

WHO SUPPORTED THE ANNAN PLAN? AN EXPLORATORY STATISTICAL ANALYSIS OF THE DEMOGRAPHIC, POLITICAL, AND ATTITUDINAL CORRELATES

Craig Webster and Alexandros Lordos

Abstract

In April 2004, the Turkish-Cypriot and Greek-Cypriot communities voted on the Annan Plan in simultaneously held referenda. The Annan Plan was a UN-sponsored plan to reunite the divided island of Cyprus under one federal government. The majority of the Greek-Cypriot electorate did not vote in support of the Plan while the majority of the Turkish-Cypriot electorate did. While the Annan Plan was not put into action, many of the factors which influenced voting patterns on both sides of the Green Line will most likely remain relevant in defining public attitudes towards future plans to re-unite Cyprus. In this work, the authors delve into the demographic, political, and attitudinal factors linked with support for the Annan Plan, using public opinion surveys of large numbers of residents in Cyprus.

In April 2004, the two communities of Cyprus voted on a referendum to decide whether they would accept or reject the UN-sponsored Annan Plan. The aim of the Plan was to unite the island's two major communities under one federal umbrella. The majority of the Turkish Cypriots (65 per cent) voted to accept the Plan while the majority of the Greek Cypriots (76 per cent) voted to reject it. Despite being rejected, the Annan Plan and its protocols continue to fuel debate regarding the search for a solution to the Cyprus Problem. Whatever form or shape the future solution plan takes, whether it utilises the Annan Plan as the basis of negotiations or simply as one reference point among others, the public's views on the Plan should not escape our attention. Such insight will surely be relevant in our search to define a settlement that will be acceptable to both communities on the island. Thus, it is necessary to explore the attitudes and demographics that are linked with support for it.

The following analysis is an investigation into what is linked with the support for the Annan Plan among the two major communities on the island. Others (Attalides, 2004; Bahcheli, 2004; Coufoudakis, 2004; Heraclides, 2004; Jakobsson-Hatay,

2004a, 2004b; Lordos, 2004, 2005a, 2005b) have conducted post-mortems of the Plan and proffered reasons as to why there were significant differences in how the electorates on the island voted on the issue. Few analyses have, however, delved into the statistical correlates to test whether assertions of the hypotheses linked with the support for the Plan are true or not. In this work, we shall not explore the normative aspects of the Annan Plan, the international dimensions of the Cyprus Problem, or the specific weaknesses and strengths of the plan. Instead, this paper will focus on the public opinion aspect of the Plan in order to determine which demographic, political, and attitudinal factors seem to be playing a role in shaping the voters' impressions of it. The hope is that the findings of this work will shed some light onto the political sociology of the politics of reunification amongst the electorate.

This paper, to a large extent, is a response to Coufoudakis (2004, p. 77) who argues that analysts of the Cyprus Problem should recognise that there are variations of opinion within each of the major ethnic groups. This investigation is thus a move away from the positioned approach of previous research, which generally views political viewpoints to be merely determined by nationality. Indeed, the vote on the Annan Plan shows that neither of the ethnic groups voting on the island did so in monolithic blocks.

Previous Works

There is a voluminous amount of literature written about the politics of Cyprus and the Cyprus Problem (see for example, Attalides, 1979; Hutchence and Georgiades, 1999; Joseph, 1997, 1999; Kyriakou, 2000; O'Malley and Craig, 1999; Peristianis, 1998; Richmond, 1999, 2001, 2002; Stravrinides, 1975; Theophanous, 1996, 2000). What is notable about the vast majority of the literature is that it largely reflects what has been referred to as a "positioned approach" to the Cyprus Problem (Demetriou, 2004). The positioned approach starts with the notion that the major ethnicities on the island have a particular position in the Cyprus Problem. Most of these approaches thus view strategic political decisions as being largely a reflection of the particular ethnicity's position in the Cyprus Problem. Each ethnicity, therefore, tends more or less to be viewed as a monolith with political figures and institutions merely reflecting the desires of the constituent ethnicity. There are a number of recent works that have broken with this tradition although the vast majority of the works written on the topic of the Cyprus Problem tend to view the conflict through the narrative of "ethnicities as rational actors", thus simplifying the social and political diversity of the societies on each side of the Green Line.

It is also notable from the preponderance of literature written on the Cyprus Problem that there is a lack of quantitative evidence unveiled to support the research. The literature generally concentrates on the Cyprus Problem and the

ethnic conflict on the island tends to be theoretical and prescriptive. Thus, there is little insight gained from new findings and new data that would contradict the researchers' expectations. There are some exceptions to this (Webster, 2005a, 2005b; Lordos, 2004, 2005a, 2005b) but in the main the works tend to be theoretical and do not burrow into testing the empirical truths behind the Cyprus conflict.

Since the 2004 referendum on the Annan Plan, there have been a number of works that have provided post-mortems on the vote and some speculation has been made as to what might happen in the future. One of the first articles to emerge, by Attalides (2004), addresses, among other things, some of the reasons for the negative vote from the Greek-Cypriot community. In this work, Attalides records the campaigns in Cyprus prior to the Annan Plan referendum and the dynamics that led to a 'no' vote by the Greek-Cypriot population. In many ways the work of Attalides is similar to that of Jakobsson Hatay (2004a and 2004b) in that both view the outcome of the vote as the product of too short a period of time in which the electorates were asked to decide how to cast their vote on the Plan, only weeks after it was finalised. During this period the political parties in Greek Cyprus experienced difficulties in terms of forming an opinion of the plan while the media tended to emphasise those aspects of it that Greek Cypriots would find problematic. Both authors analyse the campaign in a similar way, although Jakobsson Hatay delves a little further into the political situation among the Turkish-Cypriot community while Attalides deals almost exclusively with the Greek-Cypriot community, as does Heraclides (2004).

