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by

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Abstract

The purpose of this paper is to explore the effects of island status and country size on institutional quality, and to determine if these institutional effects can explain the relatively strong economic performance of islands and small countries. One of the main findings of this paper is that the relationship between island status and institutional quality is significantly positive, and that these results are robust to the inclusion of a number of control variables. Further, we find that country size is negatively related to institutional quality, which is in keeping with previous results. Finally, using an instrumental variable method we demonstrate that when *Rule of Law* is included in regressions on levels of per capita GDP, the positive effects of small country size and island status disappear. These results provide further support for our hypothesis that institutions account for these countries' relatively better economic performance.

Keywords: islands, political institutions, economic institutions, rule of law, development.

JEL Codes: N40, O10

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1 Introduction

The purpose of this paper is to explore the effects of island status and country size on institutional quality, and to determine if these institutional effects can explain the relatively strong economic performance of islands and small countries. The positive relationship between the general quality of institutions and per capita income is well documented in the empirical literature (Hall and Jones, 1999; Acemoglu et al, 2001, 2002; Easterly and Levine, 2003; Rodrik et al, 2004) and as such, the effects of island status and country size on institutional quality are likely to be pertinent to the economic development of these countries.

The number of small states in the world has been increasing in recent decades, stimulating an interest among economists in the effects of country size and, to a lesser extent, island status on economic growth.¹ Interestingly, the conclusions reached in much of the existing theoretical and empirical literature regarding these effects tend to diverge. In the theoretical literature, small countries are thought to suffer from their small labor force, limited internal markets and high per capita costs of public goods provision. Islands are thought to face the disadvantages of isolation, remoteness and the correspondingly greater transportation costs that arise as a result. Therefore, the general conclusions of the theoretical literature are that small country size and island status act to impede economic growth. The empirical evidence indicates, however, that islands do not face a significant disadvantage in terms of economic development (Armstrong and Read, 2003) and that small countries may actually perform better economically than larger countries (Easterly and Kraay, 2000).

In this paper, we argue that islands and small countries exhibit significantly better institutional quality, and that this institutional effect may account for the divergence in the theoretical and empirical results discussed above. Support for this hypothesis is found in previous research that indicates that small country size and island status are beneficial to the development of democracy (Diamond and Tsalik, 1999; Clague et al, 2001; Srebrnik, 2004). There is even some emerging evidence that small countries (in terms of geographical area) score significantly better on the World Bank governance

¹The issue of country size and island status is particularly relevant in the case of developing countries. According to the World Bank, there are currently 151 sovereign developing countries in the world. Of these, 40 have a population of 1.5 million or less, and 29 are islands with no shared borders. Further, islands constitute the majority of the small countries; 26 of the 40 countries with populations under 1.5 million are islands (World Bank, 2006a).

indicator *Rule of Law* than their larger counterparts (Hansson and Olsson, 2006).

The aims of the empirical analysis in this paper are as follows: first, the impact of island status and country size on institutional quality in former colonies is examined, drawing on previous theoretical and empirical research. We are interested in determining whether or not small countries and islands do in fact have stronger institutions on average. While there exists theoretical and empirical research that indicates that small country size and island status are positively related to democratic institutions, there is little research into the effect of country size and island status on economic institutions. This is particularly true in the case of islands. Therefore, one contribution of this paper is to establish whether or not small countries and islands have relatively better economic institutions. Second, we test to see whether the empirical results indicating that small countries and islands perform relatively better economically than their larger, continental counterparts can be explained by differences in institutional quality. To our knowledge there is no other study that has linked institutional quality to the relatively strong economic performance of islands and small countries. The focus on former colonies is in keeping in with much of the existing literature on the determinants of institutional quality, where the colonial experience is thought to play a key role (Sokoloff and Engerman, 2000; Acemoglu et al, 2001, 2002; Bertocchi and Canova, 2002; Lange, 2004).²

As many islands countries are small both in terms of population and geographical area, we believe that it is important to include both size and island status in the analysis simultaneously in order to rule out the possibility that islands perform better on measures of institutional quality due purely to their relatively small size.³ Further, while country size is often measured in terms of population, there are also arguments for measuring it in terms of geographical area. Therefore, both measures of country size are included in the analysis. In addition, two different types of institutions are analyzed. The first is the Freedom House measure *Political Rights*, which serves as our measure of democracy. The second is the World Bank governance indicator *Rule of Law*, which serves as our measure of economic institutions. The reason for

²This is not to say that only former colonies have been analyzed in the literature; some research has focused on the historical explanations of institutional quality in Europe, for example (North, 1990; Acemoglu, Johnson and Robinson, 2005).

³Indeed, there is a tendency in the literature to focus on the specific case of small island developing states (SIDS), further confounding these two effects (see Brigulio (1995), for example).

examining two different measures of institutional quality is that while democracy is important in its own right, there is evidence that it is not as strongly related to economic development as other measures of institutions, such as *Rule of Law* (Barro, 1996; Rodrik et al, 2004).

One of the main findings of this paper is that the relationship between island status and institutional quality is significantly positive. Further, these results are robust to the inclusion of a number of control variables. In keeping with the results reported above, country size is negatively related to institutional quality. In the case of *Political Rights*, however, country size becomes insignificant when a control for island status is included in the regression. Therefore, country size appears to be less powerful in explaining *Political Rights* compared to *Rule of Law*. Further, using an instrumental variable method we demonstrate that when *Rule of Law* is included in regressions on levels of per capita GDP, the positive effects of small country size and island status disappear. These results provide further support for our hypothesis that institutional quality accounts for these countries' relatively better economic performance.

The rest of the paper is organized as follows. Section two provides an overview of the existing theoretical and empirical literature related to the effects of country size and island status on institutions and economic growth. The data and empirical model are presented in section 3, while the results of the empirical analysis are discussed in section 4. Section 5 concludes the paper.

2 Country size, islands and institutional quality

2.1 Country size

The idea that country size may be related to democracy is not new. The Greek philosophers Plato and Aristotle believed that a small population was essential for a well-functioning democracy. Such beliefs about the optimality of small population were also found in the works of later philosophers, including Montesquieu and Rousseau. As a result, most political scientists and economists interested in the effects of country size on democracy or economic growth measure country size in terms of population (see Diamond and Tsalik (1999), Easterly and Kraay (2000), Armstrong and Read (2000, 2002, 2003) and Knack and Azfar (2003), for example). In the case of democracy, a small population is thought to bring with it the advantage of homogeneity and greater participation in the democratic process on the part of the indi-

vidual citizens. In terms of economic growth, however, a small population has been thought to be detrimental. The Lewis model of industrialization, for example, assumes that the typical developing country has a large agricultural sector and a correspondingly large agricultural labor force (Lewis, 1954). These conditions are obviously not met by small countries. Countries with small populations are also thought to suffer from their small domestic markets and the resulting inability to take advantage of scale economies, as well as the reduced domestic competition and risk for monopolies that arises. Further, small countries may face difficulties in diversifying their output, leaving them more vulnerable to external economic shocks (Armstrong and Read, 2003). Finally, small countries may face a disadvantage in the provision of public goods, as a small population leads to a higher per capita cost of public goods. Therefore, models that attempt to explain country size as an endogenous choice variable tend to focus on the trade-off between the democratic advantages and the economic disadvantages of a small population (Alesina and Spolaore, 1997, 2003).

Another, much less common, means of measuring country size is area (Dahl and Tufte, 1973; Rigobon and Rodrik, 2005; Hansson and Olsson, 2006). In this case, country size is thought to affect the total cost (rather than per capita cost) of public goods provision. Hansson and Olsson (2006) argue that the diffusion of public goods (among which they include institutions such as rule of law) from the capital to the hinterland is more efficient in geographically small countries than in larger countries.⁴ Therefore, it may not be the case that geographically small countries suffer from a significantly higher per capita cost of public goods if provision of public goods is significantly more expensive in geographically large countries. In terms of economic growth, however, geographic size is thought to have little impact. While land area may possibly act as a proxy for natural resource abundance, there is little evidence that area is correlated with measures of economic activity (Armstrong and Read, 2003).

While there is some theoretical and empirical evidence that country size in terms of area may be endogenous (Alesina and Spolaore, 1997, 2003), we would argue that this is not likely to be the case with former colonies. Sup-

⁴They further argue that countries with a centrally located capital are even better equipped to disseminate public goods throughout the country. This argument bears some similarity to the argument put forth by Herbst (2000), where the geographical attributes of a country play an important role in the capability of the state to effectively broadcast its power across the entire nation.

port for this assumption is found first and foremost in Africa, where borders are often considered to have been drawn in a somewhat arbitrary fashion (Herbst, 2000; Engelbert et al, 2002). Population, on the other hand, is more variable over time than area. Further, population is more likely to be directly related to the level of economic development, making it potentially difficult to distinguish the effects of population on institutional quality from the effects of income. Therefore, measuring country size in terms of area may have some advantages over population. It is difficult, however, to argue *a priori* for one measure of country size over the other. Therefore, we will test both measures separately in the remainder of this paper.⁵

2.2 Islands

The characteristics that are often assumed to set islands apart from non-islands are isolation and remoteness. Despite this, many researchers include countries such as Dominican Republic, Papua New Guinea and East Timor in the island category. Perhaps a stricter definition of an island is a country with no land borders. One advantage of this definition is that it makes it even more reasonable to assume that country size in area is exogenous.⁶

Baldicchino (2005) argues that island jurisdictions are better suited to the accumulation of social capital, making them more likely to develop into democracies and facilitating in their economic development. In terms of economic growth, small island countries are thought to face the disadvantage of increased transportation costs due to their geographic isolation, including potentially high internal transportation costs in the case of island archipelagoes (Armstrong and Read, 2003). Therefore, island status is, much like small size, thought to be an advantage in terms of political institutions, but a disadvantage in terms of economic growth.

