

The Turkey 2013 Enterprise Surveys Data Set

I. Introduction

1. This document provides additional information on the data collected in Turkey between January 2013 and December 2014 as part of the fifth round of the Business Environment and Enterprise Performance Survey (BEEPS V), a joint initiative of the World Bank Group (“WB”) and the European Bank for Reconstruction and Development (“EBRD”). It is an enterprise survey whose objective is to gain an understanding of firms’ perception of the environment in which they operate. The survey was until now administered four times at an interval of three years. This has added an important element of dynamics in the study of business environment in transition countries.

The Enterprise Surveys, through interviews with firms in the manufacturing and services sectors, capture business perceptions on the biggest obstacles to enterprise growth, the relative importance of various constraints to increasing employment and productivity, and the effects of a country’s business environment on its international competitiveness. They are used to create statistically significant business environment indicators that are comparable across countries. The Enterprise Surveys are also used to build a panel of enterprise data that will make it possible to track changes in the business environment over time and allow, for example, impact assessments of reforms.

The report outlines and describes the sampling design of the data, the data set structure as well as additional information that may be useful when using the data, such as information on non-response cases and the appropriate use of the weights.

II. Sampling Structure

2. The sample for Turkey was selected using stratified random sampling, following the methodology explained in the *Sampling Manual*¹. Stratified random sampling² was preferred over simple random sampling for several reasons³:

a. To obtain unbiased estimates for different subdivisions of the population with some known level of precision.

b. To obtain unbiased estimates for the whole population. The whole population, or universe of the study, is the non-agricultural economy. It comprises: all manufacturing sectors according to the group classification of ISIC Revision 3.1: (group D), construction sector (group F), services sector (groups G and H), and transport, storage, and communications sector (group I). Note that this definition excludes the following sectors: financial intermediation (group J), real estate and renting activities (group K, except sub-sector 72, IT, which was added to the population under study), and all public or utilities-sectors.

c. To make sure that the final total sample includes establishments from all different sectors and that it is not concentrated in one or two of industries/sizes/regions.

¹ The complete text can be found at http://www.enterprisesurveys.org/documents/Implementation_note.pdf

² A stratified random sample is one obtained by separating the population elements into non-overlapping groups, called strata, and then selecting a simple random sample from each stratum. (Richard L. Scheaffer; Mendenhall, W.; Lyman, R., “Elementary Survey Sampling”, Fifth Edition).

³ Cochran, W., 1977, pp. 89; Lohr, Sharon, 1999, pp. 95

d. To exploit the benefits of stratified sampling where population estimates, in most cases, will be more precise than using a simple random sampling method (i.e., lower standard errors, other things being equal.)

e. Stratification may produce a smaller bound on the error of estimation than would be produced by a simple random sample of the same size. This result is particularly true if measurements within strata are homogeneous.

f. The cost per observation in the survey may be reduced by stratification of the population elements into convenient groupings.

3. Three levels of stratification were used in this country: industry, establishment size, and region. The original sample design with specific information of the industries and regions chosen is described in Appendix E.

4. Industry stratification was designed in the way that follows: the universe was stratified into one manufacturing industry, and two service industries (retail, and other services).

5. Size stratification was defined following the standardized definition for the rollout: small (5 to 19 employees), medium (20 to 99 employees), and large (more than 99 employees). For stratification purposes, the number of employees was defined on the basis of reported permanent full-time workers. This seems to be an appropriate definition of the labor force since seasonal/casual/part-time employment is not a common practice, except in the sectors of construction and agriculture.

6. Regional stratification was defined in 6 regions (city and the surrounding business area) throughout Turkey.

III. Sampling implementation

7. Given the stratified design, sample frames containing a complete and updated list of establishments as well as information on all stratification variables (number of employees, industry, and region) are required to draw the sample. Great efforts were made to obtain the best source for these listings. However, the quality of the sample frames was not optimal and, therefore, some adjustments were needed to correct for the presence of ineligible units. These adjustments are reflected in the weights computation (*see below*).

8. IPSOS was hired to implement the Turkey 2013 enterprise survey. There were local subcontractors in each of the 6 regions surveyed.

9. The sample frame used for the survey in Turkey was from: Turkish Statistical Office (TUIK). The database contained the following information

- Coverage;
- Up to datedness;- Availability of detailed stratification variables;
- Contact name(s).

Counts from the sample frame are shown below.

Sample Frame

Source: Turkish Statistical Office (TUIK), 2012/2013

Region	Employees	Food	Textiles	Apparel	Chemicals	Non-Metallic Mineral Products	Fabricated Metal Products	Retail	Other Manufacturing	Other Services	Grand Total
Aegean	5-19	992	367	284	148	365	247	2678	1623	7538	14242
	20-99	416	348	235	94	307	172	54	926	365	2917
	100+	121	147	56	24	93	37	2	243	58	781
	Total	1529	862	575	266	765	456	2734	2792	7961	17940
Black Sea	5-19	413	12	31	38	209	75	2240	551	3586	7155
	20-99	252	38	79	6	150	27	29	285	264	1130
	100+	86	21	40	3	29	4	2	66	18	269
	Total	751	71	150	47	388	106	2271	902	3868	8554
Central Anatolia	5-19	693	49	95	132	280	469	4034	2365	13769	21886
	20-99	278	53	58	55	165	301	77	1141	460	2588
	100+	55	40	22	12	33	62	10	229	117	580
	Total	1026	142	175	199	478	832	4121	3735	14346	25054
Eastern and Southeastern Anatolia	5-19	643	244	85	174	165	113	2705	742	8396	13267
	20-99	236	214	38	19	157	23	45	192	307	1231
	100+	26	147	10	1	16	3	10	41	22	276
	Total	905	605	133	194	338	139	2760	975	8725	14774
Marmara	5-19	1673	1904	3214	594	517	1647	6932	9019	23879	49379
	20-99	473	774	390	248	253	480	125	2054	1702	6499
	100+	160	369	205	94	96	147	48	804	359	2282
	Total	2306	3047	3809	936	866	2274	7105	11877	25940	58160
Mediterranean	5-19	572	72	67	97	174	209	2106	806	6649	10752
	20-99	193	145	51	37	112	89	79	394	424	1524
	100+	29	116	31	11	16	13	11	104	65	396
	Total	794	333	149	145	302	311	2196	1304	7138	12672
Grand Total		7311	5060	4991	1787	3137	4118	21187	21585	67978	137154

10. The enumerated establishments were then used as the frame for the selection of a sample with the aim of obtaining interviews at 1320 establishments with five or more employees.

11. The quality of the frame was assessed at the onset of the project through visits to a random subset of firms and local contractor knowledge. The sample frame was not immune from the typical problems found in establishment surveys: positive rates of non-eligibility, repetition, non-existent units, etc.

