## Asian Barometer Survey 2010 TECHNICAL REPORT (TAIWAN)

## **1. LOCATION**

The 2010 Asian Barometer Survey covered the area of Taiwan Province, including two metropolises -- Taipei City and Kaohsiung City.

## 2. TIMETABLE

Project: August 1, 2009 – July 31, 2010 Fieldwork : January 16, 2010 – February 28, 2010

## **3. RESPONDENTS**

Data was gathered through face-to-face interviews of voting-age adults (20 years old and above), who had registered in the household system in Taiwan Province. The baseline information and addresses were drawn from the household information compiled by the Ministry of Interior and excluded residents in military organizations, hospitals, medical care centers, schools, vocational training centers, dormitories, detention centers, and prisons.

## 4. SAMPLING PROCESS AND METHODOLOGY

#### (1) Establishing a Framework for Sampling

First, following the 2006 second wave survey, we divided Taiwan into six geographical areas. Then, using the total number of people eligible to cast ballots in the 2008 presidential election, we estimated the total number of successful samples required in each geographical area.

In accordance with the 30/30 rule for using micro-level data to make macro level conclusions, the number of electoral constituencies (xuanqu) and neighborhoods (li) or villages (cun) to be sampled in each geographical area was based on the estimated total number of samples in that area. Sampling was carried out in three stages in accordance with the probability proportional to size (PPS) method. In the first stage, electoral constituencies were selected in each geographical area in accordance with the divisions in place for the 2008 Legislative Yuan elections. In the second stage, four neighborhoods or villages were selected in each of the twenty-seven electoral constituencies drawn in the first stage. In the third stage, respondents were selected in each of the neighborhoods and villages drawn in the second stage. We selected fourteen people in each neighborhood or village (ten people in Yilan, Hualien, Taitung, and the outlying islands) on the basis of the feasibility of carrying out successful interviews. In total, we selected a total of 1536 interviewees. The sampling framework is shown in table 1.

Area	Number of Voters	Percent age of Total	Number of Constituencies Selected	Number of Neighborh oods/ Villages Selected	Number of Samples Taken in Each Village/Neig hborhood	Total Number of Samples
Keelung/Taipei City/Taipei County Area	5219076	30.13	8	32	14	448
Taoyuan/Hsinchu /Miaoli Area	2464861	14.23	4	16	14	224
Taichung/Changh ua/Nantou Area	3291393	19.00	5	20	14	280
Yunlin/Chiayi/Ta inan Area	2618745	15.12	4	16	14	224
Kaohsiung City/Kaohsiung	2796361	16.14	5	20	14	280

 Table 1: Sampling Framework

County/Pingtung						
Area						
Yilan/Hualien/						
Taitung &	931186	5.38	2	8	10	80
Outlying Islands*						
Total	17321622	100.0	27	112	-	1536

\* Including Penghu, Kinmen, and Mazu

#### (2) Sampling Stages

- A. After the number of electoral constituencies to be sampled in each geographical area was established, we undertook systematic sampling on the basis of PPS to select the constituencies.
- B. After selection of the electoral constituencies, we undertook systematic sampling on the basis of PPS to select neighborhoods and villages within the constituencies. The selected neighborhoods and villages are shown in table 2.
- C. After the selection of neighborhoods and villages, we applied to the Department of Household Registration, Ministry of the Interior for access to household registration data. We then used systematic sampling to select respondents on the basis of the required number of successful samples in each neighborhood or village.

8	8	
	Urban Districts, Urban	Neighborhoods and Villages
Constituency	Townships, and Rural	Selected
	Townships Drawn	
Taipei City	Shilin District	Shengshan, Fuhua
Constituency 2	Datong District	Penglai , Jianming
Taipei City	Zhongshan District	Fuhua, Kangle, Min'an .
Constituency 3	Songshan District	Anping
Taipei City	Xinyi District	Shuanghe, Siwei, Changchun
Constituency 7	Xinyi District	Xinju
Taipei County	Vinshuong City	Danfeng, Bade, Wenming, Zixin .
Constituency 4	Xinzhuang City	
Taipei County	Deparing City	Shenqiu, Zhongshan, Tangchun,
Constituency 7	Bandiao City	Fuzhou
Taipei County	Sanxia Township	Longpu
Constituency 10	Tucheng City	Leli, Yusheng, Rihe .