2.3 Previous empirical results

There is growing empirical evidence that countries with small populations, and small island countries in particular, are more likely to be stable democracies than their large, continental counterparts (Hadenius, 1992; Stepan and Skach, 1993; Diamond and Tsalik, 1999; Clague et al, 2001, Srebrnik, 2004). The question that arises, however, is whether these results are driven by the fact that a small population is thought to have a positive effect on democracy,

⁵In our sample of former colonies, the correlation between area and population is 0.8499.

⁶One could of course argue that the size of islands is not fully exogenous, as there are island nations that consist of several small islands. We believe, however, that country size can be considered quite exogenous despite these exceptions.

or whether there is an additional advantage to island status not captured by size alone. Further, there is some evidence that the link between wealth and democracy is much weaker in small islands than in large countries, i.e. small islands are more likely to be democracies even when per capita GDP is low (Ott, 2000; Anckar, 2002).

Rigobon and Rodrik (2005) estimate the impact of population and area on democracy simultaneously and find that area has no effect, while population has a highly significant negative effect on democracy. Their estimates for the effect of population and area on rule of law show that both variables are negative and significant, but with a low overall effect compared to the other control variables. Hansson and Olsson (2006) find a robust negative relationship between rule of law and country size measured in terms of area. Overall, the results support the hypothesis that small country size is beneficial for institutional quality.

The empirical evidence on the effects of country size on economic growth run counter to the expected results, i.e. there is no great disadvantage associated with a small population (Armstrong and Read, 2003). In fact, Easterly and Kraay (2000) found that microstates perform better economically than larger countries, even after taking into account an array of control variables. Further, there does not seem to be an economic disadvantage of being an island (Armstrong and Read, 2003). We believe that the explanation for the divergence in the theoretical and empirical results lies in institutional quality, i.e. small countries and islands have stronger institutions than large countries and non-islands, accounting for the relatively better economic performance of these countries. This hypothesis will be explored in more detail in the remainder of the paper.

3 Data specification and general empirical model

Armstrong and Read (2003) and Rigobon and Rodrik (2005) distinguish between political institutions and economic institutions, where the former are generally measured in terms of a country's democratic system and political sovereignty. The definition of economic institutions, however, is less clear. Armstrong and Read are interested in economic institutions in terms of economic policy sovereignty, i.e. the extent to which a country can determine its own monetary, fiscal and trade policies, for example. Rigobon and Rodrik, on the other hand, do not explicitly define economic institutions, but measure them using the World Bank governance indicator *Rule of Law*, which measures

legal outcomes such as the likelihood of crime, the enforceability of contracts, and the effectiveness of the court system and the police (Kaufmann, Kraay and Mastruzzi, 2005). Other common measures of economic institutions used in empirical analysis are *Risk of Government Expropriation* (Acemoglu et al, 2001, 2002) and *Social Infrastructure* (Hall and Jones, 1999). There is some debate in the literature as to whether these measures can truly be called institutions (see Glaeser et al (2004), for example) and as such, these measures are sometimes referred to as structural policies. Despite this debate, measures such as *Rule of Law* continue to be used as indicators of institutional quality.

For the purpose of this paper, we will use the Freedom House measure *Political Rights* for 2004 as our measure of political institutions.⁷ Political rights are measured based for example on how well the electoral process functions, the extent of political pluralism and participation, and how well the government functions (Freedom House, 2005). Our measure of economic institutional quality will be the World Bank governance indicator *Rule of Law* for 2004. Further, the paper focuses on former colonies, in keeping with much of the previous research. One reason for this is that former colonies are more likely to exhibit exogenously determined country size, as discussed in section 2 above. Further, the sample is restricted to former European colonies outside of continental Europe that were fully independent as of 2004. The reason for this is two-fold: first, our measure of political institutions (*Political Rights*) is only available for independent countries. Second, it is not clear whether politically dependent countries are able to independently choose the institutions they implement. The second point will be addressed in more detail in section 3.6 below. With these restrictions in mind, our main sample consists of 120 former colonies. Many of the countries included in the sample are very small, both in terms of population and area. As a result, many of these smallest countries are not included in cross-country regressions, often due to missing or unreliable data (this is especially true in the case of economic variables, such as per capita GDP).

The data for *Political Rights* and *Rule of Law* is available for all 120 countries. The original *Rule of Law* data runs from -2.5 to 2.5 and has been normalized for the purpose of this paper to run from 0 to 10, where 0 is

⁷Another measure of democracy commonly used in the literature is the Polity measure. This data is not available, however, for many of the smallest countries in the world. As a result, I find it preferable to use the Freedom House measure, which is highly correlated with the Polity measure (the correlation coefficient is 0.9067 for the 93 countries in the sample where both the Polity and the Freedom House measures are available).

the lowest score a country can achieve and 10 is the highest. The original *Political Rights* data runs from 1 to 7, where 1 is the highest score a country can achieve and 7 is the lowest. Therefore, we invert the *Political Rights* data in order to make the two measures of institutions more easily comparable.

Equation (1) summarizes the general empirical model employed in this paper:

$$Inst_i = \alpha_0 + \alpha_1 Island_i + \alpha_2 S_i + \alpha_3 X_i + \epsilon \quad (1)$$

where $Inst_i$ is a measure of institutional quality (in our case, *Political Rights* or *Rule of Law*) in country i and $Island_i$ is a dummy variable taking the value of one if the country is an island. For the purpose of this paper, only islands without land borders will be considered as islands.⁸ S_i is logged country size measured in thousands of square kilometers or population in thousands ($LArea$ and $LPop$), X_i is a vector of control variables, and ϵ is the normally distributed error term. The coefficients of prime interest are α_1 and α_2 , with α_1 expected to be greater than zero and α_2 expected to be less than zero when the other control variables are taken into account.

4 Results

4.1 The basic model

Table 1 shows the correlation coefficients between our two measures of institutional quality, island status, our two measures of size, and absolute latitude. For the full sample, there is a negative correlation between country size and institutional quality, while island status is positively correlated with institutional quality. The correlation between country size and institutional quality in the sub-samples is weaker and is likely affected by outliers in terms of country size, such as Canada and the United States of America. Therefore, a multivariate analysis is likely to yield more interesting results.

Table 2 presents the regression results for political institutional quality (i.e. the dependent variable is *Political Rights*), controlling for absolute latitude (*Latitude*) and continent. The absolute value of latitude is meant to capture exogenous geographic factors that are thought to influence the formation of good institutions, such as the disease environment and the suitability of land for agriculture (Diamond, 1997; Herbst, 2000; Sachs, 2001). Continent dummies for Oceania, Africa, the Middle East and Latin America

⁸The only two exceptions to this are Cuba, which has a 29 km border with Guantanamo Bay, and Australia, which has no land borders but is considered to be a continent rather than an island.

Table 1: Pair-wise correlation coefficients for institutions, island, country size and latitude.

	Political Institutions	Economic Institutions	Island	Log Population	Log Area
Full Sample (N=120)					
Political Institutions	1.0000				
Economic Institutions	0.5868	1.0000			
Island	0.3677	0.4078	1.0000		
Log Population	-0.2779	-0.3897	-0.6260	1.0000	
Log Area	-0.2391	-0.3485	-0.7394	0.8499	1.0000
Absolute Latitude	0.0652 ^{c)}	0.3390	-0.0041 ^{c)}	0.1553 ^{b)}	0.1991 ^{a)}
Islands (N=33)					
Political Institutions	1.0000				
Economic Institutions	0.4451	1.0000			
Log Population	-0.3968 ^{a)}	-0.2329 ^{c)}		1.0000	
Log Area	-0.2238 ^{c)}	-0.3050 ^{b)}		0.8576	1.0000
Absolute Latitude	-0.0782 ^{c)}	-0.0185 ^{c)}		0.1928 ^{c)}	0.3396 ^{b)}
Non-Islands (N=87)					
Political Institutions	1.0000				
Economic Institutions	0.5371	1.0000			
Log Population	0.0695 ^{c)}	-0.0853 ^{c)}		1.0000	
Log Area	0.1825 ^{b)}	0.0434 ^{c)}		0.7030	1.0000
Absolute Latitude	0.1127 ^{c)}	0.4975		0.2032 ^{b)}	0.2812

Note: All correlation coefficients are significant at <1% except: a) significant at <5%, b) significant at <10% and c) not significant.

Table 2: Regression results for Political Rights in 2004

	Dependent Variable: Political Rights				
	(1)	(2)	(3)	(4)	(5)
Island	1.11*** (0.38)			1.01* (0.54)	1.04* (0.46)
LArea		-0.14*** [0.05]		-0.02 (0.09)	
LPop			-0.15* [0.08]		-0.03 (0.10)
Latitude	-0.01 (0.02)	0.00 [0.02]	-0.00 [0.02]	-0.01 (0.02)	-0.01 (0.02)
N	120	120	120	120	120
R-squared	0.4089	0.3910	0.3825	0.4093	0.4093

Note: Standard errors are given in (), robust standard errors are given in []. Estimated intercepts are omitted from the table. The superscripts ***/**/* indicate a p-value less than 0.01/0.05/0.10, respectively. Included continent dummies are Africa, Latin America (including Mexico), Middle East, Oceania and Neo-Europe (Australia, Canada, New Zealand and the United States of America).

