

# Host Countries' Refugee Responses and the Impact of 9/11

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**Abstract:** This paper presents a comparative analysis of the influences on host countries' refugee policies before and after 9/11, covering 27 host countries, 162 origin countries, and the period 1997 to 2005. Evidence found in this study suggests that host countries have become more conservative in their refugee responses, following 9/11. However, this reaction is not specific to asylum seekers originating from Muslim majority countries, but to all asylum seekers. The results also find evidence of significant variation in the refugee responses across host countries, which implies that asylum seekers face the danger of unequal treatment, contingent upon the destination country in which their claim is lodged.

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## I. Introduction

According to the 1951 Geneva Convention relating to the Status of Refugees, a refugee is considered to be any person who, “owing to a well founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality” and consequently, “is unwilling to avail himself of the protection of that country”.

Vink and Meijerink (2002) highlight that, rather than individuals being entitled to asylum, it is states which are obligated not to send people who need protection back to the country where they face persecution<sup>1</sup>. However, past cases such as countries of the former Yugoslavia, demonstrate how differently host countries respond to refugees, even for applicants from the same background –some countries were relatively open to asylum seekers from Kosovo and Bosnia, while others were quite closed<sup>2</sup>. Thus an investigation of what determines host countries’ refugee responses, may indicate that different countries take very different approaches to considering asylum claims.

What makes some act very conservatively, while others see merit in a large number of claims? Is an element of discrimination existent in the asylum process? The preceding example refers to Kosovo and Bosnia, but this is particularly relevant following 9/11, for the associated countries, such as Iraq and Afghanistan. There has been a strong focus on immigration and how the flow of economic migrants has been affected by 9/11, and this same focus can be applied to refugee flows. An exogenous shock such as the events of 9/11 should not significantly impact the success of asylum claims, which by international law should be judged on their merit and credibility alone. But it is entirely plausible that asylum seekers on the whole have been treated with more caution and countries have taken a more conservative approach when assessing asylum claims, as a result of 9/11.

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<sup>1</sup> Vink and Meijerink (2000), pg. 300

<sup>2</sup> Holzer, Schneider and Widmer (2000), pg. 251, note that Austria, Germany, Sweden and Switzerland were relatively open to refugees from the war-torn parts of the former Yugoslavia, whereas some countries remained tightly closed. They state, “the continuous violation of the Geneva Convention became especially pertinent in the attitude towards refugees from Bosnia and Kosovo.”

Neumayer (2005b) writes, “politics and geography matter when it comes to asylum seekers.”<sup>3</sup> He notes that forty years ago, when asylum seekers were fewer in number and mostly fleeing from communist Eastern Europe, there was greater geopolitical reward in granting asylum to such refugees. Into the 1980s, when asylum seekers began increasing in volume, and were often originating from developing countries, many developed countries introduced policy measures to reduce the number of lodged asylum claims. This manner of thinking can be applied to the institution of asylum in a post 9/11 world. The geopolitical reward to granting asylum is even smaller, and in a climate where the threat of terrorism is now part of the public psyche, governments may exercise a much greater degree of vigilance towards their borders.

The aim of this paper is to better understand the determinants of host countries’ refugee responses. The central question raised here is, do host countries truly assess asylum applications on their credibility alone, or do their own interests play a role? Is it now part of governments’ interests to admit fewer refugees, in the aftermath of 9/11? The estimation results indicate that countries have become more conservative towards refugees, following 9/11, but this does not apply specifically to origin countries of Muslim majority. The evidence also suggests that there is significant disparity in recognition rates across host countries, which has become more significant after 9/11. The results also demonstrate that successful claims increase when the host and origin countries share a common language and are contiguous, while an increase in the number of new applications, or an increase in the per capita income gap between the host and origin country, negatively impacts the number of successful claims.

The rest of the paper is structured as follows: Section II sets out the obligations that host countries hold to refugees. Section III presents a brief review of the relevant literature. Section IV provides a summary of the data and its sources<sup>4</sup>. Section V describes the empirical strategy, the results of which are in Section VI. Finally, Section VII presents some concluding remarks and implications of the results.

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<sup>3</sup> Neumayer (2005b) p.390

<sup>4</sup> A full list of data sources and definitions can be found in the Appendix.

## II. Host country obligations to refugees

Asylum seekers who wish to be recognised as refugees can file a claim, and upon recognition as a refugee, will be granted asylum in the country where their claim is lodged. Applicants recognised as refugees are granted asylum under refugee status, or under humanitarian status – these claims are based on more general humanitarian reasons. My analysis looks at these two forms of asylum combined. Asylum seekers who fail to establish either refugee or humanitarian grounds in their claim are denied the right to remain in that destination country.

Claims for asylum and refugee recognition should be assessed on the substantial merit of the claim – “the moral claim of the applicant is overriding”<sup>5</sup>. However, considering host countries’ incentives for providing asylum, it is plausible that they may base their decisions on factors other than the credibility of the asylum claim. Refugee influxes can have significant socio-economic impacts on the destination country; they may affect the labour market<sup>6</sup>, public services, create cultural tensions – and if the local community is unwilling to absorb many refugees, its government feel obligated to comply.

The ‘recognition rate’ is defined as the proportion of applicants who are recognised as refugees and granted asylum, out of the number of applicants both recognised and rejected. Finding substantial variation in recognition rates across host countries, for claims from the same country of origin, would be troubling to refugees and refugee interest groups.

Variation in recognition rates across host countries suggests that applicants whose claims carry the same substantive merit may face unequal treatment. The success of their claim becomes contingent upon the country to which they have applied. Similarly, significant disparity in recognition rates can be found across countries as well as over time, and it is entirely plausible

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<sup>5</sup> Joly (1996) p.33

<sup>6</sup> See, for example, Card, D., (1990) “The Impact of the Mariel Boatlift on the Miami Labor Market.”, which assesses the impact of Cuban refugees on the supply of native labour in Miami.

that destination countries have become more conservative in granting asylum after events such as 9/11.

To an extent, recognition rates would vary with origin countries, and over time: certain countries during particular periods might experience civil war or genocide or other such situations, which would lead to more refugees originating from those countries, or more refugees in a given year. But it may be that rates are varying as a result of the host country's relationship with that country, or due to a change in the host country's attitude towards asylum seekers, following 9/11. Discriminatory treatment of this nature violates the 1951 Convention, to which the sample host countries are signatories<sup>7</sup>. They are required by international obligation to provide protection to any person found to be a refugee. Article 3 states that the contracting countries "shall apply the provisions of this Convention to refugees without discrimination as to race, religion or country of origin."

If countries share a consistent definition of a refugee – which signatories to the Geneva Convention do – then a given asylum claim should carry the same merit in any state which processes the application. Restrictions on the choice of preferred asylum destination are only reasonable if asylum seekers can expect claims to be judged equally in any country. One such law is the Dublin Convention, an EU law signed in 1990 which restricts asylum seekers in EU states to filing their claim in the country of first entry. Its objective is to prevent 'asylum shopping': countries take responsibility for its asylum claims, to prevent burdening countries where asylum seekers believe they have a better chance of recognition.

If claims are judged equally across host countries, then disparity in recognition rates can only be attributed to differences in the substantive merit of asylum claims in that destination country. But it seems unrealistic that claims in one destination country are so much more credible than claims in another, despite originating from the same country. Similarly,

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<sup>7</sup> All host countries in my sample are signatories to both the 1951 Geneva Convention and the 1967 Protocol relating to the Status of Refugees, with the exception of the United States. The United States is party to the 1967 Protocol only. The principal difference between the 1951 Convention and the 1967 Protocol, is that the Convention defines a 'refugee' as a result of events occurring *before* 1 January 1951. The Protocol omits this from the definition, so that refugees can be defined so as a result of events occurring before or after 1 January 1951.

significant disparity in recognition rates before and after 9/11, must be attributed to the credibility of claims falling after 9/11, but is this realistic?

### III. Literature Review

Much of the relevant literature focuses on refugee policy in relation to sender countries – Neumayer (2004, 2005b) provides an empirical analysis of the determinants of asylum seekers' destination choice. Literature concerning the receiving countries, particularly empirical evidence, is more limited.

Jacobsen (1996) investigates the policy responses of host governments to mass influxes of refugees from developing countries, exploring why some governments are more generous while others act restrictively. She defines a set of policy alternatives and a set of factors influencing policy formation. These factors include: costs/benefits of accepting international assistance, relations with the sending country, local community's economic capacity for absorption, and national security. Past case studies and policy-making models are used to determine key influences on policy. The study highlights certain geopolitical aspects, such as the fact that bestowing refugee status carries the implication that the sender country persecutes its people, and a host government may want to avoid implicating an ally in this way. "Few other domestic policy issues are as transnational in their subject matter as refugee policies."<sup>8</sup> A drawback of this study is the lack of empirical or quantitative evidence establishing the significance of the influencing factors. Nonetheless, its suggestions support the central proposition of my research - that asylum decisions are influenced by factors other than the credibility of the claim - highlighting possible political or international relations aspects.

The approach of US refugee policy, which has led to its refugees largely originating from communist countries, is highlighted in many studies, including Beyer (1991) and Jacobsen (1996). Keeley (1996 and 2001) emphasises how political agendas have been part of Western

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<sup>8</sup> Jacobsen (1996), pg.9

refugee responses: There has been a history of asylum policy in the West favouring applicants from communist countries, as an instrument to embarrass such states and as an opposition to their threat.

