Determinants of Popular Support for Iran's Nuclear Program: Insights from a Nationally Representative Survey

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Introduction

In recent years, Iran's nuclear ambitions have riled the international community and have brought the Islamist Republic into ever-sharpening conflict with the United States and its key European allies.[1] The United States, working with the United Nations Security Council, the EU-3 (France, Germany, and the United Kingdom), and the European Commission, among others, has sought to increase the pressure on Iran in a variety of ways. Some voices in the American political discourse have even called for the United States to consider using military force. More broadly, since the attacks on the United States of 11 September 2001, the United States has been engaged in what is officially called the 'Global War on Terrorism'. Many of the targets in this war have been in Muslim countries, stimulating both outrage expressed by numerous Muslim leaders and the popular resentment documented in a number of public opinion polls.[2]

In 2006, as Iran continued to attract the attention of policy-makers in Washington and other capitals, the Center for Conflict Analysis and Prevention within the United States Institute of Peace (USIP) formed the Iran Policy Forum. Within the context of USIP's Iran Policy Forum, one of the authors took part in a collaborative effort to field a nationally representative poll of Iranian opinion on several key domestic and foreign policy concerns. USIP, working with Search for Common Ground (SCG) and the Program on International Policy Attitudes (PIPA), hoped that this unprecedented exercise would help identify the distance between the regime's positions on key public policy concerns and those of the Iranian public.[3] While the survey in its entirety focused on numerous domestic and foreign policy issues such as Iran's relations with near and far neighbours, support for terrorism, beliefs about democratic norms and Iran's adherence to them, among other issues, this essay concentrates specifically on the questions pertaining to Iran's nuclear program and related concerns.

This article explores data relating to public support for Iran's nuclear program. We primarily evaluate a few general hypotheses from the literature regarding support for nuclear programs using these new data from Iran. Before presenting our empirical results, we first provide some background to this poll and some of the challenges that the team encountered. This discussion is important because it illuminates both the strengths and weaknesses of the data that undergird this study. Second, this essay addresses some of the questions about the relevance and integrity of data

collected by the consortium and used in this analysis. Namely, this second section discusses whether public opinion matters in a country like Iran and whether polling of Iranians is a useful exercise given the degree of coercion which is ascribed to the regime. This section also discusses forthrightly questions about data integrity. Third, we briefly describe the top-line results of questions germane to Iranian support for its country's program and some reasons cited for this support. The fourth section, using logistic regression, focuses on key outcome measures in an effort to identify independent variables that explain variation in selected dependent variables. The fifth section exposits the findings of our model estimates. Finally, we conclude with a number of lessons that can be drawn from this exercise.

Background to the Study

Even though Iranian popular opinion may not significantly affect the regime's decision-making on national security issues, the Bush administration implicitly sought to reach out to the Iranian public, which it believed to be amenable to regime change and could have utility in achieving that objective. For example, in 2005, the US Congress passed the Iran Freedom and Support Act of 2005, which appropriated $10 million and directed the President of the United States to use these resources to fund groups that are opposed to the Iranian government. President Bush praised the allocation of these so-called regime change funds as the first step in promoting popular efforts to overthrow Iran's theocratic government and to forge a liberal democracy in its place. Such heroic US polices implicitly assume that the Iranian public has adequately discordant views of the regime's positions on key issues to force such upheaval.

In part to explore whether or not such differences existed between the regime and the public, in 2006, PIPA, SCG, and USIP collaborated on a poll of Iranian public attitudes. The proposed poll effort served the institutional equities of the three US organizations. For SCG's part, it sought to field tandem surveys of Iranian and American publics to identify areas of broad consent and dissent among the two publics as the standoff between their governments intensified. (SCG also obtained the necessary US Department of Treasury licence needed to do this work as it would involve compensating an Iranian firm to conduct the poll.) PIPA has extensive experience fielding polls across the globe and has worked to identify global norms (e.g. global warming, terrorism) and was eager to explore Iranian public opinion more extensively. This study permitted PIPA to build upon previous limited polling efforts in Iran as a part of PIPA's various multi-country studies. USIP, given its conflict-prevention mandate, sought to identify the degree to which the public accepted or rejected preferred policy approaches of the regime in effort to identify programmatic opportunities. While it is unclear to what extent (if any) Iranian public opinion affects the regime's decision-making, it is reasonable to argue that efforts to persuade the regime from pursuing a particular policy course may be least successful where there is greater accord between the regime and the public.

Prior to our poll, a number of polls had been conducted among Iranians; however, each had its own particular set of limitations. The World Values Survey included Iran

in its 2000 wave, but it did not include questions that addressed the specific policy concerns of interest mentioned above, and it predated the events of September 11 2001.[4] The Tarrance Group conducted a survey in May-June 2005 on behalf of the Iran Institute for Democracy between among 758 Iranian adults of voting age. That survey relied upon a call-in technique from a call centre in the United States using random digit dialling (RDD) by callers fluent in Farsi. Similarly, *Readers Digest* and Zogby International conducted a survey of Iranians with a national random sample of 810 Iranian adults in May 2005 through telephone calls placed from outside Iran, using the RDD method. Gallup also conducted a poll of Iranians in 2001 and 2002. While many of the questions posed by Tarrance, Zogby, and Gallup were germane to our query, they did not include questions about the nuclear (civilian or weapons) program.[5] In addition, independent domestic polls within Iran are rarely allowed and government-sponsored polls are often skewed. Needless to say, respondent-level data are not available from these polls.[6]

The PIPA, SCG, and USIP team chose to use face-to-face interviews for the poll in collaboration with an Iranian firm for reasons discussed below.[7] Conducting face-to-face interviews in a repressive environment like Iran does raise the question as to whether or not respondents would participate in a way that produced sample bias and whether they would feel free to answer honestly on difficult questions.[8] The lack of freedom of expression has been cited by groups like Terror Free Tomorrow as justification for using RDD over face-to-face interviews.

Notwithstanding these concerns, in general, the survey literature finds that face-to-face interviews are superior to RDD for a number of reasons. First, RDD is vulnerable to sample bias due to, among other issues, demographic differences among land-line users versus mobile users and between those with phone lines and those who do not have land-lines (or mobile phones) at all.[9] Second, apart from these well-known sample bias problems, RDD respondents have also been found to have higher non-response rates than face-to-face participants.[10] RDD respondents have also been found to be more likely than personal interviewees to satisfice (as evidenced by no-opinion responding, non-differentiation, and acquiescence).[11] RDD respondents have also been found to be less cooperative and engaged in the interview, and they have been found to be more inclined to complain about the length of the interview than were face-to-face respondents, even when the telephonic interview is shorter than those conducted face-to-face. RDD respondents, relative to face-to-face respondents, have also been found to be more suspicious about the interview process and more likely to present themselves in socially desirable ways.[12]

While face-to-face interviews are generally considered to be superior to telephone surveys, a few studies of sensitive topics (e.g. drug and alcohol use, sexual behaviours, religious attendance) and at-risk populations (e.g. drug users, alcoholics) suggest that RDD offers some advantage over face-to-face surveys in that the respondent has a greater sense of anonymity and may be more inclined to answer the question in the first place and offer a more honest answer in the second place. For example, Midanik *et al.*, in their study of alcohol-related harm, found that telephone respondents reported higher rates of such harm than did face-to-face respondents. They suggested that this could be due to greater anonymity, fewer social desirability

issues as well as different cognitive requirements.[13] However, other studies of similarly fraught issues found that either face-to-face techniques were superior to RDD or found no difference between the two techniques.[14]