#### Table 2: Neighborhoods and Villages Selected

Taipei County	Xindian City	Zhongyang, Baufu, Chaicheng
Constituency 11	Shenkeng Township	Wanfu
	Zhongzheng District	Xinfeng
Keelung City	Qidu District	Yongping , Changxing
	Ren'ai District	Mingde
_	Taoyuan City	Zhongyi, Daxing
laoyuan County	Guishan Township	Xinlu
Constituency 1	Luzhu Township	Zhongfu
Taoyuan County Constituency 3	Zhongli City	Hua'ai, Fuxing, Mingde, Wufu
	North District	Nanzhong
Usinghu City	East District	Yuxian
HSINCHU City	Xiangshan District	Xiangshan
	North District	Nanshi
Mizoli Coupty	Toufen Township	Pantau
	Miaoli City	Fuxing, Jiasheng
constituency z	Gongguan Township	Ren'an
Taichung City	Xitun District	Yong'an, Heren
Constituency 1	Nantun District	Sancuo, Yongding
Taichung County	Taiping City	Xinping, Dongping
Constituency 3	Dali City	Xinren ,Xiangxing
Taishung County	Shigang Township	Dexing
	Xinshe Township	Zhongzheng
Constituency 4	Fengyuan City	Sancun, Xinan
Chanabua Cauntu	Lugang Township	Gouqian, Guocuo
	Fuxing Township	Dalun
constituency I	Xiushui Township	Pulun
Changhua County	Huatan Township	Qiaotou
Constituency 2	Changhua City	Lunping, Yanhe, Changle
	Minxiong Township	Dongrong
Chiayi County	Zhongpu Township	Hemu
Constituency 2	Xingang Township	Xizhuang
	Xikou Township	Bencuo
Chiovi City	East District	Xingren, Anliau
Chiayi City	West District	Zhongyong, Daye
Tainan County	Xinying City	Sanxian
Constituency 1	Liuying Township	Guangfu

	Baihe Township	Dazhu
	Xiaying Township	Hongcuo
Tainan Citu	North District	Chengde
Tainan City	Annan District	Xidong, Anqing
Constituency 1	West Central District	Xiehe
Kaohsiung City	Gushan District	Mingcheng, Zhongzheng, Housheng
Constituency 2	Sanmin District	Tongde
Kaohsiung City Constituency 3	Sanmin District	Zhengxing, Bau'an, Bauxing, Wan'ai
	Gangshan Township	Xiehe, Gangshan
Kaohsiung County	Luzhu Township	Zhuwei
Constituency 2	Ziguan Township	Zixin
	Niaosong Township	Niaosong
Kaohsiung County	Linyuan Township	Zhongmen
Constituency 3	Renwu Township	Hou'an
	Daliao Township	Zhongzhuang
Pingtung County	Pingtung City	Shengli, Ruiguang, Jinquan
Constituency 2	Wandan Township	Wansheng
	Yilan City	Hemu
Vilan County	Su'ao Township	Nanxing
filan county	Zhuangwei Township	Zhongxiao
	Dongshan Township	Lupu
	Yuli Township	Taichang
Hualien County	Hualien City	Zhuquan, Zhuxue
	Ji'an Township	Nanhua

## (3) Alternate Samples

Unsuccessful interviews are an inevitable part of survey research regardless of approach used. In order to avoid the problem of the eventual sample size being too small because of unsuccessful interviews, we also selected alternate sets of samples. If the original sample set was unsuccessful, alternate samples sets were used. The process and methodology for selecting alternate samples was the same as for the original sample set. In total we selected a total of twenty-one sets of alternate samples for each neighborhood or village. Once interviews on an alternative sample set had been started, the entire set had to be completed.1 The

<sup>&</sup>lt;sup>1</sup>After interviews using the first sample set were completed in a neighborhood or village, if the minimum number of successful interviews is attained, then survey work in the neighborhood or village

total number of samples in the first alternate set was the same as the original set. However, due to the difference in success rate between rural and urban areas, it was decided that in cities, urban districts, and urban townships (basic unit neighborhood) that from the sixth alternate set onwards, only 50% of the original total were sampled. However, in rural townships (basic unit village) the 50% rule applied from the fourth alternate set onwards.

#### (4) **Process for Retesting to Measure Reliability**

In order to test the reliability of sampling, after interviews were completed we selected a sample from successful interviews in order to retest the reliability of responses. The number of retest interviews was required to be 20% of the total number of successful interviews. In the first stage of interviews, we achieved a total of 1,592 successful samples. We therefore needed to complete a total of 318 retest interviews. The actual number of successful retest interviews was 318. Sampling for retest interviews is shown in table 3.

Sampling for retest interviews was carried out on the basis that the total number of retest interviews would be 20% of successful interviews. Interviewees were selected through systematic sampling. Since retest interviews may also be unsuccessful, after the original sample set was selected, a total of three alternate sets were also chosen to be used if necessary.

Electoral Constituency	Number of Neighborhoods of Villages Sampled	Successful Interviews	Successful Interviews *0.2	Total Number of Retest Interviews	k
Taipei City	4	58	11.6	12	4.833333
Taipei City					
Constituency 3	4	58	11.6	12	4.833333
Taipei City	4	58	11.6	12	4.833333
Constituency 7					
Taipei County	4	58	11.6	12	4.833333
Constituency 4	<b>T</b>	20	11.0	12	1.055555

#### Table 3: Retest sampling framework

is ended. However, if the minimum number of successful interviews is not attained with the original samples, then the first set of alternate samples is used. If the minimum number of successful interviews is still not reached, then the second set is used, and so on. Each sample from a proceeding set has to be confirmed as unsuccessful before a new set can be used. However, once a new set is used, then each sample from that set must be completed even if the minimum total has already been met.