Holzer, Schneider and Widmer (2000) investigate whether decentralized decision making on asylum applications in Swiss cantons undermines the principle of equality in handling individual cases. They find evidence of discrimination, showing that the likelihood of a positive decision is twice as high in some cantons than in others, corresponding with my hypothesis that asylum claims may have a better chance of recognition in particular states. Kate (2005) examines the variance in recognition rates across destination countries, and factors which potentially influence asylum recognition; including origin country conditions, destination countries' political ideology, openness to outsiders, economic conditions and diplomatic relationships. Each range of factors is separately examined, distinguishing between their impact on origin-specific recognition rates and the global recognition rate. The analysis also considers the percentage of asylum seekers granted humanitarian status and refugee status. The results suggest that conditions in the origin country can affect the way host countries allocate protection to asylum seekers, i.e. whether they grant humanitarian or refugee status, but the amount of protection is not affected. The analysis is limited to a bivariate, cross-section analysis of data from 2002, and the separate analysis of each range of factors gives little insight on how these factors might influence each other.

Of all the literature, the study by Neumayer (2005a) is most related to my analysis. It investigates the claim that some governments influence the assessment of asylum claims to generate low recognition rates, in order to deter future applicants. He estimates the extent of variation in origin-specific recognition rates for certain refugee statuses. The empirical analysis uses data on recognition rates of fourteen EU countries, concluding that there is significant variation across EU countries' recognition rates – divergent rates for applicants of the same nationality across destination countries. He also finds that recognition rates vary, as expected, with the extent of political oppression, human rights violations etc.



Whereas Neumayer considers just EU countries, this study performs a broader analysis of the policy determinants of all OECD countries, because excluding countries such as Canada and the US may exclude some very significant results. At the time of Neumayer's study, no data on recognition rates were available after 1999. There is now data up to 2006, so not only will my analysis cover more recent years, but it will also include 9/11, which none of the literature described here have touched on and is therefore the key original contribution of my work.

## IV. Data Analysis

### *IV.1 Refugee Data*

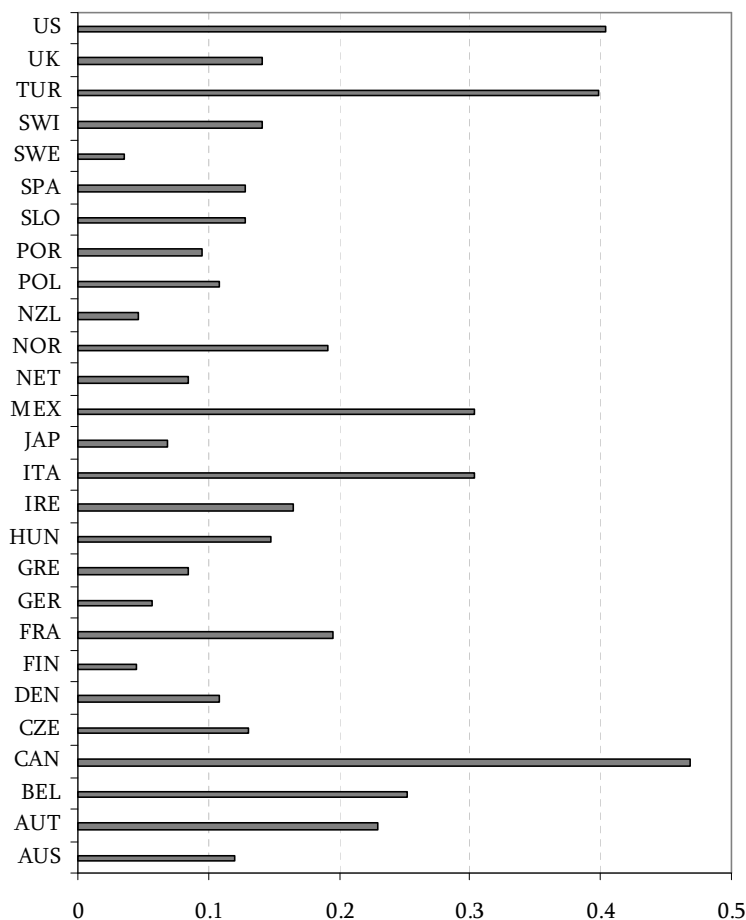
Data on recognised and rejected refugees have come from the UNHCR Online Statistical Population database. The data covers the period 1997 to 2005, with 27 host countries from the OECD<sup>9</sup>, and 162 origin countries. Data for each host country is origin-specific, which allows analysis across host countries as well as for various origin countries. Disparity in recognition rates across host countries is apparent in Figure 1.

The mean recognition rate for all host countries for the period 1997 to 2005 is 0.17. But Figure 1 clearly shows the mean recognition rates for each host country fluctuate strongly, from 0.04 in Sweden to 0.47 in Canada. Of course we would expect some variation, there are bound to be more asylum seekers in one destination whose claims carry greater merit, than in others. But this argument can only go so far, and as emphasised by Kate (2005), it seems unlikely that the average asylum seeker in Canada is almost 12 times more likely to have a real fear of persecution than asylum seekers in Sweden.

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<sup>9</sup> All OECD countries were included as host countries, with the exception of Iceland, Luxembourg and South Korea. These were omitted because they had recognition rates of, or close to, zero; but also received far fewer applications than the other host countries in the sample.

FIGURE 1  
Mean Recognition Rates (1997 - 2005)



IV.2 The dependent variable

The dependent variable used in this study is the recognition rate, defined as the rate of successful<sup>10</sup> decisions in a given year. The ideal recognition rate to examine would be the rate of successful applications in a given year, but in practice this cannot be calculated. Many cases are not decided in the year they are submitted<sup>11</sup>, and no data on the application date of each decided claim is available. Hence, standard UNHCR practice<sup>12</sup> is to compute the recognition rate as the total number of recognised decisions as a proportion of the sum of total recognised and total rejected applications: the proportion of recognised decisions out of substantive decisions made in that year. Formally, this is defined:

<sup>10</sup> 'Recognised' applications and 'successful' applications are used interchangeably hereafter.

<sup>11</sup> Hovy (2001) estimates that in 1992, just 3.9% of applications to the UK were decided in one year or less, 11.1% in 1993 and 19.7% in 1994.

<sup>12</sup> 2005 UNHCR Statistical Yearbook, pg. 48-49

$$R_{ijt} = \frac{\text{recognised asylum claims}_{ijt}}{(\text{recognised asylum claims}_{ijt} + \text{rejected asylum claims}_{ijt})} \quad (1)$$

Substantive decisions exclude decisions pending, decisions otherwise closed and other such outcomes besides formally recognised or formally rejected. The UNHCR calculates recognition rates this way, but some countries differ on their definition of substantive decisions. Some do not consider manifestly unfounded applications as part of substantive decisions, and others do. Hence, I have recalculated recognition rates as defined by the UNHCR, so that they are consistently defined across countries.

### *IV.3 The explanatory variables*

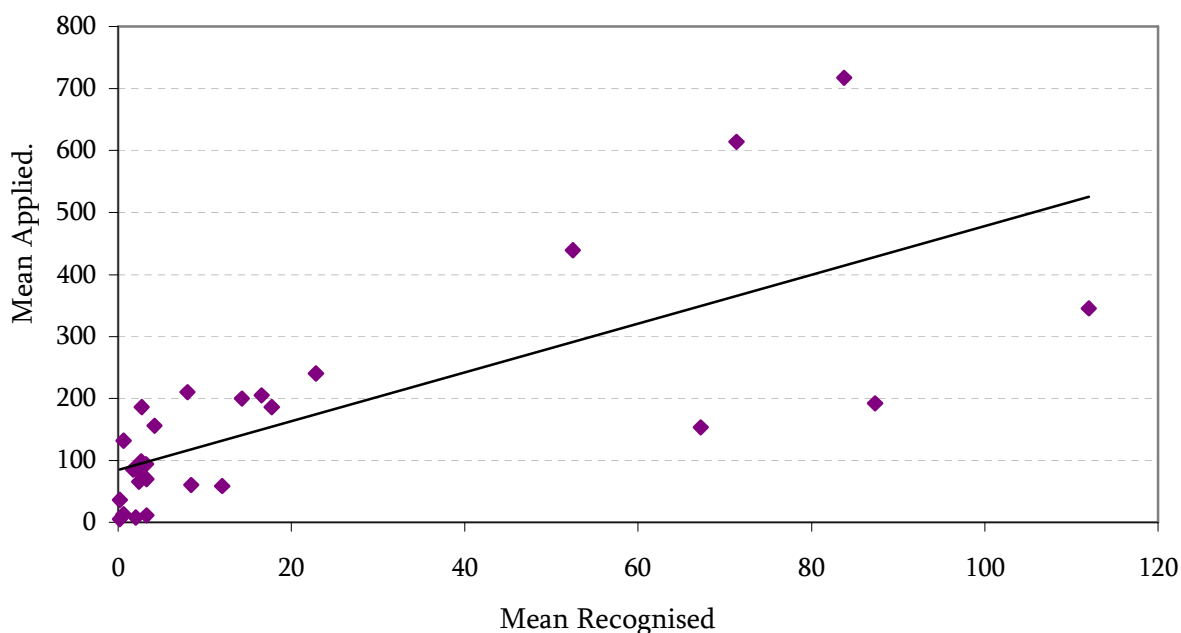
To examine the effect of economic conditions in the host country, GDP per capita of the host country is included. It may also be a major ‘pull factor’ for asylum seekers to seek refuge in a high income country. Considering economic conditions in the origin country relative to the host country, the per capita GDP gap has also been included. The data for these have come from the World Bank’s World Development Indicators.

