Iran 2023 Technical Document

Sampling

A dual frame (landline and mobile phone frames) was used to complete 1,007 telephone surveys. About 25% of the completes were from the mobile phone sample whereas landline completes accounted for the remaining 75%.

Target Population/Coverage:
Adult population (15 years of age or older) who have mobile phones for personal calls or live in households with landline. It excludes business phone numbers.

Stratification: The landline sampling frame was explicitly stratified by 31 provinces. The mobile sampling frame was implicitly stratified by mobile service providers. For the landline sample, allocation across strata was proportional to population size in each stratum. For mobile sample, allocation across the strata was proportional to their market shares in terms of the count of mobile numbers they can possibly generate.

Sample Selection: A simple stratified sample design was used for selection of landline phone samples. In the case of landline, a sample of specified size was drawn using list-assisted Random Digit Dial (RDD) procedures independently within each explicit stratum. In the case of mobile, sample of specified size was drawn using list-assisted Random Digit Dial (RDD) procedures among the mobile sampling frame. All sampled neither landline nor mobile phone numbers were pre-screened for working status.

For respondents contacted by landline telephone, random respondent selection within the household was done by enumerating all adults aged 15 or older in the household and randomly selecting one. For respondents reached on mobile, there was no random selection, just confirmation that they were 15 or older to participate in the survey.

For the purpose of data collection, the total initial sample was split into random subsamples (replicate samples) and released sequentially based on the progress of interviewing in different strata. The goal was to release an optimum amount of sample each time to achieve a high response rate while completing the targeted number of interviews within the field period.

Data Collection: September 20, 2023 – September 26, 2023

AAPOR3 response rate: 36%

Weighting: The sample data were weighted to minimize bias in survey-based estimates. The weighting procedure was formulated based on the sample design and was carried out in multiple stages. A probability weight factor (base weight) was constructed to account for selection of telephone numbers from the respective frames and correct for unequal selection probabilities as a result of selecting one adult in landline households and those reached via

mobile and for dual users coming from both the landline and mobile frames. At the next step, the base weights were post-stratified to adjust for non-response and to match the weighted sample totals to known target population totals obtained from country-level census data. The standard demographic variables used for post-stratification are: age, gender, education, and region.

Design Effect: 1.34

Margin of error: ± 3.6% (95% confidence level)

Population sources used for constructing weights were based on the following:
Age, Gender, Region, Education: 2016 Population and Housing Census, Iran

Age	**SAMPLE_UNWTD**	**SAMPLE_WTD**	**TARGET**
15-29	25.5	32.4	33.0
30-39	23.1	25.3	25.7
40-49	20.6	17.2	17.0
50+	30.8	25.0	24.2
Education	**SAMPLE_UNWTD**	**SAMPLE_WTD**	**TARGET**
Intermediate Incomplete or less	18.0	28.9	31.4
Intermediate Complete to Tertiary Incomplete	51.6	47.7	46.2
Tertiary Complete	30.4	23.5	22.5
Sex	**SAMPLE_UNWTD**	**SAMPLE_WTD**	**TARGET**
Male	49.4	50.8	50.5
Female	50.6	49.2	49.5
Region	**SAMPLE_UNWTD**	**SAMPLE_WTD**	**TARGET**
Northwest (Azerbaijan Iran)	14.7	15.4	15.3
Western Iran (excl Tehran)	24.7	23.5	24.3
Tehran	16.9	17.6	17.4
Central Iran	24.4	25.3	24.6
Eastern Iran	19.3	18.2	18.4