Even within various American populations, the relative costs and benefits of (more resource intensive) face-to-face and (comparatively less costly) RDD techniques remain in dispute. Unfortunately, there are no known studies of the comparative benefits of both techniques in Iran in particular or non-democratic, coercive regimes specifically. RDD in Iran is certainly a problem due to sample bias given the increasing mobile usage in the country. According to the World Bank, in 2006, there were 31.4 telephone mainlines (per 100 persons) and 19.5 mobile subscribers (per 100 persons). This was a significant increase from 14.8 mainlines (per 100 persons) and 1.5 mobile subscribers (per 100 persons) in 2000. This suggests that the gap between land-line and mobile users is closing.[15] (In contrast, in the United States in 2006, there were 57 mainlines and 77.9 mobile subscribers per 100 people.[16])

In the contexts of Iran, RDD could offer a few advantages over face-to-face interviews. First, as RDD can be based outside of Iran and need not employ Iranian firms, there are no restrictions on the questions that can be asked. The anonymity afforded by RDD could in principle elicit more honest responses to sensitive questions such as support for nuclear weapons, democracy, beliefs about Israel, etc. (As RDD need not employ resources spent in Iran, organizations using RDD based outside of Iran have no requirement to obtain a US Department of Treasury licence to conduct the poll.) However, as noted above, studies fielded in other contexts and countries suggest that RDD does not necessarily elicit better answers even if RDD permits more aggressive questioning in principle. Data integrity is further discussed below. Given the likely superiority of face-to-face interviews generally to RDD, the team employed the former technique.

PIPA, SCG, and USIP jointly developed the questionnaire that was fielded in coordination with the Iranian implementing partner. This firm was authorized to work with international groups and took needed steps to ensure that it complied with any legal expectations and that it mitigated any gratuitous risk to the firm or its employees as a consequence of its working with these US-based groups. In Iran, polling can be dangerous business and some pollsters have paid a heavy price for eliciting information that has undermined key positions of the regime. In 2003, Abbas Abdi (a reformist who had previously been a revolutionary hostage-taker) conducted an independent poll and determined that three out of four surveyed Iranians supported having relations with the United States. He was imprisoned for publishing the results and was charged with 'collaborating with the US elements and British intelligence ... and conducting 'psychological warfare' aimed at overthrowing the government'.[17]

Not surprisingly, there were some questions which the implementing partner simply refused to ask. For example, we were generally not allowed to ask about any neighbouring country and/or its leadership or any country with which Iran has sensitive relations (e.g. India). The Iranian firm also declined to include questions about support for Israel, given that no conceivable answer would be good for the Iranian regime. We were also not allowed to ask directly about public support for

a nuclear weapons program. Presumably the inclusion of such a question by an Iranian firm could be construed as tacit acknowledgement that there is a weapons program in Iran, which Tehran denies. (Clearly, groups using RDD polls do not have to contend with such issues.) To accommodate the various concerns of the partner, we used the term 'full nuclear fuel cycle' to denote a nuclear program which could, *but need not*, imply a weaponization option. The Iranian regime has argued that Iran has an inalienable right to develop full civilian nuclear technology. Use of this expression was justified in some measure because this expression was in vogue at the time of the survey and often implied the possibility of a weapons program.[18] Clearly, this is not ideal, but it was the best possible approach available given the concerns of the Iranian implementing partner.

The Survey Data: Are the Data Real, Fabricated or Otherwise Compromised?

The instrument that the three organizations developed and fielded included over 134 questions and interviews were on average about an hour in length. The poll was fielded between 31 October and 6 December 2006 and was representative of rural as well as urban areas with 31 per cent of respondents drawn from areas that are officially designated 'rural' by the Iranian census. These areas were not *shahrdari* (towns with their own administrations) and typically have populations below 5,000. With a simple random sample of 1,000 completed surveys, the margin of error is $+/-3.2$ percentage points. On average, interviews were about an hour in duration.[19] Because PIPA and SFG were most interested in publishing top-line results (rather than any formal modelling of determinants of any specific outcome variable), the team decided use a split sample for some questions. Unfortunately, as discussed below, some of the questions that were most relevant to this study were split, which complicated the present analysis.

Due to pervasive beliefs that polls of this nature are not credible or that data would be fabricated, PIPA's quantitative analysts examined the data for irregularities.[20] (Fabricating data for 1,000 interviews is not an easy task). The PIPA team found no evidence suggesting that data were not genuine.[21] The authors of this essay considered whether or not respondents provided answers that the regime would expect them to provide (or satisficing in other ways). There are several ways of approaching this issue albeit inconclusively, including looking for variation across other sensitive questions; for variation in the same question posed in different years in Iran; or variation in similar questions posed in different surveys with similar samples.

We first looked for variation across questions within our survey. Support for Iran's 'full nuclear fuel cycle' (henceforth 'nuclear program') was nearly universal. When asked how important it was for Iran to have such a nuclear program, 91 per cent said it was important, with 84 per cent saying it was very important. A full 96 per cent said it was important for Iran's economy to develop the capacity to produce nuclear energy; 89 per cent said it was very important. Reasons given for this importance evidenced much more variation, with more than three-quarters indicating that it would help Iran's energy needs and one in two believing that it would deter countries from economically or politically dominating Iran, among other reasons.[22]

Considerably more variation was observed regarding other sensitive subjects. For example, we asked respondents to rank on a one to ten scale (with one meaning 'not at all important' and ten meaning 'absolutely important) 'How important is it for you to live in a country that is governed by representatives elected by the people?' The mean response was 9.1, suggesting that democratic representation was highly valued. However, many Iranians did not believe that they were so governed. We next asked respondents, 'How much do you think Iran is governed by representatives elected by the people', using a scale from 1 to 10, where 1 means 'not at all' and 10 means 'completely.' The mean was 6.9.[23] Similarly, with respect to improving relations with the United States nearly 50 per cent of all respondents favoured various proposals suggested including direct talks (48 per cent), greater trade (52 per cent), greater access for journalists (51 per cent), and more American tourists in Iran (48 per cent).[24]

Next, we compared our top-line results with those of other purportedly nationally representative samples. In July 2007, Terror Free Tomorrow released the results of its RDD poll of 1,000 Iranians. They asked respondents to rank the importance of 'Developing nuclear energy, but not nuclear weapons'. In response, 76 per cent indicated that this was 'very important' and another 12 per cent said it was 'somewhat important'. This result of 88 per cent compares somewhat similarly to our result (91 per cent) measuring support for a 'full nuclear fuel cycle'. (Direct comparison is difficult because 'full nuclear fuel cycle' need not necessarily imply nuclear weapons. Moreover, the sample structures were different, as was the polling technique.) Because Terror Free Tomorrow used remote call-in, it could ask respondents about their support for developing nuclear weapons. In response to this direct question, that team found that only 37 per cent said developing weapons was 'very important' and another 15 per cent said it was 'somewhat important'.[25]

Finally, we examined variation on the same question posed to similar samples across time in other surveys. (This is difficult because two surveys rarely use the same question, with comparable samples and polling technique.) Nonetheless, we found one question that could be so compared. When Iranians were asked about their country's influence in the world in December 2006, some 86 per cent believed that it was 'mainly positive'. This was a large increase from 68 per cent a year before.[26]

While this exercise suggests that Iranians, in our poll, are not reflexively providing regime-friendly responses to all sensitive questions, we cannot conclusively rule out satisficing on the nuclear question. But it is not obvious that questions about a 'full nuclear fuel cycle' would be more sensitive than questions about democracy.