(including Mexico) are included, as well as a separate category for Neo-Europe (Australia, Canada, New Zealand and the United States of America). Neo-European countries are given their own category because they tend to be outliers, both in terms of country size and in terms of colonial experience.⁹

In column (1) we present the regression results for the full sample, with *Island* as the variable of interest. The results indicate that island countries have significantly better political institutions, and that *Latitude* does not have a significant effect on political institutions. Replacing *Island* with *LArea* in column (2) and *LPop* in column (3), the results are virtually unchanged. In both cases, country size is significantly and negatively related to political institutions, with the relationship between *LArea* and *Political Rights* being more significant than the relationship between *LPop* and *Political Rights*. The effects of the different continents and *Latitude* are the same as in column (1). Therefore, island status has a positive effect on political institutions, while country size has the opposite effect. It is possible, however, that the positive effect of islands on political institutions is due to their generally small size (see Table 1), or that the negative effect of country size is driven by the islands in the sample. Therefore, we include both *Island* and *LArea* in column (4), and *Island* and *LPop* in column (5). In both cases, *Island* remains significantly and positively related to political institutions (although at a lower level of significance than in column (1)) while country size becomes insignificant.

Table 3 presents the regression results when the dependent variable is *Rule of Law*. Columns (1)-(3) show the results when *Island*, *LArea* and *LPop* are tested individually (including the control variables for continent and *Latitude*). As in Table 2, these three variables are all highly significant in their respective regressions, with *Island* exhibiting a positive relationship with *Rule of Law* and the size variables exhibiting a negative relationship. Further, *Latitude* is significantly and positively related to economic institutions in all three cases. In columns (4) and (5), *Island* and the respective size variables are included in the same regression. The results in column (4) show that *Island* becomes insignificant when *LArea* is included in the regression, while *LArea* remains highly significant and negative. In contrast, both *Island* and *LPop* remain significant when included in the same regression. In both (4) and (5), *Latitude* is significant and positive. The results in (4) seem to indicate that much of the significant relationship between *Island* and *Rule of Law* can

⁹Due to their outlier status, the Neo-European countries are sometimes dropped from empirical analysis (Bertocchi and Canova, 2002).

Table 3: Regression results for Rule of Law in 2004

	Dependent Variable: Rule of Law							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Island	1.43*** (0.30)			0.35 (0.41)	0.73** (0.35)	2.86*** (0.56)	1.71*** (0.62)	2.15*** (0.56)
LArea		-0.28*** (0.04)		-0.24*** (0.06)			-0.22*** (0.06)	
LPop			-0.34*** (0.06)		-0.26*** (0.07)			-0.26*** (0.07)
Latitude	0.02* (0.01)	0.03*** (0.01)	0.03** (0.01)	0.03** (0.01)	0.03** (0.01)	0.04*** (0.01)	0.05*** (0.01)	0.05*** (0.01)
Isl x Lat						-0.09*** (0.03)	-0.08*** (0.03)	-0.08*** (0.03)
N	120	120	120	120	120	120	120	120
R-squared	0.4665	0.5227	0.5047	0.5259	0.5236	0.5055	0.5578	0.5626

Note: Standard errors are given in (). Estimated intercepts are omitted from the table. The superscripts ***/**/* indicate a p-value less than 0.01/0.05/0.10, respectively. Included continent dummies are Africa, Latin America (including Mexico), Middle East, Oceania and Neo-Europe (Australia, Canada, New Zealand and the United States of America).

be explained by the fact the islands in the sample are geographically smaller than the non-islands. However, there are other factors that may come into play. In column (1), for example, *Latitude* is much less significant than in column (2). It is plausible that *Latitude* is not as relevant for islands as it is for non-islands if islands are less dependent on agriculture or if islands experience more moderate temperatures than their continental counterparts on the same latitude, for example. Further, there are relatively fewer islands in Africa, the continent where absolute latitude plays the most significant role in *Rule of Law*. Therefore, an interaction term between Island and Latitude (*Isl x Lat*) is included the regressions run in columns (1), (4) and (5). The results are presented in columns (6)-(8). In all three cases, *Isl x Lat* is significant and negative while *Latitude* is positive and significant, indicating that Latitude does not have the same effect on *Rule of Law* in islands as in non-islands. Further, comparing the results in column (4) with column (7), *Island* becomes highly significant and positive when *Isl x Lat* is included in the regression.

It is possible that the effect of size on *Rule of Law* also differs significantly between islands and non-islands. Therefore, regressions including the respective size variables are run on the island and non-island sub-samples. The results of these regressions are reported in table 4. Columns (1) and (2) present the regression results for the island sub-sample. In both cases, the size variable (*LArea* and *LPop*, respectively) is negative and significant, while *Latitude* is insignificant. In columns (3) and (4), the regression results for the non-island sample are reported. Again, both size variables are negative and significant, with *LPop* somewhat more significant than *LArea*. Further, *Latitude* is positive and significant in both cases. Therefore, the major difference between the islands and the non-islands in the sample lies in the fact that *Latitude* does not significantly effect *Rule of Law* in the case of islands.

Table 4: Regression results for Rule of Law in 2004, island and non-island samples

	Dependent Variable: Rule of Law			
	(1)	(2)	(3)	(4)
Island	Islands	Islands	Non-I	Non-I
LArea	-0.28** (0.10)		-0.18** (0.08)	
LPop		-0.33** (0.15)		-0.23*** (0.08)
Latitude	-0.03 (0.03)	-0.04 (0.03)	0.05*** (0.01)	0.05*** (0.01)
N	33	33	87	87
R-squared	0.4802	0.4415	0.4768	0.4956

Note: Standard errors are given in (). Estimated intercepts are omitted from the table. The superscripts ***/**/* indicate a p-value less than 0.01/0.05/0.10, respectively. Included continent dummies are Africa, Latin America (including Mexico), Middle East, Oceania and Neo-Europe (Australia, Canada, New Zealand and the United States of America).

4.2 Institutions and economic performance

In this subsection, we test the hypothesis that the relatively better economic performance of islands and small countries can be explained by institutional quality. Table 5 presents the regression results for per capita GDP without controlling for institutions. In columns (1) - (3), the dependent variable is the natural logarithm of per capita GDP averaged over the years 1960 to 1995. In column (1), a dummy variable is included that takes the value one if a country is a small state (*Small State 1*). In order to qualify as a small state, a country must have had an average population of less than one million between the years 1960 and 1995.¹⁰ The data for average GDP and small state status are taken from Easterly and Kraay (2000) and are available for 103 of the countries in our sample. In column (2), *Island* is included as an independent variable. Further, a dummy variable indicating whether a country's major exports are fuels (*ExpFuels*) is included in both regressions.¹¹ The results show that both *Small State 1* and *Island* are quite significant and

¹⁰In the case of countries that became independent after 1960, the first available year of data is used in the averages.

¹¹This is in keeping with the regressions presented in Easterly and Kraay (2000) where a dummy variable indicating that a country was an oil producer was included.

Table 5: Regression results for Log per capita GDP from 1960 to 1995 and in 2004

Dependent Variable:	Log per capita GDP, Average 1960 - 1995				Log per capita GDP, 2004			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Small State 1	0.42*** (0.12)		0.28** (0.14)					
Small State 2				0.40** [0.18]				
Small State 3					0.17 [0.20]			0.34 [0.22]
Island		0.43*** [0.15]	0.27* (0.15)			0.35* [0.21]	0.95** [0.43]	0.80 ^{a)} [0.48]
ExpFuels	0.93*** (0.19)	0.90*** [0.23]	0.92*** (0.19)	0.87*** [0.28]	0.88*** [0.31]	0.89*** [0.32]	0.88*** [0.33]	0.86*** [0.29]
Latitude	0.02*** (0.01)	0.02*** [0.01]	0.02*** (0.01)	0.03*** [0.01]	0.03*** [0.01]	0.03*** [0.01]	0.03*** [0.01]	0.04*** [0.01]
Isl x Lat							-0.04** [0.02]	-0.04** [0.02]
N	103	103	103	120	120	120	120	120
R-squared	0.7246	0.7225	0.7338	0.5474	0.5267	0.5396	0.5571	0.5703

Note: Standard errors are given in (), robust standard errors are given in []. Estimated intercepts are omitted from the table. The superscripts ***/**/* indicate a p-value less than 0.01/0.05/0.10, respectively. Included continent dummies are Africa, Latin America (including Mexico), Middle East, Oceania and Neo-Europe (Australia, Canada, New Zealand and the United States of America). The superscript a) indicates a p-value = 0.100.

positively related to average per capita GDP. In column (3), *Small State 1* and *Island* are included in the same regression, and both variables are positive and significant.

In columns (4) - (8), the dependent variable is the natural logarithm of per capita GDP in 2004. This data is taken from the CIA World Fact Book and is available for all 120 countries in our sample. Two different measures of small state status are tested. The first includes all countries that were considered as small states according to *Small State 1* as well as countries not available in the Easterly and Kraay data with a population in 2004 of 1.5 million or less (*Small State 2*). The main reason that the upper population limit is extended to 1.5 million is that, due to population growth, many of the countries considered to be small states according to *Small State 1* had populations of well over 1 million in 2004. The second measure of small state status includes only countries with a population of one million or less as of 2004 (*Small State 3*). The results in columns (4) and (5) show that *Small State 2* is positively and significantly related to the level of per capita GDP in 2004, while *Small State 3* is insignificant. In columns (6) and (7), *Island* is included as an independent variable, with the additional independent variable *Isl x Lat* included in (7). In both cases, *Island* is positively and significantly related to the level of per capita GDP in 2004, while *Isl x Lat* is negative and significant in (7). In column (8), both *Small State 2* and *Island* are included as independent variables. While both variables are positive neither is significant, although *Island* has a p-value of 0.100. Finally, *ExpFuels* is very significantly and positively related to the level of per capita GDP in 2004 in all regressions.