12. Given the impact that non-eligible units included in the sample universe may have on the results, adjustments may be needed when computing the appropriate weights for

individual observations. The percentage of confirmed non-eligible units as a proportion of the total number of sampled establishments contacted for the survey was 12.8% (1278 out of 10018 establishments)⁴. Breaking down by stratified industries, the following sample targets were achieved (using a4a and a6a):

Achieved sample

Region	Employees	Food	Textiles	Apparel	Chemicals	Non-Metallic Mineral Products	Fabricated Metal Products	Retail	Other Manufacturing	Other Services	Grand Total
Aegean	5-19	17	9	11	10	15	16	23	20	14	135
	20-99	15	8	10	8	10	3	2	2	16	74
	100+	10	7	11	7	16	0	2	2	11	66
	Total	42	24	32	25	41	19	27	24	41	275
Black Sea	5-19	7	10	7	7	10	4	2	9	7	63
	20-99	2	8	7	7	9	2	2	2	3	42
	100+	0	10	8	3	6	2	2	2	0	33
	Total	9	28	22	17	25	8	6	13	10	138
Central Anatolia	5-19	12	11	7	17	9	18	28	19	9	130
	20-99	11	8	9	7	9	5	1	2	8	60
	100+	2	7	11	6	7	2	2	2	5	44
	Total	25	26	27	30	25	25	31	23	22	234
Eastern and Southeastern Anatolia	5-19	7	10	7	10	9	6	4	10	8	71
	20-99	1	10	6	8	8	2	2	2	10	49
	100+	1	6	2	0	2	2	1	2	7	23
	Total	9	26	15	18	19	10	7	14	25	143
Marmara	5-19	13	19	24	23	9	26	24	31	16	185
	20-99	20	14	16	12	10	22	13	1	17	125
	100+	13	7	10	8	8	3	2	2	9	62
	Total	46	40	50	43	27	51	39	34	42	372
Mediterranean	5-19	9	12	9	12	9	7	6	15	8	87
	20-99	8	9	7	8	9	2	2	1	8	54
	100+	2	6	7	5	7	2	2	2	8	41
	Total	19	27	23	25	25	11	10	18	24	182
Grand Total		150	171	169	158	162	124	120	126	164	1344

IV. Data Base Structure:

13. The structure of the data base reflects the fact that 3 different versions of the questionnaire were used. The basic questionnaire, the Core Module, includes all common questions asked to all establishments from all sectors. The second expanded variation, the

⁴ Based on out of target contacts and impossible to contact establishments

Manufacturing Questionnaire, is built upon the Core Module and adds some specific questions relevant to manufacturing sectors. The third expanded variation, the Retail Questionnaire, is also built upon the Core Module and adds to the core specific questions relevant to retail firms. Each variation of the questionnaire is identified by the index variable, *a0*.

14. All variables are named using, first, the letter of each section and, second, the number of the variable within the section, i.e. *a1* denotes section A, question 1. Variable names preceded by a prefix “*ECA*” indicate questions specific to the Eastern Europe and Central Asia region, therefore, they may not be found in the implementation of the rollout in other countries. All other suffixed variables are global and are present in all country surveys over the world. All variables are numeric with the exception of those variables with an “x” at the end of their names. The suffix “x” denotes that the variable is alpha-numeric.

15. There are 2 establishment identifiers, *idstd* and *id*. The first is a global unique identifier. The second is a country unique identifier. The variables *a2* (sampling region), *a6a* (sampling establishment’s size), and *a4a* (sampling sector) contain the establishment’s classification into the strata chosen for each country using information from the sample frame. The strata were defined according to the guidelines described above.

16. There are three levels of stratification: industry, size and region. Different combinations of these variables generate the strata cells for each industry/region/size combination. A distinction should be made between the variable *a4a* and *d1a2* (industry expressed as ISIC rev. 3.1 code). The former gives the establishment’s classification into one of the chosen industry-strata, whereas the latter gives the actual establishment’s industry classification (four digit code) in the sample frame.

17. All of the following variables contain information from the sampling frame. They may not coincide with the reality of individual establishments as sample frames may contain inaccurate information. The variables containing the sample frame information are included in the data set for researchers who may want to further investigate statistical features of the survey and the effect of the survey design on their results.

-*a2* is the variable describing sampling regions

-*a6a*: coded using the same standard for small, medium, and large establishments as defined above. The code -9 was used to indicate units for which size was undetermined in the sample frame.

-*a4a*: coded using ISIC Rev 3.1 codes for the chosen industries for stratification. These codes include most manufacturing industries (15 to 37), retail (52), and (45, 50, 51, 55, 60-64, 72) for other services.

18. The surveys were implemented following a 2 stage procedure. Typically first a screener questionnaire is applied over the phone to determine eligibility and to make appointments. Then a face-to-face interview takes place with the Manager/Owner/Director of each establishment. The variables *a4b* and *a6b* contain the

industry and size of the establishment from the screener questionnaire. Variables *a8* to *a11* contain additional information and were also collected in the screening phase.

19. Note that there are additional variables for location (*a3x*) and size (*11*, *16* and *18*) that reflect more accurately the reality of each establishment. Advanced users are advised to use these variables for analytical purposes.

20. Variable *a3x* indicates the actual location of the establishment. There may be divergences between the location in the sampling frame and the actual location, as establishments may be listed in one place but the actual physical location is in another place.

21. Variables *11*, *16* and *18* were designed to obtain a more accurate measure of employment accounting for permanent and temporary employment. Special efforts were made to make sure that this information was not missing for most establishments.

22. Variables *a17x* gives interviewer comments, including problems that occurred during an interview and extraordinary circumstances which could influence results. Please note that sometimes this variable is removed due to privacy issues.

V. Universe Estimates

23. Universe estimates for the number of establishments in each cell in Turkey were produced for the strict, median and weak eligibility definitions. The estimates were the multiple of the relative eligible proportions.

24. Appendix B shows the overall estimates of the numbers of establishments in Turkey based on the sample frame.

25. For some establishments where contact was not successfully completed during the screening process (because the firm has moved and it is not possible to locate the new location, for example), it is not possible to directly determine eligibility. Thus, different assumptions about the eligibility of establishments result in different adjustments to the universe cells and thus different sampling weights.

26. Three sets of assumptions on establishment eligibility are used to construct sample adjustments using the status code information.

27. Strict assumption: eligible establishments are only those for which it was possible to directly determine eligibility. The resulting weights are included in the variable *wstrict*.