Taipei County	1	56 11.3	11.2	11	5 000000
Constituency 7	4	50	11.2	11	5.090909
Taipei County	1	56	11.2	11	5 000000
Constituency 10	т	50	11.2	11	5.070707
Taipei County	1	58	11.6	12	1 833333
Constituency 11	4	58	11.0	12	4.055555
Keelung City	4	57	11.4	11	5.181818
Taoyuan County	Δ	61	12.2	12	5 083333
Constituency 1	Т	01	12.2	12	5.005555
Taoyuan County	1	50	11.8	12	1 916667
Constituency 3	<b>T</b>	57	11.0	12	<b>H.</b> 910007
Hsinchu City	4	57	11.4	11	5.181818
Miaoli County	Δ	60	12	12	5
Constituency 2	т	00	12	12	5
Taichung City	Δ	57	11 4	11	5 181818
Constituency 1	т	51	11.7	11	5.101010
Taichung County	Δ	56	11.2	11	5 000000
Constituency 3	т	50	11.2	11	5.070707
Taichung County	1	50	11.8	12	1 916667
Constituency 4	т	57	11.0	12	4.910007
Changhua County	Δ	56	11.2	11	5 000000
Constituency 1	т	50	11.2	11	5.070707
Changhua County	4	56	11.2	11	5 090909
Constituency 2	I	50	11.2	11	5.090909
Chiayi County	Δ	60	12	12	5
Constituency 2	т	00	12	12	5
Chiayi City	4	58	11.6	12	4.833333
Tainan County	Δ	58	11.6	12	4 833333
Constituency 1	т	50	11.0	12	4.055555
Tainan City	1	61	12.2	12	5 083333
Constituency 1	<b>T</b>	01	12.2	12	5.0055555
Kaohsiung City	1	55	11	11	5
Constituency 2	<b>T</b>	55	11	11	5
Kaohsiung City	1	62	12 /	12	5 166667
Constituency 3	4	02	12.4	12	5.100007
Kaohsiung County	1	61	10.0	10	5 082222
Constituency 2	7	01	14.4	12	5.005555
Kaohsiung County	4	55	11	11	5

Constituency 3					
Pingtung County	4	57	11 /	11	<b>5</b> 101010
Constituency 2	4	57	11.4	11	5.181818
Yilan County	4	40	8	8	5
Hualien County	4	45	9	9	5
Total	112	1592	318.4	318	

#### (5) Sample Sizes and Error Margins

An indicator of data quality is the standard error of the estimate, on which the margin for sampling error is based. As survey statistics are mostly proportions, the key measure of data precision is the standard error of a proportion taken from a sample. It is computed as follows:

$$\pm \mathbf{z}^* \sqrt{\frac{p(1-p)}{N}}$$

Where Z, at 95% confidence level is 1.96; p is the sample proportion estimate and n is the sample size. The overall sample size of 1,592 voting-age adults gives a maximum error margin of  $\pm 2.46$ % at the 95% confidence level, assuming a simple random sampling design.

## 5. RESEARCH METHODOLOGY

#### (1) **Preparation**

#### A. Questionnaire

The Chinese-version questionnaire was designed based on the module questionnaire developed by the Asian Barometer Survey. In order to deliver the definitive message in the questionnaire, several meetings were held among the team members to discuss the questions and indicators that would accurately evaluate and explore the citizens' attitudes toward democracy.

#### **B.** Pre-testing and Finalizing the Questionnaire

In order to narrow down the perception gap between the questionnaire designers and the respondents, a pre-test was needed so that problems, such as unclear wording, conceptually vague sentences, recording difficulties etc., could be corrected before the fieldwork began. The team also received feedback about the questionnaire from field supervisors and interviewers after they conducted the pre-test. The pre-test has helped determine the following things:

- -- The length of interviews (about 40 min. to 1 hour)
- -- Wording of questions
- -- Adding new items or eliminating less significant questions
- -- Question sequence
- -- Translation
- -- Coding system
- -- Questionnaire instructions
- -- Conception and idea of questions

#### C. Training

#### a. Training for Supervisor

Two one-day trainings were held to allow the field supervisors to become familiar with the questionnaire and survey procedure. They were instructed on how to supervise their field interviewers and check the questionnaires returned by the field interviewers. The supervisors were asked to conduct a pre-test before the second training. In the second training, the problems that the supervisors found during the pre-test were discussed together with the national team members and they were also instructed on how to deal with real situations encountered in fieldwork.

#### **b.** Training for Interviewers

The training for field interviewers were conducted in Taipei City (north) and Tainan City (south) respectively. In the training, the interviewers were given instruction on interview skills and coding. Moreover, they learned to become familiar with questionnaire by reading the questions in both Mandarin and Taiwanese, the dialect the majority of people speak in Taiwan, in order to deliver the exact meaning that the questions want to convey. The interviewers were asked to conduct pre-test before going to field and the supervisors were asked to assist their field interviewers when needed.