Variables such as distance between host and origin country, whether they share a common language, whether they are contiguous and whether they share colonial link have been included, following the results of studies like Neumayer (2004), which found a greater share of asylum seekers in host countries which are geographically closer to the origin country and speak the same language as the origin country. Bilateral data for these variables have been taken from the CEPII distance dataset.

As explained previously, refugee recognition cannot be examined as a proportion of total new applications in a year, and is instead considered as a proportion of total substantive decisions. Consequently, total new applications submitted in a year is included as an explanatory variable, as it is likely that high volume of new applications from a particular origin country induces host countries to recognise fewer refugees. The data has also come from the UNHCR online statistical population database.

Figure 2 shows the correlation between new applications and recognised claims, using the average over 1997 to 2005 for each host country. It displays a positive correlation between overall new applications and recognised claims, which is understandable – host countries which receive more applications are in the position to recognise a greater number of refugees. New applications might also be seen as an indicator of the credibility of claims coming from that origin country – if there has been civil war situation, for example, we would expect a greater volume of applications. This relationship can be further examined in the regression analysis, when host and origin-specific applications can be investigated. If a host country receives a high number of new applications from one origin country in that year, is it deterred from recognising more refugees from that origin, or encouraged?

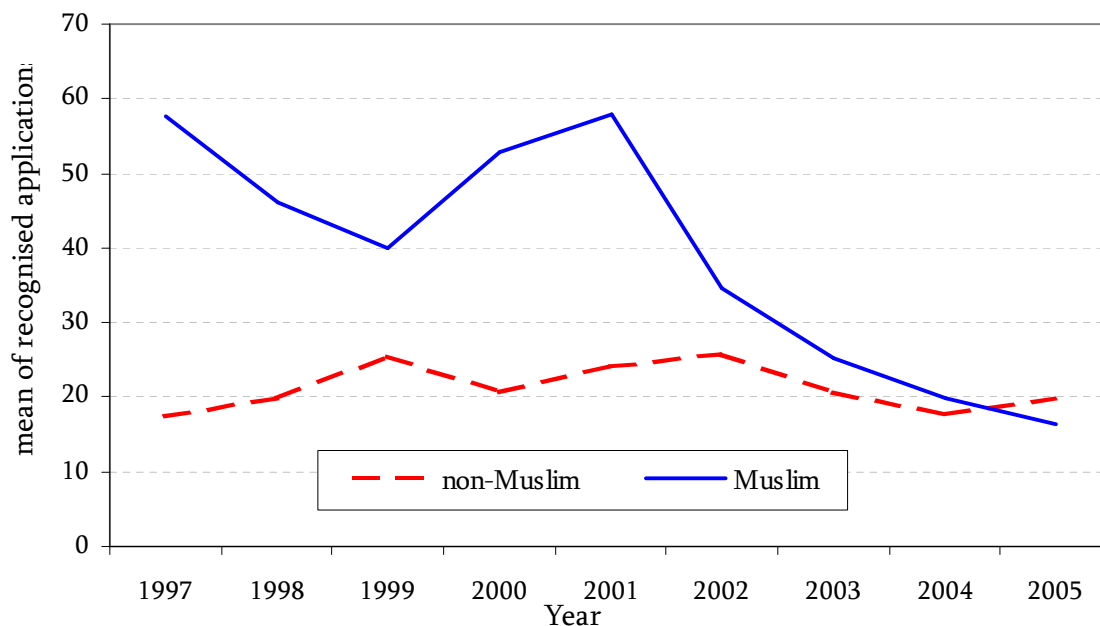
FIGURE 2  
Correlation between new applications and recognised claims



To analyse recognition rates before and after 9/11, I have included a dummy variable covering all periods after 2001, that is, 2002 to 2005. I have also included a dummy for origin countries in which the majority of the population is Muslim, to test for discrimination in refugee response towards Muslim majority countries, particularly following 9/11.

Figure 3 shows the mean of recognised claims for all host countries in my sample by year, distinguishing between those which originate from Muslim majority countries and those which originate from all other countries. The different trends are striking – it shows a clear drop in recognised claims for Muslim majority countries from 2001, but no such trend for all other countries.

FIGURE 3  
Recognised Applications by religious majority



Note that the mean for non-Muslim countries is consistently lower than the mean for Muslim countries, despite the sharp drop in recognised claims for Muslims after 2001. This implies that Muslims were less likely to be recognised as refugees after 2001 than they were prior to 2001, but still more likely than asylum seekers from all other countries.

## V. Empirical Strategy

To examine variation in recognition rates, I will estimate the following panel data model using ordinary least squares (OLS), which enables me to consider the effects across countries and over time:

$$\ln(R_{ijt}) = \alpha + \beta_1 \ln(Y_{it}) + \beta_2 \ln(Y_{it} - Y_{jt}) + \beta_3 app_{ijt} + \delta_1 x_{ij} + \delta_2 mus_j + \delta_3 sept11_t + \varepsilon_{ijt} \quad (2)$$

where subscripts  $i$ ,  $j$  and  $t$  represent host country, origin country and year respectively. The vector  $x$  contains the bilateral dummy variables, such as contiguity and common language, as in Neumayer (2004). Investigating the effect of the exogenous event, 9/11, on refugee recognition rates, should eliminate the risk of endogeneity bias to a large extent.

In order to test for a negative effect for claims originating from Muslim majority countries, the Muslim majority dummy will be of significant interest. I will interact this with the September 11 dummy, to determine the effect for Muslim majority countries after 9/11, relative to the period before.

I will also estimate the following model including host country dummy variables, splitting the sample to cover 1997 to 2000 and 2002 to 2005, in order to compare and contrast the results:

$$\ln(R_{ijt}) = \alpha + \beta_1 \ln(Y_{it}) + \beta_2 \ln(Y_{it} - Y_{jt}) + \beta_3 app_{ijt} + \delta_1 x_{ij} + \delta_2 mus_j + \sum_{k=1}^{26} \delta_k host_{ijt} + \varepsilon_{ijt} \quad (3)$$

This practice is employed by Neumayer (2005a), who finds significant variation across European host countries. The coefficients on the host country dummies should indicate whether there is any discrepancy in recognition rates across the host countries in my sample. Significant differences in recognition rates for each country, even after controlling for other factors with the remaining explanatory variables, would imply that a particular claim would have a greater chance of being recognised in one host country than in another.

When focusing on specific host countries, I will also estimate a split sample regression. Narrowing down to specific host countries will enable a somewhat micro view of what drives changes in recognition rate.

## VI. Results

### VI.1 Results for comparative analysis of before 9/11 and after 9/11

Table 1 gives the estimates of the model for all host and origin countries in the sample, based on equation (2). Column 1 shows the results for regressing just the host country GDP, the Muslim and September 11 dummies on  $\log(R_{ijt})$  where  $R_{ijt}$  is defined in Equation (1). The September 11 dummy is highly significant and displays a negative impact on recognition rate, as expected. The Muslim dummy is positive but insignificant; but when interacted with the September 11 dummy, it becomes significant and negative. This result corresponds with the relationship illustrated in Figure 3: claims from Muslim majority countries are more likely to be recognised relative to claims from other countries, but Muslim applications after 2001 are less likely to be recognised relative to Muslim applications prior to 2001. Each further column adds additional variables to the model, and after the first column with minimum variables, the Muslim dummy becomes insignificant.

TABLE 1  
Estimation Results using total sample, all years

	(1)	(2)	(3)	(4)	(5)
C	0.2839	-0.0198	-1.3662 **	-1.4689 ***	-1.3067 ***
log(GDP <sub>host</sub> )	-0.1877 ***	-0.1531 ***	0.1223 **	0.0493	0.0351
log(GDP <sub>gap</sub> )		-0.0219	-0.0173	-0.0709 ***	-0.0821 ***
log(newApps)			-0.3213 ***	-0.2791 ***	-0.2786 ***
dist				0.0002 ***	0.0002 ***
dist <sup>2</sup>				-4.57E-09 **	-4.58E-09 **
contiguous				0.6427 ***	0.5737 **
colony					-0.3403 *
language					0.3925 ***
sept11	-0.1753 ***	-0.1904 ***	-0.2539 ***	-0.2685 ***	-0.2812 ***
muslim	0.0038 *	-0.0310	0.0293	0.1251	0.1251
muslim*sept11	-0.1209 *	-0.0842	-0.1480 **	-0.1421 **	-0.1266 **
Obs.	6826	6119	6001	6001	6001
R <sup>2</sup>	0.0138	0.0124	0.1898	0.2461	0.2560

*Dependent variable = log(recognitionrate)*

1) Subscripts \*, \*\*, \*\*\* correspond to significance at the 10%, 5%, 1% level respectively

2) As the 9/11 attacks occurred in September of 2001, 2001 has been omitted from the sample to ensure a clear distinction between pre 9/11 and post 9/11.

3) Detailed outputs can be found in the appendix.

The introduction of new applications shows a negative effect on the recognition rate, supporting the result found in Neumayer (2005a)<sup>13</sup>. This not consistent with the positive correlation displayed in Figure 2, between the mean recognised applications and the mean new applications. The negative coefficient here may be explained by host countries exhibiting lower recognition rates, in order to deter new applications.<sup>14</sup> Adding the geographic variables to the regression leads to the coefficient on host GDP becoming insignificant, and instead the GDP gap becomes significant. The negative coefficient on income gap implies that the poorer the origin country is relative to the host country, the less likely their claims will be recognised. This is rather surprising; because we might infer that a greater income gap shows that the origin country suffers poor economic circumstances, and therefore may send a greater number of refugees. It might be that host countries are more willing to accept refugees from countries that are similar, income-wise, because such refugees would be more easily absorbed into the local community.