One of the most intriguing aspects arising from Jakobsson Hatay's (2004b) analysis is her argument that age is one of the key drivers of positions on the Annan Plan within the two communities. She argues that in Greek Cyprus the young are more likely to reject the Plan because they are more nationalistic and less likely to want to share political power and influence with non-members of their ethnic group. She also argues that for the Turkish-Cypriot community, the opposite is true – that the young Turkish-Cypriot population have not experienced the negative aspects of being an ethnic minority in a country dominated by a Greek-speaking and Greek Orthodox majority while the older generation have such experience and this has influenced support for the Annan Plan.

Coufoudakis (2004) added his weight to the debate regarding the Annan Plan and its aftermath by analysing both the Plan and the foreign involvement in the development of it and analysing the Greek-Cypriot public's reaction to it. He gives a full list (Coufoudakis, 2004, pp. 74-75) regarding the reasons why the Greek-Cypriot community rejected the Plan. Among the political reasons cited he says that the Annan Plan would infringe upon certain Cypriot human rights and result in the dissolution of the current republic which has been in existence since 1960. The fact

that the financial cost of unification would largely rest on the shoulders of the Greek-Cypriot population is also one notable economic reason for reticence. There is at any rate a substantial list of reasons why the Greek-Cypriot community rejected the Annan Plan, apart from the major political and economic reasons outlined.

A radically different view of the Annan Plan – in terms of methodology – is an econometric analysis of the views of the Greek-Cypriot population on their preferences for types of solution in Cyprus (Webster, 2005b). Webster (2005b) investigates Jakobsson Hatay's (2004b) assertion that there is a generational difference in views upon the desirability of reunification or continued division on the island. The major finding shows that the two variables tested that seem to play a role in shaping views regarding the desirability of unification, or continued division, are the ages of respondents and their views toward the ability of the two communities to coexist. Those Greek-Cypriot individuals who are younger tend to prefer division and those who do not feel that the two ethnicities on the island can coexist successfully are more likely to prefer a continued division.

In a similar fashion, Lordos (2004, 2005a, 2005b) has led an extensive effort to gain an understanding of the views of the Greek- and Turkish-Cypriot communities on the desirability of the Annan Plan and those aspects of a solution that would be necessary and agreeable to both populations. He has made available on his website (www.cypruspolls.org), the findings of four major survey efforts on the island since the Annan Plan vote. This data-gathering effort has amassed a wealth of public opinion data assembled on topics linked with the Cyprus Problem and the Annan Plan. The story-telling that results from the data collected by Lordos gives insights into the changes that should be made to future versions of the UN Plan, in order for both communities to find a settlement which is acceptable.

While there is a great deal of theory about the Cyprus Problem and the Annan Plan, there has been little rigorous testing of data to assimilate what plays a role in terms of shaping opinions on the Plan. In this paper, we shall attempt to fill the void by investigating, via rigorous statistical testing, which things are linked with support for it. The hope is that by testing various propositions, we can determine those characteristics of the voters which influenced voting either for or against the Plan.

Data and Indicators

In an independent research project, two surveys were completed just a few months following the Annan Plan plebiscite. The data were collected in order to study the opinions of the Greek-Cypriot and Turkish-Cypriot communities following the Annan Plan referendum, with special emphasis on exploring possible amendments to the Plan that might render it mutually acceptable. It should be emphasised at this point

that the surveys were not originally designed with a view to developing a model to explain voters' behaviour at the referendum; thus, not all the variables that we might have wished to include in the current model were available in the database. This research is, therefore, based upon data containing large numbers of observations on both sides of the Green Line in Cyprus but there are some differences in the questions asked to both the Greek-Cypriot and Turkish-Cypriot sample since an econometric analysis and comparison of the communities was not originally intended. The timeframe in which the questionnaires went to field is an advantage, since awareness of the Annan Plan was probably at its height soon after the referendum, and there is some indication that elections create awareness of issues and lower the cost of information for citizens (Zaller, 1992), meaning that surveys taken near the time of the actual election or referendum may actually be more accurate than similar polls taken at other times.

Two leading market research firms in Cyprus were contracted to conduct the surveys in order to discover more about the views of the public on the Annan Plan and related issues. For the Greek-Cypriot community, Cymar Market Research Limited pledged to gather field research whilst KADEM was given the task of gathering the data for the Turkish-Cypriot community. Both of these organisations enjoy a good reputation in Cyprus and as a result, they have been assigned to carry out the Eurobarometer in Cyprus – the EU's polling tool.

Within each community on the island, research was handled in a slightly different way. Among the Greek-Cypriot community, Greek language interviews took place by telephone between the dates 1-15 September, 2004. Interviewing via the telephone is fairly common in the Republic of Cyprus-controlled areas on the island, since telephone access is almost universal. Interviewing via the telephone is an extremely cost-effective method of reaching a reasonably representative sample of the population quickly and efficiently. In order to study the Greek-Cypriot population and their views on the Annan Plan and related issues, 1,000 interviews were gathered using this inexpensive method which yielded a large sample.

To test whether the resulting Greek-Cypriot sample is representative, we can compare two key demographic measures against what is known from census figures detailing the island's population. Table one (p. 18) illustrates that this sample is very close to parameters used to describe the population. Thus, while the sample may contain a few more males than one would expect from the population, the differences are very minor indeed and suggest that the telephone interviews are generally representative of the population's gender mix and geographical spread.

