# The Business Environment and Enterprise Performance Survey (BEEPS) 2008-2009 

A Report on methodology and observations
November 2013

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## 1 Background

The Business Environment Survey (BEEPS) is a joint initiative of the European Bank for Reconstruction and Development (EBRD) and the World Bank Group (the World Bank). The survey was first undertaken on behalf of the EBRD and World Bank in 1999 - 2000, when it was administered to approximately 4000 enterprises in 26 countries of Eastern Europe and Central Asia (including Turkey) to assess the environment for private enterprise and business development.

In the second round of the BEEPS, the survey instrument was administered to approximately 6500 enterprises in 27 countries (including Turkey but excluding Turkmenistan) in the year 2002. In the third round of the BEEPS, the survey included approximately 9,500 enterprises in 28 countries in the year 2005. In seven of the countries the survey also included an additional sampling overlay of the manufacturing sector in addition to the main BEEPS sample.

In the fourth round of the BEEPS in 2008-2009, the survey covered almost 12,000 enterprises in 29 countries (including Mongolia for the first time). The survey was restructured to improve cross-country comparability and to make it compatible with the Enterprise Surveys the Enterprise Analysis Unit of the World Bank has been implementing in the past two years in other regions of the world.

The objective of the survey is to obtain feedback from enterprises in EBRD countries of operation on the state of the private sector as well as to help in building a panel of enterprise data that will make it possible to track changes in the business environment over time.

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 nonresponse cases and the appropriate use of weights.

The fourth round of BEEPS was implemented by TNS Opinion in cooperation with local partners. For details, refer to Annex A.

BEEPS IV has been supported by the Taiwan Business - EBRD TC Fund and EBRD - Canadian Technical Cooperation Fund 2006-2009.

## 2 BEEPS Methodology

### 2.1 Survey universe, sample population and sampling frames

The survey universe was defined as commercial, service or industrial business establishments with at least five full-time employees. Government departments including military, police, education, health and similar activities were excluded, as were those in primary industries including agriculture, mining, etc. There are no up to date and reliable statistics relating to this universe in the countries being surveyed in BEEPS IV. Consequently the universe size and characteristics have to be directly estimated from the survey results themselves. This requirement increases the emphasis that has to be placed on the quality of the sample frame, because the validity of the results is predominantly a function of coverage and age of the sampling frame.

The criteria used to evaluate the available sampling frame in descending priority were those of:

- Coverage
- Up to datedness
- Availability of detailed stratification variables
- Location identifiers- address, phone number, email
- Electronic format availability
- Contact name(s)

The sample frames used for the surveys must consist of the lists of enterprises in each country that most optimally meet these requirements. The final selection was made by the TNS in collaboration with the EBRD and the World Bank. For most countries covered in BEEPS IV two sample frames were used. The first sample frame was often an official frame of establishments supplied by the national statistical office of the country and the second sample frame consisted of establishments that participated in BEEPS III. The Enterprise Survey conducted for the World Bank in Albania in 2007/8 showed that a suitable frame did not exist for the country. Instead, the design returned to first principles, using a blocks enumeration methodology.

### 2.2 Specifications of the survey

### 2.2.1 Coverage of countries:

Fourth round of BEEPS was implemented in 29 countries (Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Former Yugoslav Republic of Macedonia, Georgia, Hungary, Kazakhstan, Kyrgyz Republic, Latvia, Lithuania, Moldova, Mongolia, Montenegro, Poland, Romania, Russia, Serbia (including Kosovo under UNSCR 1244), Slovak Republic, Slovenia, Tajikistan, Turkey, Ukraine and Uzbekistan). It was not possible to implement BEEPS in Turkmenistan.

### 2.2.2 Sampling structure

In all countries where a reliable sample frame was available (except Albania), the sample was selected using stratified random sampling, following the methodology explained in the Sampling Manual (available at http://www.enterprisesurveys.org/Methodology/). Stratified random sampling was preferred over simple random sampling for several reasons:

- To obtain unbiased estimates for different subdivisions of the population with some known level of precision.
- To obtain unbiased estimates for the whole population. The whole population, or the 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.
- 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.
- 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, all things being equal).
- 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.
- The cost per observation in the survey may be reduced by stratification of the population elements into convenient groupings.
Due to a lack of reliable sample frame blocks enumeration was used in Albania. Detailed description can be found under country-specific information.

Three levels of stratification were used in all countries: industry, establishment size and region. The original sample designs with specific information of the industries and regions chosen are described in country-specific pages in Annex A.