General Hypotheses

As we stated above, our primary purpose is to evaluate domestic support for Iran's nuclear program. To do so, we want to briefly lay out some hypotheses to test using these data and use them to help specify a model and organize a discussion

around the results. Why might individuals support such a program? Though Sagan frames his argument around leaders,[27] we think it is a useful heuristic for considering public support given that a leader's survival is often contingent upon the support of the public. This is true to some extent even for authoritarian leaders. (The recent departure of Pakistan's autocratic president, Pervez Musharraf, under public pressure in a limited way underscores this reality.[28]) Moreover, using his hypotheses as a point of departure allows us to examine whether or not his argument is applicable to domestic audiences constrained by authoritarian regimes. The two most relevant hypotheses following from Sagan's argument worth testing stem from (1) traditional security concerns and (2) expected benefits.

To begin, states seek nuclear weapons to deter conventional military threats or to coerce and/or compel changes in the status quo. In Waltzian terms,[29] states develop nuclear weapons to balance against its major rivals. Alternatively, states develop weapons programs for other benefits, namely economic and/or international power status. Realists argue that international relations are all about power: power gives nations the abilities to survive and prosper. It follows that domestic publics should also desire nuclear programs for the same reasons. After all, assumptions about individuals desiring power, status, prosperity, and survival seem plausible. Below we empirically evaluate whether or not the Iran survey data support these suppositions.

A View from the Data: Iranian Preferences and Concerns[30]

Unable to ask respondents directly about their support for acquiring a nuclear weapons capability, the team was permitted to query participants about their support for 'full nuclear fuel cycle'. An overwhelming majority (84 per cent) said that it was very important. *Notably, there was no statistically significant variation in responses to the question by gender, age, geographical location, and most other demographic factors.* Other questions also revealed this high level of motivation for addressing Iran's energy needs through nuclear energy. Almost 90 per cent said that it was very important for 'Iran's economy to develop the capacity to produce nuclear energy'. Fifty-nine per cent said they saw 'disruption in energy supply' as either a critical (47 per cent) or an important (12 per cent) threat to Iran's vital interests in the next ten years. These findings suggest that Iranians feel that they cannot rely on their domestic supply of fossil fuels indefinitely. Indeed, discussions of the limited period of time that Iran's fossil fuel supply will last are prominent in the Iranian discourse.[31]

These summary findings suggest that Iranians believe that a full fuel cycle capacity confers benefits beyond nuclear energy, including indications of technical competence that add to Iran's great power status, providing an independent source of energy that reduces Iranian vulnerability to outside pressure, and providing at least an existential nuclear deterrent. Many Iranians appear to believe that being closer to a nuclear weapons capability enhances their great power status and their ability to deter other countries from seeking to dominate them on the assumption that Iran cannot acquire nuclear weapons.

Iran and the West

When Iranians were asked to 'think about Muslim and Western cultures' and whether they believe that 'violent conflict between them is inevitable, or that it is possible to find common ground', most (58 per cent) believed that it was possible to find common ground. Only one in four thought conflict was inevitable. Similarly, most respondents (54 per cent) believed that 'most people in the West and the Islamic world have similar needs and wants, so it is possible to find common ground' compared to fewer than one in four who believed that 'Islamic and Western religious and social traditions are incompatible with each other'.

Iran and the United States

Despite generally sanguine views about the scope for common ground between the Muslim World and the West, three out of four Iranians (76 per cent) regarded the United States unfavourably and 93 per cent of Iranians indicated an unfavourable opinion of the US government. Iranians' negative views of the United States also extend to American culture (at least when it is asked about in general terms) with 78 per cent espousing an unfavourable opinion of American culture. When it comes to the American people, Iranians are ambivalent: while 49 per cent had an unfavourable opinion of the American people, another 45 percent had a favourable opinion.

Attitudes toward the United States and the American people improved with Iranians' level of education. Thirty-four per cent of Iranians with some college education viewed the United States favourably – some 12 points more than the public as a whole. Among those with some college education, more than one in four (26 per cent) viewed American culture favourably, which is nine points more than the public as a whole. Similarly, 60 per cent of those with some college education regarded the American people favourably, 15 points more than the public as a whole. However, views of the current American government did not significantly differ between those with and without college education.

A majority of Iranians see the United States as a threat to Iran. When respondents were presented with a list of possible threats, 'US foreign policy' was seen as an important threat by 77 per cent, including 59 per cent who called it a critical threat. When asked, 'How much, if at all, do you think US bases in the Middle East are a threat to Iran?', 83 per cent replied that the bases threatened Iran to some degree, including 44 per cent who called them 'a major threat', 29 per cent 'some threat', and 10 per cent 'a minor threat'. Only 11 per cent thought these bases did not threaten Iran.

Similarly, a large majority of Iranians believe that American bases in the Middle East are destabilizing the region and oppose them. To evoke a longer time-frame than that of the ongoing Iraq war, the survey question reminded respondents that 'for decades, the United States has had military forces in long-term bases in the Middle East'. Respondents were asked whether they thought these bases 'have a positive or negative effect on stability in the region'. Four out of five (79 per cent) said the bases' effect is negative (59 per cent said very negative). Only 10 per cent described the bases' effect as positive. Even more (89 per cent) said they opposed the presence of American bases in the Middle East (80 per cent were strongly opposed).

Finally, respondents were presented a number of putative goals of what the 'US calls the war on terrorism'. These included 'Weaken and divide the Islamic world, the Islamic religion and its people', 'Achieve political and military domination to control Middle East resources', and 'Protect itself [America] from terrorist attacks'. When asked to identify what they believed to be the 'primary goal', the plurality (47 per cent) believed that the US sought to achieve domination over and control of the Middle East resources while another third believed it was to divide the Muslim world. Only one in ten believed the US primarily seeks to protect itself.

Israel

The survey team was restricted in terms of the kinds of questions that could be posed in Iran about Israel. Most of the questions posed were deemed too sensitive by the national firm. The team was allowed to include Israel among a 'a list of possible threats to vital interests of Iran in the next 10 years'. Respondents were asked to indicate whether 'this as a critical threat, an important but not critical threat, or not an important threat at all'. When asked about Israel, a solid majority said that Israel was a critical (64 per cent) or important threat (14 per cent). Only 17 per cent said it was not a threat at all. Not surprisingly, when asked whether Israel (along with several other countries) is 'having a mainly positive or mainly negative influence in the world', solid majorities (83 per cent) said 'negative', while four per cent said 'positive'. Needless to say, Israel was viewed the most negatively of the countries listed.

Models and Findings: Determinants of Belief

Having reported the descriptive statistics for many questions related to our causal study, we proceed to analyze the interrelated causal effects of the variables discussed above using regression analysis. As noted above, the survey team was forced to query support using the expression 'full nuclear fuel cycle'. Unfortunately, there are two problems with this variable. First, there was very little variation – support for a full fuel cycle program was overwhelming (84 per cent affirmative). Second, this question was fielded in Iran using a split sample, with only half of the survey participants having the opportunity to respond. The other half of the sample was asked to answer the question: 'How important is it for Iran's economy to develop the capacity to produce nuclear energy?' As a result we chose to analyze the correlates of both responses. Doing so allowed us to take advantage of the full sample and to tap support for different aspects of Iran's nuclear program.