Table 1: The Structure of the Greek-Cypriot Sample and Population in per cent

Males/Females – Sample	Male	Female			
	50%	50%			
Males/Females – Population	Male	Female			
	49%	51%			
District – Sample	Nicosia	Limassol	Larnaca	Famagusta	Paphos
	40%	28%	17%	5%	10%
District – Population	Nicosia	Limassol	Larnaca	Famagusta	Paphos
	40%	29%	17%	5%	10%

Based upon data from Cymar Market Research Limited and Cyprus 2001 Census. Census figures adjusted in 2004. Figures do not add to 100 due to rounding.

In terms of the data from the Turkish-Cypriot community, 700 face-to-face interviews were used to gather data during January 2005. Face-to-face interviews were adopted among the Turkish-speaking population of the island since telephone penetration in the Turkish-speaking parts of the island is not as comprehensive in comparison to accessibility in the Greek-speaking areas. Similar questions were asked of the Turkish-speaking population by KADEM and additional questions were raised, since the political situation among this community evokes dimensions that complicate the political situation and face-to-face exchange offered the opportunity for longer discussion than the telephone method.

It is difficult to determine whether the data from the Turkish-speaking interviews on the island is representative of the Turkish-speaking population since demographic data gathered from the political authorities is dubious and will frequently be contested. One figure that seems to stand out is the fact that about 69 per cent of the respondents to the survey are male, suggesting that males are over-represented in the sample. The favouring of males in the Turkish-Cypriot data could be a result of a real gender imbalance, a cultural factor which leads males to respond to enquiries on their doorstep, or just pure chance. According to feedback from interviewers in the field, males tended to insist on responding themselves in households because “political issues” are generally considered to be a male domain, while in a similar way females tended to demure to their husbands. This tendency was particularly strong in rural regions. Males are thus over-represented in this sample, although the females in such households probably vote following discussions with the male, so the political positions and attitudes recorded in the survey may actually reflect the consensus of a household on political issues.

Bivariate regressions using the gender of the respondent and voting on the Annan Plan indicate that there is no convincing evidence that gender had any impact upon voting for the Plan, thus the gender imbalance may not be a major

concern. At any rate, gender is taken into account in the analysis to ensure that this gender imbalance does not contort the results despite the fact that a bivariate test indicates no reason to believe that gender played any significant role in influencing the vote. Since a gender imbalance resulted from this highly political issue, future research should take into account the problem faced by this investigation. The outcome of the gender imbalance seems to be the effect of a cultural factor, as well as the lack of foresight by the researchers to put into place a quota to ensure that females were adequately represented in the sample.

The regions, from which interviews were taken, seem to suggest however, that the regional spread of interviews was reasonable, with about 35 per cent of interviews taking place in the Nicosia district (Lefkosa), 26 per cent in Famagusta (Magusa), and 17 per cent in Kyrenia (Girne). The other districts, Morfou (Guzelyurt) and Trikomo (Iskele) were represented in the sample with slightly over 10 per cent of the responses from each district. The regional spread of the canvass suggests that an increased number of interviews took place where the population was denser, given that Nicosia and Famagusta are the major cities in the region covered by KADEM. Indeed, KADEM used a similar frame when carrying out all its major research efforts among the Turkish-Cypriot sample, which resulted in the collection of data from districts being no different to Eurobarometers conducted within the same community.

There are some differences in the surveys in terms of the wording of questions and the types of questions asked, since the questionnaires were not intended to be compared directly. However, there is also a considerable overlap in the questions, the major difference being that the Turkish-Cypriot sample was asked additional questions pertaining to Islam, links with Turkey, and the length of time each family had lived in Cyprus. These are questions that would not be relevant to the Greek-Cypriot population. Furthermore, additional, questions were asked of the Turkish-Cypriot population because it was possible to raise more questions with respondents in face-to-face exchanges than during interviews taken over the telephone.

Support for the Annan Plan

The dependent variable for this work is derived from questions that directly asked respondents how they had voted on the Annan Plan referendum. In the Turkish-Cypriot survey the respondents were asked, "How did you vote in last April's referendum?" In the Greek-Cypriot survey, the respondents were asked, "How did you vote in the referendum, 'yes' or 'no'?" There were some responses that did not fit into the yes/no categories, and these responses were either refusals to answer the question, "don't know" responses, or blank votes.

The responses to the question closely correlated with the responses to the referendum, as shown in Table two. For the Turkish-Cypriot population, the data indicate a nearly perfect reflection of the support in the voting at the April 2004 referendum, while the Greek-Cypriot figures depicting support are also very close to the actual figures in the voting. The responses to the support for the Annan Plan suggest that the sample is reasonably reflective of the Turkish-Cypriot and Greek-Cypriot populations in terms of their voting behaviour in the referendum.

Table 2: Frequencies of Responses to Vote on Annan Plan

	Yes	No	Others	Number of Interviews
Turkish-Cypriot sample	65%	32%	3%	702
Greek-Cypriot sample	27%	65%	7%	1000

Note: Figures do not add to 100 due to rounding.

For the purposes of this research, the data have been recoded to denote those who voted for the Annan Plan. All those who voted in favour of the Plan are denoted with a dummy variable. Those who did not vote for the Annan Plan are denoted with a zero, while other responses have been removed from the analysis. We now turn to explanatory variables that might help to explain the variations in the dependent variables in this research. It should once again be emphasised at this point that, in designing this model, we did not have absolute freedom to construct and define the independent variables in precisely the way we might have wished, based on theoretical considerations. Instead, we had no choice but to adapt our model to the data that was already available, a weakness that made itself particularly felt in the selection of the attitudinal variables. Normally in sociometric studies, an attitude (such as nationalism, social tolerance, political trust etc.) is quantified by first asking the respondent a battery of associated questions, and then constructing a suitable scale by summing up the various responses. Such a methodology was not available to us, though we did agglomerate similar attitudinal questions into encompassing scales, wherever it was theoretically sound to do so.