In all countries, the sample was stratified along Manufacturing, Retail trade (sector 52) and Other services. In some of the countries, there were specific target numbers of interviews for more detailed sectors within these three groups.

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). ${ }^{1}$ 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 labour force, since seasonal/casual/part-time employment is not a common practice, except in the sectors of construction.

Details on the regional stratification can be found in country-specific information in Annex A.
There were no additional requirements on the ownership, exporter status, location or years in operation of the establishment as was the case in the previous rounds of BEEPS. Along the defined stratification guidelines, priority was given to completing interviews with establishments who participated in BEEPS 2005. As mentioned, stratified random sampling was used in this round of BEEPS, whereas quota (non-random) sampling was used in the three previous rounds of BEEPS.

### 2.3 Sampling implementation

Given the stratified design, sample frames containing a complete and updated list of establishments for the selected regions were required. Great efforts were made to obtain the best source for these listings. However, the quality of 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.

For most countries covered in BEEPS IV two sample frames were used. The first sample frame was obtained from the official sources in the countries (details for each country can be found in country-specific information). The second sample frame, supplied by the EBRD and the World Bank, consisted of enterprises interviewed in BEEPS 2005. TNS Opinion was required to attempt to re-interview establishments responding to the BEEPS 2005 survey where they were within the selected geographical region and met eligibility criteria. That sample is referred to as the Panel. In Turkey, both BEEPS and World Bank's Investment Climate Survey (ICS) were conducted in 2005 and the World Bank's ICS sample was used as the Panel sample for BEEPS IV as it had more observations.

In Albania and Croatia, the World Bank conducted an Enterprise Survey in 2007. Before doing the BEEPS IV there, it was first necessary to remove any establishments that had been selected for use in World Bank Enterprise Survey in 2007. Examination of the remaining establishments and the panel establishments showed that they would not be sufficient to obtain the target number of interviews. Therefore, it was agreed that the numbers could be augmented by reinterviewing establishments interviewed for the Enterprise Survey 2007, asking them only additional questions. A few such cases also occur in Bulgaria, where World Bank Enterprise Survey was also implemented in 2007.

[^0]The quality of the sample frames was assessed at the onset of the project. The sample frames proved to be useful, though they all showed positive rates of non-eligibility, repetition, nonexistent units, etc. These problems are typical of establishment surveys, but given the impact these inaccuracies may have on the results, adjustments were needed when computing the appropriate weights for individual observations.

In Poland and Russia, the original sample target was not achieved in the first wave. We went back to the field in these two countries and completed additional interviews (78 in Poland and 256 in Russia) which brought the total number of completed interviews closer to the target number of interviews. Note that the World Bank decided not to include these interviews in the BEEPS dataset available on their website.

Table 1 depicts the targeted number of interviews for BEEPS IV, along with achieved total number of interviews and number of interviews with panel establishments.