Despite this inconvenient survey characteristic, it did afford an unexpected advantage in that we were able to analyze the similarities and differences that variables have on support for the nuclear program versus support for the program in terms of its capacity to affect Iran's economy. For both variables we concentrated on the dichotomy among strong supporters (1's) and others (0's). Finally, we also analyzed a variable asking whether (1) or not (0) respondents believed Iran would possess nuclear weapons in the next 50 years. In sum we developed three models of domestic beliefs about Iran's nuclear program, with and without demographic

control variables. We estimated the models using logistical regression (logit) with robust standard errors.[32]

We report the results from all of our models in Table 2 and Figures 1–3. Table 2 reports the coefficient estimates, while Figures 1–3 display the expected changes in probabilities for the dependent variables given changes in the independent variables from 0 to 1 holding all other variables constant. The first model in Table 2 reports the coefficient estimates for the 'economy' model, while the second and third columns display the estimates for the 'fuel cycle' and 'future nuclear Iran' models, respectively. We include in each model several independent variables which employs concepts relevant to our hypotheses.

To begin, our variable *conflict with the West* measures whether or not respondents feel threatened by confrontations with the West. The next two variables, *Israeli threat* and *nuclear Israel*, instrument for respondent's sentiment toward Israel. We also include variables that inquired respondents about Iran's *nuclear neighbours* and about beliefs about the United States. To instrument for status, we used a survey item that asked respondents whether or not the most important reason for Iran's fuel cycle program was to enhance Iran's great power status. Aside from including these key variables, we also include a series of demographic control variables. The complete set of dependent and independent variables and question wordings, excluding the demographic control variables, is described in Table 1. The demographic variables are explained in the analysis when relevant.

Each of the models fit the data fairly well. First, using Chi square tests, the models are statistically robust. Second, the Receiver Operating Characteristic curves (ROC) curves reveal that the models fit the data well. ROC curves plot the 'sensitivity' (proportion of actual positives identified) vs. the '1-specificity' (proportion of negatives correctly identified) measures for a binary classifier, in this case our logit model. When these two measures are plotted as an ROC curve, the greater the area under the curve, the better is the predictive power of the model. Generally speaking, models reflecting .70 of the area under of the curve represent fair models, .80 cutoffs indicate good models, and .90 measures convey that the model has excellent predictive accuracy.[33] The area under the ROC curves produced by Models 1a–3a, respectively are .72, .68, and .78. Each improves with the inclusion of the demographic variables – especially model 1b. The area under the ROC curves produced by Models 1b–3b, respectively are .83, .70, and .80. In sum our models fit the data fairly well, especially Model 1b. All exceed the fair .70 mark and a couple meet and exceed the .80 'good' mark. As a result, we are satisfied with overall model fits.

Here, we focus our attention on the results conveyed in Figures 1–3 rather than the individual coefficient estimates. Thus, rather than discussing each and every variable and its effects in turn, we draw out thematic insights that can be tweezed out from the analyses. The figures given below convey the expected change in probability that a respondent answers in the affirmative for each question used as the dependent variable, conditioned upon their answers to those questions that comprise our set of independent variables. The black bars indicate the associated changes for the models without demographic controls, while the grey bars indicate the changes associated with those models which also include the demographic control variables.

TABLE 1
VARIABLES AND CORRESPONDING SURVEY QUESTIONS

Variable category	Variable name	Per cent = 1	Survey question
Dependent Variables	Economy	91.5%	'How important is it for Iran's economy to develop the capacity to produce nuclear energy?'
	Fuel Cycle	88.0%	'How important do you think it is for Iran to have a full fuel cycle nuclear program?'
	Nuclear Iran	47.8%	'Do you think that 50 years from now there will be more countries with nuclear weapons than there are today?' If the response is 'yes', then, 'Do you think that Iran will be one of them?'
Independent Variables	Conflict w/ West	80.0%	The threat posed to Iran by the potential for conflict between Islamic and Western countries.*
	Israeli Threat	77.4%	The threat posed to Iran by the potential for conflict with Israel.*
	Nuclear Neighbours	75.4%	The threat posed to Iran by its neighbours developing nuclear weapons.*
	Nuclear Israel	56.1%	The threat posed to Iran by Israel's possession of nuclear weapons.*
	Opinion of US	22.2%	'Please tell me if you have a very favourable, somewhat favourable, somewhat unfavourable, or very unfavourable opinion of the following: the United States government.'
	US Motive	88.3%	'Do you think the primary goal of what the US calls the war on terrorism is to: (a) Weaken and divide the Islamic world, the Islamic religion and its people, (b) Achieve political and military domination to control Middle East resources, (c) Protect itself [the US] from terrorist attacks.'
	US Base Threat	44.4%	'How much, if at all, do you think US bases in the Middle East are a threat to Iran?'
	Deterrence Benefit	50.2%	Respondents were asked if they believed the most important reason for Iran's development of a full fuel cycle nuclear program was as a deterrent to potential aggressors.**
	Status Benefit	60.6%	Respondents were asked if they believed the most important reason for Iran's development of a full-fuel-cycle nuclear program was to enhance Iran's great power status.**

*For these questions, respondents were given this explanation, and then given the opportunity to express their concern over each potential threat: 'I am going to read you a list of possible threats to vital interests of Iran in the next 10 years. For each one, please select whether you see this as a critical threat, an important but not critical threat, or not an important threat at all.'

**For these questions, respondents were given this explanation, and then given the opportunity to express their opinion of each potential reason for a full fuel cycle program: 'Here are some reasons that some people give for why Iran should have a full-fuel-cycle nuclear program. For each one, please tell me whether it is: (a) The most important reason, (b) An important reason, though not the most important, (c) A minor reason, (d) Not a reason at all.'

TABLE 2
LOGISTIC REGRESSIONS OF LATENT VARIABLE MODELS

| | Model 1 | | Model 2 | | Model 3 | |
| | Importance of Program to Economy | | Importance of Fuel Cycle Program | | Future Nuclear Iran | |
	a	b	a	b	A	b
Key Independent Variables						
Conflict w/ West	−.511 (.620)	−.925* (.717)	.424 (.432)	−.237 (.532)	.055 (.286)	−.232 (.330)
Israeli threat	−.419 (.544)	−.208 (.907)	−.242 (.445)	.157 (.530)	−.030 (.296)	.164 (.319)
Nuclear Israel	.667** (.392)	.187 (.439)	.484* (.341)	.319 (.380)	.088 (.206)	.207 (.236)
Nuclear neighbours	−.053 (.587)	−.030 (.795)	−.567 (.450)	−.466 (.550)	.272 (.254)	−.061 (.302)
Opinion of US	−.886** (.386)	−1.085** (.511)	−.481* (.374)	−.406 (.440)	.524** (.255)	.703*** (.291)
US motive	.423 (.636)	1.168** (.691)	.228 (.465)	.353 (.535)	−.211 (.331)	−.176 (.381)
US base threat	.299 (.398)	.253 (.399)	.079 (.339)	.118 (.397)	.481*** (.206)	.704*** (.242)
Deterrence benefit	.166 (.433)	.152 (.466)	.803** (.353)	.690** (.424)	1.440*** (.216)	1.408*** (.259)
Status benefit	.795** (.419)	.694* (.491)	.671** (.347)	.434 (.398)	1.203*** (.228)	1.243*** (.262)
Demographics						
Secondary education		−.702 (.903)		−.586 (.612)		−.191 (.339)
Highly educated		−.297 (.871)		−.768 (.750)		−.905** (.410)
36−50 years		−.263 (.601)		−.526 (.483)		−.161 (.304)
Over 50 years		−.906 (.816)		−.322 (.676)		−.129 (.389)
Low income		.226 (.504)		.097 (.446)		.102 (.309)
High income		1.07 (1.27)		.112 (.807)		.448 (.559)
Internet		−.495 (.560)		−.206 (.551)		.925*** (.336)
Interest in current affairs		1.936*** (.506)		.497 (.444)		.091 (.243)
Female		−.758* (.475)		.001 (.400)		.377* (.243)
Region of Tehran		−1.102* (.784)		.188 (.567)		−.338 (.375)
Regions bordering Iraq		.027 (.666)		.130 (.601)		−.222 (.333)
Regions bordering Afghanistan/Pakistan		−1.938** (1.015)		.420 (.511)		.406 (.332)
Tehran resident		1.578** (1.004)		.146 (.982)		−.050 (.439)
Rural resident		.256 (.593)		.321 (.538)		.167 (.289)
Constant	2.214*** (.869)	2.512** (1.490)	1.246 (.765)	1.619 (1.336)	−2.272** (.508)	2.371*** (.723)
n	411	345	423	349	519	431
Log pseudolikelihood	−106.15	−73.987	−135.16	−108.079	−295.30	−235.94
	2		4		2	5
Wald chi^2	17.81**	51.41***	17.46**	31.68*	89.90**	76.91***