Strict eligibility = (Sum of the firms with codes 1,2,3,4,&16) / Total

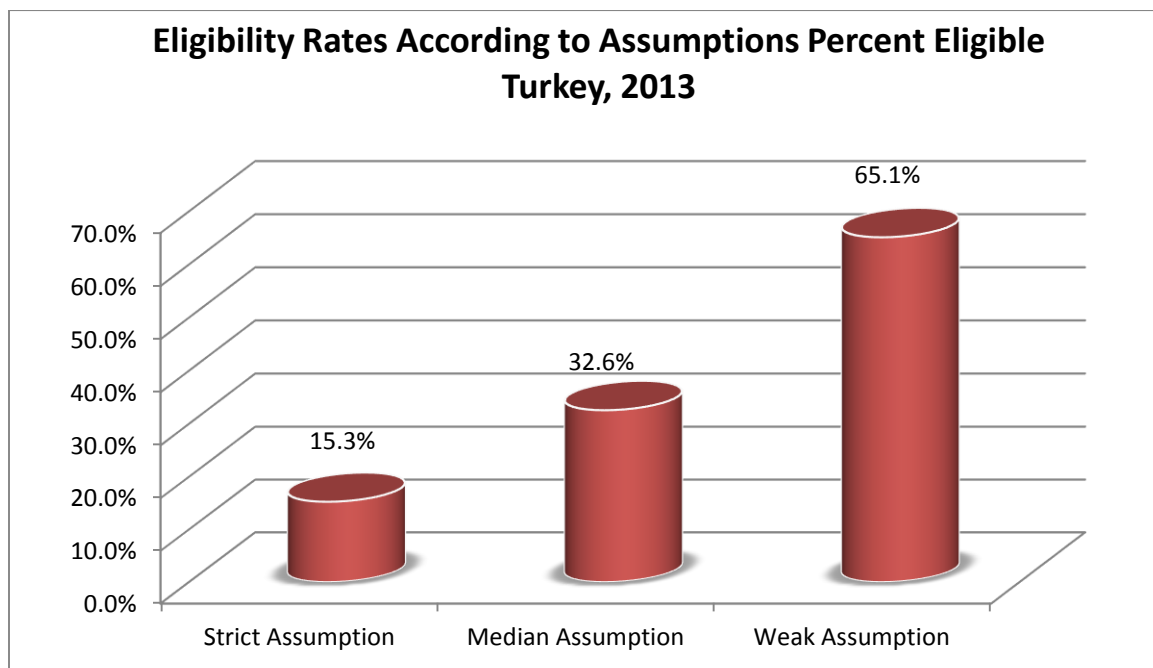
28. Median assumption: eligible establishments are those for which it was possible to directly determine eligibility and those that rejected the screener questionnaire or an answering machine or fax was the only response. The resulting weights are included in the variable *wmedian*.

Median eligibility = (Sum of the firms with codes 1,2,3,4,16,10,11, & 13) / Total

29. Weak assumption: in addition to the establishments included in points a and b, all establishments for which it was not possible to contact or that refused the screening questionnaire are assumed eligible. This definition includes as eligible establishments with dead or out of service phone lines, establishments that never answered the phone, and establishments with incorrect addresses for which it was impossible to find a new address. Under the weak assumption only observed non-eligible units are excluded from universe projections. The resulting weights are included in the variable *wweak*.

Weak eligibility = (Sum of the firms with codes 1,2,3,4,16,91,92,93,10,11,12,&13) / Total

30. The indicators computed for the Enterprise Survey website use the median weights. The following graph shows the different eligibility rates calculated for firms in the sample frame under each set of assumptions.



31. Universe estimates for the number of establishments in each industry-region-size cell in Turkey were produced for the strict, weak and median eligibility definitions. Appendix D shows the universe estimates of the numbers of registered establishments that fit the criteria of the Enterprise Surveys.

32. Once an accurate estimate of the universe cell projection was made, weights for the probability of selection were computed using the number of completed interviews for each cell.

VI. Weights

33. Since the sampling design was stratified and employed differential sampling, individual observations should be properly weighted when making inferences about the population. Under stratified random sampling, unweighted estimates are biased unless sample sizes are proportional to the size of each stratum. With stratification the probability of selection of each unit is, in general, not the same. Consequently, individual observations must be weighted by the inverse of their probability of selection (probability weights or *pw* in Stata).⁵

34. Special care was given to the correct computation of the weights. It was imperative to accurately adjust the totals within each region/industry/size stratum to account for the presence of ineligible units (the firm discontinued businesses or was unattainable, education or government establishments, establishments with less than 5 employees, no reply after having called in different days of the week and in different business hours, no tone on the phone line, answering machine, or fax line⁶, wrong address or moved away and could not get the new references). The information required for the adjustment was collected in the first stage of the implementation: the screening process. Using this information, each stratum cell of the universe was scaled down by the observed proportion of ineligible units within the cell. Once an accurate estimate of the universe cell (projections) was available, weights were computed using the number of completed interviews.

35. Appendix C shows the cell weights for registered establishments in Turkey.

VII. Appropriate use of the weights

36. Under stratified random sampling weights should be used when making inferences about the population. Any estimate or indicator that aims at describing some feature of the population should take into account that individual observations may not represent equal shares of the population.

37. However, there is some discussion as to the use of weights in regressions (see Deaton, 1997, pp.67; Lohr, 1999, chapter 11, Cochran, 1953, pp.150). There is not a strong large sample econometric argument in favor of using weighted estimation for a common population coefficient if the underlying model varies per stratum (stratum-specific coefficient): both simple OLS and weighted OLS are inconsistent under regular conditions. However, weighted OLS has the advantage of providing an estimate that is independent of the sample design. This latter point may be quite relevant for the Enterprise Surveys as in most cases the objective is not only to obtain model-unbiased

⁵ This is equivalent to the weighted average of the estimates for each stratum, with weights equal to the population shares of each stratum.

⁶ For the surveys that implemented a screener over the phone.

estimates but also design-unbiased estimates (see also Cochran, 1977, pp 200 who favors the used of weighted OLS for a common population coefficient.)⁷

38. From a more general approach, if the regressions are descriptive of the population then weights should be used. The estimated model can be thought of as the relationship that would be expected if the whole population were observed.⁸ If the models are developed as structural relationships or behavioral models that may vary for different parts of the population, then, there is no reason to use weights.

VIII. Non-response

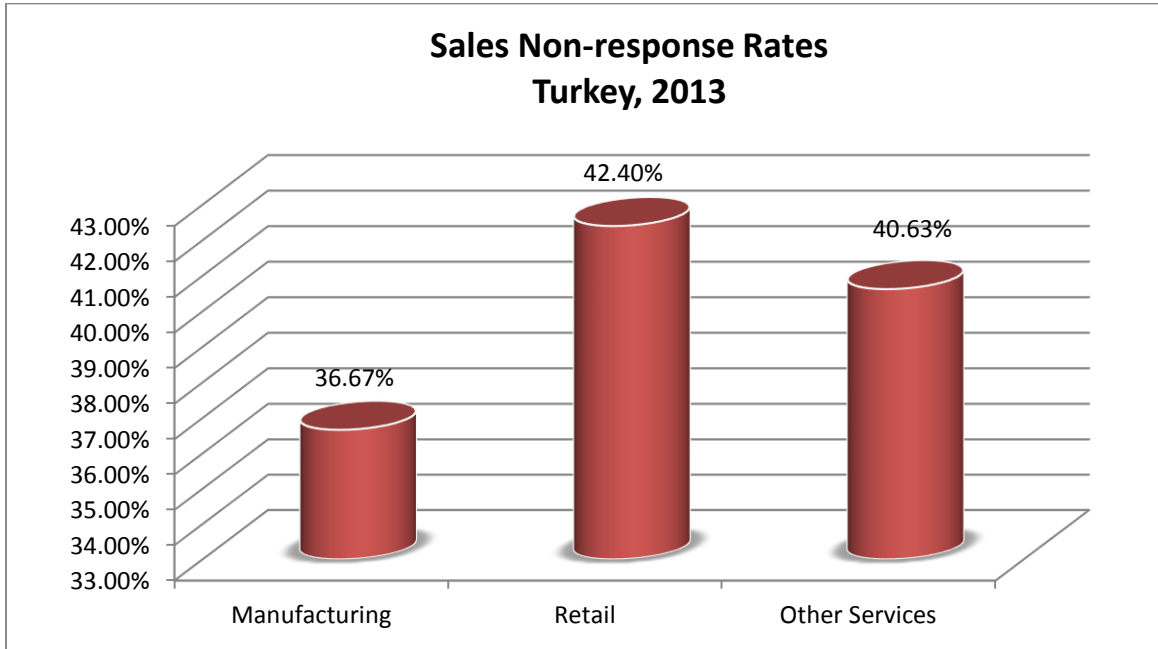
39. Survey non-response must be differentiated from item non-response. The former refers to refusals to participate in the survey altogether whereas the latter refers to the refusals to answer some specific questions. Enterprise Surveys suffer from both problems and different strategies were used to address these issues.