Independent Variables

Age

One of the critical aspects to investigate in this work is the role that time has played in the development of perceptions of the Cyprus Problem and a solution. Jakobsson Hatay (2004b) argues that young Turkish Cypriots have grown up in isolation and that merging with the rest of the country is viewed as a positive development, bringing them out of a political wilderness to be part of a wealthier

economy. The older Turkish-Cypriot generation feel, however, that according to this logic, entering into a union with the Greek-Cypriot community raises the spectre of interethnic violence. Thus, the argument continues that: a) support for the Annan Plan among the Turkish-Cypriot community is likely to be influenced by different views of working and living with the Greek-Cypriot community, b) members of the older generation – remembering ethnic clashes and violence – are more likely to desire to continue the separation, and c) the younger Turkish-Cypriot population are more likely to view unification as an opportunity for their community to join a wealthier economy.

On the other hand, the Greek-Cypriot expectations could quite likely be different. Jakobsson Hatay (2004b) argued that the Greek-Cypriot youth are more likely to be against the Annan Plan while the older Greek-Cypriot generation support it. The reasoning is that the younger Greek-Cypriot population are more nationalistic which thus repels them from power sharing with the Turkish-Cypriot community. On the other hand, members of the older Greek-Cypriot generation might be more sympathetic towards a reunified island and support the Annan Plan, since this generation remembers a time when there was unification. According to Webster (2005b), these sentiments have been shown to have some empirical basis. Webster (2005b) found that in terms of preferences for unification or continued division, the age of the Greek-Cypriot respondent was one of the best predictors as to whether a person favoured continued division or political unification. The Greek-Cypriot young are more likely to favour division (whether a continuation of the status quo or a permanent division) and the older generation are more likely to favour unification (whether merely generic “unification” or federation).

Age is measured at the ordinal level in this work. In both questionnaires, the age of the respondent was an integral part of the generic demographic data gathered on each respondent. All respondents were aged eighteen years or older. In the Turkish-Cypriot data, age was placed upon a five-point scale with the highest category indicating those aged fifty-five years or over. In the Greek-Cypriot data, age was placed upon a six-point scale with the highest category indicating those aged sixty-five years or over. The expectation is that older Turkish-Cypriot respondents will be less likely to support the Annan Plan and that older Greek-Cypriot respondents will be more likely to support it.

Refugee Status

Refugee status should play a role in the support for the Annan Plan, since it was a concrete plan that would have enabled many to return to their homes according to a schedule. This should have been a major factor in the decision-making process, as support for the Plan was designed to solve the refugee problem and would have enabled many refugees to regain their land. In Cyprus, the question of land is

especially sensitive, since land is one of the major ways of investing and saving (Zetter, 1994). Thus, if refugees were acting as rational economic actors and they valued their land, refugees ought to show a statistical predilection for supporting the Annan Plan. In this analysis refugees are denoted with a dummy variable and are identified by self-description.

Education

In the analysis the highest education level achieved is also a consideration as there may be some influence on attitudes. The socialisation that goes hand-in-hand with education may play a role in conditioning how people perceive political choices. In this research, the Greek-Cypriot sample were coded into a trichotomy into which the most educated (those with a tertiary education) were denoted with a “3” while those with only a primary school education or less were coded with a “1.” In a similar manner, the Turkish-Cypriot sample were coded into a four-point scale with “1” denoting the least educated and “4” denoting the most educated.

Gender

Gender may also play a role in the formation of opinions regarding unification and the Annan Plan. In this work, males are denoted with a “1” as a dummy variable. Males and females may conceptualise the issue of the Plan differently because the demilitarisation of the island that the Plan would bring about, would engender contrasting implications for males and females including the end of compulsory military service.

Party Preference

Since political parties play a major role in the formation of political opinion and because they are reflective of support for a particular worldview, there ought to be a link between party support and support for the Annan Plan. For this research the major political parties were, therefore, denoted with dummy variables. Among the Greek-Cypriot population, support for political parties was measured by how people claimed they had voted in the last parliamentary elections. The parties that are denoted as major parties are AKEL, DISY, DIKO, and EDEK. Among the Turkish-Cypriot population, party support was derived from how respondents claimed they had voted in the parliamentary elections of 2003. The resulting Turkish-Cypriot parties that were to be identified in the research are the UBP, CTP, DP, and BDH.

Preferences for a Federation

Attitudes toward the Annan Plan may be merely a function of the support for the generic form of solution (federation) that was also presented to the public on both sides of the Green Line. Support for federation may thus be a leading explanatory variable to explain why some people supported the Plan while others did not. Support for a federative solution is measured on a ten-point Likert scale. On both sides of the Green Line, respondents were asked how much they supported a

bizonal-bicommunal federation. The highest score on this independent variable indicates that this is the ideal solution while zero marks this solution as entirely unacceptable. The data were recoded as a dummy variable to indicate those responses that were most in favour of federations (responses eight, nine, and ten). The recoding into a dummy variable was carried out in order to prevent a loss of observations, since about 5.4 per cent of the Turkish-Cypriot sample and 8.4 per cent of the Greek-Cypriot sample did not respond to the question.