#### (2) Field work

#### A. Workers on Hand

For the survey, a total of 142 field staff was deployed:

Keelung/Taipei City/Taipei County Area Field Supervisor = 7 Field Interviewer = 44

Taoyuan/Hsinchu/Miaoli Area Field Supervisor = 4 Field Interviewer = 21

Taichung/Changhua/Nantou Area Field Supervisor = 3 Field Interviewer = 23

Yunlin/Chiayi/Tainan Area Field Supervisor = 3 Field Interviewer = 20

Kaohsiung City/Kaohsiung County/Pingtung Area Field Supervisor = 3 Field Interviewer = 26

Yilan/Hualien/Taitung/Penghu/Kinmen/Matsu Area Field Supervisor = 2 Field Interviewer = 8

#### **B.** Supervision

Supervisors reported to the project manager who monitored the progress and quality of the survey full-time. Supervisors would accompany the interviewers to conduct one or two interviews in the beginning to observe the interviewers and instruct them on how to improve their skills and avoid refusal from respondents. They also followed up and checked on the field interviewers as well as ensured that field logistics were received promptly and administered properly.

#### C. Spot-checking

Supervisors were responsible for investigating the failure or success of a case and spot-check in order to retain the survey quality. Supervisors either visited the respondent or called the respondent to ensure that the questionnaire was properly conducted and that the respondent was the one selected on the list. By doing so, any incomplete or inconsistent answer was verified by the supervisors.

#### D. Re-testing

One fifth of respondents were selected for re-test. The questions in the re-test questionnaires were far fewer and the same interviewer was not allowed to interview the same respondent he/she interviewed in the previous fieldwork.

#### (3) Field Editing and Data Processing

The supervisors went over the interviewers' work to check for consistency after the interview and the office editors conducted final consistency checks on all interviews prior to coding. The team members also gathered to discuss the coding problem in open questions and decided the new codes. Data was then verified and the consistency of the encoded data was checked before data tables were generated.

## 6. RELIABILITY ANALYSIS

## (1) **Economic Evaluations**

Each of the six items showed positive correlation with the other five items. "Q2. How would you describe the change in the economic condition of our country over the last few years?" had the lowest correlation with a figure of .232. The total Cronbach's  $\alpha$  value for the six items was .652. The consistency of each concept was acceptable in terms of reliability analysis. There was no significant difference in the coefficient Cronbach's  $\alpha$  when we removed individual items. Therefore, it is not necessary to delete any items.

	Corrected	Cronbach's
Cronbach's $\alpha = .652$	Item-total	lpha if Item
	correlation	Deleted
Q1. How would you rate the overall economic	.462	.580
condition of our country today?		
Q2. How would you describe the change in the	.232	.674
economic condition of our country over the last few		
years?		
Q3. What do you think will be the state of our	.405	.601
country's economic condition a few years from now?		
Q4. As for your own family, how do you rate the	.405	.603
economic situation of your family today?		
Q5. How would you compare the current economic	.436	.588
condition of your family with what it was a few years		
ago?		
Q6. What do you think the economic situation of your	.390	.608
family will be a few years from now?		

## (2) Trust In Institutions

Each of the twelve items showed positive correlation with the other eleven items. "Q16. Newspapers" had the lowest correlation with a figure of .367. The total Cronbach's  $\alpha$  value of the twelve items was .833. The consistency of each item was acceptable in terms of reliability analysis. There was no significant difference in the coefficient Cronbach's  $\alpha$  when we removed individual items. Therefore, it is not necessary to delete any items. Overall, the design of this group of questions was good, and each item passed the reliability test.

	Corrected	Cronbach's
Cronbach's $\alpha = .833$	Item-total	lpha if Item
	correlation	Deleted
Q7. The president (for presidential system) or Prime	.500	.819
Minister (for parliamentary system)		
Q8. The courts	.539	.816
Q9. The national government [in capital city]	.603	.812
Q10. Political parties [not any specific party]	.524	.817
Q11. Parliament	.572	.814
Q12. Civil service	.489	.820
Q13. The military(or armed forces)	.496	.820
Q14. The police	.509	.819
Q15. Local government	.529	.817
Q16. Newspapers	.367	.829
Q17. Television	.379	.828
Q18. The election commission	.388	.828

## (3) Social Capital

## A. Family Trust

Each of the three items showed positive correlation with the other two items. "Q27. Other people you interact with" had the lowest correlation with a figure of .457. The total Cronbach's  $\alpha$  value of the three questions was .684. The consistency of each concept was acceptable in terms of reliability analysis. There was no significant difference in the coefficient Cronbach's  $\alpha$  when we removed individual items. Therefore, it is not necessary to delete any items.