**p < .05, * p < .10 (one-tailed tests). The figures in parentheses represent robust standards errors.

TABLE 3
INTERVIEW ALLOCATIONS

Region	Province	Total Interviews	Urban	Rural
C	Isfehan	59	45	14
C	Chahar Mahal Bakhtiyari	14	8	6
C	Yazd	22	19	3
Tehran	Tehran	186	164	22
Tehran	Semnan	11	9	2
Tehran	Ghazvin	22	12	7
Tehran	Ghom	16	15	1
Tehran	Markazi	12	12	3
Tehran	Hamedan	15	8	7
N	Gilan	34	16	18
N	Golestan	18	12	6
N	Mazandaran	48	28	20
NE	Khorasan Razavi	65	40	25
NE	Khorasan Jonoobi (South)	8	4	4
NE	Khorasan Shomali (North)	22	16	6
SE	Sistan Baluchestan	42	27	15
SE	Kerman	30	24	6
S	Fars	63	33	30
S	Kohkeelooyeh va Boyerahmad	12	7	5
S	Hormozgan	22	14	8
SW	Bushehr	11	6	5
SW	Khoozestan	58	38	20
SW	Lorestan	20	11	9
W	Ilam	8	4	4
W	Kurdestan	15	10	5
W	Kermanshah	39	27	12
NW	Azarbaijan Sharghi (East)	58	34	24
NW	Azarbaijan Gharbi (West)	34	21	13
NW	Ardabil	19	15	4
NW	Zanjan	17	10	7
	Total	**1000**	**689**	**311**

We first explore the effects of *American opinion* on the three models. Figure 1 reveals that when Iranian opinion of the United States (o*pinion of US*) is positive, the expected change in the probability that a respondent feels that Iran's nuclear program is important for the economy decreases by almost 6.5 percentage points, on average, holding all other variables constant. Put another way, when opinion of the United States is negative, individuals are more likely to respond that Iran's nuclear program is important for Iran's economy. The same holds true when controlling for demographic variables though the expected change shrinks slightly. Moreover, the same relationship holds for the importance of Iran's fuel cycle program. For instance, Figure 2 shows that when American opinion is positive, support for Iran's fuel cycle program drops by about five percentage points with or without demographic controls. Thus, again, we see that negative American opinion is related to positive support for the fuel cycle program. On the contrary, Figure 3 reveals that positive *American opinion* is highly associated with beliefs that Iran will become a nuclear state.

Another significant variable in the non-demographic model is *nuclear Israel*. Figure 1 and Figure 2 show that when individuals believe that the threat of Israel
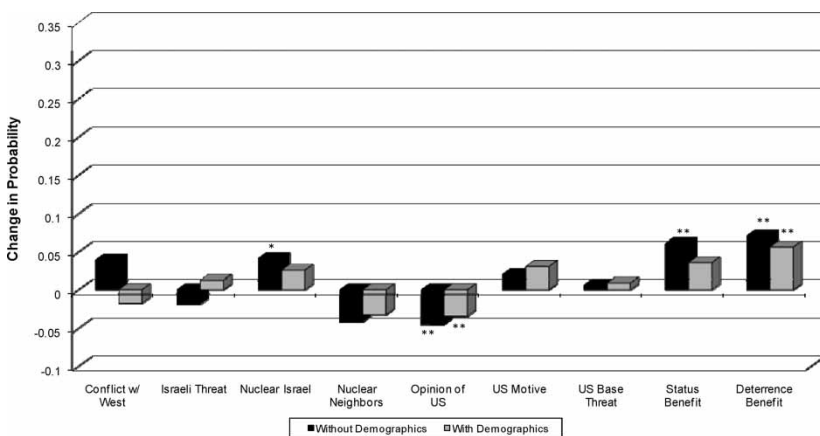
FIGURE 1
CHANGES IN PROBABILITIES FOR 'IMPORTANCE OF IRAN'S NUCLEAR PROGRAM FOR
THE ECONOMY'
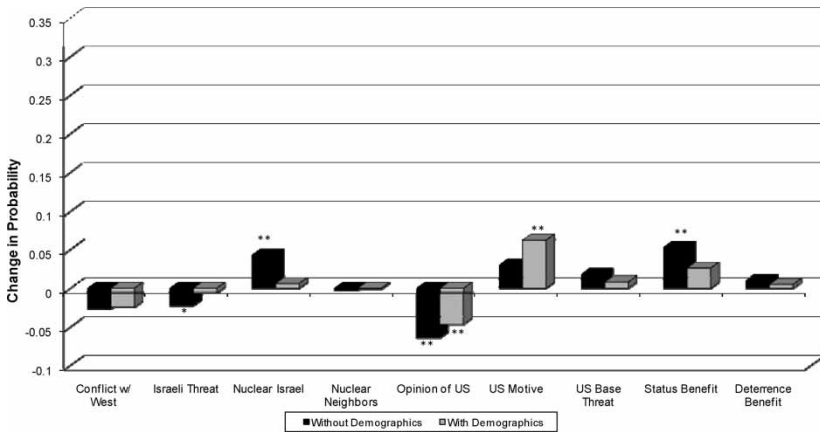
**p < .01, **p < .05, * p < .10. All significance tests are one-tailed.

possessing nuclear weapons is high, the importance for Iran's program as it relates to
the economy increases, as does support for Iran's fuel cycle program. However, this
effect washes out when controlling for demographic factors for both the economy and
fuel cycle dependent variables. That said, we should also note that controlling for
demographic factors reduces our sample size by about 17 per cent. On the other
hand, while controlling for demographics, importance for the economy, as shown
in Figure 2, increases as *US motive* is perceived to be antagonistic towards the

FIGURE 2
CHANGES IN PROBABILITIES FOR 'IMPORTANCE OF IRAN'S FUEL CYCLE PROGRAM'