40. Item non-response was addressed by two strategies:

- a- For sensitive questions that may generate negative reactions from the respondent, such as corruption or tax evasion, enumerators were instructed to collect the refusal to respond as a different option from don't know (-8).
- b- Establishments with incomplete information were re-contacted in order to complete this information, whenever necessary. However, there were clear cases of low response. The following graph shows non-response rates for the sales variable, *d2*, by sector. Please, note that the coding utilized in this dataset does not allow us to differentiate between "Don't know" and "refuse to answer", thus the non-response in the chart below reflects both categories (DKs and NAs).

⁷ Note that weighted OLS in Stata using the command `regress` with the option of weights will estimate wrong standard errors. Using the Stata survey specific commands `svy` will provide appropriate standard errors.

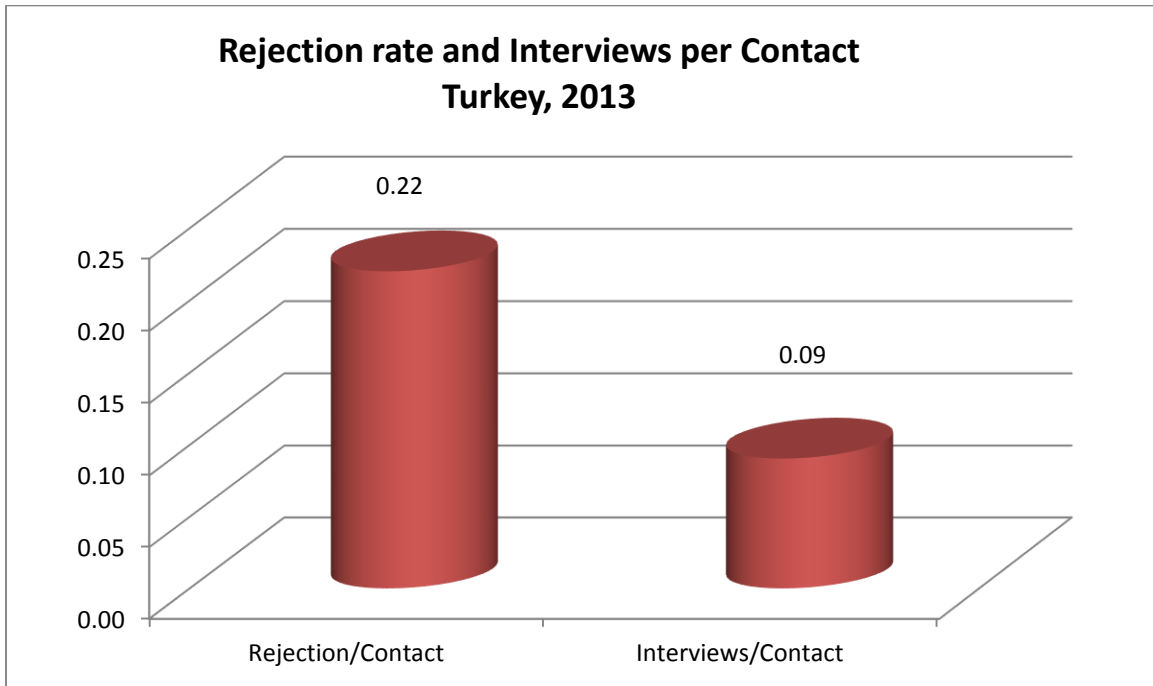
⁸ The use of weights in most model-assisted estimations using survey data is strongly recommended by the statisticians specialized on survey methodology of the JPSM of the University of Michigan and the University of Maryland.



41. Survey non-response was addressed by maximizing efforts to contact establishments that were initially selected for interview. Attempts were made to contact the establishment for interview at different times/days of the week before a replacement establishment (with similar strata characteristics) was suggested for interview. Survey non-response did occur but substitutions were made in order to potentially achieve strata-specific goals. Further research is needed on survey non-response in the Enterprise Surveys regarding potential introduction of bias.

42. As the following graph shows, the number of realized interviews per contacted establishment was 0.09⁹. This number is the result of two factors: explicit refusals to participate in the survey, as reflected by the rate of rejection (which includes rejections of the screener and the main survey) and the quality of the sample frame, as represented by the presence of ineligible units. The number of rejections per contact was 0.22.

⁹ The estimate is based on the total number of firms contacted including ineligible establishments.



43. Details on the rejection rate, eligibility rate, and item non-response are available at the strata level. This report summarizes these numbers to alert researchers of these issues when using the data and when making inferences. Item non-response, selection bias, and faulty sampling frames are not unique to Turkey. All Enterprise Surveys suffer from these shortcomings, but in very few cases they have been made explicit.

References:

Cochran, William G., Sampling Techniques, 1977.

Deaton, Angus, The Analysis of Household Surveys, 1998.

Levy, Paul S. and Stanley Lemeshow, Sampling of Populations: Methods and Applications, 1999.

Lohr, Sharon L. Sampling: Design and Techniques, 1999.

Scheaffer, Richard L.; Mendenhall, W.; Lyman, R., Elementary Survey Sampling, Fifth Edition, 1996.

Appendix A

Status Codes Total:

ELIGIBLES	
1. Eligible establishment (Correct name and address)	1968
2. Eligible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment)	13
3. Eligible establishment (Different name but same address - the firm/establishment changed its name)	37
4. Eligible establishment (Wrong address - the firm/establishment has changed address and the address could be found)	247
16. Panel firm - now less than five employees	4
5. The establishment has less than 5 permanent full time employees	56
6. The firm discontinued businesses	152
7. Not a business: private household	43
8. Ineligible activity: education, agriculture, finances, governments...	86
151. Out of target - outside the covered regions, firm moved abroad	1034
152. Out of target - firm moved abroad	1
153. Impossible to find	0
91. No reply (<i>after having called in different days of the week and in different business hours</i>)	770
92. Line out of order	223
93. No tone	641
94. Phone number does not exist	2940
10. Answering machine	1
11. Fax line - data line	41
12. Wrong address/ moved away and could not get the new references	260
13. Refuses to answer the screener	2527
14. In process (<i>the establishment is being called/ is being contacted - previous to ask the screener</i>)	3805
Total	14845

Response Outcomes Total:

Complete interviews (<i>Total</i>)	1334
Incomplete interviews	144
Eligible in process	36
Refusals	741
Out of target	1035
Impossible to contact	4876
Ineligible - coop.	1035
Refusal to the Screener	2527
Total	14845

Status Codes Fresh:

