify. Studies that examine the effect of political institutions usually choose political indicators in a rather arbitrary way.

According to De Haan (2007), most indicators of political institutions contain some measurement error leading to a low quality of data and biased estimation. Also the question remains whether the indicators used in previous studies represent all dimensions of the latent construct they examine. To come up with better measures that include more information and to determine whether indicators of political institutions have a multidimensional character, we employ Factor Analysis (FA). Factor analysis is a statistical data reduction technique used to explain variability among observed random variables in terms of fewer unobserved random variables.
called factors. The observed variables are modelled as linear combinations of the factors plus an error term. The eigenvalue for a given factor measures the variance of all the variables that is accounted for by that particular factor. If a factor has a low eigenvalue, it may be ignored because other factors are more important in explaining variance.

On the basis of previous empirical studies, we distinguish between five dimensions of a political system. This first dimension is the type of regime, which measures the level of democracy in a country. The factor analysis showed that democracy can be represented by a one-dimensional construct. The second dimension is political instability. The results of the factor analysis indicate that there are four different forms of political instability: political instability related to aggression, political instability related to protest, political instability related to regime instability, and political instability related to government instability. These four factors measure a different dimension of political instability. The third dimension is the ideology of the regime measured on a left wing/rightwing scale and if a government is nationalistic. The fourth dimension is the governance of the regime, which can be represented as a one-dimensional construct and measures corruption and bureaucracy. The final dimension is policy stability, which can be decomposed in three dimensions measuring the uncertainty in trade policy, fiscal policy, and monetary policy, respectively.

Most studies on economic performance focus on the growth rate of the economy. However, economic growth and economic volatility are both determined by the same data-generating process. This thesis has a focus on the indirect effect of political factors on important economic performance. In particular, the research questions that have been addressed in this thesis are:

- Do political factors influence the health outcomes in a country?
- Do political factors influence the accumulation of human capital?
- Do political factors influence the repayment of debt to the IMF?
- Do political factors influence the volatility of the economic growth rate?

In this chapter, we present an overview of the empirical results reported in the thesis. In chapter 3, we first addressed the problem of the measurement error in health data. Using individual indicators of health that contain some measurement error leads to biased and inconsistent estimations. This is especially the case for developing countries. Also, using different health indicators may lead to different results. We use factor analysis to come up with a better measure on health. We con-
struct two new measures of health. The first is based on the health of individuals, while the second is based on the quality of the health care sector.

We use the created health measures to examine the effect of political factors on health. Because our health variables and our political variables are both latent constructs, we make use of a Structural Equation Model including a number of control variables suggested by previous studies. After employing the general-to-specific approach, we conclude that some dimensions of the political system significantly influence health. More specially, we find that democracy has a positive, while regime instability has a negative effect on the quality of health of individuals. Furthermore we find that governance has a positive effect on the quality of the health care sector, while government instability has a significant negative influence.

In chapter 4 we use, due to the absence of well-defined measures of human capital, factor analysis to come up with a better measure of human capital. We use indicators of education, skills, experience and technological development. Our results suggest that we can distinguish between two types of human capital: basic human capital and advanced human capital. The first is related to higher education and scientific development, while the latter is more related to basic skills such as reading and writing. Using these two factors as a dependent variable in a structural equation model, we find that democracy has a positive effect on basic human capital, while regime instability has a significant negative impact on basic human capital. For advanced human capital we find that governance has a positive effect, while government instability has a negative effect.

In chapter 5 we examine to what extent political factors are robust determinants of the likelihood that a country will repay an IMF loan in a particular year. We use a multinomial logit model for about 130 countries in the period 1985 to 2007. Our main findings suggest that democracy decreases the likelihood of payment problems, while autocratic regimes repay their outstanding loan in advance. With respect to political instability we find that regime instability and government instability increase the probability of payment problems to the IMF, while regime instability also increases the probability of repaying the outstanding debt at once. We find that good government governance decreases the likelihood of payment problems to the IMF. Finally, the effect of cabinet ideology is ambiguous. Left wing governments have significantly more repayment problems, but the presence of a left wing government also significantly increases the likelihood that the country concerned will repay its total debt at once. This latter is also the case for nationalistic governments.
Finally, in Chapter 6 we examine the effect of political factors on economic growth volatility, using a dynamic panel model in which we include various economic control variables as suggested by previous studies. The first problem we address in this chapter is the measurement of volatility. Most studies use the standard deviation of the GDP growth rate as indicator of economic volatility. However, this measure does not take differences in growth performance into account. Because growth and volatility are determined by the same underlying process, we use the relative standard deviation, which is defined as the standard deviation divided by the absolute mean growth rate, as our dependent variable. In line with the findings of Mobarak (2005), we conclude that democracy is negatively related to economic volatility. We also find that some dimensions of political instability and policy uncertainty increase economic volatility significantly.