Greek-Cypriot-specific Indicators

A battery of questions was raised to ascertain Greek-Cypriot attitudes toward Turkish Cypriots and the Cyprus Problem. Four social attitudes that are Greek-Cypriot-specific have been added to the analysis to determine the role of attitudes in shaping views on the Annan Plan. Responses ranged on a five-point Likert scale from “completely disagree” to “completely agree”. Higher scores indicate higher levels of agreement with the questions asked. One important concept to explore was the distrust of Turks. In order to examine this, responses to the statement “I could never trust a Turk” and “Turkish Cypriots are primarily after personal gain” were added together, creating an index ranging from two to ten. In a similar fashion, political radicalness was measured by summing the values of the responses to the question that the Cyprus Problem can only be solved with a war of liberation and, if it is not possible for all refugees to have the right of return, a solution is not wanted. Thus, two indexes were developed, one to measure the mistrust of Turks and Turkish Cypriots and another to measure the radical nature of the respondent’s beliefs.

In addition, a sense of commonality with the Turkish-Cypriot community was taken into account by studying the responses to the notion that Greek-Cypriot and Turkish-Cypriot communities have much in common, as expressed on a five-point Likert Scale. Finally, a dummy variable was taken into consideration to measure the sense of urgency in solving the Cyprus Problem. Those respondents who believed the appropriate time to pursue a settlement was before December 2004 were denoted with a dummy variable. The expectations are that those who have a mistrust of Turks and Turkish Cypriots and those who are more radical in their political beliefs will be more likely to reject the Annan Plan. The expectation is, however, that those with a sense of commonality with the Turkish-Cypriot community and who feel that there is an urgency in solving the Cyprus Problem would be more likely to support the Plan.

Turkish-Cypriot-specific Indicators

There are several indicators that should be added to the analysis of the Turkish-Cypriot sample due to the availability of the data as well as the very different dimension of the ethnic clash on the island between the Turkish- and the Greek-Cypriot communities. The Turkish-Cypriot sample was asked a battery of questions

on a five-point Likert scale. One dimension to explore is the apprehension of the Greek-Cypriot community. This notion is revealed by summing the responses to levels of agreement to statements regarding whether “Greek Cypriots are murderers” and whether “Greek Cypriots will attempt to dominate us”. In addition, there is a measure of commonality with the Greek-Cypriot community, accessed by summing the extent of agreement to statements regarding whether “Greek Cypriots are brothers” and “Greek Cypriots are co-citizens”. Finally, there was a measure of the pro-Turkish orientation of the respondents, gathered by seeking responses as to whether “Turkey is in Cyprus to protect Turkish Cypriots” and whether the respondent “is happy to allow Turkey to guide Turkish-Cypriot policies”. The lower end of the scale (“1”) indicates total disagreement while the upper end of the scale (“5”) represents total agreement – summing these values created three indicators ranging from two to ten.

Finally, there is a need to separate the island’s natives from the more recent arrivals on the island. The Turkish-speaking respondents were, therefore, asked whether their parents were from Cyprus or elsewhere. The majority (68.9 per cent) claimed that their parents were both born in Cyprus while about 25 per cent reported that both of their parents were born in Turkey. Those who reported that their parents were both born in Turkey were denoted with a dummy variable to indicate that their families are of Turkish origin. We expect that those of mainland Turkish extraction will be less likely to support the Annan Plan.

Statistical Tests and Findings

A Maximum Likelihood Estimation (MLE) approach has been used for this investigation because the dependent variable is dichotomous. Binary logistic regression is used in this analysis to determine the probability of attaining a “1” – those supporting the Annan Plan. To simplify interpretation of the results, all the independent variables have been standardised so that the extent of their impact on the dependent variable can be compared. All independent variables are scaled from zero to one to allow for comparisons.

The ‘Enter’ method was used to determine the impact of the independent variables, although the independent variables were added into the equation in blocks. The first block entered into the equation is used to judge the extent to which demographic variables influenced voting. The second block includes the independent variable to measure generic support for a federal solution. The third block incorporates underlying attitudes toward the other community and the fourth block included political party supporters. By adding the variables in blocks, the impact of categories of variables (demographics, attitude toward federation, attitudes towards the “other” and political party support) can be measured.

Before running the regressions, however, bivariate correlations were run to determine the impact of collinearity in the regressions. In the Turkish-Cypriot data, these correlations produce no statistically significant value, that is, above the absolute value of $r=.4$, apart from the expected correlations between party supporters. In the Greek-Cypriot data, there are only two noteworthy statistically significant correlations, i.e. that between the political radicals and the mistrust of Turks ($r=.454$), and that between age and educational levels ($r=-.445$). Although there are a few other correlations below the $r=.4$ range, there is little reason to believe that there is a major problem with collinearity in the dataset.

Table three (p. 26) shows the outcomes of the first three stages of the regressions for the Greek-Cypriot population. In each of the stages, the Chi-square statistic shows significant evidence that the model is superior to the null model. We see, however, that the first two models do not have much explanatory power when considering the pseudo-R-Square statistic (Naglekerke R Square). By this measure of the success of the model, it does not appear that the models with the demographic variables and support for federation have much explanatory value, apart from explaining the .045 per cent of the variation. The model does properly classify about 70 per cent of the variation in the first two stages, though it should be acknowledged that this is approximately what one would expect from the null model as well. The third stage of the model adds significantly to the analysis, making the pseudo R-Square statistic rocket from .045 to about .26 while it properly classifies about 77 per cent of the dependent variable. This highlights that the addition of attitudes towards the Turkish-Cypriot community and the urgency toward solving the Cyprus Problem adds a great deal to the explanatory value of the model.