The coefficient on distance is positive in the linear term and negative in the quadratic, suggesting that the further away a country is, the higher the recognition rate; but countries furthest away are less likely to have their claims recognised. The other extreme in distance are countries which are contiguous, and the coefficient here indicates that there is a positive effect on recognition rates for neighbouring origin countries. Countries with a colonial relationship experience lower recognition rate relative to those without a colonial relationship, and countries which share a common official language with the host country have higher recognition rates – the latter result is not surprising. It implies that sharing cultural or ethno-linguistic characteristics with the host country works in the asylum seekers' favour, and suggests that host countries might be more receptive to people whom they consider would better assimilate.

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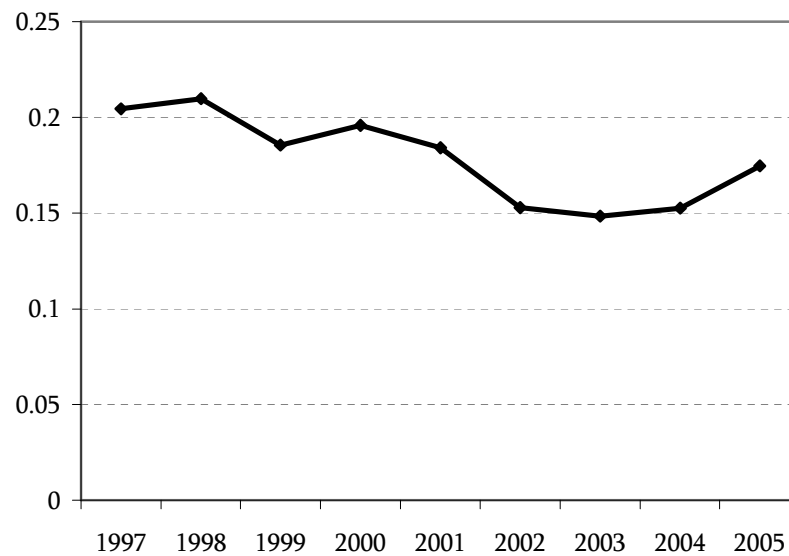
<sup>13</sup> This result also supports that of Vink and Meijerink (2003), who found a strong, negative correlation between aggregate EU recognition rates and the total number of asylum applications.

<sup>14</sup> In addition to Neumayer (2005a), and Vink and Meijerink (2003), this theory is also proposed by Robinson and Segrott (2002), who present causal evidence that Sri Lankan asylum seekers have been increasingly filing claims in the UK, in response to low recognition rates in Germany.



In each column, the dummy for September 11 is significant and the coefficient has a negative sign. This implies that overall, host countries in my sample became more conservative after 2001 relative to before 2001 in their responses to refugees. This corresponds with Figure 4, which displays mean recognition rates over time:

FIGURE 4  
Mean Recognition Rates



While the dummy for muslim majority countries becomes insignificant, the coefficient on the interacted term is consistently significant and with a negative sign. This supports my hypothesis that claims from Muslim majority countries were less likely to be recognised after 9/11.

Table 2 shows the split sample regression based on equation (3). Many of the results for both before and after 2001 support those shown in Table 1: new applications in a year have a significant and negative impact on recognition rates, the coefficient on the common language dummy is significant and positive, and the two distance variables display very small coefficients, but again translates to diminishing marginal increases in recognition rates.

TABLE 2  
Estimation Results for split sample regression

1997 - 2000				2002 - 2005			
	(1)	(2)	(3)		(1)	(2)	(3)
C	-1.9179 ***	-2.0791 ***	-1.9040 ***	C	-0.9578	-1.0517	-0.9110
log(GDP <sub>host</sub> )	0.1595 **	0.0974	0.0807	log(GDP <sub>host</sub> )	0.0730	-0.0052	-0.0167
log(GDP <sub>gap</sub> )	-0.0089	-0.0695 **	-0.0769 **	log(GDP <sub>gap</sub> )	-0.0224	-0.0710 ***	-0.0854 ***
log(newApps)	-0.2861 ***	-0.2522 ***	-0.2505 ***	log(newApps)	-0.3560 ***	-0.3072 ***	-0.3090 ***
dist		0.0002 ***	0.0002 ***	dist		0.0002 ***	0.0002 ***
dist <sup>2</sup>		-4.28E-09 *	-4.04E-09 *	dist <sup>2</sup>		-4.95E-09 **	-5.12E-09 **
contiguous		0.4862 *	0.4113	contiguous		0.8057 **	0.7451 **
colony			-0.3522	colony			-0.3127 *
language			0.3588 ***	language			0.4293 ***
muslim	0.0207	0.1242	0.1257	muslim	-0.1310 *	-0.0233	-0.0088
Obs.	2760	2760	2760	Obs.	3241	3241	3241
R <sup>2</sup>	0.150834	0.215227	0.223178	R <sup>2</sup>	0.218071	0.267139	0.279538

*Dependent variable = log(recognitionrate)*

1) Subscripts \*, \*\*, \*\*\* correspond to significance at the 10%, 5%, 1% level respectively

2) Detailed outputs can be found in the appendix.

Similarly, the coefficient on host GDP becomes insignificant as more independent variables are added, and the income gap variable displays a negative effect on recognition rates.

The coefficients on whether two countries are contiguous and whether they share a colonial link become significant after 2001, but the signs correspond with Table 1: origin countries which are contiguous to the host are more likely to receive asylum, while countries which share a colonial link show lower recognition rates. Perhaps after 9/11, host countries began to consider additional factors like colonial links, and neighbouring relationships.

My focus variable, the Muslim dummy, displays the expected change of sign, from positive before 2001 to negative after 2001 – but the coefficients are statistically insignificant in almost all the estimations, which implies that ultimately, claims from Muslim majority countries have not experienced unequal treatment after 9/11.

### *VI.2 Results demonstrating specific host country effects*

Table 3 presents the results when host country dummies are included, where Switzerland is used as the base category. Hence, the coefficients on these dummy variables show how the recognition rate changes for each host country, relative to Switzerland. This was chosen after investigating mean recognition rates for each host country by year, and determining Switzerland as the country whose rates were closest to the mean for each year. Where coefficients on the dummy variables have decreased from before 2001 to after 2001, indicates that those countries became, on average, less likely to grant asylum after 2001 than they would have been before 2001. Almost all host countries, with the exception of Japan and Norway, display a decrease in the coefficient on their dummies from before 2001 to after 2001 – indicating that most of the hosts in my sample became more conservative after 2001 than they were before 2001.

TABLE 3  
Estimation Results with host country dummies

	1997 - 2000	2002 - 2005
C	-1.241	28.741 **
log(GDP <sub>host</sub> )	0.009	-2.856 **
log(GDP <sub>gap</sub> )	0.006	0.034
log(newApps)	-0.249 ***	-0.304 ***
dist	0.000	0.000
dist <sup>2</sup>	0.000	0.000
contiguous	0.097	0.362
colony	-0.137	0.050
language	-0.012	0.018
muslim	0.142 **	0.008
AUSTRALIA	-0.331	-1.183 **
AUSTRIA	0.146	-0.238
BELGIUM	0.684 **	-0.463
CANADA	1.000 ***	0.214
CZE	-0.013	-5.291 ***
DEN	-0.154	-0.386
FIN	-0.211	-1.204 **
FRA	<b>0.308</b>	<b>-1.110</b> **
GERMANY	-1.099 ***	-2.157 ***
GREECE	<b>0.224</b>	<b>-4.464</b> ***
HUN	<b>-0.066</b>	<b>-4.893</b> **
IRE	-0.266	-0.634 **
ITA	<b>0.646</b>	<b>-1.415</b> *
JAP	-0.104	0.337
MEX	<b>0.457</b>	<b>-4.474</b> **
NETH	<b>0.779</b> *	<b>-1.949</b> ***
NOR	-0.864 ***	0.051
NZ	<b>1.501</b> ***	<b>-2.790</b> ***
POL	<b>0.108</b>	<b>-5.472</b> **
PORTUGAL	<b>0.308</b>	<b>-3.148</b> **
SLO	<b>1.256</b>	<b>-5.221</b> **
SPAIN	-0.144	-2.102 **
SWE	-0.519 *	-1.542 ***
TUR	<b>1.131</b>	<b>-5.513</b> *
UK	-0.018	-0.875 **
USA	1.338 ***	0.800 ***
Obs.	2760	3241
R <sup>2</sup>	0.417	0.473

*Dependent variable = log(recognitionrate)*

1) Subscripts \*, \*\*, \*\*\* correspond to significance at the 10%, 5%, 1% level respectively

2) Detailed outputs can be found in the appendix.

3) Host country dummies with significant changes from positive to negative signs are in bold type.

Where the estimates have changed from a positive to a negative sign, indicates that those countries were more likely to grant asylum, relative to Switzerland, prior to 2001; but after 2001 they became less likely to grant asylum than Switzerland – this is the case for a number of the host countries. As Switzerland is a proxy for the average recognition rate, this implies asylum seekers have a less than average chance of receiving asylum in those countries after 2001, but before 2001, they would have had a better than average chance. The coefficients show there is significant variation across host countries, even after controlling for other factors with the other explanatory variables. Claims to Canada and the US are more likely to be recognised relative to Switzerland, whereas claims to Germany are less likely to be recognised relative to Switzerland.