	Corrected	Cronbach's
Cronbach's $\alpha = .684$	Item-total	lpha if Item
	correlation	Deleted
Q25. Your relatives	.489	.604
Q26. Your neighbors	.554	.513
Q27. Other people you interact with	.457	.642

## **B.** Social Trust

"Q31. If you had friends or co-workers whose opinions on politics differed from yours, would you have a hard time conversing with them?" showed the lowest correlation with the other two items with a figure of only .104. This item can be considered for removal. The total Cronbach's  $\alpha$  value of the three items was .422. The consistency of each item was therefore not ideal in terms of reliability analysis. If "Q31. If you had friends or co-workers whose opinions on politics differed from yours, would you have a hard time conversing with them?" is deleted, then Cronbach's  $\alpha$  value becomes .622. Removing Q31. will therefore improve reliability.

	Corrected	Cronbach's
Cronbach's $\alpha = .422$	Item-total	lpha if Item
	correlation	Deleted
Q29. If you have a difficult problem to manage, are	.368	.115
there people outside your household you can ask for		
help?		
Q30. When people outside your household have	.325	.204
problems, do they come to you for help?		
Q31. If you had friends or co-workers whose opinions	.104	.622
on politics differed from yours, would you have a hard		
time conversing with them?		

## (4) **Psychological Involvement**

"Q45. How often do you use the internet?" had the lowest correlation with the other three items with a figure of only .128. The total Cronbach's  $\alpha$  value of the four items was only .380. The consistency of each item was therefore not ideal in terms of reliability analysis. If "Q45. How often do you use the internet?" is deleted, then Cronbach's  $\alpha$  value becomes .552. Removing Q31. will therefore improve reliability. However, overall the reliability of this set of questions is not ideal.

	Corrected	Cronbach's
Cronbach's $\alpha = .380$	Item-total	lpha if Item
	correlation	Deleted
Q43. How interested would you say you are in	.370	.240
politics?		
Q44. How often do you follow news about politics	.228	.287
and government?		
Q45. How often do you use the internet?	.128	.552
Q46. When you get together with your family	.432	.273
members or friends, how often do you discuss		
political matters?		

## (5) Traditionalism

"Q49. Most people are trustworthy?", "Q61. Wealth and poverty, success and failure are all determined by fate.", and "Q62. If one could have only one child, it is more preferable to have a boy than a girl." each had correlations of under .200. Given these relatively low figures, these items can be considered for deletion. The total Cronbach's  $\alpha$  value of the fifteen items was .682. The consistency of each item was acceptable in terms of reliability analysis. There was no significant difference in the coefficient Cronbach's  $\alpha$  when we removed individual items. There are therefore no items that need to be deleted from this perspective.

	Corrected	Cronbach's
Cronbach's $\alpha = .682$	Item-total	lpha if Item
	correlation	Deleted
Q49. Most people are trustworthy?	.154	.684
Q50. For the sake of the family, the individual should	.309	.665
put his personal interests second.		
Q51. In a group, we should sacrifice our individual	.402	.653
interest for the sake of the group's collective interest.		
Q52. For the sake of national interest, individual	.311	.665
interest could be sacrificed.		
Q53. When dealing with others, developing a	.316	.664
long-term relationship is more important than		
securing one's immediate interest.		
Q54. When dealing with others, one should not only	.275	.669
focus on immediate interest but also plan for future.		
Q55. Even if parents' demands are unreasonable,	.340	.660
children still should do what they ask.		
Q56. When a mother-in-law and a daughter-in-law	.367	.656
come into conflict, even if the mother-in-law is in the		
wrong, the husband should still persuade his wife to		
obey his mother.		
Q57. Being a student, one should not question the	.351	.659
authority of their teacher.		
Q58. In a group, we should avoid open quarrel to	.392	.656
preserve the harmony of the group.		
Q59. Even if there is some disagreement with others,	.401	.653
one should avoid the conflict.		

Q60. A person should not insist on his own opinion if	.319	.664
his co-workers disagree with him.		
Q61. Wealth and poverty, success and failure are all	.124	.694
determined by fate.		
Q62. If one could have only one child, it is more	.088	.692
preferable to have a boy than a girl.		
Q63. When dealing with others, one should not be	.270	.670
preoccupied with temporary gains and losses.		

#### (6) **Political Participation**

#### A. Expression of Ideas

Each of the five items showed positive correlation with the other four questions. "Q68. Contacted news media." had the lowest correlation with a figure of .224. The total Cronbach's  $\alpha$  value for the five items was .679. The consistency of each concept was acceptable in terms of reliability analysis. There was no significant difference in the coefficient Cronbach's  $\alpha$  when we removed individual items. Therefore, it is not necessary to delete any items.