Table 3: Greek-Cypriot Sample – Outcome of Logistic Regressions (Stages 1-3)

Stage 1	Omnibus Tests of Model Coefficients							
			Chi-square	df	Sig.			
		Step	26.209	4	.000			
		Block	26.209	4	.000			
		Model	26.209	4	.000			
			B	S.E.	Wald	df	Sig.	Exp(B)
		Age	.571	.268	4.518	1	.034	1.769
		Education	.778	.227	11.702	1	.001	2.177
		Males	.117	.151	.605	1	.437	1.124
		Refugee	.539	.147	13.424	1	.000	1.715
		Constant	-1.974	.267	54.829	1	.000	.139
	Nagelkerke R Square	.04						
	% Properly classified	69.8						
Stage 2	Omnibus Tests of Model Coefficients							
			Chi-square	df	Sig.			
		Step	3.404	1	.065			
		Block	3.404	1	.065			
		Model	29.614	5	.000			
			B	S.E.	Wald	df	Sig.	Exp(B)
		Age	.587	.269	4.748	1	.029	1.798
		Education	.751	.228	10.833	1	.001	2.119
		Males	.081	.152	.283	1	.595	1.084
		Refugee	.542	.147	13.523	1	.000	1.720
		Federation Supporter	.306	.165	3.449	1	.063	1.358
	Constant	-2.031	.269	56.846	1	.000	.131	
	Nagelkerke R Square	.045						
	% Properly classified	70.8						
Stage 3	Omnibus Tests of Model Coefficients							
			Chi-square	df	Sig.			
		Step	155.893	4	.000			
		Block	155.893	4	.000			
		Model	185.507	9	.000			
			B	S.E.	Wald	df	Sig.	Exp(B)
		Age	.126	.310	.167	1	.683	1.135
		Education	.305	.253	1.457	1	.227	1.356
		Males	-.198	.170	1.362	1	.243	.820
		Refugee	.488	.163	9.001	1	.003	1.629
		Federation Supporter	-.084	.183	.214	1	.644	.919
		Mistrust of Turks	-1.228	.273	20.291	1	.000	.293
		Radical	-2.278	.363	39.327	1	.000	.102
		Commonality with Turkish Cypriots	.243	.290	.702	1	.402	1.276
	Urgency	.977	.190	26.421	1	.000	2.656	
	Constant	-.762	.433	3.096	1	.078	.467	
	Nagelkerke R Square	.259						
	% Properly classified	76.9						

Finally, the full model shown in Table four illustrates that this model has greater explanatory value than the previous stages of the regressions. The Naglekerke R-Square value indicates that the model explains approximately .37 per cent of the variation while the model also classifies about 80 per cent of the dependent variables properly. What is interesting about this final model is that the independent variables that have explanatory value are attitudinal and political, with the exception of refugee status. The final model shows that refugees are more likely to support the Annan Plan, while those who mistrust Turks, or are “radical”, or are DIKO supporters, tend not to support it. Those, however, who view an urgency in solving the Cyprus Problem; who see a commonality with the Turkish-Cypriot community, and those who are DISY supporters, are more likely to support the Plan.

Table 4: Greek-Cypriot Sample – Outcome of Logistic Regressions (Stage 4: Final Stage)

Stage 4	Omnibus Tests of Model							
	Coefficients							
			Chi-square	df	Sig.			
	Step	89.902		4	.000			
	Block	89.902		4	.000			
	Model	275.409		13	.000			
		B	S.E.	Wald	df	Sig.	Exp(B)	
	Age	.140	.333	.178	1	.673	1.151	
	Education	.129	.270	.227	1	.634	1.137	
	Males	-.271	.181	2.234	1	.135	.762	
	Refugee	.408	.175	5.469	1	.019	1.504	
	Federation Supporter	-.083	.193	.186	1	.666	.920	
	Mistrust of Turks	-1.466	.296	24.551	1	.000	.231	
	Radical	-2.047	.385	28.310	1	.000	.129	
	Commonality with Turkish Cypriots	.562	.315	3.179	1	.075	1.754	
	Urgency	.964	.202	22.910	1	.000	2.623	
	AKEL Supporter	.236	.266	.793	1	.373	1.267	
	EDEK Supporter	-.454	.460	.975	1	.323	.635	
	DIKO Supporter	-.665	.333	3.995	1	.046	.514	
	DISY Supporter	1.461	.247	34.911	1	.000	4.310	
	Constant	-1.236	.499	6.148	1	.013	.290	
	Nagelkerke R Square	.367						
	% Properly classified	79.9						
	N	925						

The coefficients show that the strongest opposition to the Annan Plan is from those who could be classified as “political radicals.” The political attitudes toward the Plan seem, therefore, to meet with strongest opposition from those who support armed struggle to solve the Cyprus Problem and who feel that any solution should entail the right of return for all refugees. The weakest statistically significant independent variable is the dummy variable denoting refugees, which shows

evidence suggesting that they were statistically more likely to support it, despite the addition of other independent variables in the equation.

In general, the regressions on the Greek-Cypriot sample illustrate that the model using demographic variables alone has little explanatory value, despite the fact that all of the demographic variables, with the exception of gender, are statistically significant. With the addition of attitudinal and political variables, the model attains increased explanatory value. In the final regression, we see that voting for the Annan Plan is best explained by attitudes and political party support and not by demographic variables, with the exception of refugee status.

It is now that we turn to the regression on the Turkish-Cypriot data. The outcome of the first three stages of the regression is shown in Table five (p. 29). The findings of this regression show that there is significant evidence to indicate that all of the models run are statistically different from the null hypotheses, as the Chi-squared statistics show. The first two stages, however, seem to be very similar in terms of explaining the variations in the dependent variable, meaning that the insertion of attitudes toward federation adds little or no explanatory value to the model. By adding other attitudes into the equation in the third model, we see a leap in the explanatory value of the model, from a Naglekerke R-Squared value of .046 to .355, meaning that the addition of attitudes amplifies the explanation of the patterns of voting for the Annan Plan to unravel about 35 per cent of the variation, while the model itself can properly classify about 73 per cent of the votes for and against the Plan.