Table 6 presents the two-stage least squares regression results for log per capita GDP where *Rule of Law* is included in the regression. The variables used to instrument for *Rule of Law* are *Island*, *Latitude*, *ExpFuels* and the various measures of country size (*LArea* or one of the small state dummies, depending on the particular regression), as well as *Isl x Lat* in columns (4) - (6). The dependent variable in columns (1) - (3) is log per capita GDP averaged over the years 1960 to 1995, whereas it is log per capita GDP in 2004 in columns (4) - (6).

In all columns except (3), *Rule of Law* is significantly and positively related to log per capita GDP, while the measures of island status and country size become insignificant. These results lend strong support to our hypothesis that the positive effects of country size and island status on levels of per capita

Table 6: Two-stage least squares regression results for Log per capita GDP from 1960 to 1995 and in 2004 controlling for Rule of Law in 2004

Second Stage:						
Dependent Variable:	Log per capita GDP, Average 1960 -1995			Log per capita GDP, 2004		
	(1)	(2)	(3)	(4)	(5)	(6)
Rule of Law	0.21** (0.09)	0.24* [0.14]	0.11 (0.21)	0.31** [0.15]	0.27** [0.13]	0.26* [0.16]
Small State 1	0.16 (0.16)		0.22 (0.18)			
Small State 2				0.01 [0.24]		0.10 [0.23]
Island		0.04 [0.24]	0.13 (0.30)		-0.03 [0.22]	-0.08 [0.21]
ExpFuels	1.00*** (0.16)	1.00*** [0.18]	0.96*** (0.18)	0.87*** [0.20]	0.87*** [0.22]	0.86*** [0.21]
Latitude	0.01* (0.01)	0.01 [0.01]	0.02 (0.01)	0.02*** [0.01]	0.02*** [0.01]	0.02*** [0.01]
N	103	103	103	120	120	120
R-squared	0.8177	0.8155	0.7947	0.7086	0.7025	0.7018

First Stage:						
Dependent Variable: Rule of Law						
Small State 1	0.62* (0.36)		0.27 (0.41)			
Small State 2				0.86*** (0.30)		0.38 (0.38)
ExpFuels	-0.38 (0.47)	-0.23 (0.47)	-0.25 (0.47)	0.02 (0.41)	0.13 (0.40)	0.10 (0.40)
LArea		-0.19** (0.08)	-0.16 (0.09)		-0.22*** (0.06)	-0.18** (0.07)
Island	1.32*** (0.38)	0.82* (0.48)	0.80* (0.48)	2.48*** (0.57)	1.70*** (0.63)	1.76*** (0.63)
Latitude	0.04** (0.01)	0.05*** (0.01)	0.04*** (0.01)	0.04*** (0.01)	0.05*** (0.01)	0.05*** (0.01)
Isl x Lat				-0.09*** (0.03)	-0.08*** (0.03)	-0.08*** (0.03)
N	103	103	103	120	120	120
R-squared	0.5392	0.5513	0.5535	0.4958	0.5582	0.5629

Note: Standard errors are given in (), robust standard errors are given in []. Estimated intercepts are omitted from the table. The superscripts ***/**/* indicate a p-value less than 0.01/0.05/0.10, respectively. Included continent dummies are Africa, Latin America (including Mexico), Middle East, Oceania and Neo-Europe (Australia, Canada, New Zealand and the United States of America).

GDP are due to the relatively stronger institutional quality in these countries.

4.3 Robustness checks

In this subsection, the robustness of the relationship between island status, country size and institutional quality is investigated.

4.3.1 Trade openness

The correlation between country size and trade openness in our sample (where trade openness is measured as imports plus exports as a percentage of GDP) is between -0.50 and -0.54 (when country size is measured by *LArea* and *LPop*, respectively). This is hardly surprising, as small countries do not have access to large internal markets. As a result, many small developing countries have followed markedly different development strategies than their larger counterparts. During the late 1950s to mid-1980s, developing countries were encouraged to limit both international trade and the establishment of multinational companies within their borders, based in part on the infant industry argument. These strategies were not feasible for small developing countries, as their size often necessitated extensive participation in international trade (Lingle and Wickman, 1999).¹²

It is plausible, then, that some of the effect of country size on institutional quality is a result of trade openness. Lingle and Wickman (1999) argue, for example, that increasing trade liberalization and the free movement of capital are forcing countries to compete with one another on the basis of their economic institutions. One empirical study of the relationship between trade openness and institutions (measured in terms of corruption) is found in Wei (2000). Wei argues that trade openness can be divided into "natural openness" and "residual openness". A country's level of natural openness depends on population size, remoteness, the language spoken by the majority, and geographical factors, such as the length of the coast and whether the country is an island or landlocked. He finds that natural openness is significantly negatively related to corruption, while the effect of residual openness is insignificant.

One shortcoming of Wei's analysis is that the data on corruption for small countries (and particularly, small islands) is often missing. Knack and Azfar (2003) argue that this results in a sample selection bias in favor of small

¹²Lingle and Wickman (1999) argue that the small open economies (particularly city-states, such as Hong Kong and Singapore) have performed better economically than countries that followed the UN development strategies, due to the former's integration in world markets. Further, the establishment of multinational corporations in city-states is thought to have greatly facilitated the transfer of technology from developed countries.

countries, as corruption data has typically been available only for relatively well-governed small countries. Using an expanded data set, they argue that the relationship between trade openness and corruption all but disappears.

Despite the findings of Knack and Azfar, the arguments presented by Lingle and Wickman (1999) suggest that there may be a positive relationship between trade openness and institutional quality, especially in the case of small countries. Congdon Fors and Olsson (2005) develop a model of endogenous institutional investment where a thriving modern sector provides the ruling elite with the incentive to invest in property rights institutions. While this model assumes a closed economy, one could extend the analysis to include the export sector. If countries that are more open have a greater share of their economic activity in the modern sector, they would face a greater incentive to invest in their institutions. However, the model also predicts that abundant natural resource rents have a potentially detrimental effect on institutional quality. Therefore, if a country's trade is dominated by natural resources, then openness could have a negative effect on institutional quality. Finally, the preceding arguments suggest that trade openness may be more relevant for economic institutions than political institutions.

Table 7 presents the regression results for *Political Rights* when the natural logarithm of trade openness (*LOpen*) is included as an independent variable, along with dummy variables indicating whether a country's major exports are non-fuel primary products (*ExpNonF*) or fuels (*ExpFuels*).¹³ The data for *ExpNonF* and *ExpFuels* is available for all 120 countries in the sample, while *LOpen* is only available for 101 countries. The results indicate that *LOpen* does not have a significant effect on political institutions, while *ExpNonF* and *ExpFuels* are significantly and negatively related to political institutions. However, when trade openness and major export categories are included in the same regression, only *ExpFuels* remains significant. Further, *Island* remains positive and significant in all cases. These results are not altered by the inclusion of the size variables.

¹³As mentioned above, openness is measured as exports plus imports as a percentage of GDP. This measure is employed because the effect of trade volume relative to total GDP on institutional quality is the relationship of interest.

Table 7: Regression results for Political Rights in 2004, controlling for trade openness and major export category

	Dependent Variable: Political Rights				
	(1)	(2)	(3)	(4)	(5)
LOpen	0.11 [0.35]		0.17 [0.34]	0.42 [0.36]	0.39 [0.38]
ExpNonF		-0.84** (0.33)	-0.46 [0.36]	-0.59* [0.35]	-0.46 [0.36]
ExpFuels		-1.34** (0.54)	-1.29*** [0.42]	-1.56*** [0.48]	-1.36*** [0.43]
Island	1.28*** [0.36]	0.92** (0.37)	1.18*** [0.35]	2.01*** [0.51]	1.50*** [0.43]
LArea				0.21** [0.10]	
LPop					0.14 [0.11]
Latitude	-0.00 [0.02]	-0.01 (0.02)	-0.00 [0.02]	-0.01 [0.02]	-0.00 [0.02]
N	101	120	101	101	101
R-squared	0.4198	0.4572	0.4533	0.4764	0.4616

Note: Standard errors are given in (), robust standard errors are given in []. Estimated intercepts are omitted from the table. The superscripts ***/**/* indicate a p-value less than 0.01/0.05/0.10, respectively. Included continent dummies are Africa, Latin America (including Mexico), Middle East, Oceania and Neo-Europe (Australia, Canada, New Zealand and the United States of America).

The results in table 7 indicate that trade openness does not have a significant effect on political institutions. Exports of non-fuel primary products and fuels, on the other hand, have a negative effect on *Political Rights*, with the latter category exhibiting the greatest effect. Further, *Island* remains positive significant in all 5 of the regressions. Perhaps the most surprising result is that *LArea* becomes positive and significant in (4), although this may be related to the fact that the 19 countries with missing observations for *LOpen* are geographically much smaller on average than the countries for which *LOpen* is available.¹⁴

Table 8 presents the regression results for *Rule of Law* when *LOpen*, *ExpNonF* and *ExpFuels* are included as independent variables. *LOpen* and *Island*

¹⁴The average value of *LArea* for the countries missing *LOpen* is 1.94 (with a standard deviation of 3.09). For countries where *LOpen* is available, the corresponding figure is 4.74 (with a standard deviation of 2.67).