**p < .01, **p < .05, * p < .10. All significance tests are one-tailed.

FIGURE 3
CHANGES IN PROBABILITIES FOR 'IRAN WILL BECOME A NUCLEAR STATE'
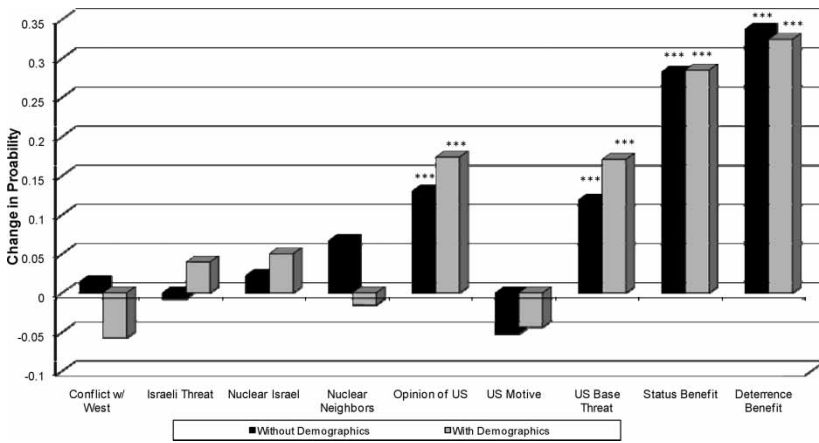
**p<.01, **p<.05, * p<.10. All significance tests are one-tailed.

Islamic world and the Middle East rather than as defending American national security interests. This finding does not hold up when eliminating demographic variables. It is also not evident in the fuel cycle model. None of the findings discussed in this paragraph show up in the future nuclear Iran model (Figure 3).

Turning attention towards s*tatus benefit*, we see that Figures 1, 2, and 3 all reveal positive relationships when not controlling for demographics. That is, when people believed Iran's status increases as a result of the development of its fuel cycle program, support for the fuel cycle program increases as well as perceived importance of the program for the economy. In both models 1a and 2a, s*tatus benefit* increases support for the fuel cycle program and perceived importance of the program for the economy by almost five percentage points holding all else constant. The effects of *status benefit* dramatically increase the probability that individuals' beliefs that Iran will become a nuclear state in the future with or without controls. For instance, s*tatus benefit* in Figure 3 shows an increase in almost 30 percentage points. All in all, status seems to have significant effects on individuals' attitudes towards Iran's fuel cycle program and the importance of the program for Iran's economy.

Interestingly, and consistent with our expectations, our measure of deterrence benefit is not statistically significant in our economy model but is significant in our fuel-cycle model. Respondents who felt that deterrence was the most important reason for Iran's fuel cycle program tended to support the program. Figure 2 shows that *deterrence benefit* increases the expected change in the probability of support for the fuel cycle program by about five percentage points with and without demographic controls. The same variable, in Figure 3, increases the probability that someone believes Iran will have a nuclear program in the future by more than 30 percentage points with and without controls. Overall, *deterrence benefit* seems to yield the expected relationships.

As for statistically significant demographic variables, an interest in current affairs increased individuals' beliefs about the importance of the nuclear program for Iran's economy. Also residents from Tehran regions and Tehran itself tended to believe the program was very important for the economy, while residents from provinces bordering Afghanistan and Pakistan tended to believe it was less important for the economy. Interestingly, none of the demographic variables were statistically significant for the fuel cycle model. In terms of the future nuclear Iran model, highly educated respondents tended to believe Iran would *not* have a nuclear program in the future, while those who used the internet and who were female tended to think it would have a nuclear program.

Several of the *insignificant* results also merit brief mention. First, Iranian's belief about the inevitability of a conflict with the Western world – fundamental to 'clash of civilizations' theories – does not predict support for an Iranian nuclear program across any of the models tested with the exception of the economy with demographics model, though the coefficient is barely significant. Second, opinions of Israel – the frequent target of bellicose rhetoric by the Iranian government – do not predict support for a nuclear program, despite respondents' overwhelming belief in the existence of an Israeli nuclear program. Beliefs about the general threat posed to Iran by Israel, as well as Iranians' belief in the existence of an Israeli nuclear-weapons capability, only predict support for Iran's own nuclear program in Model 2b. Similarly, nuclear neighbours did not affect levels of support across our dependent variables.

Discussion and Conclusions

Over all, our results suggest that Iranians' support for the country's nuclear program stem from the perceived status and deterrence benefits garnered from such programs as well as the opinions of the United States. Contrary to common belief and Tehran's own rhetoric, Iranian impressions of Israel do not drive support for the country's nuclear efforts. On the other hand, negative beliefs about the United States do appear to predict this support. While these results do not refute – and indeed generally comport with – the conventional wisdom about the nation's program, they do suggest that there is less distance between the sentiment of the public and that of the regime than may be popularly believed. Indeed in some measure the premise of American 'regime change' funds presumes a degree of difference in preferences that is not supported by these data.

Given the concerns about collecting face-to-face polling data in Iran, some methodological reflection is likely in order. Both this effort and efforts employing RDD suggest that it is possible to collect public opinion data in Iran, although the relative quality of data yielded from both techniques is debatable. Because of the relative – but indeterminate – strengths and weaknesses of face-to-face and RDD techniques, scholars conducting public opinion work in Iran should consider employing both types of data collection using identical questions and sample structures that are as similar as technically feasible. Such an approach would allow researchers to use RDD to ask more aggressive questions while benchmarking RDD answers to those obtained by face-to-face questioning. Results derived from non-sensitive questions

could illuminate the extent to which the two methods produce different responses. Such an approach would likely yield higher-quality policy-relevant data as well as insights into the best poll techniques in repressive environments like Iran. (As repressive regimes concentrate the interests of policy-maker and researchers alike, these insights could have considerable generalizable import.) Other survey techniques such as vignettes (or scenarios) or information cues may also be useful in eliciting quality answers to sensitive questions under conditions where speech is policed, where respondents may feel compelled to satisfice, or where respondents may seek to game the questions.[34] While we are aware that this effort does not answer our own questions decisively, this exercise does demonstrate that this kind of work is possible and likely merits further investigation.

NOTES

1. Colin Dueck and Ray Takeyh, 'Iran's Nuclear Challenge', *Political Science Quarterly*, Vol. 122, No. 2 (Summer 2007), pp. 109–10.

2. See inter alia, World Public Opinon.org, 'Muslim Public Opinion on US Policy, Attacks on Civilians and al Qaeda', 24 April 2007, http://www.worldpublicopinion.org/pipa/pdf/apr07/START_Apr07_rpt.pdf; Dalia Mogahed, 'The Battle for Hearts Moderate vs. Extremist the Muslim World', 2008, http://media.gallup.com/WorldPoll/PDF/GALLUP+MUSLIM+STUDIES_Moderate+v+Extremist+Views_11.13.06_FINAL.pdf; Pew Global Attitudes Survey, 'Global Opinion Trends 2002–2007: A Rising Tide Lifts Mood In The Developing World – Sharp Decline in Support for Suicide Bombing in Muslim Countries', 24 July 2007, http://pewglobal.org/reports/pdf/257.pdf.

3. The full results of this survey are available at 'USIP and PIPA Give Advance Briefing on Unprecedented In-Depth Poll of Iranians', 16 January 2007, http://www.usip.org/iran/index.html; WorldPublic Opinion.org, 'Public Opinion in Iran and America on Key International Issues', 24 January 2007, http://www.worldpublicopinion.org/pipa/pdf/jan07/Iran_Jan07_rpt.pdf.