Table 1: Targeted and achieved number of interviews

| Country | Number of interviews |  |  |  |  |  | Completed in 2005 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Target | Completed | - Panel | - Manufacturing | - Retail | - Core | Main <br> BEEPS | Manufacturing overlay |
| Albania | 200 | 175 | 17 | 65 | 47 | 63 | 204 | na |
| Armenia | 360 | 374 | 99 | 113 | 154 | 107 | 201 | 150 |
| Azerbaijan | 360 | 380 | 106 | 120 | 144 | 116 | 200 | 150 |
| Belarus | 360 | 273 | 71 | 84 | 126 | 63 | 325 | na |
| Bosnia and Herzegovina | 360 | 361 | 63 | 124 | 127 | 110 | 200 | na |
| Bulgaria | 270 | 288 | 118 | 95 | 150 | 43 | 300 | na |
| Croatia | 270 | 159 | 50 | 71 | 55 | 33 | 236 | na |
| Czech Republic | 270 | 250 | 17 | 94 | 90 | 66 | 343 | na |
| Estonia | 270 | 273 | 66 | 90 | 124 | 59 | 219 | na |
| FYR Macedonia | 360 | 366 | 87 | 115 | 142 | 109 | 200 | na |
| Georgia | 360 | 373 | 68 | 121 | 139 | 113 | 200 | na |
| Hungary | 270 | 291 | 62 | 103 | 105 | 83 | 312 | 298 |
| Kazakhstan | 600 | 544 | 77 | 181 | 203 | 160 | 300 | 285 |
| Kyrgyz Republic | 360 | 235 | 71 | 92 | 82 | 61 | 202 | na |
| Latvia | 270 | 271 | 57 | 89 | 111 | 71 | 205 | na |
| Lithuania | 270 | 276 | 45 | 97 | 113 | 66 | 205 | na |
| Moldova | 360 | 363 | 128 | 110 | 149 | 104 | 200 | 150 |
| Mongolia | 360 | 362 | na | 132 | 86 | 144 | na | na |
| Montenegro | 120 | 116 | 5 | 37 | 44 | 35 | $17^{*}$ | na |
| Poland | 540 | 533 | 79 | 172 | 175 | 186 | 580 | 395 |
| Romania | 540 | 541 | 92 | 193 | 192 | 156 | 315 | 285 |
| Russia | 1260 | 1256 | 57 | 734 | 207 | 315 | 601 | na |
| Serbia | 360 | 388 | 112 | 132 | 158 | 98 | $283 *$ | na |
| Kosovo under UNSCR 1244 | 270 | 270 | na | 98 | 63 | 109 | na | na |
| Slovak Republic | 270 | 275 | 33 | 86 | 97 | 92 | 220 | na |
| Slovenia | 270 | 276 | 57 | 102 | 101 | 73 | 223 | na |
| Tajikistan | 360 | 360 | 67 | 116 | 151 | 93 | 200 | na |
| Turkey | 1160 | 1152 | $425{ }^{\dagger}$ | 860 | 165 | 127 | 557 | na |
| Ukraine | 840 | 851 | 120 | 487 | 182 | 182 | 594 | na |
| Uzbekistan | 360 | 366 | 112 | 121 | 160 | 85 | 300 | na |
| TOTAL | 12280 | 11998 | 2361 | 5020 | 3794 | 3106 | 7942 | 1713 |

Notes:

* In 2005, Serbia and Montenegro were part of Yugoslavia and 300 interviews were completed on their territories.
${ }^{\dagger}$ Panel sample frame for Turkey refers to World Bank's Investment Climate Survey conducted in 2005 and there were 425 interviews conducted with panel establishments from that sample. Note that these cannot be matched to Turkey BEEPS 2005 establishments.


## 3 Survey and item non-response

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. BEEPS suffers from both problems and different strategies were used to address these issues.

Item non-response was addressed by two strategies:

- 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 (-8).
- Establishments with incomplete information were re-contacted in order to complete this information, whenever necessary. However, there were clear cases of low response.

Survey non-response was addressed by maximising efforts to contact establishments that were initially selected for interviews. Up to 4 attempts were made to contact an 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.

Details on rejection rates, eligibility rates, and item non-response are available at the strata level. This report summarized these numbers to alert researchers to these issues when using the data and when making inferences.

## 4 BEEPS Database

### 4.1 Database structure

The structure of the database reflects the fact that three different versions of the questionnaire were used. The basic questionnaire, the Core Module, includes all common questions asked to all establishments from all sectors (manufacturing, services and IT). The second expanded variation, the Manufacturing Questionnaire, is built upon the Core Module and adds some specific questions relevant to the sector. The third expanded variation, the Services Module, is also built upon the Core Module and adds to the core specific questions relevant to either retail or IT. Each variation of the questionnaire is identified by the index variable, $a 0$.

All variables are named using, first, the letter of each section and, second, the number of the variable within the section (i.e., al denotes section A, question 1). Variable names preceded by "eca" indicate either questions used in BEEPS 2005 or questions specific to BEEPS IV (Table 2 identifies these questions), and therefore, they may not be found in the implementation of Enterprise Surveys in other parts of the world. All other suffixed variables are global and are present in all country surveys over the world. All variables are numeric, with the exception of the variables ending with " $x$ ". The suffix " $x$ " denotes that the variable is alpha-numeric.