Most of the host country dummies become significant after 2001, which implies that the host country in which claims are filed had a greater effect on the success of claims after 2001 than before 2001, when particular host countries did not affect recognition rates as much. This suggests 9/11 might have intensified disparity in recognition rates across hosts, and we are increasingly seeing an inconsistent refugee stance across OECD countries. Notable examples include France and New Zealand, exhibiting higher than average recognition rates prior to 2001, but lower than average recognition rates after 2001.

Tables 4 and 5 present the results after narrowing down the sample, first to Canada alone and then to the UK. This provides a micro insight into the determinants of asylum decision-making of two host countries which receive and grant more applications than most other countries. Moreover, I have chosen these two countries because the sample sizes for each are still relatively large.

When estimating these models, dummies for origin countries that have experienced refugee crises or large refugee outflows to Canada or the UK have been included. I expect positive coefficients on these dummies, because claims from these countries are most

likely to be credible, relative to other origin countries in the sample. This is true of Canada, Table 4 – almost all the dummy variables display positive and significant coefficients – and the signs remain unchanged after 2001. The coefficient on the Muslim dummy is positive in both periods also, which refutes the proposition that Canadian refugee policy has discriminated against Muslim majority countries after 9/11. The results generally suggest that Canada is a relatively open country, with regards to refugees.

TABLE 4  
Canada estimation results

	1997 - 2000	2002 - 2005
C	-8.7815 *	-12.7242
log(GDPHost)	0.7116	1.0910
log(newApps)	-0.0295	-0.0700 **
dist	0.0002 **	0.0002 ***
dist <sup>2</sup>	-7.28E-09	-1.13E-08 **
language	-0.0445	0.0616
muslim	0.3122 ***	0.2173 ***
SERBIA	0.6623 ***	-0.0161
IRAQ	0.3288 ***	0.3133 ***
TURKEY	0.3034 ***	0.3268 ***
RUSSIA	0.4186 ***	0.5341 ***
AFGHAN	0.4271 ***	0.4462 ***
CHINA	0.1377	0.5994 ***
PAKISTAN	0.0220	-0.0072
SOMALIA	0.3968 ***	0.5852 ***
SRI	0.6307 ***	0.7977 ***
Obs.	407	471
R <sup>2</sup>	0.2573	0.2344

*Dependent variable = log(recognitionrate)*

- 1) Subscripts \*, \*\*, \*\*\* correspond to significance at the 10%, 5%, 1% level respectively
- 2) The contiguity and colony variables have been omitted, as they do not apply to Canada
- 3) Detailed outputs can be found in the appendix.

Table 5 concentrates on the UK, and there several negative coefficients on the origin countries. However, some of the positive coefficients, such as that of Serbia, Somalia and Iraq, are of greater magnitude than for Canada; so this may explain the negative signs for some countries – the UK admits more refugees from particular countries, so that asylum

seekers from other countries are relatively less likely to be recognised as refugees; whereas in Canada, the coefficients are smaller but positive for all origin countries specified in the regression.

The Muslim coefficient is positive in both periods for the UK, as for Canada, but it is of smaller magnitude after 2001, suggesting that Muslims applying to the UK before 2001 had a better chance of recognition than those applying after – but relative to applicants from all other religious majority countries, Islamic majority countries are more likely to receive asylum.

TABLE 5  
UK estimation results

	1997 - 2000	2002 - 2005
C	-76.4536 *	188.2340 ***
log(GDPHost)	7.2346 *	-18.5547 ***
log(newApps)	-0.0971	-0.5350 ***
dist	0.0006	0.0005 *
dist <sup>2</sup>	-4.11E-08	-4.02E-08 *
colony	-1.7697 ***	-0.0928
language	0.3824	-0.2199
muslim	1.2040 ***	0.0840
SERBIA	2.6812 ***	-0.1086
IRAQ	1.2078 ***	-0.7990 ***
TURKEY	-0.2846	0.2861
RUSSIA	-1.0370 **	-0.1924
CHINA	-2.1613 ***	-1.1730 ***
AFGHAN	0.5351	-0.2169
PAKISTAN	-2.0498 ***	0.6590
SOMALIA	2.3915 ***	2.8872 ***
Obs.	108	181
R <sup>2</sup>	0.5879	0.4087

*Dependent variable = log(recognitionrate)*

- 1) Subscripts \*, \*\*, \*\*\* correspond to significance at the 10%, 5%, 1% level respectively
- 2) The contiguity variable has been omitted, as it does not apply to the UK.
- 3) Detailed outputs can be found in the appendix.

An interesting result which supports my hypothesis is the coefficient on Iraq, which suggests that prior to 2001, Iraqi claims were more likely to be recognised, whereas after

2001 they became less likely to be recognised, relative to other origin countries. This stands out because the war in Iraq, following 9/11, meant Iraq became one of the top sender countries of refugees, so we would expect a positive coefficient after 2001.

The outstanding conclusion of these regressions, is the disparity across host countries – even when considering the same origin countries, from which claims are more likely to hold more substantive merit, there remains significant variation in recognition rates between Canada and the U.K.

## VII. Conclusions

### *VII.1 Limitations and Further Research*

The quality of refugee data has limited my analysis. Due to different reporting practices in each country, only ‘first instance’ applications and decisions have been examined. Several applications are submitted for ‘administrative review’, and a number of these claims reach substantive outcomes. However, not all countries report these data, and older data tends to cover first instance decisions only. Factoring administrative review decisions into an investigation might yield significantly different results, because certain countries such as the US and Australia make a lot of decisions on an administrative review basis.

Furthermore, my analysis combines recognition rates for refugee status and the broader humanitarian status. The UNHCR reports separate recognition rates for each, but application, recognition and rejection data is reported for combined statuses only. Since I have recalculated recognition rates, my analysis is limited to combined refugee and humanitarian status. The empirical analysis includes a preliminary investigation of two specific host countries – Canada and the UK. Further research could explore this further, perhaps including specific controls relevant to the chosen host countries.



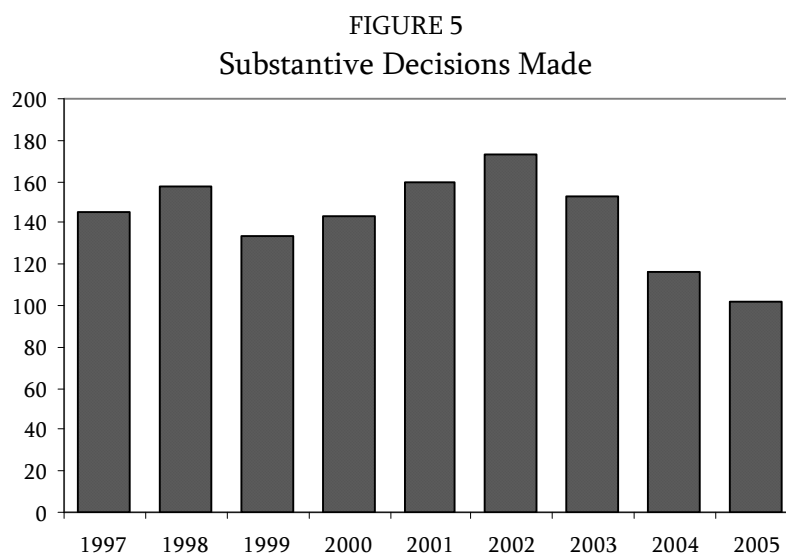
The major drawback of the empirical analysis is the absence of any kind of proxy for credible asylum claims. As a result of limitations to comprehensive, cross country and time series data, I have been unable to include variables such as political oppression, events of genocide, armed conflict and human rights violations in my model without substantially cutting the number of data points. Instead I have included dummy variables for origin countries which have experienced severe refugee crises, but this does not compare to having other variables as proxies for the credibility of asylum claims. Neumayer (2005a) makes use of such variables, but his analysis is restricted to 1999. Such data extending to 2005 are scarcely available, therefore including these variables would significantly reduce my sample size. However, if these data were available, including such variables would inevitably add to the explanatory power of the model and could support a counter hypothesis that host countries do actually assess claims based on their substantive merit. Extending the analysis in this way could form the basis for further research.

### *VII.2 Conclusion*

The results of my investigation suggest that host country responses in the aftermath of September 11 have become more conservative, with recognition rates after 2001 significantly lower than recognition rates before 2001. However, there is no conclusive evidence to suggest that asylum seekers from Muslim majority countries suffered discrimination after 2001. The drop in recognition rates for Muslim majority countries after 2001 correspond with an overall fall in recognition rates for all origin countries after 2001. There is some evidence to support my hypothesis for countries such as the UK and claims for Iraq, but overall, claims from Muslim majority countries are *more* likely to be recognized than claims from other countries – less so after 2001, but still more likely nonetheless.

This might be a reflection that host countries disguised their bias against Muslim majority countries after 9/11, with an overall decline in recognition rates towards all countries. Another possible explanation is that instead of recognizing fewer claims outright, host

countries became more conservative by making fewer substantive decisions altogether. Figure 5 shows the average number of substantive decisions made by the sample destination countries – recognized and rejected claims – and displays a noticeable and ongoing fall from 2002.