ELIGIBLES	
1. Eligible establishment (<i>Correct name and address</i>)	1671
2. Eligible establishment (<i>Different name but same address - the new firm/establishment bought the original firm/establishment</i>)	12
3. Eligible establishment (<i>Different name but same address - the firm/establishment changed its name</i>)	36
4. Eligible establishment (<i>Wrong address - the firm/establishment has changed address and the address could be found</i>)	187
16. Panel firm - now less than five employees	4
5. The establishment has less than 5 permanent full time employees	50
6. The firm discontinued businesses	128
7. Not a business: private household	38
8. Ineligible activity: education, agriculture, finances, governments...	84
91. No reply (<i>after having called in different days of the week and in different business hours</i>)	666
92. Line out of order	198
93. No tone	603
94. Phone number does not exist	2933
10. Answering machine	1
11. Fax line - data line	39
12. Wrong address/ moved away and could not get the new references	242
13. Refuses to answer the screener	2295
14. In process (<i>the establishment is being called/ is being contacted - previous to ask the screener</i>)	3734
151. Out of target - outside the covered regions, firm moved abroad	1032
152. Out of target - firm moved abroad	0
153. Impossible to find	0
Total	13953

Response Outcomes Fresh:

Complete interviews (<i>Total</i>)	1206
Incomplete interviews	131
Eligible in process	36
Refusals	537
Out of target	1032
Impossible to contact	4682
Ineligible - coop.	1032
Refusal to the Screener	2295
Total	13953

Status Codes Panel:

ELIGIBLES		
Eligible	1. Eligible establishment (<i>Correct name and address</i>)	297
	2. Eligible establishment (<i>Different name but same address - the new firm/establishment bought the original firm/establishment</i>)	1
	3. Eligible establishment (<i>Different name but same address - the firm/establishment changed its name</i>)	1
	4. Eligible establishment (<i>Wrong address - the firm/establishment has changed address and the address could be found</i>)	60
	16. Panel firm - now less than five employees	0
Ineligible	5. The establishment has less than 5 permanent full time employees	2
	6. The firm discontinued businesses	24
	7. Not a business: private household	5
	8. Ineligible activity: education, agriculture, finances, governments...	2
Unobtainable	91. No reply (<i>after having called in different days of the week and in different business hours</i>)	104
	92. Line out of order	25
	93. No tone	38
	94. Phone number does not exist	7
	10. Answering machine	0
	11. Fax line - data line	2
	12. Wrong address/ moved away and could not get the new references	18
	13. Refuses to answer the screener	232
	14. In process (<i>the establishment is being called/ is being contacted - previous to ask the screener</i>)	71
	151. Out of target - outside the covered regions, firm moved abroad	2
	152. Out of target - firm moved abroad	1
	153. Impossible to find	0
	Total	892

Response Outcomes Panel:

Complete interviews (<i>Total</i>)	138
Incomplete interviews	13
Eligible in process	4
Refusals	204
Out of target	3
Impossible to contact	194
Ineligible - coop.	3
Refusal to the Screener	232
Total	892

Appendix B

Sampling Frame, Turkey:

Source: Turkish Statistical Office (TUIK), 2012/2013

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	Total	1026	142	175	199	478	832	4121	3735	14346	25054
Eastern and Southeastern Anatolia	5-19	643	244	85	174	165	113	2705	742	8396	13267
	20-99	236	214	38	19	157	23	45	192	307	1231
	100+	26	147	10	1	16	3	10	41	22	276
	Total	905	605	133	194	338	139	2760	975	8725	14774
Marmara	5-19	1673	1904	3214	594	517	1647	6932	9019	23879	49379
	20-99	473	774	390	248	253	480	125	2054	1702	6499
	100+	160	369	205	94	96	147	48	804	359	2282
	Total	2306	3047	3809	936	866	2274	7105	11877	25940	58160
Mediterranean	5-19	572	72	67	97	174	209	2106	806	6649	10752
	20-99	193	145	51	37	112	89	79	394	424	1524
	100+	29	116	31	11	16	13	11	104	65	396
	Total	794	333	149	145	302	311	2196	1304	7138	12672
Grand Total		7311	5060	4991	1787	3137	4118	21187	21585	67978	137154

Appendix C

Turkey, administrative divisions



NUTS-1 regions	NUTS-2 regions	NUTS-3 provinces
Istanbul	Istanbul	Istanbul
Bati Marmara	Tekirdag	Tekirdag, Edirne, Kırklareli
	Balıkesir	Baleksir, Canakkale
Ege	Izmir	Izmir
	Aydın	Aydın, Denizli, Muğla
Dogu Marmara	Manisa	Manisa, Afyon, Kutahya, Usak
	Bursa	Bursa, Eskisehir, Bilecik
Bati Anadolu	Kocaeli	Kocaeli, Sakarya, Duzce, Bolu, Yalova
	Ankara	Ankara
Akdeniz	Konya	Konya, Karaman
	Antalya	Antalya, Isparta, Burdur
	Adana	Adana, Icel
Orta Anadolu	Hatay	Hatay, Kahramanmaras, Osmaniye
	Kirikkale	Kirikkale, Aksaray, Nigde, Nevsehir, Kirsehir
Bati Karadeniz	Kayseri	Kayseri, Sivas, Yozgat
	Zonguldak	Zonguldak, Karabuk, Bartin
	Kastamonu	Kastamonu, Cankiri, Sinop
Dogu Karadeniz	Samsun	Samsun, Tokat, Corum, Amasya
	Trabzon	Trabzon, Ordu, Giresun, Rize, Artvin, Gumushane
Kuzeydogu Anadolu	Erzurum	Erzurum, Erzincan, Bayburt
	Agri	Agri, Kars, Igridir, Ardahan
Ortadogu Anadolu	Malatya	Malatya, Elazig, Bingol, Tunceli
	Van	Van, Mus, Bitlis, Hakkari
Guneydogu Anadolu	Gaziantep	Gaziantep, Adiyaman, Kilis
	Sanliurfa	Sanliurfa, Diyarbakir
	Mardin	Mardin, Batman, Sirnak, Siirt

Appendix D

Strict Cell Weights Turkey – Panel

Region	Employees	Chemicals	Food	Apparel	Fabricated Metal Products	Non-Metallic Mineral Products	Other Manufacturing	Other Services	Retail	Textiles
Aegean	5-19	1.6	2.3	2.4		4.3	1.8		2.2	5.0
	20-99	1.5	4.4	3.0		4.6				
	100+	2.0	2.9	1.8						
Black Sea	5-19	2.3	11.5	2.5		2.7				
	20-99	2.8	5.3				10.1			
	100+					1.3				
Central Anatolia	5-19	1.3	2.7	1.4		2.7				1.0
	20-99	1.3	7.8	2.2		3.0				1.5
	100+	1.2	2.4	1.0						1.1
Eastern and Southeastern Anatolia	5-19		4.0				3.3	2.1		
	20-99							2.2		6.4
	100+		2.3							5.5
Marmara	5-19	5.0	2.3	1.0		1.3	2.4	4.1		2.2
	20-99	3.3	1.6	1.0			2.2	2.4		1.5
	100+			1.8						1.7
Mediterranean	5-19	2.9	3.2	1.6			2.4			
	20-99		1.9	4.0			3.4			
	100+		2.2							