4. World Values Survey, Online Data Analysis, http://www.worldvaluessurvey.org/.

5. Moreover, all Gallup and Zogby respondent-level data were and are proprietary. Several months after this study was executed Terror Free Tomorrow also fielded a survey of Iranians using the RDD method from call centres outside of Iran. See Terror Free Tomorrow, 'Polling Iranian Public Opinion', http://www.terrorfreetomorrow.org/upimagestft/TFT%20Iran%20Survey%20Report.pdf.

6. Karim Sadjadpour, 'How Relevant is the Iranian Street?', *The Washington Quarterly*, Vol. 30, No. 1 (Winter 2006–07), pp. 151–62.

7. This required a US Department of Treasury license, which Search for Common Ground obtained for their study of US and Iranian opinions. PIPA, working with the Iranian partner, oversaw the implementation of the poll and data analysis. USIP only funded the portion fielded in Iran. The Iranian firm preferred to remain anonymous.

8. There is no freedom of speech in Iran. The Ministry of Culture approves publication of all books and inspects foreign books prior to distribution and there is a Press Court, which has procedural and jurisdictional power to prosecute journalists, editors, and publishers for offensive material, often capriciously determined. See Freedom House, *Map of Freedom 2008-Iran*, http://www.freedomhouse.org/

template.cfm?page=22&year=2008&country=7413; Human Rights Watch, '"You Can Detain Anyone for Anything". Iran's Broadening Clampdown on Independent Activism', January 2008, http://hrw.org/reports/2008/iran0108/iran0108web.pdf.

9. The Pew Research Center, in their effort to estimate bias resulting in mobile phone substitution, found that lack of a landlines in the United States is not currently damaging estimates for the entire population. However, they found that evidence that it does create biased estimates on certain variables for young adults, 25 per cent of whom are cell-only according to the most recent government estimate. See Scott Keeter, Trevor Tompson, and Mike Mokrzycki, 'What's Missing from National RDD Surveys? The Impact of the Growing Cell-Only Population', Revised version of paper presented at the 2007 annual conference of the American Association for Public Opinion Research, Anaheim, California, 17–20 May 2007, http://pewresearch.org/assets/pdf/514.pdf.
Some studies in the United States found that bias accruing from substitution to mobile phones is low for adults as the percentage of adults without landlines is low. See for example, Stephen J. Blumberg, Julian V. Luke, and Marcie L. Cynamon, 'Telephone Coverage and Health Survey Estimates: Evaluating the Need for Concern About Wireless Substitution', *American Journal of Public Health*, Vol 96, No. 5 (May 2006), pp. 926-931. No comparable studies of Iranian phone usage has been conducted and given the well-known youth bulge and reliance upon mobile phones, sample bias likely remains an issue.

10. See for example, Donna J. Brogan, Maxine M. Denniston, Jonathan M. Liff, Elaine W. Flagg, Ralph J. Coates, and Louise A. Brinton, 'Comparison of Telephone Sampling and Area Sampling: Response Rates and Within-Household Coverage', *American Journal of Epidemiology*, Vol. 153, No. 11 (June 2001), pp. 1119–27; M. Galesic, R. Tourangeau, and M. Couper, 'Complementing Random-Digit-Dial Telephone Surveys with Other Approaches to Collecting Sensitive Data', *American Journal of Preventive Medicine*, Vol. 31, No. 5 (November 2006), pp. 437–43.

11. In the context of survey answers, satisficing includes choosing explicitly offered no-opinion response option, selecting responses which are believed to be socially desirable, failing to differentiate among responses when presented with a battery of questions asking for ratings of multiple objects on the same response scale, and manifesting 'acquiescence response bias' by tending to agree with any assertion, regardless of the content offered.

12. See for example, Allyson L. Holbrook, Melanie C. Green, and Jon A. Krosnick, 'Telephone versus Face-to-Face Interviewing of National Probability Samples with Long Questionnaires: Comparisons of Respondent Satisficing and Social Desirability Response Bias', *Public Opinion Quarterly* Vol. 67, No. 1 (Spring 2003), pp. 79–125.

13. L. Midanik, T. Greenfield, and G. Rogers, 'Reports of Alcohol-Related Harm: Telephone Versus Face-to-Face Interviews', *Journal of Studies on Alcohol*, Vol. 62, No. 1 (January 2001), pp. 74–8.

14. See for example, William S. Aquilino, 'Telephone Versus Face-to-Face Interviewing for Household Drug Use Surveys', *Substance Use & Misuse*, Vol. 27, No. 1 (January 1991), pp. 71–91; Thomas K. Greenfield, Lorraine T. Midanik, and John D. Rogers, 'Effects of Telephone Versus Face-To-Face Interview Modes on Reports of Alcohol Consumption', *Addiction*, Vol. 95, No. 2 (May 2002), pp. 277–84; William Alex Pridemore, Kelly R. Damphousse, and Rebecca K. Moore, 'Interview mode effects on estimates of need for alcohol and drug treatment among welfare recipients: evidence from a quasi-experiment,' *Journal of Experimental Criminology*, Vol. 3, No. 4 (December 2007), pp. 323–336.

15. World Bank, 'ICT at a Glance-Iran', http://devdata.worldbank.org/ict/irn_ict.pdf.

16. World Bank, 'ICT at a Glance-United States', http://devdata.worldbank.org/ict/usa_ict.pdf.

17. Sadjadpour, 'How Relevant is the Iranian Street?' (note 6), p. 151.

18. See 'USIP and PIPA Give Advance Briefing' (note 3); WorldPublicOpinion.org, 'Public Opinion in Iran and America' (note 3).

19. Since face-to-face national surveys are normally multi-stage stratified samples, as was employed in Iran, a small design effect is typically present. With a sample of this size and 177 primary sampling units, the actual margin of sampling error is likely to be somewhat wider, but still less than 4.5 percentage points. For more information about the technical aspects of this poll, see 'Survey Methods: Poll of the Iranian Public, October 31 – December 6, 2006. WorldPublicOpinion.org, USIP and Search for Common Ground', 16 January 2007, http://www.usip.org/iran/survey_methods.pdf.

20. See discussion in Sadjadpour, 'How Relevant is the Iranian Street?' (note 6).

21. 'USIP and PIPA Give Advance Briefing' (note 3); WorldPublicOpinion.org, 'Public Opinion in Iran and America' (note 3).