Whatever the underlying reason, it is clear that recognition rates have fallen since 9/11, and that in general, the host countries in my sample have been significantly less receptive towards asylum seekers than they would have been prior to 2001. This implies that an exogenous shock, such as 9/11, can have a negative impact on how host countries assess asylum claims. If this is true, and the institution of asylum has suffered a negative bias as a result of 9/11, then the success of applications is influenced by more than just their credibility – violating the Geneva Convention. The analysis has also shown that there is significant variation in recognition rates across host countries, when we should expect convergence. If, after controlling for income gaps, distance, common language, etc. there remains such disparity in recognition rates it creates cause for concern. It suggests a conflict between the spirit of the 1951 Convention and EU law. Restrictions such as the Dublin Convention become hard to justify, when the evidence suggests that asylum claims are judged to different standards depending on the destination country which processes the application.

## References

Bergstrand, J., (1985) "The Gravity Equation in International Trade: Some Microeconomic Foundations and Empirical Evidence." *The Review of Economics and Statistics*, 67(3): 474-481

Beyer, G.A., (1991) "The Evolving United States Response to Soviet Jewish Emigration", *Journal of Palestine Studies*, 21(1): 139-156

Central Intelligence Agency, 2008. CIA World Factbook, published online:  
<https://www.cia.gov/library/publications/the-world-factbook/>

Centre d'Etudes Prospectives et d'Informations Internationales (CEPII), Distance dataset, available online: <http://www.cepii.fr/anglaisgraph/bdd/distances.htm>

Holzer, T., Schneider, G., and Widmer, T., (2000) "Discriminating Decentralization: Federalism and the Handling of Asylum Applications in Switzerland, 1988-1996." *Journal of Conflict Resolution*, 44(2): 250-276

Hovy, B., (2001) "Statistically Correct Asylum Data: Prospects and Limitations." *New Issues in Refugee Research*, UNHCR Evaluation and Policy Analysis Unit

Jacobsen, K., (1996) "Factors Influencing the Policy Responses of Host Governments to Mass Refugee Influxes", *International Migration Review*, 30(3): 655-678

Joly, D., (1996) *Haven or Hell?: Asylum Policies and Refugees in Europe*, MacMillan Press

Kate, M., (2005) "The Provision of Protection to Asylum-Seekers in Destination Countries", *New Issues in Refugee Research*, UNHCR Evaluation and Policy Analysis Unit

Keeley, C.B., (1996) "How Nation-States Create and Respond to Refugee Flows", *International Migration Review*, 30(4): 1046-1066

Keeley, C.B. (2001) "The International Refugee Regime(s): The End of Cold War Matters" *International Migration Review*, 35(1): 303-314

Neumayer, E., (2004), "Asylum Destination Choice: What Makes Some West European Countries More Attractive Than Others?" *European Union Politics*, 5(2): 155-180

Neumayer, E., (2005a), "Asylum Recognition Rates in Western Europe: Their Determinants, Variation and Lack of Convergence", *Journal of Conflict Resolution*, 49(1): 43-66

Neumayer, E., (2005b), "Bogus Refugees? The Determinants of Asylum Migration to Western Europe." *International Studies Quarterly*, 49: 389-409

Robinson, V., and Segrott, S., (2002), "Understanding the decision-making of asylum seekers." Home Office Research Study 243

UNHCR, (2007), *Statistical Yearbook 2005: Trends in Displacement, Protection and Solutions*, United Nations.

UNHCR, (2007), *Convention and Protocol relating to the Status of Refugees*, United Nations: published online.

UNHCR Statistical Online Population Database, United Nations High Commissioner for Refugees (UNHCR), Data extracted: 19/12/2007

Vink, M., and Meijerink, F., (2003), "Asylum Applications and Recognition Rates in EU Member States 1982-2001: A Quantitative Analysis", *Journal of Refugee Studies*, 16(3): 297-314

**Appendix A**

## List of Countries in the sample

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Host countries:		
Australia	Greece	Poland
Austria	Hungary	Portugal
Belgium	Ireland	Slovakia
Canada	Italy	Spain
Czech Rep.	Japan	Sweden
Denmark	Mexico	Switzerland
Finland	Netherlands	Turkey
France	New Zealand	United Kingdom
Germany	Norway	United States

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Total number of host countries: 27

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Origin countries:		
Afghanistan	France	Occupied Palestinian Territory
Albania	Gabon	Pakistan
Algeria	Gambia	Panama
Angola	Georgia	Papua New Guinea
Antigua and Barbuda	Germany	Paraguay
Argentina	Ghana	Peru
Armenia	Greece	Philippines
Austria	Grenada	Poland
Azerbaijan	Guatemala	Portugal
Bahrain	Guinea	Rep. of Korea
Bangladesh	Guinea-Bissau	Rep. of Moldova
Barbados	Guyana	Romania
Belarus	Haiti	Russian Federation
Belgium	Honduras	Rwanda
Benin	Hong Kong SAR, China	Saint Lucia
Bhutan	Hungary	Saint Vincent and the Grenadines
Bolivia	India	Saudi Arabia
Bosnia and Herzegovina	Indonesia	Senegal
Botswana	Iraq	Serbia
Brazil	Islamic Rep. of Iran	Sierra Leone
Bulgaria	Israel	Singapore
Burkina Faso	Italy	Slovakia
Burundi	Jamaica	Slovenia
Cambodia	Japan	Solomon Islands
Cameroon	Jordan	Somalia
Canada	Kazakhstan	South Africa
Cape Verde	Kenya	Spain
Central African Rep.	Kiribati	Sri Lanka

Chad	Kuwait	Suriname
Chile	Kyrgyzstan	Swaziland
China	Lao People's Dem. Rep.	Sweden
Colombia	Latvia	Syrian Arab Rep.
Comoros	Lebanon	Tajikistan
Congo	Liberia	TFYR Macedonia
Costa Rica	Libyan Arab Jamahiriya	Thailand
Côte d'Ivoire	Lithuania	Togo
Croatia	Macao SAR, China	Tonga
Cuba	Madagascar	Trinidad and Tobago
Cyprus	Malawi	Tunisia
Czech Rep.	Malaysia	Turkey
Dem. People's Rep. of Korea	Mali	Turkmenistan
Dem. Rep. of the Congo	Mauritania	Uganda
Denmark	Mauritius	Ukraine
Djibouti	Mexico	United Arab Emirates
Dominica	Mongolia	United Kingdom
Dominican Rep.	Morocco	United Rep. of Tanzania
Ecuador	Mozambique	United States
Egypt	Myanmar	Uruguay
El Salvador	Namibia	Uzbekistan
Equatorial Guinea	Nepal	Venezuela
Eritrea	Netherlands	Viet Nam
Estonia	Nicaragua	Yemen
Ethiopia	Niger	Zambia
Fiji	Nigeria	Zimbabwe

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Total number of origin countries: 162

## Appendix B

### Summary Statistics

Variable	Mean	Standard Deviation	Maximum	Minimum	Number of Observations
<i>log(GDP<sub>host</sub>)</i>	9.670	0.747	10.596	7.897	39366
<i>log(GDP<sub>gap</sub>)</i>	2.848	1.469	6.136	-2.389	18591
<i>log(newApps)</i>	3.083	2.167	10.463	0	17743
<i>distance</i>	6961	4209	19586	60	39366
<i>contiguous</i>	0.018	0.132	1	0	39366
<i>colony</i>	0.020	0.139	1	0	39366
<i>language</i>	0.099	0.299	1	0	39366
<i>sept 11</i>	0.444	0.497	1	0	39366
<i>muslim</i>	0.269	0.444	1	0	39366

## Appendix C

### Data Sources and Description of Variables

<i>Variable</i>	<i>Definition</i>	<i>Source</i>
log(Recog)	Natural log of the recognition rate, where the recognition rate equals the number of recognised asylum claims to country i from country j at time t as a proportion of the total number of recognised and rejected asylum claims from country i to country j at time t.	UNHCR Statistical Online Population Database, United Nations High Commissioner for Refugees (UNHCR), Data extracted: 19/12/2007
log(GDPhost)	Natural log of the GDP per capita measured in constant 2000 US\$ of host country i	World Development Indicators, World Bank (2005)
log(GDPgap)	Natural log of the GDP per capita of host country i minus the GDP per capita of origin country j (measured in constant 2000 US\$ )	World Development Indicators, World Bank (2005)
log(newApps)	Natural log of the number of new applications from country j to country i at time t	UNHCR Statistical Online Population Database, United Nations High Commissioner for Refugees (UNHCR), Data extracted: 19/12/2007
dist	Distance in km from country i to country j, using the distance between the most important city of each country (either the capital, or that with the largest population)	CEPII distance dataset, calculated with the latitude and longitudes of each city using the great circle formula
contiguous	Dummy variable taking value 1 if country i and j are contiguous, and 0 if country i and j are not	CEPII distance dataset
colony	Dummy variable taking value 1 if country i and j had a colonial link after 1945, and 0 if country i and j if they did not	CEPII distance dataset, for which colony data has been compiled using the CIA World Factbook and the Correlates of War Project's Colonial/Dependency Contiguity data
language	Dummy variable taking value 1 if country i and j share a common official language, and 0 if country i and j if they do not	CEPII distance dataset, for which language data has been compiled using the CIA World Factbook and <a href="http://www.ethnologue.org">www.ethnologue.org</a>
muslim	Dummy variable taking value 1 for origin countries which are Muslim majority, and 0 for	CIA World Factbook (2008)
sept11	Dummy variable taking value 1 for all observations after 2001, and 0 for observations	



**Appendix D**

## Bivariate Correlation Matrix

	log(recograte)	log(GDPhost)	log(GDPgap)	log(newApps)	dist	contiguous	colony	language	sept11
log(GDPhost)	-0.0974								
log(GDPgap)	-0.0016	0.3809							
log(newApps)	-0.3891	0.2010	0.0760						
dist	0.2926	0.1480	0.1914	-0.1989					
contiguous	-0.0055	-0.2358	-0.2027	0.0461	-0.1713				
colony	-0.0694	0.0284	0.1168	0.1216	-0.0064	-0.0278			
language	0.0805	0.1079	0.1847	0.0342	0.1780	-0.0154	0.3460		
sept11	-0.1065	0.1333	0.0283	-0.0357	0.0306	-0.0103	-0.0069	0.0277	
muslim	-0.0172	-0.0119	-0.1123	0.0074	-0.1378	-0.0362	0.0254	-0.0503	-0.0197

Correlations with the dependent variable, log(recograte), are largely as expected: there are positive correlations for distance and common language, supporting the result found in the regression analysis. The negative correlations for new applications and income gap also correspond to the regression analysis. The two focus variables, sept11 and muslim, are negatively correlated with the dependent variable, which is consistent with my hypothesis. Bivariate correlations shown in this table are not very high, providing an indication that multicollinearity is not a major concern.

