

## Sampling Procedures of East Asia Barometer Project

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### Taiwan Survey

#### (a) Population

The target population is defined as ROC citizens who are 20 and over 20 years of age and have the right to vote, that is, the sample is of voting age and has not been disenfranchised due to mental illness, or incarceration. The target population was sampled according to the PPS method.

#### (b) PPS Method (Probability Proportional to Size)

Sampling was divided into three stages: Towns/Countries, Villages/Li and individual voters. Taiwan was statistically divided into 359 districts in accordance with changes in vote share from 1998 to 2000 national elections. Gary King's EI method was used to estimate the effect of both elections on vote share.

Using PPS method voters were stratified and leveled into eight divisions. Each division was Systematically Sampled. Within each division four, six, or eight Towns/Countries were selected, from these two Villages/Li were selected, and out of the villages between thirteen and sixteen people were sampled. However, in the municipalities of Taipei and Kaohsiung, only Li and individuals were sampled. The total sample is displayed in the Table A-1 below:

**Table A-1 Population division and sampling breakdown**

<i>Division</i>	<i>Township (*Li)</i>	<i>Number of Voters</i>	<i>% Total Voters</i>	<i>Expected Sample</i>	<i>Total Sample Township x Villages x Individuals</i>
1	38	2,486,529	16.1%	225	8 x 2 x 14 = 224
2	31	1,384,339	9.0%	126	4 x 2 x 16 = 128
3	73	1,729,024	11.2%	157	6 x 2 x 13 = 156
4	51	2,603,242	16.9%	237	8 x 2 x 15 = 240
5	48	1,889,900	12.3%	172	6 x 2 x 14 = 168
6	95	2,372,053	15.4%	216	8 x 2 x 14 = 224
7 (Taipei)	444*	1,914,915	12.4%	174	30 x 6 = 180

8 (Kaoshiung)	463*	1,042,117	6.8%	95	16 x 6 = 96
Total		15,422,119	100.0%	1402	1416

Note: The Taiwan project does not have the authority to access the personal information required to select individuals to survey. Instead that responsibility fell to the Academia Sinica.

### (c) Goodness of Fit and Data Weighting

The purpose of Chi-Square test within the SPSS Nonparametric Statistical Test is to establish that the data is consistent with the distribution among the entire population. Three sample characteristics are addressed: gender, age and education. Table A-2 is highlighting the Chi-square result, and the significance (p-value) of each characteristic.

Both age and education failed the chi-square test. This means that the data for age and education are inconsistent with the whole population. The problem is rooted in the sampling. In order to rectify the data, “Raking,” a kind of weighting method in accordance with multiple variables, was used to render the sample’s gender, age and education data consistent with the entire population. Table A-3 is the result after data weighted which shows Chi-square test and the significance (p-value) of three characteristics passed.

**Table A-2 Data before Raking**

<i>Variables</i>	<i>Var. values</i>	<i>Sample Values</i>	<i>Expected Population</i>	<i>Chi Square</i>	<i>Significance</i>
Gender	Male	688	719.1	2.735	P = 0.098
	Female	727	695.9		
Age	20-29	247	340.8	43.591	P = 0.000
	30-39	398	345.1		
	40-49	368	314.1		
	50-59	168	172.5		
	60 +	234	242.5		
Education	Elementary	374	413.3		
	Junior High	172	282.6		

	Senior High	445	408.5		
	College	178	162.7		
	University	246	147.8	116.959	P = 0.000

**Table A-3 Data after Raking**

<i>Variables</i>	<i>Var. values</i>	<i>Sample Values</i>	<i>Expected Population</i>	<i>Chi Square</i>	<i>Significance</i>
Gender	Male	719	719.1		
	Female	696	695.9	0.00003	P > 0.05
Age	20-29	336	340.8		
	30-39	341	345.1		
	40-49	314	314.1		
	50-59	175	172.5		
	60 +	249	242.5	0.327	P > 0.05
Education	Elementary	414	413.3		
	Junior High	282	282.6		
	Senior High	409	408.5		
	College	162	162.7		
	University	148	147.8	0.006	P > 0.05

The questionnaire used in Taiwan was composed of the core questionnaire used in all participating countries and a supplementary module employed in the three predominantly Chinese societies of China, Taiwan, and Hong Kong.

The interviews were conducted by 140 university students. Over 300 students interviewed for these jobs, and we chose among the applicants based on their ability to communicate in both Mandarin and Taiwanese, previous interviewing experience, and our geographic needs. The interviewers were overseen by fifteen supervisors, most of whom had previously served as interviewers in a survey on the 2000 presidential election. All interviewers attended a day-long training session.

64.8% of the interviews were conducted predominantly or exclusively in Mandarin. 14.1% were conducted predominantly or exclusively in Taiwanese.

20.5% of the interviews used a mixture of Mandarin and Taiwanese. The remaining 0.6% were conducted in other languages.

To check the quality of the data collected, we conducted post-tests of all 1415 cases. 15% of these were done in person, and the other 85% were conducted by telephone. Kappa values for all eight of the variables retested ranged between .328 (fair) and .860 (almost perfect). None of the kappa values fell in the “poor” or “slight” ranges, evidence that the data possess a fairly high degree of reliability.