In Albania and Croatia, the World Bank conducted an Enterprise Survey in 2007. Some of the interviews in these two countries were completed by re-interviewing establishments interviewed for the Enterprise Survey 2007, asking them only additional questions. In particular, the responses to the following questions were taken directly from the Enterprise Survey 2007: a7, a8, a9, a10, a11, a14d, a14m, a14y, a14h, a14min, b1, b1x, b3, b2a, b2b, b2c, b2d, b2dx, b4, b5, $b 6, b 6 a, b 6 b, b 7, b 8, c 3, c 4, c 5, c 6, c 7, c 8, c 9 a, c 9 b, c 12, c 13, c 14, c 19, c 20, c 21, c 22 a, c 22 b$, $c 30 a, d 2, d 3 a, d 3 b, d 3 c, d 4, d 8, d 30 a, d 30 b$, e11, e30, g2, g3, g4, g30a, i1, i2a, i2b, i3, i4a, i4b, i30, k2a, k2b, k2c, k4, n5a, n5b, k5a, k5i, k5f, k6, k7, k8, k9, k11, k13, k14a, k14b, k14c, k14d, k14e, k15, k16, k17, k21, k30, h7a, j2, j3, j4, j5, j6a, j6, j7a, j7b, j10, j11, j12, j13, j14, j15, j30a, j30b, j30c, j30e, j30f, h30, l1, l2, l6, 18, l30a, l30b, m1a, m1d, n2a, n2b, n2c, n3, a15m, a15d, a15h, a15min, a15a1a, a15a2a, a15a3a, a15a1b, a15a2b, a15a3b, a17x, a18, a19h and a19min. These establishments are identified by the dummy variable es2007, which is equal to 1 if the establishment that participated in Enterprise Survey in 2007 was re-interviewed with additional questions only.

Table 2: Variable names preceded by "eca" - BEEPS 2005 and specific to BEEPS IV

| BEEPS 2005 questions | BEEPS IV-specific questions |
| :---: | :---: |
| ecaq5 (q5) | ecae30 |
| ecaq5x (q5x) | ecab7a |
| ecaq63a (q63a) | ecad8a |
| ecaq63b (q63b) | ecaol |
| ecaq63c (q63c) | ecao2 |
| ecaq64a (q64a) | ecao3 |
| ecaq64b (q64b) | ecao6 |
| ecaq64c (q64c) | ecao14 |
| ecaq53 (q53) | ecao15 |
| ecao4 (q58b) | ecao15x |
| ecao11 (q60a6) | ecaw1 |
| ecao12 (q60a3) | ecaw2 |
| ecao13 (q60a2) | ecaw3 |
| ecak5c (q45a19) | ecaw30 |
| ecaq31e (q31e) | ecap1 |
| ecaq39 (q39) | ecap2 |
| ecaq41a (q41a) | ecap3 |
| ecaq41b (q41b) | ecap4 |
| ecaq41c (q41c) | ecap5 |
| ecaq52a (q52a1) | ecap6 |
| ecaq52b (q52a2) | ecap7 |
|  | ecap30 |
|  | ecag9 |
|  | ecag10 |
|  | ecag11 |
|  | ecag 12 |
|  | ecag13 |
|  | ecag14 |
|  | ecak5b |
|  | ecaj1b |
|  | ecaj1c |
|  | ecaj5a |
|  | ecaj14a |
|  | ecaq69 |
|  | ecaq69x |

Note: Variable names in brackets are the equivalent variable names from BEEPS III.
There are two establishment identifiers, idstd and $i d$. The first is a global unique identifier. The second is a country unique identifier. The variables $a 2$ (sampling region), $a 6 a$ (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 and in country-specific information.

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 $a 4 a$ (sampling sector) and d1a2 (industry expressed as ISIC rev. 3.1 code). The former gives the establishment's classification into one of the chosen industrystrata, whereas the latter gives the actual establishment's industry classification (four digit code) in the sample frame.

All of the following variables contain information from the sampling frame and were defined with the sampling design. 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:

- $a 2$ is the variable describing sampling regions
- a6a: coded using the same standard for small, medium, and large establishments as defined above
- a4a: coded using ISIC codes for the chosen industries for stratification.
- id2005: contains the firm ids of the panel firms
- id2007: contains the firm ids of the panel firms interviewed in an Enterprise Survey by the World Bank in 2007 (available only in Albania, Bulgaria and Croatia)

The surveys were implemented following a two-stage procedure. In the first stage, a screener questionnaire was applied over the phone to determine eligibility and to make appointments; in the second stage, a face-to-face interview took place with the Manager/Owner/Director of each establishment. The variables $a 4 b$ and $a 6 b$ contain the industry and size of the establishment from the screener questionnaire. Variables $a 8$ to all contain additional information and were also collected in the screening phase.

There are additional variables for location (a3x), industry (dla2) and size ( $l 1, l 6$ and $l 8$ ) that reflect more accurately the reality of each establishment:

- Variable $a 3 x$ indicates the actual location of the establishment. There may be divergencies between the location in the sampling frame and the actual location, as the establishment may be listed in one place but the actual physical location is in another place.
- Variable dla2 indicates the actual ISIC code of the main output of the establishment as answered by the respondent. This is probably the most accurate variable to classify establishments by activity.
- Variables $l 1, l 6$ and $l 8$ 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.
- Variable $a 17 x$ gives interviewer comments, including problems that occurred during an interview and extraordinary circumstances which could influence results.