	Corrected	Cronbach's
Cronbach's $\alpha = .679$	Item-total	lpha if Item
	correlation	Deleted
Q64. Contacted elected officials or legislative	.506	.594
representatives at any level.		
Q65. Contacted officials at higher level.	.444	.624
Q66. Contacted acquaintances in the government.	.500	.597
Q67. Contacted other influential people outside the	.491	.603
government.		
Q68. Contacted news media.	.224	.700

## **B.** Civil Action

Each of the five items showed a low level of correlation with the other four questions. Only "Q69. Got together with others to try to resolve local problems." and "Q70. Got together with others to raise an issue or sign a petition."scraped passed the .200 level. The total Cronbach's  $\alpha$  value of the five items was only .323. The consistency of each item was therefore not ideal in terms of reliability analysis. Even when individual items were removed, the Cronbach's  $\alpha$  value remained low. Overall, this group of questions needs to be reconsidered in order to clarify more clearly what concepts we want to measure.

	Corrected	Cronbach's
Cronbach's $\alpha = .323$	Item-total	lpha if Item
	correlation	Deleted
Q69. Got together with others to try to resolve local	.257	.177
problems.		
Q70. Got together with others to raise an issue or sign	.276	.183
a petition.		
Q71. Attended a demonstration or protest march.	.186	.269
Q72. Used force or violence for a political cause.	.089	.337
Q73. Thinking of whether you voted or not ever since	.104	.432
you became eligible for voting, how would you		
describe yourself have you voted in every election,		
voted in most elections, voted in some elections or		
hardly ever voted?		

#### (7) **Regime Preference**

#### A. Ideal System of Democratic Government

This group has a total of twelve items. After measuring each main question and supplementary question, the two were grouped together and given a new code. For example, Q74 and Q74a were grouped together as "Strongly agree: Government leaders implement what voters want. (Code 1)", "Agree: Government leaders implement what voters want. (Code 2)", "Agree: Government leaders do what they think is best for the people. (Code 3)", and "Strongly agree: Government leaders do what they think is best for the people. (Code 4)".

"Q74. Regime Preference 1" and "Q77. Regime Preference 4" showed the lowest correlations with the other five items with a figure of less than .200 in both cases. These items can be considered for removal. The total Cronbach's  $\alpha$  value for the six items was .399. The consistency of each item was therefore not ideal in terms of reliability analysis. If "Q77. Regime Preference 4" is deleted, then Cronbach's  $\alpha$  value rises appreciably. However, the overall reliability of the question set remains less than ideal. It is therefore recommended that the overall design of this set is reconsidered.

	Corrected	Cronbach's
Cronbach's $\alpha = .399$	Item-total	lpha if Item
	correlation	Deleted
Q74+Q74a. Regime Preference 1	.154	.381
Statement 1. Government leaders implement what		
voters want.		
Statement 2. Government leaders do what they think		
is best for the people.		
Q75+Q75a. Regime Preference 2	.290	.295
Statement 1. Government is our employee, the people		
should tell government what needs to be done.		
Statement 2. The government is like parent, it should		
decide what is good for us.		
Q76+Q76a. Regime Preference 3	.213	.341
Statement 1. The media should have the right to		
publish news and ideas without government control.		
Statement 2. The government should have the right to		
prevent the media from publishing things that might		

be politically destabilizing.		
Q77+Q77a. Regime Preference 4	024	.498
Statement 1. People should look after themselves and		
be primarily responsible for their own success in life.		
Statement 2. The government should bear the main		
responsibility for taking care of the wellbeing of the		
people.		
Q78+Q78a. Regime Preference 5	.266	.312
Statement 1. Political leaders are chosen by the		
people through open and competitive elections.		
Statement 2. Political leaders are chosen on the basis		
on their virtue and capability even without election.		
Q79+Q79a. Regime Preference 6	.314	.291
Statement 1. Multiple parties compete to represent		
political interests.		
Statement 2. One party represents the interests of all		
the people.		

## **B.** Operation of Current Government Institutions

The correlation of each item with the other three items in the set is good, with a minimum figure of .482. The total Cronbach's  $\alpha$  value for the four items was .791. The consistency of each item was acceptable in terms of reliability analysis. There was no significant difference in the coefficient Cronbach's  $\alpha$  when we removed individual items. Therefore, it is not necessary to delete any items. Overall, the design of this set of questions is good. Each question passed the reliability test.

	Corrected	Cronbach's
Cronbach's $\alpha = .791$	Item-total	lpha if Item
	correlation	Deleted
Q80. Over the long run, our system of government is	.591	.743
capable of solving the problems our country faces.		
Q81. Thinking in general, I am proud of our system of	.686	.694
government.		
Q82. A system like ours, even if it runs into problems,	.644	.716
deserves the people's support.		
Q83. I would rather live under our system of	.482	.794
government than any other that I can think of.		

## (8) Quality of Governance

"Q102. Most citizens in our country don't make much effort to influence government decisions." had the lowest correlation with the other nine questions with a figure of only .087. This figure is far from ideal. The total Cronbach's  $\alpha$ value of the ten items was .639. The consistency of each item was therefore acceptable in terms of reliability analysis. There was no significant difference in the coefficient Cronbach's  $\alpha$  when we removed individual items. However, it is suggested that a redesign of "Q102. Most citizens in our country don't make much effort to influence government decisions." should be considered.