Strict Cell Weights Turkey – Fresh

Region	Employees	Chemicals	Food	Apparel	Fabricated Metal Products	Non-Metallic Mineral Products	Other Manufacturing	Other Services	Retail	Textiles
Aegean	5-19	2.6	23.3	9.4	14.0	4.6	38.7	88.7	39.1	8.4
	20-99	1.4	10.9	11.2	6.3	6.9	88.9	275.9	62.5	4.5
	100+	1.0	4.4	2.8	1.7	1.4	0.0	35.2	5.3	1.8
Black Sea	5-19	1.0	13.8	2.8	6.9	3.0	53.0	549.0	56.3	1.0
	20-99	1.7	8.2	3.6	2.0	4.4	90.8	184.2	55.0	1.9
	100+	0.0	1.0	1.1	1.1	1.0	9.6	15.3	1.8	
Central Anatolia	5-19	7.6	15.7	7.1	11.7	5.4	38.7	101.7	38.9	3.1
	20-99	1.3	9.9	3.7	13.5	5.2	71.8	937.7	80.8	1.6
	100+	1.9	4.7	1.0	3.1	1.6	34.5	87.4	8.5	1.5
Eastern and Southeastern Anatolia	5-19	3.0	11.0	3.6	4.1	3.4	46.0	650.2	46.3	6.9
	20-99	5.2	5.0	2.6	1.2	4.0	33.5	538.5	50.9	5.0
	100+	1.0	1.1	1.6		2.1	4.2	55.5	3.2	4.6
Marmara	5-19	18.2	20.6	43.2	25.4	20.6	102.3	349.1	69.4	28.5
	20-99	5.8	15.4	51.7	22.5	9.0	72.0	237.4	416.1	23.7
	100+	1.6	7.4	21.1	8.8	4.4	119.9	218.0	35.3	20.7
Mediterranean	5-19	2.4	9.8	5.2	7.9	4.3	71.4	321.1	47.1	4.0
	20-99	1.3	7.2	2.5	4.8	3.5	128.6	329.2	128.2	3.8
	100+	1.4	1.1	1.4	1.9	1.2	12.5	52.7	6.5	2.7

Median Cell Weights Turkey – Panel

Region	Employees	Chemicals	Food	Apparel	Fabricated Metal Products	Non-Metallic Mineral Products	Other Manufacturing	Other Services	Retail	Textiles
Aegean	5-19	2.8	3.2	3.7		7.0	2.3		4.4	8.4
	20-99	2.5	6.1	4.7		7.5				
	100+	3.5	4.1	2.9						
Black Sea	5-19	2.7	11.1	2.7		3.0				
	20-99	3.2	5.1				8.8			
	100+					1.4				
Central Anatolia	5-19	2.0	3.4	1.9		4.0				1.4
	20-99	1.9	9.7	3.0		4.3				2.3
	100+	1.8	3.0	1.0						1.6
Eastern and Southeastern Anatolia	5-19		4.4				3.2	2.9		
	20-99							3.0		8.5
	100+		2.5							7.4
Marmara	5-19	14.1	5.2	2.0		3.4	5.1	11.7		6.2
	20-99	9.2	3.7	2.2			4.6	6.8		4.3
	100+			4.7						5.0
Mediterranean	5-19	4.7	4.3	2.4			2.9			
	20-99		2.5	6.0			4.0			
	100+		2.9							

Median Cell Weights Turkey – Fresh

Region	Employees	Chemicals	Food	Apparel	Fabricated Metal Products	Non-Metallic Mineral Products	Other Manufacturing	Other Services	Retail	Textiles
Aegean	5-19	5.8	59.0	27.5	34.7	11.5	108.1	276.1	120.9	21.5
	20-99	3.2	26.8	31.5	15.2	17.0	240.4	831.9	187.4	11.2
	100+	1.3	9.6	6.9	3.6	3.0		94.1	14.0	4.0
Black Sea	5-19	1.2	23.4	5.5	11.5	5.1	98.7	1139.9	116.3	1.7
	20-99	2.5	13.5	6.8	3.2	7.2	163.8	370.7	110.2	3.1
	100+		1.3	1.8	1.6	1.5	15.3	27.3	3.2	
Central Anatolia	5-19	14.2	32.7	17.1	23.8	11.2	88.8	260.2	99.1	6.4
	20-99	2.3	20.1	8.5	26.6	10.4	159.6	2325.6	199.4	3.2
	100+	3.0	8.5	1.4	5.5	2.8	68.0	192.1	18.7	2.8
Eastern and Southeastern Anatolia	5-19	4.8	20.1	7.5	7.3	6.2	92.1	1453.1	103.0	12.7
	20-99	8.2	8.9	5.2	2.1	7.1	65.1	1166.5	109.6	8.9
	100+	1.0	1.8	2.9		3.3	7.2	106.6	6.1	7.3
Marmara	5-19	40.3	50.9	122.2	61.3	50.8	277.3	1056.0	208.9	71.2
	20-99	12.3	36.9	142.0	52.7	21.6	189.2	696.0	1213.9	57.4
	100+	3.0	15.6	51.4	18.3	9.3	279.3	566.4	91.2	44.4
Mediterranean	5-19	4.3	19.3	11.7	15.2	8.4	154.5	775.0	113.2	8.0
	20-99	2.1	13.7	5.6	9.0	6.7	269.8	770.4	298.5	7.4
	100+	2.1	1.9	2.7	3.1	2.0	23.2	109.3	13.5	4.7

Weak Cell Weights Turkey – Panel

Region	Employees	Chemicals	Food	Apparel	Fabricated Metal Products	Non-Metallic Mineral Products	Other Manufacturing	Other Services	Retail	Textiles
Aegean	5-19	2.9	3.1	3.8		8.3	2.2		5.0	9.5
	20-99	2.8	6.3	5.1		9.3				
	100+	3.8	4.1	3.1						
Black Sea	5-19	3.1	12.0	3.1		3.9				
	20-99	4.0	5.8				9.8			
	100+					1.9				
Central Anatolia	5-19	2.1	3.3	1.9		4.7				1.6
	20-99	2.1	10.1	3.3		5.4				2.8
	100+	1.9	3.0	1.0						1.9
Eastern and Southeastern Anatolia	5-19		4.8				3.4	3.6		
	20-99							3.9		11.3
	100+		2.8							9.5
Marmara	5-19	21.0	7.3	3.0		5.7	6.9	18.6		9.9
	20-99	14.5	5.4	3.4			6.7	11.5		7.4
	100+			7.1						8.2
Mediterranean	5-19	7.9	6.7	3.9			4.4			
	20-99		4.2	10.5			6.6			
	100+		4.7							

Weak Cell Weights Turkey – Fresh

Region	Employees	Chemicals	Food	Apparel	Fabricated Metal Products	Non-Metallic Mineral Products	Other Manufacturing	Other Services	Retail	Textiles
Aegean	5-19	12.7	141.7	73.3	75.5	33.7	218.7	661.0	303.6	48.8
	20-99	5.5	50.7	66.3	26.2	39.3	383.8	1571.5	371.3	20.1
	100+	1.7	14.6	11.7	4.9	5.5		142.3	22.2	5.8
Black Sea	5-19	3.4	73.9	19.3	32.8	19.6	262.5	3587.7	383.9	5.1
	20-99	5.7	33.6	18.8	7.3	21.8	343.7	920.5	286.9	7.4
	100+		2.7	4.0	2.9	3.6	25.8	54.4	6.6	
Central Anatolia	5-19	30.1	76.1	44.2	50.3	31.6	174.1	603.8	241.3	14.1
	20-99	3.9	36.9	17.3	44.3	23.3	247.0	4257.7	383.0	5.6
	100+	4.0	12.5	2.3	7.3	5.1	84.3	281.7	28.8	3.9
Eastern and Southeastern Anatolia	5-19	11.8	53.9	22.3	17.9	20.1	208.6	3892.2	289.5	32.2
	20-99	15.8	18.8	12.3	4.1	18.3	116.2	2465.0	243.0	17.9
	100+	1.5	3.0	5.5		6.9	10.2	180.4	10.8	11.8
Marmara	5-19	77.0	106.7	284.6	116.5	129.5	490.0	2207.4	458.1	140.8
	20-99	18.6	61.0	260.8	79.1	43.4	263.7	1147.8	2100.0	89.5
	100+	3.7	20.7	75.6	22.0	15.1	311.9	748.3	126.4	55.5
Mediterranean	5-19	10.0	49.6	33.4	35.5	26.2	334.5	1985.3	304.1	19.3
	20-99	4.0	27.7	12.6	16.6	16.5	460.7	1556.8	632.8	14.1
	100+	3.2	3.1	4.9	4.5	4.0	31.8	177.0	22.9	7.2

