5.2.1 Country size and welfare

We consider a set of independent variables similar to the set in Chapter 3, where we analyzed the determinants of government size (government consumption) to assess the influence of country size on welfare in multiple regressions based on OLS, where standard errors are White heteroscedasticity-consistent.[106] The results are summarized in Table 5.2, and there is a reasonable case for rejecting the central theoretical predictions. There does not seem to be any relationship between country size and welfare, even when we include a set of control variables which might help in explaining the sources of welfare. Again, analogously to Chapter 3, country size is measured by population figures and welfare by per capita GDP. We are, of course, aware of the shortcomings of these measures but have to stick to them, because they are available and harmonized for a sufficiently large sample of countries. Similar to Chapter 3, we use logs when distributions are very skewed. Descriptive statistics and the correlation matrix of all variables can be found in Tables 5.3 and A.16 in the Appendix.

The results in Table 5.2 are clearly not in line with theoretical predictions. The log of population is not significant in any of the seven models chosen. Furthermore, with the exception of model (2) the coefficients are far from being significant, and we therefore clearly do not obtain a result that supports theoretical expectations. The univariate regression with a comprehensive set of 158 countries under consideration fares poorly with regard to explaining welfare. Due to the high number of observations, this is a remarkable result. In model (2) we arrive at the expected result that trade openness plays an important role in determining welfare. This is the only model where the log of population is not far from being significant, but one has to bear in mind that we have fewer observations than in model (1), and the fit of the model is rather poor, which is somehow surprising, because we expected the variable openness to exhibit considerable explanatory power. Note that the bivariate correlation between openness and welfare is surprisingly low[107], but there is – as expected and in line with theories in international economics – a

106 For details on the method and on Whitecorrection see Section 3.2.3.
107 Pearson correlation coefficient: 0.220 ($p = 0.029$; two-sided).