	Corrected	Cronbach's
Cronbach's $\alpha = .639$	Item-total	lpha if Item
	correlation	Deleted
Q98. People have the power to change a government	.248	.627
they don't like.		
Q99. Political parties or candidates in our country	.244	.627
have equal access to the mass media during the		
election period.		
Q100. Between elections, the people have no way of	.304	.615
holding the government responsible for its actions.		
Q101. When government leaders break the laws,	.321	.611
there is nothing the court can do.		
Q102. Most citizens in our country don't make much	.087	.656
effort to influence government decisions.		
Q103. All citizens from different ethnic communities	.398	.593
in Country X are treated equally by the government.		
Q104. Rich and poor people are treated equally by	.375	.598
the government.		
Q105. People have basic necessities like food, clothes,	.319	.612
and shelter.		
Q106. People are free to speak what they think	.427	.590
without fear.		
Q107. People can join any organization they like	.329	.611
without fear.		

## (9) Democratic Legitimacy

Each of the five questions showed positive correlation with the other four questions. The correlation of each item with the other four items in the set was above .250, just reaching the minimum standard. The total Cronbach's  $\alpha$  value for the five items was .519. The consistency of each item was a little on the low side in terms of reliability analysis. There was no significant difference in the coefficient Cronbach's  $\alpha$  when we removed individual items. There are therefore no items that need to be deleted. Overall, the ability of this set to reliably measure democratic legitimacy is not adequate and improvements to parts of the set are possible.

	Corrected	Cronbach's
Cronbach's $\alpha = .519$	Item-total	lpha if Item
	correlation	Deleted
Q124. Which of the following statements comes	.257	.492
closest to your own opinion?		
(1) Democracy is always preferable to any other kind		
of government		
(2) Under some circumstances, an authoritarian		
government can be preferable to a democratic		
one		
(3) For people like me, it does not matter whether we		
have a democratic or a nondemocratic regime		
Q125. Which of the following statements comes	.256	.489
closer to your own view?		
(1) Democracy is capable of solving the problems of		
our society		
(2) Democracy cannot solve our society's problems		
Q126. If you had to choose between democracy and	.382	.395
economic development, which would you say is more		
important?		
Q127. If you had to choose between reducing	.315	.447
economic inequality and protecting political freedom,		
which would you say is more important?		
Q128. Do you agree or disagree with the following	.271	.479
statement: "Democracy may have its problems, but it		
is still the best form of government."		

#### (10) General Political Attitudes

"Q133. I think I have the ability to participate in politics.", "Q135. People like me don't have any influence over what the government does.", and "Q137. A citizen should always remain loyal only to his country, no matter how imperfect it is or what wrong it has done." each had correlations of under .200. These figures are not ideal. The total Cronbach's  $\alpha$  value of the nine items was .606. The consistency of each item was acceptable in terms of reliability analysis. There was no significant difference in the coefficient Cronbach's  $\alpha$  when we removed individual items. However, there is space to further improve the reliability of this set. The design of "Q137. A citizen should always remain loyal only to his country, no matter how imperfect it is or what wrong it has done." should be reconsidered.

	Corrected	Cronbach's
Cronbach's $\alpha = .606$	Item-total	lpha if Item
	correlation	Deleted
Q129. We should get rid of parliament and elections	.441	.535
and have a strong leader decide things.		
Q130. Only one political party should be allowed to	.507	.520
stand for election and hold office.		
Q131. The army (military) should come in to govern	.424	.544
the country.		
Q132. We should get rid of elections and parliaments	.454	.533
and have experts make decisions on behalf of the		
people.		
Q133. I think I have the ability to participate in	.139	.620
politics.		
Q134. Sometimes politics and government seems so	.248	.588
complicated that a person like me can't really		
understand what is going on.		
Q135. People like me don't have any influence over	.189	.604
what the government does.		
Q136. You can generally trust the people who run our	.280	.580
government to do what is right.		
Q137. A citizen should always remain loyal only to his	.017	.646
country, no matter how imperfect it is or what wrong		
it has done.		

## (11) Authoritarian / democratic values

Each of the eleven questions showed positive correlation with the other ten questions. "Q138. The government should consult religious authorities when interpreting the laws." had the lowest correlation with a figure of .227. The total Cronbach's  $\alpha$  value for the eleven items was .699. The consistency of each item was acceptable in terms of reliability analysis. There was no significant difference in the coefficient Cronbach's  $\alpha$  when we removed individual items. There are therefore no items that need to be deleted.