Appendix E

Strict Universe Estimates Turkey – Panel

Region	Employees	Chemicals	Food	Apparel	Fabricated Metal Products	Non-Metallic Mineral Products	Other Manufacturing	Other Services	Retail	Textiles	Grand Total
Aegean	5-19	7	7	2	0	9	6	0	2	5	37
	20-99	4	4	6	0	9	0	0	0	0	24
	100+	2	6	7	0	0	0	0	0	0	15
	Total	13	17	16	0	18	6	0	2	5	76
Black Sea	5-19	2	12	3	0	3	0	0	0	0	19
	20-99	3	5	0	0	0	10	0	0	0	18
	100+	0	0	0	0	1	0	0	0	0	1
	Total	5	17	3	0	4	10	0	0	0	38
Central Anatolia	5-19	9	11	3	0	3	0	0	0	3	29
	20-99	5	8	4	0	3	0	0	0	2	22
	100+	1	9	2	0	0	0	0	0	1	14
	Total	16	28	9	0	6	0	0	0	6	64
Eastern and Southeastern Anatolia	5-19	0	8	0	0	0	7	4	0	0	19
	20-99	0	0	0	0	0	0	2	0	6	9
	100+	0	2	0	0	0	0	0	0	6	8
	Total	0	10	0	0	0	7	6	0	12	35
Marmara	5-19	5	5	5	0	4	2	4	0	4	29
	20-99	7	6	6	0	0	4	5	0	6	34
	100+	0	0	7	0	0	0	0	0	7	14
	Total	12	11	18	0	4	7	9	0	18	78
Mediterranean	5-19	3	3	6	0	0	5	0	0	0	17
	20-99	0	4	4	0	0	3	0	0	0	11
	100+	0	2	0	0	0	0	0	0	0	2
	Total	3	9	10	0	0	8	0	0	0	31
Grand Total		48	92	56	0	31	37	15	2	40	322

Strict Universe Estimates Turkey – Fresh

Region	Employees	Chemicals	Food	Apparel	Fabricated Metal Products	Non-Metallic Mineral Products	Other Manufacturing	Other Services	Retail	Textiles	Grand Total
Aegean	5-19	33	140	94	140	59	504	2041	742	109	3862
	20-99	17	76	89	51	56	267	552	125	72	1305
	100+	9	22	19	12	22	0	70	11	20	185
	Total	60	238	203	202	137	770	2663	877	202	5351
Black Sea	5-19	6	124	17	48	27	212	1098	506	7	2047
	20-99	2	57	25	14	40	91	368	110	6	713
	100+	0	10	9	3	5	19	31	4	0	81
	Total	8	192	51	66	72	322	1497	620	13	2840
Central Anatolia	5-19	38	110	36	198	43	697	2847	740	18	4727
	20-99	9	70	26	94	41	359	938	162	11	1709
	100+	2	14	9	19	11	69	175	17	6	322
	Total	49	193	70	311	95	1124	3960	919	35	6757
Eastern and Southeastern Anatolia	5-19	21	88	25	41	30	184	1300	463	55	2208
	20-99	5	50	15	10	32	67	539	102	45	865
	100+	1	6	3	0	4	8	56	6	28	112
	Total	27	144	44	51	67	259	1894	571	128	3186
Marmara	5-19	219	351	820	584	124	2556	8029	2152	400	15234
	20-99	104	154	517	270	90	1439	2611	416	308	5911
	100+	21	52	127	71	35	360	436	71	104	1275
	Total	343	557	1464	925	250	4355	11076	2638	812	22420
Mediterranean	5-19	19	108	26	95	38	357	1926	707	32	3309
	20-99	10	50	15	39	32	129	658	128	30	1092
	100+	3	6	10	9	9	25	105	13	22	202
	Total	32	164	51	143	79	510	2690	848	84	4602
Grand Total		518	1487	1883	1698	699	7342	23781	6474	1274	45156

Median Universe Estimates Turkey – Panel

Region	Employees	Chemicals	Food	Apparel	Fabricated Metal Products	Non-Metallic Mineral Products	Other Manufacturing	Other Services	Retail	Textiles	Grand Total
Aegean	5-19	11	10	4	0	14	7	0	4	8	58
	20-99	8	6	9	0	15	0	0	0	0	38
	100+	3	8	12	0	0	0	0	0	0	23
	Total	22	24	25	0	29	7	0	4	8	119
Black Sea	5-19	3	11	3	0	3	0	0	0	0	20
	20-99	3	5	0	0	0	9	0	0	0	17
	100+	0	0	0	0	1	0	0	0	0	1
	Total	6	16	3	0	4	9	0	0	0	38
Central Anatolia	5-19	14	14	4	0	4	0	0	0	4	40
	20-99	8	10	6	0	4	0	0	0	2	30
	100+	2	12	2	0	0	0	0	0	2	17
	Total	23	35	12	0	8	0	0	0	8	87
Eastern and Southeastern Anatolia	5-19	0	9	0	0	0	6	6	0	0	21
	20-99	0	0	0	0	0	0	3	0	8	11
	100+	0	3	0	0	0	0	0	0	7	10
	Total	0	11	0	0	0	6	9	0	16	42
Marmara	5-19	14	10	10	0	10	5	12	0	12	74
	20-99	18	15	13	0	0	9	14	0	17	86
	100+	0	0	19	0	0	0	0	0	20	39
	Total	32	25	42	0	10	14	25	0	50	199
Mediterranean	5-19	5	4	10	0	0	6	0	0	0	24
	20-99	0	5	6	0	0	4	0	0	0	15
	100+	0	3	0	0	0	0	0	0	0	3
	Total	5	12	16	0	0	10	0	0	0	42
Grand Total		88	124	97	0	52	46	34	4	82	528