22. *Ibid.*

23. *Ibid.*

24. *Ibid.*

25. See Terror Free Tomorrow, 'Polling Iranian Public Opinion: An Unprecedented Nationwide Survey of Iran', July 2007, http://www.terrorfreetomorrow.org/upimagestft/TFT%20Iran%20Survey%20Report.pdf.
26. 'USIP and PIPA Give Advance Briefing' (note 3); WorldPublicOpinion.org, 'Public Opinion in Iran and America' (note 3).
27. D. Sagan, 'Why do States Build Nuclear Weapons?', *International Security*, Vol. 21, No. 3 (Winter 1996–1997), pp. 57–63.
28. While Musharraf resigned in August 2008, he was actually forced from power much earlier in November 2007 when he was forced, under civil society pressure, to step down as the all-powerful army chief. While the ultimate push likely came from the Pakistan army, the army was forced to act because of its relations with the Pakistani polity became very strained over Musharraf's policies. In effort to rehabilitate the public standing of the army, it turned against Musharraf and executed a volte face of his policies.
29. Kenneth Waltz, *Theory of International Politics* (New York: Mcgraw Hill, 1979).
30. This section draws from an unpublished working paper co-authored by C. Christine Fair with Clay Ramsay and Steve Kull of PIPA. Fair, Kull, and Ramsay collaborated on the survey questionnaire fielded and on the subsequent data analyses.
31. Iranians also show a low level of concern about the safety issues associated with nuclear energy. Eight out of ten said that 'nuclear power is relatively safe and an important source of electricity, and interested countries should build new nuclear power plants'. Only about a quarter (24 per cent) said that 'the risk of terrorist acts involving radioactive materials or nuclear facilities is high,' while a plurality of 39 per cent believed such a risk to be very low since nuclear facilities and radioactive materials are 'securely protected'.
32. The model was also tested using scobit and rare events logit estimators. Both scobit and rare events logit offer means of dealing with dichotomous response models where one response (in this case, positive support for Iran's nuclear program) is far more prevalent than the other. Scobit allows the regression to move from 0 to 1 'faster' by adding an adjusting exponent to the standard probit estimator in order to maximize slope. The rare events logit estimator, on the other hand, takes a random sample from the modal response to place it in closer proportion to the 'rare' response. By so doing, a rare event is estimable under the normal assumptions of logistical regression. Results were consistent across all three estimators used, giving us greater confidence in the results of our models. Only results from the standard logit estimator are reported to avoid redundancy. See Jonathan Nagler, 'Scobit: An Alternative Estimator to Logit and Probit', *American Journal of Political Science*, Vol. 38, No. 1 (February 1994), pp. 230–55; Gary King and Langche Zeng, 'Logistic Regression in Rare Events Data', Department of Government, Harvard University, 19 May 1999, http://gking.harvard.edu; Gary King and Langche Zeng, 'Estimating Absolute, Relative, and Attributable Risks in Case-Control Studies', Department of Government, Harvard University, 30 September 1999, http://gking.harvard.edu.
33. Note that the researcher can use the ROC curves to set different cutoffs for binary classifications. For example, one may choose a probability cutoff value of .50 (the default in most statistics packages), but the ROC curves can be used to set more useful cutoffs. For example, a probability cutoff of .27 may provide the most correctly classified 1's and 0's and produce the fewest false positives and false negatives.
34. Janet Finch, 'The Vignette Technique in Survey Research', *Sociology*, Vol. 21, No. 1 (February 1987), pp. 105–14; Cheryl S. Alexander and Henry Jay Becker, 'The Use of Vignettes in Survey Research', *The Public Opinion Quarterly*, Vol. 42, No. 1 (Spring 1978), pp. 93–104; Marjorie Wall, John Liefeld, and Louise A. Heslop, 'Impact Of Country-Of-Origin Cues On Consumer Judgments In Multi-Cue Situations: A Covariance Analysis', *Journal of the Academy of Marketing Science*, Vol. 19, No. 2 (March 1991), pp. 105–13; George F. Bishop, Robert W. Oldendick, and Alfred J. Tuchfarber, 'Political Information Processing: Question Order and Context Effects', *Political Behavior*, Vol. 4, No. 2 (June 1982), pp. 177–200.

Appendix A: Technical Appendix*

Sample Design

A multistage stratified sample with randomized household selection and random selection of respondents within households was utilized for this poll. The sample's universe

included all residents of Iran aged 16 and over. The poll was conducted in 80 urban PSUs (Primary Sampling Units) and 97 villages. All provinces were covered.

Urban. Urban cities were distributed into four tiers according to their population.
   Tier 1 cities: 1M+
   Tier 2 cities: 500K-1M
   Tier 3 cities: 100K-500K
   Tier 4 cities: less than 100K

Selection of PSUs

Stage 1: Selecting T1 (tier 1) and T2 (tier 2) Cities. All first-tier (population of over one million) and second-tier (500,000–1 m) cities were selected with a probability of 1.

Stage 2: Selecting Tier 3 Cities (Ethnic Representation). Iran's census does not collect information on ethnicity for both practical and political reasons. Therefore, there is no reliable data available on the ethnic composition of the country. Hence, in order to make the sample as representative of the ethnic makeup of the country as possible, at stage 2, each T3 city was categorized on the basis of the prevalent ethnic character of the city as one of the following seven major ethnic groups:

1. Fars (also includes very small minorities, total three per cent of population)
2. Azeri
3. Kurd
4. Lur
5. Arab
6. Baluch
7. Gilak/Shomali

In other words, each T3 city was classified as belonging to only one of the above categories. Once the categorization was completed, the share of each category in the total of T3 cities was established. The number of PSUs for each ethnic category was made proportional to the share of this category in the total of all T3 cities. Then, T3 cities were selected randomly and independently within each ethnic category of T3 cities according to the number of PSUs allocated to each category.

Stage 3: Selecting T4 Cities and Rural Districts (Regional Representation). All 30 provinces of Iran were divided into the following nine regional categories without any overlap:

1. Tehran *(Province of Tehran, Semnan, Ghazvin, Ghom, Markazi, and Hamedan)*
2. N *(Province of Gilan, Golestan, and Mazandaran)*
3. NE *(Province of Khorasan Razavi, Khorasan Jonoobi, and Khorasan Shomali)*
4. SE *(Province of Sistan Baluchestan and Kerman)*
5. S *(Province of Fars, Kohkeelooyeh va Boyerahmad and Hormozgan)*
6. C *(Province of Isfehan, Chahar Mahal Bakhtiyari, and Yazd)*

7. SW *(Province of Bushehr, Khoozastan, and Lorestan)*
8. W *(Province of Ilam, Kurdestan, and Kermanshah)*
9. NW *(Province of Azarbaijan Sharghi, Azarbaijan Gharbi, Ardabil, and Zanjan)*

All T4 cities and rural districts were assigned to regional categories according to the geographic location of their province. Then, T4 cities and rural districts were selected randomly and independently within each category of T4 cities and rural districts according to the number of PSUs allocated to each category.

Stage 4: Sample Point Selection (SPs). Once PSUs were selected through the indicated first three stages, sampling points (SPs) were randomly selected from within each PSU. For urban areas, an SP was defined as the streets within an Urban PSU. For rural areas, an SP was defined as the village within a Rural PSU. In general, no more than five interviews were conducted in each SP.

Stage 5: Household Selection Within SP. From the pre-selected starting point, the first residential unit on the left side of street and then every third residential unit were contacted. If the residential unit was a single family house or a two-level building in which two households resided, then the household residing on the first level was picked. If the residential unit was a 3+ level apartment building, the household residing on the middle level was picked. If multiple households reside within a particular level, then the first household on the left, closest to the elevator/staircase was picked.

Stage 6: Selecting a Respondent within a Household. Our interviewers asked to speak to an eligible member of the household who had had the most recent birthday. If more than one household member qualified because two members had the same birthday, our interviewers asked to speak with the one who had most recently been out of the house. If no one was home, we tried two additional times. If someone was home but the randomly selected member was not, a mutually agreeable time was arranged for the interview to take place. If the selected member refused to participate, if a mutually agreeable arrangement could not be made, or if a selected household could not be reached after three attempts, the interviewers abandoned the household and moved to the next.

Stage 7: Interview Allocation. Interviews were allocated proportional to the population size of the selected PSUs and the areas those PSUs represented in the region. Selected PSUs within each region were made to represent the population of similar settlements (population category) within that region.

NOTE

*The technical appendix included in this article draws from technical specifications provided to the USIP team.