Sources of welfare in VSC

high and significant (negative) correlation between the log of population and openness.¹⁰⁸ Even though correlation between the log of population and the log of per capita GNP is low (even negative, but not significantly), it is correct to rule out the linear influence of size on the correlation between welfare and openness by running a partial correlation. Irrespective of the openness measure chosen, the magnitude and the significance of the correlation remains, nevertheless, almost unchanged.

Models (3) – (7) show relatively high adjusted R², and most of the coefficients have the expected sign. Trade openness and the freedom index are always significant. Note that higher figures mean lower freedom and that the negative sign of the coefficient is therefore perfectly in line with theoretical notions. The indices for vulnerability and transport costs are also significant, and their magnitude is not negligible, especially when we regard the vulnerability index. In other words, the remoteness and vulnerability of an economy or a region are important determinants of welfare. Given the fact that at least all VSC in the Pacific region have to be considered remote, having to bear high transport costs for imports and exports, and that most of island VSC in the Pacific and the Caribbean exhibit high ratings of vulnerability due to natural hazards and environmental problems, the disadvantage of those countries becomes obvious. Although vulnerability indices also incorporate size as a source of vulnerability 109, it is not difficult to conclude that the countries in the Pacific and in the Caribbean would have lower growth rates, higher unemployment and a lower living standard even if they were not so small. Hence, it is difficult to compare their economic performance to that of European VSC due to the remarkable effects of transport costs and vulnerability. Note that because of the high correlation of the two variables resulting from their definition, their magnitude and significance decrease when both are incorporated in one model (see model (4) versus models (3) and (5)).

Geographic dummies do not pop up with surprising news. The OECD dummy is, as expected, always positive and significant, the Sub-Saharan Africa dummy is negative and significant. The only slightly sur-

Pearson correlation coefficient: -0.636 (p < 0.001; two-sided).

Note that vulnerability indices also take the level of transport costs into account. It is therefore not surprising that the correlation between those two independent variables is very high (Pearson correlation coefficient: 0.630) and highly significant.