Median Universe Estimates Turkey – Fresh

Region	Employees	Chemicals	Food	Apparel	Fabricated Metal Products	Non-Metallic Mineral Products	Other Manufacturing	Other Services	Retail	Textiles	Grand Total
Aegean	5-19	75	354	275	347	150	1405	6349	2297	280	11532
	20-99	38	187	252	122	136	721	1664	375	180	3675
	100+	11	48	49	25	48	0	188	28	44	441
	Total	125	590	575	493	334	2126	8201	2700	504	15649
Black Sea	5-19	7	211	33	80	46	395	2280	1046	12	4110
	20-99	3	94	48	23	65	164	741	220	9	1367
	100+	0	13	14	5	7	31	55	6	0	132
	Total	10	319	95	108	118	589	3076	1273	21	5608
Central Anatolia	5-19	71	229	85	405	89	1598	7286	1884	39	11686
	20-99	16	141	60	186	83	798	2326	399	22	4031
	100+	3	25	13	33	20	136	384	37	11	662
	Total	90	395	158	624	192	2532	9996	2320	72	16379
Eastern and Southeastern Anatolia	5-19	34	161	52	73	55	369	2906	1030	102	4782
	20-99	8	89	31	17	57	130	1166	219	81	1798
	100+	1	9	6	0	7	14	107	12	44	200
	Total	43	258	90	90	119	513	4179	1262	226	6780
Marmara	5-19	484	866	2322	1410	305	6933	24288	6476	996	44079
	20-99	222	369	1420	633	216	3783	7656	1214	746	16258
	100+	40	110	308	146	75	838	1133	182	222	3054
	Total	745	1344	4051	2188	595	11555	33076	7872	1964	63391
Mediterranean	5-19	34	212	58	183	75	773	4650	1698	64	7748
	20-99	17	96	33	72	60	270	1541	299	59	2447
	100+	4	10	19	15	14	46	219	27	37	392
	Total	56	318	111	270	150	1089	6410	2023	160	10587
Grand Total		1068	3224	5079	3774	1509	18404	64938	17449	2948	118394

Weak Universe Estimates Turkey – Panel

Region	Employees	Chemicals	Food	Apparel	Fabricated Metal Products	Non-Metallic Mineral Products	Other Manufacturing	Other Services	Retail	Textiles	Grand Total
Aegean	5-19	12	9	4	0	17	7	0	5	9	62
	20-99	8	6	10	0	19	0	0	0	0	44
	100+	4	8	12	0	0	0	0	0	0	24
	Total	24	24	26	0	35	7	0	5	9	130
Black Sea	5-19	3	12	3	0	4	0	0	0	0	22
	20-99	4	6	0	0	0	10	0	0	0	20
	100+	0	0	0	0	2	0	0	0	0	2
	Total	7	18	3	0	6	10	0	0	0	44
Central Anatolia	5-19	15	13	4	0	5	0	0	0	5	41
	20-99	8	10	7	0	5	0	0	0	3	33
	100+	2	12	2	0	0	0	0	0	2	18
	Total	25	35	12	0	10	0	0	0	9	93
Eastern and Southeastern Anatolia	5-19	0	10	0	0	0	7	7	0	0	23
	20-99	0	0	0	0	0	0	4	0	11	15
	100+	0	3	0	0	0	0	0	0	10	12
	Total	0	12	0	0	0	7	11	0	21	51
Marmara	5-19	21	15	15	0	17	7	19	0	20	113
	20-99	29	22	20	0	0	13	23	0	30	137
	100+	0	0	28	0	0	0	0	0	33	61
	Total	50	36	64	0	17	20	42	0	82	311
Mediterranean	5-19	8	7	16	0	0	9	0	0	0	39
	20-99	0	8	10	0	0	7	0	0	0	25
	100+	0	5	0	0	0	0	0	0	0	5
	Total	8	20	26	0	0	15	0	0	0	69
Grand Total		114	146	132	0	68	59	53	5	122	698

Weak Universe Estimates Turkey – Fresh

Region	Employees	Chemicals	Food	Apparel	Fabricated Metal Products	Non-Metallic Mineral Products	Other Manufacturing	Other Services	Retail	Textiles	Grand Total
Aegean	5-19	165	850	733	755	439	2843	15203	5769	635	27391
	20-99	66	355	530	209	314	1151	3143	743	322	6833
	100+	16	73	82	34	89	0	285	44	63	686
	Total	246	1278	1345	999	841	3995	18631	6556	1020	34910
Black Sea	5-19	21	665	116	230	176	1050	7175	3455	36	12923
	20-99	6	235	132	51	196	344	1841	574	22	3400
	100+	0	27	32	9	18	52	109	13	0	259
	Total	26	927	279	289	390	1445	9125	4042	58	16582
Central Anatolia	5-19	150	533	221	854	253	3134	16908	4585	85	26723
	20-99	27	258	121	310	186	1235	4258	766	39	7201
	100+	4	37	21	44	36	169	563	58	15	946
	Total	181	828	363	1208	475	4538	21729	5409	139	34870
Eastern and Southeastern Anatolia	5-19	83	432	156	179	181	834	7784	2895	258	12801
	20-99	16	188	74	33	146	232	2465	486	161	3801
	100+	1	15	11	0	14	20	180	22	71	335
	Total	100	635	241	211	341	1087	10430	3402	489	16936
Marmara	5-19	924	1814	5407	2680	777	12249	50771	14200	1971	90794
	20-99	334	610	2608	949	434	5273	12626	2100	1164	26099
	100+	48	145	454	176	121	936	1497	253	277	3906
	Total	1306	2569	8469	3804	1332	18458	64894	16553	3412	120798
Mediterranean	5-19	80	545	167	426	236	1672	11912	4562	154	19754
	20-99	32	194	75	133	148	461	3114	633	113	4902
	100+	6	16	34	23	28	64	354	46	57	628
	Total	118	755	276	581	413	2197	15379	5241	324	25284
Grand Total		1978	6992	10973	7093	3792	31720	140187	41203	5442	249381

Appendix F

Original Sample Design, Turkey:

Region	Employees	Food	Textiles	Apparel	Chemicals	Non-Metallic Mineral Products	Fabricated Metal Products	Retail	Other Manufacturing	Other Services	Grand Total
Aegean	5-19	21	12	5	3	4	3	25	14	30	117
	20-99	9	0	7	6	10	6	0	2	0	40
	100+	2	5	1	4	4	2	0	1	0	20
	Total	31	18	13	14	17	11	25	17	30	177
Black Sea	5-19	21	1	1	5	7	3	10	2	0	49
	20-99	6	2	2	4	6	2	0	1	0	23
	100+	1	1	1	3	2	2	0	1	0	12
	Total	28	4	4	12	15	7	10	4	0	84
Central Anatolia	5-19	27	27	11	8	9	14	30	29	30	185
	20-99	7	2	2	5	6	10	0	4	0	36
	100+	1	2	1	4	2	3	0	1	0	15
	Total	35	31	14	17	18	27	30	34	30	236
Eastern and Southeastern Anatolia	5-19	15	8	3	9	6	4	23	2	30	100
	20-99	6	7	1	5	6	2	0	1	0	28
	100+	1	5	1	1	2	2	0	1	0	14
	Total	22	20	5	15	14	8	23	4	30	142
Marmara	5-19	28	29	30	21	16	29	30	30	30	243
	20-99	13	23	11	11	9	15	1	28	0	112
	100+	4	12	6	7	4	6	1	2	0	41
	Total	44	63	47	39	29	50	31	61	30	396
Mediterranean	5-19	0	5	26	27	27	25	0	0	0	111
	20-99	0	9	26	27	27	22	0	0	0	112
	100+	0	8	24	8	13	9	0	0	0	62
	Total	0	23	76	63	67	57	0	0	0	286
Grand Total		160	160	160	160	160	160	120	120	120	1320