**Appendix E**

## Detailed Regression Outputs

TABLE 1A

Detailed Output corresponding to regression from TABLE 1, column 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Dependent Variable: LOG(RECOGRATE)				
Method: Panel Least Squares				
Sample: 1997 2000 2002 2005				
Cross-sections included: 1470				
Total panel (unbalanced) observations: 6001				
White period standard errors & covariance (d.f. corrected)				
C	-1.306714	0.52598	-2.48434	0.013
LGDPHOST	0.03512	0.058502	0.600319	0.5483
LGDPGAP	-0.082064	0.025201	-3.256328	0.0011
LNEWAPPS	-0.278591	0.019115	-14.57473	0
DIST	0.000162	3.43E-05	4.707405	0
DIST*DIST	-4.58E-09	2.04E-09	-2.244647	0.0248
CONTIG	0.573699	0.246807	2.324486	0.0201
COL45	-0.340287	0.179245	-1.898442	0.0577
OFFLANG	0.392529	0.078882	4.976151	0
SEPT11	-0.281248	0.048522	-5.796327	0
MUSLIM	0.125087	0.079952	1.564522	0.1177
MUSLIM*SEPT11	-0.1266	0.072526	-1.745566	0.0809
R-squared	0.25604	Mean dependent var		-1.779212
Adjusted R-squared	0.254673	S.D. dependent var		1.42394
S.E. of regression	1.22932	Akaike info criterion		3.252797
Sum squared resid	9050.739	Schwarz criterion		3.266194
Log likelihood	-9748.017	F-statistic		187.3784
Durbin-Watson stat	0.651231	Prob(F-statistic)		0

TABLE 2A

Detailed Output corresponding to TABLE 2, 1997 - 2000, column 3

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.903997	0.611963	-3.111295	0.0019
LGDPHOST	0.080653	0.067677	1.191733	0.2335
LGDPGAP	-0.076903	0.032733	-2.349399	0.0189
LNEWAPPS	-0.250478	0.021411	-11.69854	0
DIST	0.00016	4.03E-05	3.962788	0.0001
DIST*DIST	-4.04E-09	2.46E-09	-1.642303	0.1006
CONTIG	0.411282	0.277463	1.482294	0.1384
COL45	-0.352224	0.222215	-1.585062	0.1131
OFFLANG	0.358759	0.098768	3.632346	0.0003
MUSLIM	0.125741	0.080656	1.55897	0.1191
Effects Specification				
Period fixed (dummy variables)				
R-squared	0.223178	Mean dependent var	-1.640017	
Adjusted R-squared	0.219784	S.D. dependent var	1.414523	
S.E. of regression	1.249446	Akaike info criterion	3.287976	
Sum squared resid	4288.383	Schwarz criterion	3.315875	
Log likelihood	-4524.407	F-statistic	65.76676	
Durbin-Watson stat	0.583173	Prob(F-statistic)	0	

TABLE 2B

Detailed Output corresponding to TABLE 2, 2002 - 2005, column 3

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.911023	0.66849	-1.362807	0.173
LGDPHOST	-0.016674	0.072752	-0.22919	0.8187
LGDPGAP	-0.085407	0.027134	-3.14763	0.0017
LNEWAPPS	-0.309007	0.022731	-13.59437	0
DIST	0.000162	3.98E-05	4.081222	0
DIST*DIST	-5.12E-09	2.37E-09	-2.161365	0.0307
CONTIG	0.74505	0.33811	2.203572	0.0276
COL45	-0.312688	0.176822	-1.768382	0.0771
OFFLANG	0.429306	0.084194	5.099002	0
MUSLIM	-0.008849	0.071101	-0.124462	0.901
Effects Specification				
Period fixed (dummy variables)				
R-squared	0.279538	Mean dependent var	-1.897748	
Adjusted R-squared	0.27686	S.D. dependent var	1.421418	
S.E. of regression	1.208741	Akaike info criterion	3.221038	
Sum squared resid	4716.282	Schwarz criterion	3.24544	
Log likelihood	-5206.692	F-statistic	104.3717	
Durbin-Watson stat	0.528328	Prob(F-statistic)	0	

TABLE 3A

Detailed Output corresponding to TABLE 3, 1997 - 2000				
Dependent Variable: LOG(RECOGRATE)				
Method: Panel Least Squares				
Sample: 1997 2000				
Cross-sections included: 1078				
Total panel (unbalanced) observations: 2760				
White period standard errors & covariance (d.f. corrected)				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.241417	6.066949	-0.20462	0.8379
LGDPHOST	0.00947	0.583213	0.016238	0.987
LGDPGAP	0.005614	0.029249	0.191926	0.8478
LNEWAPPS	-0.24901	0.020852	-11.94166	0
DIST	4.07E-05	3.63E-05	1.120047	0.2628
DIST*DIST	9.71E-10	2.25E-09	0.431113	0.6664
CONTIG	0.096808	0.180447	0.536492	0.5917
COL45	-0.137385	0.226705	-0.606007	0.5446
OFFLANG	-0.011613	0.091516	-0.12689	0.899
MUSLIM	0.142032	0.065049	2.183475	0.0291
AUSTRALIA	-0.331221	0.399508	-0.829072	0.4071
AUSTRIA	0.145534	0.316364	0.460023	0.6455
BELGIUM	0.683652	0.331163	2.0644	0.0391
CANADA	0.999587	0.318951	3.133986	0.0017
CZE	-0.01255	1.066456	-0.011768	0.9906
DEN	-0.154042	0.27142	-0.567539	0.5704
FIN	-0.211365	0.378115	-0.558998	0.5762
FRA	0.307863	0.345802	0.890286	0.3734
GERMANY	-1.09858	0.350101	-3.137894	0.0017
GREECE	0.223868	0.738364	0.303195	0.7618
HUN	-0.066009	1.220815	-0.054069	0.9569
IRE	-0.266416	0.328536	-0.810918	0.4175
ITA	0.646459	0.408063	1.584214	0.1133
JAP	-0.104444	0.328953	-0.317505	0.7509
MEX	0.456995	1.06096	0.430737	0.6667
NETH	0.778915	0.31603	2.464687	0.0138
NOR	-0.864377	0.301733	-2.864713	0.0042
NZ	1.501018	0.2912	5.154597	0
POL	0.108187	1.231184	0.087873	0.93
PORTUGAL	0.308385	0.745632	0.413589	0.6792
SLO	1.256192	1.311447	0.957867	0.3382
SPAIN	-0.14447	0.562897	-0.256655	0.7975
SWE	-0.518888	0.298927	-1.735838	0.0827
TUR	1.131072	1.464258	0.772454	0.4399
UK	-0.017501	0.387889	-0.045118	0.964
USA	1.338414	0.210125	6.369604	0
Effects Specification				
Period fixed (dummy variables)				
R-squared	0.416868	Mean dependent var	-1.640017	
Adjusted R-squared	0.408724	S.D. dependent var	1.414523	
S.E. of regression	1.08769	Akaike info criterion	3.020019	
Sum squared resid	3219.132	Schwarz criterion	3.103713	
Log likelihood	-4128.626	F-statistic	51.18898	
Durbin-Watson stat	0.744736	Prob(F-statistic)	0	