Table 5: Turkish-Cypriot Sample – Outcome of Logistic Regressions (Stages 1-3)

Stage	Omnibus Tests of Model Coefficients							
		Chi-square	df	Sig.				
Stage 1	Step	2.268	1	.132				
	Block	2.268	1	.132				
	Model	20.821	6	.002				
		B	S.E.	Wald	df	Sig.	Exp(B)	
	Age	-.158	.305	.270	1	.603	.854	
	Education	.574	.378	2.310	1	.129	1.775	
	Males	-.182	.192	.899	1	.343	.834	
	Refugee	.285	.220	1.683	1	.195	1.330	
	Turkish Parents	-.585	.208	7.912	1	.005	.557	
	Constant	.613	.368	2.777	1	.096	1.846	
	Nagelkerke R Square	.041						
	% Properly classified	65.6						
Stage 2	Omnibus Tests of Model Coefficients							
		Chi-square	df	Sig.				
	Step	2.268	1	.132				
	Block	2.268	1	.132				
	Model	20.821	6	.002				
		B	S.E.	Wald	df	Sig.	Exp(B)	
	Age	-.114	.307	.138	1	.710	.892	
	Education	.633	.380	2.775	1	.096	1.884	
	Males	-.198	.192	1.060	1	.303	.820	
	Refugee	.315	.221	2.027	1	.154	1.370	
Turkish Parents	-.574	.208	7.593	1	.006	.563		
Federation Supporter	-.265	.176	2.261	1	.133	.768		
Constant	.687	.373	3.397	1	.065	1.987		
	Nagelkerke R Square	.046						
	% Properly classified	65.6						
Stage 3	Omnibus Tests of Model Coefficients							
		Chi-square	df	Sig.				
	Step	159.978	3	.000				
	Block	159.978	3	.000				
	Model	180.799	9	.000				
		B	S.E.	Wald	df	Sig.	Exp(B)	
	Age	-.358	.350	1.044	1	.307	.699	
	Education	.350	.439	.636	1	.425	1.420	
	Males	-.446	.225	3.912	1	.048	.640	
	Refugee	.012	.256	.002	1	.962	1.012	
Turkish Parents	-.333	.240	1.926	1	.165	.717		
Federation Supporter	-.138	.208	.437	1	.508	.871		
Apprehension of Greeks	-1.813	.335	29.381	1	.000	.163		
Pro-Turkish	-1.756	.526	11.161	1	.001	.173		
Commonality with Greek Cypriots	3.288	.414	63.069	1	.000	26.784		
Constant	2.470	.629	15.437	1	.000	11.817		
	Nagelkerke R Square	.355						
	% Properly classified	72.5						

Table six below illustrates the outcome of the final stage of the regressions, showing the full model. This model, like the others before it, has strong evidence to show that it is statistically different from the null hypothesis. This means that the model itself has explanatory power versus a constant. In addition, the full model shows strong explanatory power, properly classifying over 82 per cent of the votes for and against the Annan Plan.

Table 6: Turkish-Cypriot Sample – Outcome of Logistic Regressions (Stage 4: Final Stage)

Stage 4		Omnibus Tests of Model Coefficients		Chi-square	df	Sig.		
	Step	156.205	4	.000				
	Block	156.205	4	.000				
	Model	337.004	13	.000				
		B	S.E.	Wald	df	Sig.	Exp(B)	
	Age	.264	.421	.392	1	.531	1.302	
	Education	.439	.526	.696	1	.404	1.550	
	Males	-.487	.264	3.400	1	.065	.615	
	Refugee	.241	.318	.570	1	.450	1.272	
	Turkish Parents	.031	.287	.012	1	.914	1.032	
	Federation Supporter	-.059	.250	.055	1	.815	.943	
	Apprehension of Greeks	-1.193	.396	9.093	1	.003	.303	
	Pro-Turkish	-.638	.653	.956	1	.328	.528	
	Commonality with Greek Cypriots	1.882	.502	14.055	1	.000	6.563	
	UBP Supporter	-1.871	.320	34.143	1	.000	.154	
	CTP Supporter	1.924	.400	23.197	1	.000	6.850	
	DP Supporter	-.808	.350	5.341	1	.021	.446	
	BDH Supporter	1.887	.779	5.859	1	.015	6.597	
	Constant	1.239	.774	2.558	1	.110	3.451	
	Nagelkerke R Square	.587						
	% Properly classified	82.1						
	N	610						

In terms of the value of the independent variables, we see that the hypothesised demographic variables generally fail to predict Annan Plan voting, with the exception of males. Attitudes, however, towards the Greek-Cypriot community seem to have played a major role in conditions supporting the Plan. On the other hand, support for political parties indicate that CTP and BDH supporters were more likely to have been supporters of the Plan while UBP and DP party supporters were statistically less likely to have voted in support of it. Political parties and their positions thus seem to have played an important role in the formation of opinions of the Plan among the Turkish-Cypriot population, rather than demographic factors.

What is notable is that with the addition of attitudes and political party support, the demographic variables used to predict the Annan Plan voting become increasingly less powerful in their explanatory value. The only exception to this is

the independent variable denoting males, which for some reason becomes more statistically significant with the addition of independent variables in the model, suggesting that it is a statistical fluke. The addition of the political variables provides the greatest leap in explaining the Annan Plan voting among the Turkish-Cypriot population.