	Corrected	Cronbach's
Cronbach's $\alpha = .699$	Item-total	lpha if Item
	correlation	Deleted
Q138. The government should consult religious	.227	.696
authorities when interpreting the laws.		
Q139. Women should not be involved in politics as	.363	.677
much as men.		
Q140. People with little or no education should have	.239	.694
as much say in politics as highly-educated people.		
Q141. Government leaders are like the head of a	.443	.664
family; we should all follow their decisions.		
Q142. The government should decide whether	.475	.658
certain ideas should be allowed to be discussed in		
society.		
Q143. Harmony of the community will be disrupted if	.377	.673
people organize lots of groups.		
Q144. When judges decide important cases, they	.316	.684
should accept the view of the executive branch.		
Q145. If the government is constantly checked [i.e.	.279	.689
monitored and supervised] by the legislature, it		
cannot possibly accomplish great things.		
Q146. If we have political leaders who are morally	.424	.666
upright, we can let them decide everything.		
Q147. If people have too many different ways of	.367	.675
thinking, society will be chaotic.		
Q148. When the country is facing a difficult situation,	.292	.688
it is ok for the government to disregard the law in		
order to deal with the situation.		

#### (12) Globalization

"Q151. Our country should defend our way of life instead of becoming more and more like other countries." had the lowest correlation with a figure of only .056. This figure is low in comparison with the other four questions. This item can therefore be considered for deletion. The total Cronbach's  $\alpha$  value of the five items was only .475. The consistency of each item was therefore not ideal in terms of reliability analysis. When "Q151. Our country should defend our way of life instead of becoming more and more like other countries." was removed, the Cronbach's  $\alpha$  coefficient rose to .510. Since the increase in reliability is limited, it is suggested that further review of this question set is needed.

	Corrected	Cronbach's
Cronbach's $\alpha = .475$	Item-total	lpha if Item
	correlation	Deleted
Q149. How closely do you follow major events in	.338	.358
foreign countries / the world?		
Q150. How often do you watch or listen to foreign	.360	.379
programs (television, DVDs, movies, radio)?		
Q151. Our country should defend our way of life	.056	.510
instead of becoming more and more like other		
countries.		
Q152. Do you agree or disagree with the following	.292	.411
statement: "We should protect our farmers and		
workers by limiting the import of foreign goods."		
Q153. Do you agree or disagree with the following	.333	.397
statement: "Foreign goods are hurting the local		
community."		

# 7. EXAMINATION OF REPRESENTATIVENESS OF SAMPLE SET AND WEIGHTING

Is the demographic structure of successful samples consistent with that of the entire population? Characteristics of the sampled population are listed below to examine whether or not our sample is representative. Population characteristics considered were gender, age, and education level. Figures for the entire population come from the most recent 2009 statistics from the Department of Household Registration, Ministry of the Interior.

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	Sample		Population	Dogult
	Frequency	Percent	Percent	Kesult
Male	835	52.4	50.3	Chi square=2.943
Female	757	47.6	49.7	P>.05
Total	1592	100	100	Consistent with the population

## Sample Representativeness: Gender (before weighting)

## Sample Representativeness: Age (before weighting)

	Sample		Population	Degult
	Frequency	Percent	Percent	Kesun
20 - 29	291	18.3	19.7	
30 - 39	301	18.9	21.3	Chi square=12.214
40 - 49	346	21.7	21.1	P<.05
50 - 59	335	21.0	18.5	Not consistent with
60 and above	319	20.0	19.3	the population
Total	1592	100	100	

## Sample Representativeness: Level of education (before weighting)

Sample		Population	Degult
Frequency	Percent	Percent	Kesun

Elementary	269	16.9	18.8	
Junior High				
School	211	13.3	14.2	Chi square=14.283
Senior High School	454	28.6	29.4	P<.05
Vocational	207	13.0	13.3	Not consistent with
College and above	448	28.2	24.3	the population
Total	1589	100	100	

As the tables above show, only the gender structure in our sample set is consistent with the entire population. Both age and educational structures in the sample set are not consistent with the entire population. In order to achieve consistency between the sample set and the entire population, we used the ranking method to weight our samples. We then verified that the structure of the sample set after weighting was consistent with the entire population.

Sample Representativeness: Gender (After weighting)

	Sample		Population	Pogult
	Frequency	Percent	Percent	Kesult
Male	790	49.6	50.3	Chi square=0.343
Female	804	50.4	49.7	P>.05
Total	1595	100	100	Consistent with the population

## Sample Representativeness: Age (After weighting)

	Sample		Population	Decult
	Frequency	Percent	Percent	Kesun
20-29	281	17.6	19.7	Chi square=7.521
30 - 39	327	20.5	21.3	P>.05
40 - 49	339	21.2	21.1	Consistent with the

50 - 59	311	19.5	18.5	population
60 and above	337	21.1	19.3	
Total	1595	100	100	

## Sample Representativeness: Level of education (After weighting)

	Sample		Population	Degult
	Frequency	Percent	Percent	Kesuit
Elementary and less	300	18.8	17.3	
Junior High School	226	14.2	14.0	Chi square=0.007
Senior High School	469	29.4	32.3	P>.05
Vocational	211	13.3	12.7	Consistent with the
College and above	387	24.3	23.7	population
Total	1592	100	100	