Table 8: Regression results for Rule of Law in 2004, controlling for trade openness and major export category

	Dependent Variable: Rule of Law							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
LOpen	0.59** (0.25)	0.51* (0.27)			0.65** (0.25)	0.55** (0.27)		
ExpNonF			-0.45* (0.26)	-0.57** (0.26)	-0.42 (0.26)	-0.45* (0.25)		
ExpFuels			-0.07 (0.41)	-0.24 (0.40)	-0.63 (0.41)	-0.64 (0.40)		
Island	1.53** (0.64)	1.62*** (0.61)	1.51** (0.63)	1.80*** (0.58)	1.43** (0.65)	1.37** (0.62)	1.48** (0.66)	1.58** (0.62)
LArea	-0.09 (0.07)		-0.20*** (0.06)		-0.05 (0.07)		-0.15** (0.07)	
LPop		-0.12 (0.08)		-0.25*** (0.07)		-0.11 (0.08)		-0.20** (0.08)
Latitude	0.05*** (0.01)	0.05*** (0.01)	0.04*** (0.01)	0.04*** (0.01)	0.04*** (0.01)	0.04*** (0.01)	0.05*** (0.01)	0.05*** (0.01)
Isl x Lat	-0.05* (0.03)	-0.05* (0.03)	-0.06** (0.03)	-0.07** (0.03)	-0.04 (0.03)	-0.04 (0.03)	-0.05 (0.03)	-0.05 (0.03)
N	101	101	120	120	101	101	101	101
R-squared	0.5932	0.5951	0.5700	0.5816	0.6101	0.6152	0.5686	0.5790

Note: Standard errors are given in (). Estimated intercepts are omitted from the table. The superscripts ***/**/* indicate a p-value less than 0.01/0.05/0.10, respectively. Included continent dummies are Africa, Latin America (including Mexico), Middle East, Oceania and Neo-Europe (Australia, Canada, New Zealand and the United States of America).

are both positive and significant in columns (1) and (2), while the size measures (*LArea* and *LPop*, respectively) become insignificant. *ExpNonF* and *ExpFuels* replace *LOpen* in columns (3) and (4). In both cases, *ExpNonF* is negative and significant while *ExpFuels* is negative and insignificant. *Island* remains positive and significant in both cases, while *LArea* and *LPop* are significant and negative in (3) and (4), respectively. When *LOpen* is included together with *ExpNonF* and *ExpFuels*, *LOpen* and *Island* remain positive and significant, while the size measures (*LArea* and *LPop*, respectively) are insignificant. *ExpNonF* is insignificant in (5) and negative and significant in (6), while *ExpFuels* is insignificant in both cases.

In contrast to table 7, the results in table 8 indicate that trade openness has a significant and positive effect on economic institutions. This is in keeping with the fact that the arguments for a positive effect of openness on institutions listed above were more relevant for economic institutions than political institutions. Further, the inclusion of *LOpen* in the regressions renders country size insignificant, while *Island* remains significant in all cases. The results in columns (7) and (8) indicate, however, that this is not due to missing variables as country size remains significant in the smaller sample when *LOpen* is not included in the regression.

Exports of non-fuel primary products has a significantly negative effect on *Rule of Law* (except in (5)), whereas exports of fuels do not have a significant effect on economic institutions. The latter result is somewhat surprising, given the significance of fuel exports in political institutions. Part of the explanation may have to do with the fact that fuel exporting countries tend to have higher GDP per capita than the other countries in the sample, as can be seen in table 9. Therefore, the positive income effect of fuels may offset the potentially negative effect on economic institutions. Similarly, the positive effect of *LOpen* on *Rule of Law* may be due in part to the positive effect of openness on per capita GDP. Exports of non-fuel primary products, on the other hand, are negatively related to per capita GDP, which may account for some of the negative effect of *ExpNonF* on *Rule of Law*.

Rigobon and Rodrik (2005) use a method known as identification through heteroskedasticity to control for the endogeneity of trade openness in per capita GDP. Their results show that trade openness has a negative effect on per capita GDP, while it has a significant positive effect of *Rule of Law* and negative effect on democracy. These results lends some support to our results that trade openness has a positive effect on economic institutions.

Table 9: Regression results for Log per capita GDP in 2004

	Dependent Variable: Log per capita GDP, 2004		
	(1)	(2)	(3)
LOpen	0.53*** [0.13]		0.49*** (0.13)
ExpNonF		-0.29** [0.14]	-0.27* (0.14)
ExpFuels		0.75** [0.35]	0.45* (0.24)
Latitude	0.03*** [0.01]	0.03*** [0.01]	0.03*** (0.01)
N	101	120	101
R-squared	0.6062	0.5376	0.6449

Note: Standard errors are given in (), robust standard errors are given in []. Estimated intercepts are omitted from the table. The superscripts ***/**/* indicate a p-value less than 0.01/0.05/0.10, respectively. Included continent dummies are Africa, Latin America (including Mexico), Middle East, Oceania and Neo-Europe (Australia, Canada, New Zealand and the United States of America).

Table 10: Regression results for Rule of Law and Political Rights in 2004 controlling for vulnerability

Dependent Variable:	Rule of Law			Political Rights
	(1)	(2)	(3)	(4)
Vuln	3.02** (1.24)	2.45 (1.56)	1.49 (1.67)	-0.35 [1.52]
Island	2.03*** (0.68)	1.76** (0.82)	1.67** (0.73)	1.04** [0.49]
LArea		-0.06 (0.10)		
LPop			-0.17 (0.12)	
Latitude	0.04*** (0.02)	0.04*** (0.02)	0.04** (0.02)	-0.02 [0.02]
Isl x Lat	-0.06 (0.04)	-0.05 (0.04)	-0.05 (0.04)	
N	80	80	80	80
R-squared	0.6081	0.6102	0.6183	0.4270

Note: Standard errors are given in (), robust standard errors are given in []. Estimated intercepts are omitted from the table. The superscripts ***/**/* indicate a p-value less than 0.01/0.05/0.10, respectively. Included continent dummies are Africa, Latin America (including Mexico), Middle East, Oceania and Neo-Europe (Australia, Canada, New Zealand and the United States of America).

4.3.2 Vulnerability

Small countries are often considered to be more vulnerable than large countries due to their greater exposure to exogenous shocks (Briguglio, 1995). Such exogenous shocks are generally thought to be economic in nature, although political and environmental shocks also play a role. Easterly and Kraay (2000) show, for example, that small countries have greater output volatility and a greater volatility of terms of trade shocks than the large countries in their sample. They explain this based on the fact that trade accounts for a larger proportion of GDP in small countries, and that small countries are less able to diversify their output and their export markets. In terms of politics, small countries are thought to be vulnerable to external political pressures from large countries, and hence constrained in their ability to formulate and implement independent foreign policy. This in turn is partially due to the fact that small countries face difficulty in maintaining credible domestic defence, limiting their strategic options (Armstrong and Read, 2003). Finally, small countries tend to be more vulnerable to environmental shocks in the form of natural disasters, due in part to the fact that many small countries are located in geographic areas where hurricanes and typhoons are common. Indeed, low-lying islands are especially vulnerable to storms and rising sea-levels resulting from climate change (Armstrong and Read, 2003).¹⁵

An early attempt to measure vulnerability was made by Briguglio (1995). His Vulnerability Index uses economic measures of vulnerability that take into account trade openness, transport costs as a share of trade, and the cost of natural disasters. In table 10, Briguglio's Vulnerability Index (*Vuln*) is included as an independent variable in the *Rule of Law* and *Political Rights* regressions. In columns (1) - (3), *Vuln* is included as an explanatory variable for *Rule of Law*. *Vuln* is only significant in (1), whereas *Island* and *Latitude* are positive and significant in all cases. In column (4), *Vuln* is included as an independent variable in the *Political Rights* regression, and is found to be insignificant. Therefore, the effect of vulnerability on *Rule of Law* and *Political Rights* is nearly identical to the effect of trade openness on these institutions. This is perhaps unsurprising, given the high correlation between *Vuln* and *LOpen* (0.642 for 75 observations).

¹⁵An extreme example is the tiny island nation Tuvalu, located in the South Pacific. The tides have been 1.5 meters higher than average this year, and there are growing fears that the islands of the archipelago will become uninhabitable in the near future. The country's Prime Minister, Maatia Toafa, has suggested that a possible solution is the resettlement of the entire population in Australia and New Zealand (*Nature*, 2006).

While the Vulnerability Index is an interesting concept, it is quite sensitive to specification, as the reliance on economic indicators and the large role that trade plays in the index may mean that it is mis-specified. Indeed, Armstrong and Read (2002) find that the Vulnerability Index actually has a significant and *positive* effect on the long-run economic growth performance of small states, which runs counter to the intuition behind the index. Therefore, it is difficult to ascertain whether the effect of vulnerability on institutions stems from the fact that vulnerability forces countries to adapt stronger institutions to help offset shocks, or whether it stems from the positive effects of trade openness captured by the Vulnerability Index.¹⁶

4.3.3 Colonial history

Much of the previous research into the determinants of institutional quality in former colonies has focused on the extent to which Europeans were able to establish settlements in the colonies. Acemoglu, Johnson and Robinson (henceforth AJR) (2001) focus on the effect of settler mortality on institutions, and argue that in former colonies where settler mortality was high, Europeans did not settle but rather implemented extractive institutions. In a subsequent paper (AJR, 2002), they use the log of population density in 1500 as an instrument for institutional quality, arguing that countries with a high population density were less conducive to European settlement and were likely to have certain institutions in place already that could be used for extractive purposes. Countries with low population density, on the other hand, were more conducive to European settlement. Further, it was not as straightforward to extract resources from countries with a low population density, as the requisite infrastructure was often weak or nonexistent.