TABLE 3B  
Detailed Output corresponding to TABLE 3, 2002 - 2005

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	28.74124	12.99758	2.211276	0.0271
LGDPHOST	-2.85647	1.244925	-2.294493	0.0218
LGDPGAP	0.034159	0.023961	1.425573	0.1541
LNEWAPPS	-0.303952	0.020258	-15.00371	0
DIST	2.87E-05	3.49E-05	0.820786	0.4118
DIST*DIST	5.57E-10	2.03E-09	0.274402	0.7838
CONTIG	0.361664	0.305028	1.185674	0.2358
COL45	0.050123	0.186417	0.268877	0.788
OFFLANG	0.017625	0.076806	0.229475	0.8185
MUSLIM	0.007748	0.057537	0.134668	0.8929
AUSTRALIA	-1.182669	0.594473	-1.989441	0.0467
AUSTRIA	-0.237975	0.455635	-0.522294	0.6015
BELGIUM	-0.462826	0.518835	-0.892048	0.3724
CANADA	0.2137	0.460279	0.464284	0.6425
CZE	-5.29074	2.093629	-2.527066	0.0115
DEN	-0.385689	0.244759	-1.575791	0.1152
FIN	-1.204007	0.498725	-2.41417	0.0158
FRA	-1.109973	0.540622	-2.05314	0.0401
GERMANY	-2.156801	0.529747	-4.071377	0
GREECE	-4.464184	1.349441	-3.308173	0.0009
HUN	-4.892542	2.319363	-2.109434	0.035
IRE	-0.634339	0.296972	-2.136021	0.0328
ITA	-1.414706	0.745171	-1.898499	0.0577
JAP	0.337236	0.362556	0.930161	0.3524
MEX	-4.473954	2.182129	-2.050271	0.0404
NETH	-1.949007	0.476675	-4.088757	0
NOR	0.050731	0.278292	0.182293	0.8554
NZ	-2.790366	1.076343	-2.592451	0.0096
POL	-5.471537	2.470299	-2.214929	0.0268
PORTUGAL	-3.147827	1.419333	-2.217821	0.0266
SLO	-5.221125	2.571269	-2.030564	0.0424
SPAIN	-2.102346	1.027478	-2.046123	0.0408
SWE	-1.542108	0.315262	-4.891514	0
TUR	-5.513238	2.976647	-1.852164	0.0641
UK	-0.874646	0.394387	-2.217732	0.0266
USA	0.799631	0.191936	4.166127	0

Effects Specification

Period fixed (dummy variables)			
R-squared	0.472959	Mean dependent var	-1.897748
Adjusted R-squared	0.466705	S.D. dependent var	1.421418
S.E. of regression	1.03802	Akaike info criterion	2.924468
Sum squared resid	3450.11	Schwarz criterion	2.997674
Log likelihood	-4700.1	F-statistic	75.61665
Durbin-Watson stat	0.686047	Prob(F-statistic)	0

TABLE 4A

Detailed Output corresponding to TABLE 4, 1997 - 2000, column

Dependent Variable: LOG(RECOGRATE)

Method: Panel Least Squares

Sample: 1997 2000 IF HOST=104

Cross-sections included: 120

Total panel (unbalanced) observations: 407

White period standard errors &amp; covariance (d.f. corrected)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-8.781513	4.732098	-1.855734	0.0642
LGDPHOST	0.71159	0.478622	1.486749	0.1379
LNEWAPPS	-0.029526	0.031325	-0.942575	0.3465
DIST	0.000176	8.38E-05	2.10319	0.0361
DIST*DIST	-7.28E-09	4.78E-09	-1.521412	0.129
OFFLANG	-4.45E-02	9.85E-02	-0.451573	0.6518
MUSLIM	0.312246	0.097769	3.193703	0.0015
SERBIA	0.662266	0.101393	6.531704	0
IRAQ	0.328752	0.088264	3.724629	0.0002
TURKEYORIGIN <sup>1</sup>	0.303397	0.093109	3.258516	0.0012
RUSSIA	0.418579	0.120452	3.475053	0.0006
AFGHAN	0.427148	0.098085	4.354887	0
CHINA	0.137697	0.149684	0.919918	0.3582
PAKISTAN	0.021954	0.153502	0.143021	0.8863
SOMALIA	0.3968	0.13823	2.870576	0.0043
SRI	0.630663	0.190075	3.317974	0.001
R-squared	0.257341	Mean dependent var	-0.77611	
Adjusted R-squared	0.228851	S.D. dependent var	0.603209	
S.E. of regression	0.529709	Akaike info criterion	1.605539	
Sum squared resid	109.7112	Schwarz criterion	1.763134	
Log likelihood	-310.7273	F-statistic	9.032456	
Durbin-Watson stat	0.649768	Prob(F-statistic)	0	

TABLE 4B

Detailed Output corresponding to TABLE 4, 2002 - 2002, column

Dependent Variable: LOG(RECOGRATE)

Method: Panel Least Squares

Sample: 2002 2005 IF HOST=104

Cross-sections included: 131

Total panel (unbalanced) observations: 471

White period standard errors &amp; covariance (d.f. corrected)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-12.72415	9.895181	-1.285893	0.1991
LGDPHOST	1.090998	0.970115	1.124608	0.2613
LNEWAPPS	-0.070032	0.035871	-1.952347	0.0515
DIST	0.000235	9.49E-05	2.47269	0.0138
DIST*DIST	-1.13E-08	5.28E-09	-2.140759	0.0328
OFFLANG	6.16E-02	8.92E-02	0.690609	0.4902
MUSLIM	0.217344	0.083974	2.588226	0.01
SERBIA	-0.016147	0.103826	-0.155523	0.8765
IRAQ	0.313266	0.074811	4.187446	0
TURKEYORIGIN <sup>1</sup>	0.326753	0.102352	3.192459	0.0015
RUSSIA	0.534135	0.121336	4.402112	0
AFGHAN	0.446233	0.084884	5.256956	0
CHINA	0.599401	0.199519	3.004231	0.0028
PAKISTAN	-0.007181	0.151502	-0.047397	0.9622
SOMALIA	0.585175	0.129513	4.518276	0
SRI	0.797738	0.209957	3.799525	0.0002
R-squared	0.234379	Mean dependent var	-0.805599	
Adjusted R-squared	0.209139	S.D. dependent var	0.623535	
S.E. of regression	0.554512	Akaike info criterion	1.691924	
Sum squared resid	139.9051	Schwarz criterion	1.833066	
Log likelihood	-382.4481	F-statistic	9.285929	
Durbin-Watson stat	0.60915	Prob(F-statistic)	0	

1) The Dummy variable for Turkey is denoted TURKEYORIGIN to differentiate between Turkey as an origin and Turkey as a host country

TABLE 5A

Detailed Output corresponding to TABLE 5, 1997 - 2000, column

Dependent Variable: LOG(RECOGRATE)

Method: Panel Least Squares

Sample: 1997 2000 IF HOST=126

Cross-sections included: 40

Total panel (unbalanced) observations: 108

White period standard errors &amp; covariance (d.f. corrected)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-76.45359	42.57839	-1.795596	0.0758
LGDPHOST	7.234573	4.251621	1.701604	0.0922
LNEWAPPS	-0.097119	0.116545	-0.833318	0.4068
DIST	0.000615	4.95E-04	1.241915	0.2174
DIST*DIST	-4.11E-08	4.78E-08	-0.859523	0.3923
COL45	-1.77E+00	4.70E-01	-3.765793	0.0003
OFFLANG	0.382376	0.55118	0.693741	0.4896
MUSLIM	1.203962	0.419206	2.872004	0.0051
SERBIA	2.681243	0.576434	4.651434	0
IRAQ	1.207785	0.39687	3.04328	0.0031
TURKEYORIGIN	-0.284603	0.404374	-0.703811	0.4833
RUSSIA	-1.037026	0.443292	-2.339376	0.0215
CHINA	-2.161314	0.411775	-5.248771	0
AFGHAN	0.535083	0.454006	1.178583	0.2416
PAKISTAN	-2.049777	0.348591	-5.880181	0
SOMALIA	2.391523	0.453238	5.276534	0
R-squared	0.587925	Mean dependent var	-2.369943	
Adjusted R-squared	0.520738	S.D. dependent var	1.599877	
S.E. of regression	1.107575	Akaike info criterion	3.178176	
Sum squared resid	112.8584	Schwarz criterion	3.575529	
Log likelihood	-155.6215	F-statistic	8.750676	
Durbin-Watson stat	1.373309	Prob(F-statistic)	0	

TABLE 5B

Detailed Output corresponding to TABLE 5, 1997 - 2000, column

Dependent Variable: LOG(RECOGRATE)

Method: Panel Least Squares

Sample: 2002 2005 IF HOST=126

Cross-sections included: 71

Total panel (unbalanced) observations: 181

White period standard errors &amp; covariance (d.f. corrected)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	188.234	51.73972	3.638095	0.0004
LGDPHOST	-18.55466	5.067511	-3.661494	0.0003
LNEWAPPS	-0.534968	0.103734	-5.157098	0
DIST	0.000457	2.50E-04	1.825451	0.0697
DIST*DIST	-4.02E-08	2.22E-08	-1.808498	0.0723
COL45	-9.28E-02	2.99E-01	-0.310813	0.7563
OFFLANG	-0.219889	0.339763	-0.647182	0.5184
MUSLIM	0.083979	0.295553	0.284142	0.7767
SERBIA	-0.10861	0.415184	-0.261594	0.794
IRAQ	-0.799027	0.304063	-2.627837	0.0094
TURKEYORIGIN	0.286095	0.300063	0.953448	0.3418
RUSSIA	-0.192376	0.304069	-0.632672	0.5278
CHINA	-1.173008	0.362952	-3.231853	0.0015
AFGHAN	-0.216942	0.308255	-0.703776	0.4826
PAKISTAN	0.659039	0.527405	1.249587	0.2132
SOMALIA	2.887151	0.610384	4.730056	0
R-squared	0.408688	Mean dependent var	-2.584615	
Adjusted R-squared	0.354932	S.D. dependent var	1.411325	
S.E. of regression	1.133521	Akaike info criterion	3.172779	
Sum squared resid	212.0037	Schwarz criterion	3.455519	
Log likelihood	-271.1365	F-statistic	7.602697	
Durbin-Watson stat	1.132234	Prob(F-statistic)	0	