Conclusions

One of the interesting discoveries from the work is that most of the demographic independent variables hypothesised to predict voting on the Annan Plan fail to be predictive in the fuller model. The full models which run the multiple regressions capture information and illustrate which intervening variables have stronger explanatory power. For example, in the case of the Turkish-Cypriot constituency, it seems that many of the attitudinal and demographic factors generally fail to be predictive in the multiple regressions, indicating perhaps that the political parties have constituencies consisting of people who have attitudinal and demographic similarities. It could also be argued, however, that the relationship between the Turkish-Cypriot parties and voting for the Annan Plan should be expected, since the parliamentary elections among the Turkish-Cypriot electorate served in many ways as a realigning election among the Turkish-Cypriot population, where parties were beneficiaries of votes based on their position on the Plan.

A further intriguing observation is that the age of voters does not seem to play a role in terms of support for the Annan Plan. As Jacobsson Hatay (2004b) had first suggested, the Greek-Cypriot youth appear to be more against the Annan Plan. It is, however, the intervening variable of attitudes that really drives the positions on the Plan. Thus, while it is true that the younger Greek-Cypriot population were more likely to reject the Plan, it is probably more meaningful and useful to assert that those who do not experience a sense of commonality with the Turkish-Cypriot community were more likely to reject it, and that such alienation from the other community is somewhat more common among the young than among their elders. Future research should investigate why the youth have such different attitudes and whether these attitudes change over time, or whether they are retained. If such attitudes are retained, it is suggestive that reunification under an agreement such as the Annan Plan will increasingly meet a harder sell among the Greek-Cypriot community. Certainly, the findings are not inconsistent with the notion that the Greek nationalist state of mind of many of the Greek-Cypriot population played an important role in their rejection of the Plan as suggested by Heraclides (2004), though it should be emphasised that in this model the variables that were tested are indicators of “mistrust” and “alienation”, not “nationalism” per se.

There is evidence to support the notion that Greek-Cypriot refugees acted as economic rational actors, grasping that the Annan Plan was a scheme that would

have allowed many to regain their properties or at least to contest their properties; this can be inferred from the fact that there is a statistically meaningful difference between refugees and non-refugees in their votes for the Plan – 35 per cent of refugees voted for it while approximately only 25 per cent of the non-refugees voted for it in the data gathered – and also by the fact that refugee status “made it” into the final model among the Greek-Cypriot population. The sentiments of refugees more than likely played a role in bringing some support to the Plan among the Greek-Cypriot population, although this does not seem to have been the case among the Turkish-Cypriot population. Future research should examine the Turkish-Cypriot refugees to determine their perception of the Annan Plan and ownership issues. Future research should also enquire further into the segments of the refugee populations, by modelling those refugees who would most clearly benefit from unification, instead of viewing them as a monolith. In addition, future research should explore the question of the return of refugees and security issues, since some votes against the Plan by refugees may have been the result of concerns about security upon returning to their property.

In terms of the Turkish-Cypriot population, the strong correlation between political party support and referendum vote is open to various alternative interpretations. One possibility is to argue that Turkish-Cypriot political parties are “constructed” ideologically around the issue of re-unification, much more so than Greek-Cypriot parties. Another possibility is to argue that Turkish-Cypriot parties took an early stance either in favour or against the Annan Plan, and therefore they had the time to align their voters with the official party position, much more so than the Greek-Cypriot parties who only made their decision two weeks before the referendum. A third possibility is to argue that the arrow of causality is an inverse correlation, in the sense that the 2003 parliamentary election in the north was in many ways a pre-referendum referendum. The truth is probably a combination of all three factors.

Another very interesting discovery regards the settlers from Turkey. While in the first iteration of the model – in which only demographics were tested – settler status emerged as a significant predictor. The variable dropped out of the model as soon as underlying attitudes were included; more particularly, “pro-Turkish orientation”, but also “sense of commonality with Greek Cypriots”. The “pro-Turkish orientation” variable itself dropped out of the model when political party support was included, seemingly suggesting that Turkish-Cypriot parties are themselves constructed around the issue of how dependent on Turkey the Turkish-Cypriot population should be. Therefore, in a similar vein to the argument used concerning the Greek-Cypriot youth, it is more meaningful and useful to say that those with a pro-Turkish orientation are more opposed to re-unification, and that more of the settlers than the Turkish-Cypriot population have a pro-Turkish orientation, than to state that settlers are more opposed to re-unification than the Turkish-Cypriot community.

Future works should delve into those specific aspects of the Annan Plan that played a role in the rejection of it by the Greek-Cypriot population. This is especially necessary since the Greek-Cypriot community has demonstrated that it is the least likely to accept the Plan. Future statistical analysis may probe more deeply into the first forays on this topic presented by Lordos (2005b) in an attempt to clarify what modifications might have to be made on the Plan in order for the two communities on the island to accept it.

Future research should also attempt to tie in the voting patterns on the Annan Plan with what is known about referendum voting in other countries. Future research should not thus view the Plan merely as a Cyprus-specific phenomenon but should link it with referenda in other parts of the world. There is probably a great deal to learn by incorporating what is known about referenda from the substantial literature on the topic (see for example; Banducci, 1998: Bowler and Donovan, 1998: Bowler et al., 1992: Cronin, 1989).

There is much to discover about the Cypriot community and public opinion on solutions to the Cyprus Problem. Public opinion does matter in Cyprus since future plans for reuniting the Cypriot communities will most likely be presented in plebiscites of the two communities on the island, so that learning about the predilections of the public on both sides of the Green Line is necessary in order to understand the elements that are likely to lead to success or failure. In the less likely scenario that a future plan might be presented to parliamentary votes, the political leaders will ultimately have to answer to their constituencies. Consequently, the political views of the public on the issue of continued separation and unification on the island are vital.

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