Another factor that may influence institutional quality is the identity of the last colonizing power. The empirical evidence indicates that former British colonies exhibit better economic development after independence (Grier, 1999) and are generally more democratic than other former colonies (Clague et al, 2001).

Table 11 presents the regression results for *Political Rights* when historical controls are included as independent variables. The log of settler mortality (*LMort*) is included in column (1) and is insignificant. In column (2), log population density in 1500 (*LPopDen*) is included as an independent variable and is found to be negative and significant. Turning to the identity of

¹⁶A regression including both *Vuln* and *LOpen* as independent variables renders both variables insignificant for both measure of institutions.

Table 11: Regression results for Political Rights in 2004 including historical controls

	Dependent Variable: Political Rights				
	(1)	(2)	(3)	(4)	(5)
LMort	0.03 [0.22]				
LPopDen		-0.30** [0.14]			
Portugal			1.21* (0.64)		0.93 (0.64)
France				-0.95** (0.40)	-0.82** (0.41)
Island	1.05* [0.55]	0.94* [0.48]	1.06*** (0.38)	1.04*** (0.38)	1.01*** (0.37)
Latitude	0.01 [0.02]	-0.01 [0.02]	-0.01 (0.02)	-0.01 (0.02)	-0.01 (0.02)
N	77	94	120	120	120
R-squared	0.4336	0.3997	0.4273	0.4368	0.4473

Note: Standard errors are given in (), robust standard errors are given in []. Estimated intercepts are omitted from the table. The superscripts ***/**/* indicate a p-value less than 0.01/0.05/0.10, respectively. Included continent dummies are Africa, Latin America (including Mexico), Middle East, Oceania and Neo-Europe (Australia, Canada, New Zealand and the United States of America).

Table 12: Regression results for Rule of Law in 2004 including historical controls

	Dependent Variable: Rule of Law					
	(1)	(2)	(3)	(4)	(5)	(6)
LMort	-0.28* (0.16)	-0.27* (0.16)				
LPopDen			-0.23** (0.11)	-0.13 (0.11)		
UK+Neo					0.53** (0.26)	0.58** (0.25)
Island	2.58*** (0.90)	3.08*** (0.84)	1.62* (0.92)	2.34*** (0.82)	1.51** (0.62)	1.85*** (0.57)
LArea	-0.17* (0.09)		-0.22*** (0.08)		-0.20*** (0.06)	
LPop		-0.17* (0.10)		-0.24** (0.09)		-0.24*** (0.07)
Latitude	0.04** (0.02)	0.04** (0.02)	0.05*** (0.01)	0.04*** (0.01)	0.05*** (0.01)	0.04*** (0.01)
Isl x Lat	-0.08* (0.04)	-0.09** (0.04)	-0.06 (0.05)	-0.09* (0.04)	-0.07** (0.03)	-0.08*** (0.03)
N	77	77	94	94	120	120
R-squared	0.6484	0.6439	0.5780	0.5745	0.5739	0.5823

Note: Standard errors are given in (). Estimated intercepts are omitted from the table. The superscripts ***/**/* indicate a p-value less than 0.01/0.05/0.10, respectively. Included continent dummies are Africa, Latin America (including Mexico), Middle East, Oceania and Neo-Europe (Australia, Canada, New Zealand and the United States of America).

the last colonizing power, five dummy variables were constructed: *Portugal*, *Spain*, *France*, *Belgium*, UK or Neo-Europe (*UK+Neo*), and *Other*. Only *Portugal* and *France* were significantly related to *Political Rights* when the colonial dummies were included separately in the regression. Regardless of the historical controls included in the regressions, *Island* remains positive and significant in all cases, indicating that *LMort*, *LPopDen* and the identity of the last colonizing power do not explain the significance of *Island* in *Political Rights*.

The effects of the various historical control variables on *Rule of Law* are reported in table 12. *LMort* is significantly and negatively related to *Rule of Law*, while *LPopDen* is negative and significant in (3) and insignificant in (4). *UK+Neo* is the only colonial variable to exert a significant effect on *Rule of Law* when the identity of the last colonizing power is taken into account, with the relationship being a positive one. In all of the above cases, both the size variables and *Island* remain significant, the former negatively so and the latter positively so. Again, the various historical controls do not explain the significant positive effect of *Island* on *Rule of Law*. Further, while both *LMort* and *LPopDen* are popular instrumental variables in the institutions literature, they are somewhat restrictive when the variable of interest is *Island*. The data for *LMort* is only available for 10 of the islands in the sample, for example, while the *LPopDen* data is available for 17 (compared to 33 for the full sample). In the case of *LPopDen*, many of the small Caribbean islands have been assigned the same population density as Dominican Republic, making the data availability for islands somewhat inflated.

While the historical variables listed above are no doubt important factors in explaining institutional quality, they may be somewhat too broad to capture important differences between countries with similar mortality rates, population densities, or former colonizing power. Rather, the manner in which the former colony was administered by the colonial powers may prove to be a significant factor in institutional quality. For example, Lange (2004) has demonstrated that the extent of indirect rule in 1955 is significantly and negatively related to *Rule of Law* and an average of *Political Rights* in 33 former British colonies.¹⁷ It is plausible that smaller countries were easier to administer from a bureaucratic point of view and that as a result, the transplantation of institutions from the colonizer to the colony was much more effective in

¹⁷Lange uses *Rule of Law* data from 1998. The average democracy scores are calculated for the years 1972 to 2000.

smaller countries than in larger countries. In the case of islands, administration may have been further facilitated by the fact that borders were often pre-determined by geography, and as such were not a point of contention.

Table 13 reports the regression results for *Rule of Law* and *Political Rights* when *Indirect* is included as an independent variable. In column (1), *Island* is also included as an independent variable, but neither of the size variables are included. *Indirect* is negatively and significantly related to *Rule of Law*, while *Island* becomes insignificant. In column (2), the size variable *LArea* is included in the regression. In this case, the relationship between *Indirect* and *Rule of Law* is negative and nearly significant (p-value=0.1000), while both *Island* and *LArea* are insignificant. In column (3), *LArea* is replaced with *LPop*. The relationship between *Indirect* and *Rule of Law* is insignificant in this case, as is the relationship between *LPop* and *Rule of Law*. *Island*, on the other hand, becomes positive and significant. In all three of the previous regressions, *Latitude* was insignificant. Finally, column (4) presents the regression results for *Political Rights* when *Indirect* and *Island* are included as independent variables. The results show that neither *Indirect* nor *Island* are significantly related to *Political Rights*. In fact, the only significant variables in this regression are the unreported control for Latin America and the constant term.

The results in table 13 indicate that the extent of indirect rule may partially explain the better performance of island countries, at least in terms of *Rule of Law*. As table A3 in the data appendix shows, all islands in the sample were ruled directly except Fiji and Solomon Islands, both of which are located on the opposite side of the globe in relation to Britain. African countries tend to exhibit a greater extent of indirect rule, while all Latin American countries were ruled directly, island or not. Indeed, several factors seem to play a role in determining the extent of indirect rule. While the results in table 13 are interesting, it is difficult to draw definite conclusions based on such a small sample. Further, the sample is restricted to former British colonies that were still under British rule in 1955. Therefore, more research into the extent of indirect rule in a broader range of colonies may be a fruitful line of future research.

4.3.4 Dependent versus independent states

So far, the analysis has been restricted to former colonies that were independent as of 2004. There is, however, *Rule of Law* data available for a number of politically dependent territories. Therefore, it may be of inter-

Table 13: Regression results for Rule of Law and Political Rights in 2004 controlling for the extent of indirect rule in 1955

Dependent Variable:	Rule of Law			Political Rights
	(1)	(2)	(3)	(4)
Indirect	-0.03** (0.01)	-0.02 ^{a)} (0.01)	-0.01 (0.02)	-0.01 (0.02)
Island	1.16 (0.80)	0.55 (0.87)	1.50* (0.81)	0.78 (1.02)
LArea		-0.26 (0.16)		
LPop			-0.35 (0.23)	
Latitude	-0.01 (0.03)	-0.00 (0.03)	-0.01 (0.03)	-0.01 (0.04)
N	31	31	31	31
R-squared	0.5398	0.5853	0.5828	0.3574

Note: Standard errors are given in (). Estimated intercepts are omitted from the table. The superscripts ***/**/* indicate a p-value less than 0.01/0.05/0.10, respectively and a) indicates p-value=0.100. Included continent dummies are Africa, Latin America (including Mexico), Middle East, Oceania and Neo-Europe (Australia, Canada, New Zealand and the United States of America).

Table 14: Regression results for Rule of Law and Political Rights in 2004 controlling for dependent status and years of independence

Dependent Variable:	Rule of Law						Political Rights
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Dependent	2.25*** (0.51)	1.48*** (0.51)	1.77*** (0.49)				
Years Indep				-0.01** [0.003]	-0.01** (0.003)	-0.01** (0.003)	-0.003 [0.004]
Island	2.72*** (0.55)	1.62*** (0.57)	2.07*** (0.53)	2.23*** [0.59]	1.24** (0.57)	1.78*** (0.55)	0.96** [0.45]
LArea		-0.23*** (0.06)			-0.25*** (0.06)		
LPop			-0.27*** (0.06)			-0.27*** (0.07)	
Latitude	0.04*** (0.01)	0.05*** (0.01)	0.05*** (0.01)	0.05*** [0.01]	0.05*** (0.01)	0.05*** (0.01)	-0.00 [0.02]
Isl x Lat	-0.09*** (0.03)	-0.08*** (0.03)	-0.09*** (0.03)	-0.08*** [0.02]	-0.07*** (0.03)	-0.08*** (0.03)	
N	127	127	127	127	127	127	120
R-squared	0.5501	0.6099	0.6089	0.5297	0.5998	0.5796	0.4120

Note: Standard errors are given in (), robust standard errors are given in []. Estimated intercepts are omitted from the table. The superscripts ***/**/* indicate a p-value less than 0.01/0.05/0.10, respectively. Included continent dummies are Africa, Latin America (including Mexico), Middle East, Oceania and Neo-Europe (Australia, Canada, New Zealand and the United States of America).

est to test whether dependent territories have stronger or weaker economic institutions than independent countries. For example, it might be the case that territories with strong institutions are more likely to successfully gain their independence, while territories with weak institutions are more likely to remain dependents of the colonial ruler. On the other hand, colonial powers may have a greater incentive to hold on to colonies that score highly on *Rule of Law* if these territories perform well economically as a result. Further, dependent territories may exhibit stronger economic institutions as a direct result of their dependent status, i.e. the close connection with the colonial power may lead to better economic institutions. Indeed, Armstrong and Read (2000) find that dependent territories perform better economically than sovereign microstates. Focusing exclusively on islands, Bertram (2004) also finds that dependent islands perform better economically than independent islands.

Table 14 presents the regression results for *Rule of Law* when seven dependent territories (Bermuda, Cayman Islands, French Guiana, Macao, Martinique, Hong Kong and Puerto Rico) are included and controlled for in the sample. In columns (1) - (3), a dummy variable indicating dependency status (*Dependent*) is included in the analysis. In all three regressions, *Dependent* is positively and significantly related to *Rule of Law*, indicating that the depended territories in the sample have significantly better economic institutions than the independent countries. In columns (4) - (6), a variable measuring the number of years a country has been independent (*Years Indep*) is included as an independent variable. The results show that *Years Indep* is negatively and significantly related to *Rule of Law*, i.e. countries that have been independent for a shorter period of time have significantly better economic institutions than countries that have been independent for a long period of time. Column (7) reports the regression results for *Political Rights* when *Years Indep* is included as an independent variable, and show that *Years Indep* has no significant effect on political institutions. Taken together, the results in table 14 indicate that late colonial rule is good for economic institutions, while it has no effect on political institutions. One hypothesis is that late colonial rule brought with it closer trade ties, which in turn was beneficial for economic institutions (see 4.3.1, for example).

4.3.5 Social capital and identity

A concept that has become increasingly popular in the social sciences literature is social capital and its effect on economic development and institutions. A seminal contribution to this field is Putnam (1993), where it is argued that

social capital is positively related to economic growth and government performance in Italy. Using cross-country data, Knack and Keefer (1997) find that social capital is positively related to economic performance, and that there is a significant positive relationship between social capital and formal institutions. Djankov et al (2003) argue that countries with greater amounts of civic capital (which in addition to social capital includes culture, ethnic heterogeneity and other historical factors) are able to better minimize the aggregate social costs of disorder and dictatorship, and therefore have a greater freedom in choosing and implementing optimal formal institutions.

The definition and measurement of social capital differs between Putnam (1993) and Knack and Keefer (1997); Putnam's measure of social capital is membership in formal groups (also referred to as associational activity), while Knack and Keefer measure social capital in terms of the level of trust and the strength of norms of civic cooperation in a society. Perhaps the most important difference between these two definitions is that Putnam's definition tends to conceptualize social capital as a horizontal measure where social capital can be strong within specific groups in a society, whereas Knack and Keefer conceptualize social capital as a broader term, measuring trust and civic norms at the national level rather than group level. Indeed, Knack and Keefer argue that associational activity can have ambiguous effects on economic performance, trust and civic cooperation. The risk is that associational activity can facilitate rent-seeking, as well as weaken trust between groups in society. They find, in contrast to Putnam, that associational activity does not have a significant effect on economic performance. Therefore, social capital that manifests itself at the national level may be more relevant for institutions and economic performance than social capital measured at the group level.

Baldicchino (2005) argues that social capital is a key factor in explaining the favorable economic and institutional results that often develop on island jurisdictions. Like Knack and Keefer, he acknowledges that social capital can be detrimental if it is strongest within distinct groups rather than at the national level, and argues that islands may be better able to foster a sense of national identity that is stronger than group identity (such as ethnicity, for example) than non-islands. Perhaps the greatest advantage of island jurisdictions is that their "geographical precision" may give islanders a distinct sense of place, which in turn may lead to a sense of unitarism (Baldicchino, 2005). Therefore, if islands face an advantage in terms of accumulating society level social capital as opposed to group level social capital, then this may help to

explain their relatively better economic and institutional performance. This suggests that identity may play an important role, as island jurisdictions that fail to foster a national identity that is stronger than group identity may not benefit from social capital at all or, even worse, may suffer the adverse effects of group level social capital (such has been the case in Fiji and Haiti, for example).

As mentioned above, the "geographical precision" of islands may help foster a sense of national identity. So far, our measure of island status has only included islands with no land borders, which would fit with the above hypothesis. However, many studies include countries that occupy parts of islands in the island category. Therefore, we run regressions for *Political Rights* and *Rule of Law* where we introduce a second measure of island status (*Island2*) that includes partial islands, increasing the total number of islands by six.¹⁸ The results are presented in table 15. Column (1) shows the results for *Political Rights* when *Island2* is included instead of *Island*. While *Island2* is positive and significant, it is less significant than *Island* (column (1) in table 2). In column (2), a dummy variable is included that indicates an island has land borders (*Isl LB*). While this variable is negatively related to *Political Rights*, it is also insignificant. Therefore, we cannot conclude that islands with land borders have significantly worse political rights than islands with no land borders. In columns (3) - (6), the dependent variable is *Rule of Law*. In all cases, *Island2* is significantly and positively related to economic institutions. Further, *Isl LB* is negative and significant, indicating that islands with land borders have significantly worse economic institutions than islands without land borders. Therefore, while the evidence indicates that geographical precision (i.e. no land borders) is positively related to institutional quality, the results are only significant in the case of economic institutions.

¹⁸The countries now considered islands are Brunei, Dominican Republic, Haiti, Indonesia, Papua New Guinea and East Timor.

Table 15: Regression results for Political Rights and Rule of Law in 2004, including islands with land borders as islands.

Dependent Variable:	Political Rights			Rule of Law		
	(1)	(2)	(3)	(4)	(5)	(6)
Island2	0.92** (0.38)	1.10*** (0.39)	1.38** (0.58)	1.81*** (0.56)	1.94*** (0.63)	2.36*** (0.58)
Isl LB		-1.18 (0.75)			-1.22** (0.58)	-1.51*** (0.56)
LArea			-0.28*** (0.06)		-0.23*** (0.06)	
LPop				-0.30*** (0.07)		-0.26*** (0.07)
Latitude	0.00 (0.02)	-0.01 (0.02)	0.05*** (0.01)	0.05*** (0.01)	0.05*** (0.01)	0.05*** (0.01)
Isl2 x Lat			-0.08*** (0.03)	-0.09*** (0.03)	-0.09*** (0.03)	-0.10*** (0.03)
N	120	120	120	120	120	120
R-squared	0.3956	0.4089	0.5616	0.5503	0.5787	0.5787

Note: Standard errors are given in (). Estimated intercepts are omitted from the table. The superscripts ***/**/* indicate a p-value less than 0.01/0.05/0.10, respectively. Included continent dummies are Africa, Latin America (including Mexico), Middle East, Oceania and Neo-Europe (Australia, Canada, New Zealand and the United States of America).

5 Conclusions

The purpose of this paper has been to explore the effects of island status and country size on institutional quality (measured in terms of *Political Rights* and *Rule of Law*), and to determine if these institutional effects can explain the relatively strong economic performance of islands and small countries. Previous theoretical and empirical research indicates that small country size and island status are positively related to political institutional quality, while there is little research into the effect of country size and island status on economic institutional quality. This is particularly so in the case of islands. Therefore, one contribution of this paper has been to establish that small countries and islands have relatively strong economic institutions. Further, to our knowledge there is no other study that has linked institutional quality to the relatively strong economic performance of islands and small countries.

Our results indicate that island status and small country size are positively and significantly related to institutional quality, and that these results are robust to the inclusion of an array of control variables. We also demonstrate

that island status and small country size are positively related to levels of per capita GDP, using average data from 1960 to 1995, as well as data from 2004. This is in keeping with the results found in much of the previous empirical literature on the subject. When *Rule of Law* is included in these regressions by means of two-stage least squares, however, the positive island and small country size effects disappear, indicating that the strength of economic institutions in these countries accounts for their relatively stronger economic performance.

The results in this paper do not, however, provide any conclusive explanations as to why islands and small countries exhibit relatively stronger institutional quality. Rather, the evidence indicates possible avenues for further research. One such avenue is to explore the nature of colonial rule in greater detail, as direct rule and closer political connections between the former colonizing country and the former colony seem to be beneficial for economic institutions. Another possible explanation for the relatively stronger performance of islands in terms of institutional quality may lie in the accumulation of social capital. This in turn may be facilitated by the geographical precision of islands, which is thought to be an advantage in the formation of a strong national identity.

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Data Appendix

Table A1: Definitions of the variables.

Variable	Definition
Political Rights	Political rights. Source: Freedom House (2005)
Rule of Law	Rule of law. Source: Kaufmann et al (2005)
Island	Dummy variable=1 if country is an island with no land borders. Source: CIA (2005) and own assessment.
Population	Total population ('000) in 2004. Source: World Development Indicators 2005.
LPop	Natural logarithm of Population.
Area	Total land area (in'000 km). Source: CIA (2005).
LArea	Natural logarithm of Area.
Latitude	Absolute value of latitude degree. Source: World Bank (2005) and CIA (2005)
Open	Open=(exports + imports)/GDP in current prices local currency units, 2002. Source: World Development Indicators 2005.
LOpen	Natural logarithm of Open.
ExpNonF	Country's major export category (i.e. 50% of total exports or more) is non-fuels. Source: World Bank (2005) and CIA (2005).
ExpFuels	Country's major export category (i.e. 50% of total exports or more) is fuels. Source: World Bank (2005) and CIA (2005).
Vuln	Country's score on the Vulnerability Index (from 0 to 1). Source: Briguglio (1995).
Settler Mortality	Estimated settler mortality. Source: Acemoglu et al (2001).
LMort	Natural logarithm of Settler Mortality.
Pop. Density 1500	Population density in 1500. Source: Acemoglu et al (2002).
LPopDen	Natural logarithm of Pop. Density 1500.
Portugal	Dummy variable=1 if the last colonizing power was Portugal. Source: CIA (2005) and own assessment.
France	Dummy variable=1 if the last colonizing power was France. Source: CIA (2005) and own assessment.
UK+Neo	Dummy variable=1 if the last colonizing power was the UK or a Neo-European country. Source: CIA (2005) and own assessment.
Indirect	The extent of indirect rule by the UK in 1955. Source: Lange (2004).
Dependent	Dummy variable=1 if the country is a dependent territory. Own assessment.
Years Indep	Number of years the country has been independent from most recent colonial period. Source: CIA (2005) and own assessment.
Island2	Dummy variable=1 if country occupies all or part of an island. Source: CIA (2005) and own assessment.
Isl LB	Dummy variable=1 if country is an island with a land border. Source: CIA (2005) and own assessment.
Av GDP 1960-1995	The average per capita real GDP for the period 1960-1995. Source: Easterly and Kraay (2000).
Log Av GDP 1960-1995	Natural logarithm of Av GDP 1960-1995.
GDP 2004	PPP per capita GDP for 2004. Source: CIA (2005)
Log GDP 2004	Natural logarithm of GDP 2004.
Small State 1	Dummy variable=1 if the country's average population over the period 1960-1995 was less than one million. Source: Easterly and Kraay (2000).
Small State 2	Dummy variable=1 if Small State 1=1 or the country's average population in 2004 was less than 1.5 million. Own assessment.
Small State 3	Dummy variable=1 if the country's average population in 2004 was less than one million. Own assessment.

Table A2: Summary statistics of the variables.

Variable	Full Sample			Islands			Non-Islands		
	Mean	St. Dev.	N	Mean	St. Dev.	N	Mean	St. Dev.	N
Political Rights	4.39	2.04	120	5.61	1.68	33	3.93	1.99	87
Rule of Law	4.56	1.78	127	5.69	1.52	37	4.10	1.67	90
Island	0.29	0.46	127	1.00	0.00	37	0.00	0.00	90
Population	28420.65	103430.20	127	4184.85	14053.94	37	38384.26	121329.10	90
LPop	8.20	2.29	127	5.97	2.06	37	9.12	1.68	90
Area	659.51	1570.60	127	38.83	113.16	37	914.67	1805.85	90
LArea	4.05	3.07	127	0.67	2.50	37	5.44	2.04	90
Latitude	15.55	9.98	127	15.91	9.04	37	15.41	10.38	90
Open	82.20	45.16	103	102.84	32.24	23	76.26	46.73	80
LOpen	4.27	0.52	103	4.58	0.37	23	4.19	0.53	80
ExpNonF	0.34	0.48	127	0.16	0.37	37	0.41	0.49	90
ExpFuels	0.10	0.30	127	0.05	0.23	37	0.12	0.33	90
Vuln	0.47	0.15	80	0.60	0.12	25	0.42	0.12	55
Settler Mortality	235.32	430.29	78	105.90	156.38	10	254.36	454.56	68
LMort	4.70	1.20	78	3.96	1.25	10	4.81	1.17	68
Pop. Density 1500	4.69	11.46	95	2.38	3.59	17	5.20	12.50	78
LPopDen	0.45	1.52	95	0.27	1.13	17	0.49	1.59	78
Portugal	0.06	0.24	127	0.05	0.23	37	0.07	0.25	90
France	0.20	0.41	127	0.08	0.28	37	0.26	0.44	90
UK+Neo	0.52	0.50	127	0.81	0.40	37	0.40	0.49	90
Indirect	38.64	32.27	32	11.84	23.52	9	49.13	29.27	23
Dependent	0.06	0.23	127	0.11	0.31	37	0.03	0.18	90
Years Indep	63.88	58.00	127	33.92	24.01	37	76.20	63.27	90
Island2	0.35	0.48	127	1.00	0.00	37	0.09	0.29	90
Isl LB	0.06	0.24	127	0.00	0.00	37	0.09	0.29	90
Av GDP 1960-1995	3188.52	3910.98	105	4432.30	3845.98	25	2799.83	3872.98	80
Log Av GDP 1960-1995	7.57	0.95	105	8.05	0.86	25	7.41	0.93	80
GDP 2004	6874.02	8509.56	127	8894.60	9175.12	37	6043.33	8128.35	90
Log GDP 2004	8.21	1.12	127	8.57	1.09	37	8.06	1.11	90
Small State 1	0.28	0.45	110	0.74	0.45	27	0.13	0.34	83
Small State 2	0.34	0.48	127	0.76	0.43	37	0.17	0.37	90
Small State 3	0.30	0.46	127	0.73	0.45	37	0.12	0.33	90

Table A3: Descriptive statistics for extent of indirect rule 1955 and country size.

Non-Islands			Islands		
Country	Extent of Indirect Rule 1955 (%)	Log Area	Country	Extent of Indirect Rule 1955 (%)	Log Area
Bangladesh	60	4.87	Bahamas	0	2.30
Belize	0	3.13	Barbados	0	-0.84
Botswana	42.5	6.34	Fiji	55	2.91
Brunei	0	1.66	Jamaica	0	2.38
Gambia	37.3	2.30	Mauritius	0	0.71
Ghana	64.8	5.43	Singapore	0	-0.49
Guyana	0	5.28	Solomon Islands	51.6	3.33
India	60	8.00	Sri Lanka	0	4.17
Kenya	58.8	6.34	Trinidad	0	1.64
Lesotho	49.5	3.41			
Malawi	81.8	4.54			
Malaysia	6.1	5.79			
Myanmar	60	6.49			
Nigeria	93.4	6.81			
Pakistan	60	6.65			
Sierra Leone	80.8	4.27			
Sudan	72.6	7.77			
Swaziland	49	2.84			
Tanzania	74.5	6.78			
Uganda	79.6	5.28			
Zambia	59.6	6.61			
Zimbabwe	39.7	5.96			
Average	51.36	5.30		11.84	1.79
- Africa	63.14	5.34		0	0.71
- Asia	40.02	5.58		0	1.84
- Latin America	0	4.20		0	1.37
- Oceania	N/A	N/A		53.3	3.12

Source: Lange (2004), CIA World Factbook (2005) and author's own calculations.

Table A4: List of countries included in the analysis.

Non-Islands			Islands
ALGERIA	GUYANA	TUNISIA	ANTIGUA
ANGOLA	HAITI	UGANDA	BAHAMAS
ARGENTINA	HONDURAS	UNITED ARAB EMIRATES	BAHRAIN
AUSTRALIA	HONG KONG*	UNITED STATES	BARBADOS*
BANGLADESH	INDIA	URUGUAY	BERMUDA
BELIZE	INDONESIA	VENEZUELA	CAPE VERDE
BENIN	KENYA	VIETNAM	CAYMAN ISLANDS*
BHUTAN	KUWAIT	YEMEN	COMOROS
BOLIVIA	LAOS	ZAMBIA	CUBA
BOTSWANA	LESOTHO	ZIMBABWE	DOMINICA
BRAZIL	LIBYA		FIJI
BRUNEI	MACAO*		GRENADA
BURKINA FASO	MALAWI		JAMAICA
BURUNDI	MALAYSIA		KIRIBATI
CAMBODIA	MALI		MADAGASCAR
CAMEROON	MAURITANIA		MALDIVES
CANADA	MEXICO		MARSHALL ISLANDS
CENTRAL AFRICAN REPUBLIC	MOROCCO		MARTINIQUE*
CHAD	MOZAMBIQUE		MAURITIUS
CHILE	MYANMAR		MICRONESIA
COLOMBIA	NAMIBIA		NAURU
CONGO	NICARAGUA		NEW ZEALAND
COSTARICA	NIGER		PHILIPPINES
COTE D'IVOIRE	NIGERIA		PUERTO RICO*
DR CONGO	PAKISTAN		SAMOA
DJIBOUTI	PANAMA		SAO TOME
DOMINICAN REPUBLIC	PAPUA NEW GUINEA		SEYCHELLES
EAST TIMOR	PARAGUAY		SINGAPORE
ECUADOR	PERU		SOLOMON ISLANDS
EGYPT	QATAR		SRI LANKA
EL SALVADOR	RWANDA		ST KITTS
EQGUINEA	SENEGAL		ST LUCIA
ERITREA	SIERRA LEONE		ST VINCENT
FRENCH GUIANA*	SOMALIA		TONGA
GABON	SOUTH AFRICA		TRINIDAD
GAMBIA	SUDAN		TUVALU
GHANA	SURINAME		VANUATU
GUATEMALA	SWAZILAND		
GUINEA	TANZANIA		
GUINEA BISSAU	TOGO		

Note: Countries with an asterisk beside their names were not politically independent as of 2004.