Note that certain variables (including $a 3 x$, actual location of the establishment) have been removed from the public version of the dataset for confidentiality reasons.

### 4.2 Weights

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). ${ }^{2}$

Special care was given to the correct computation of weights. Considering the varying quality of the sample frames, 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 business or was unattainable, education or government establishments, non-panel establishments with less than 5 employees, no reply after having called on different days of the week and at different business hours, out of order, no tone in the phone line, answering machine, fax line, wrong address or moved away and could not get the new reference). The information required for the adjustment was collected in the first stage of the implementation, during 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. Note that panel firms with less than 5 employees were also included in the eligible sample and special code zero was used in $a 6 a$ and $a 6 b$ (sample and screener size) to reflect those cases.

For some units it was impossible to determine eligibility because the contact was not successfully completed. Consequently, different assumptions as to their eligibility result in different universe cells' adjustments and in different sampling weights. Three sets of assumptions were considered:

1. 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.
2. 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.
3. Weak assumption: In addition to the establishments included in the first two points, all establishments for which it was not possible to finalize a contact are assumed to be eligible. This includes 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. The resulting weights are included in the variable wweak. Note that under the weak assumption only observed non-eligible units are excluded from universe projections.
Table 3 summarizes the eligibility criteria for each of the above three assumptions. For Albania, only one set of weights was calculated due to the different source of sample frame. They can be found in the variable weights_al. For Poland and Russia, two different sets of weights are available in the dataset since additional interviews were completed after the first set of interviews was completed and weights were calculated. The first set of weights is called wstrict, wmedian and wweak and was prepared by TNS. The second set of weights was calculated by the WB (Poland) and EBRD (Russia) taking into account additional completed interviews - the names of these variables are wstrict2, wmedian2, and wweak2.

Within each of these assumptions regarding eligibility a pair of weight sets was calculated. The first set of estimates calculated proportions using the raw sample count for each cell. However, the achieved sample numbers in many cells were small. Hence, those eligibility rates, and the adjusted universe cells projections, are subject to relatively large sampling variations. Therefore a second set of more robust estimates (collapsed weights) was also produced where needed.

[^1]Those estimates made use of the multiples of the relative eligibility rates for each industry, size and region. Those relative rates were based on much larger samples than the individual cells and thus produced values with smaller sampling variations. The dataset includes only these robust weights where applicable.

Note that for the purpose of the weights computations all panel firms were considered to be part of the current universe, although technically they are not randomly selected.

Table 3: Eligibility criteria

| Status Code | Eligibility Criteria |  |  |
| :--- | :--- | :--- | :--- |
|  | Strict | Weak | Median |
| 1. Eligible establishment (Correct name and address) | 1 | 1 | 1 |
| 2. Eligible establishment (Different name but same address - the new | 1 | 1 | 1 |
| firm/establishment bought the original firm/establishment) |  |  |  |
| 3. Eligible establishment (Different name but same address - the <br> firm/establishment changed its name) | 1 | 1 | 1 |
| 4. Eligible establishment (Wrong address - the firm/establishment has | 1 | 1 | 1 |
| changed address and the address could be found) |  |  |  |
| 16. Panel firm - now less than five employees | 1 | 1 | 1 |
| 5. The establishment has less than 5 permanent full time employees | 0 | 0 | 0 |
| 6. The firm discontinued businesses | 0 | 0 | 0 |
| 7. Not a business: Private household | 0 | 0 | 0 |
| 8. Ineligible activity: education, agriculture, finances, governments... | 0 | 0 | 0 |
| 91. No reply (after having called in different days of the week and in | 0 | 1 | 0 |
| different business hours) |  |  |  |
| 92. Line out of order | 0 | 1 | 0 |
| 93. No tone | 0 | 1 | 0 |
| 10. Answering machine | 0 | 1 | 1 |
| 11. Fax line - data line | 0 | 1 | 1 |
| 12. Wrong address/ moved away and could not get the new references | 0 | 1 | 0 |
| 13. Refuses to answer the screener | 0 | 1 | 1 |
| 14. In process (the establishment is being called/ is being contacted - | 0 | 0 | 0 |
| previous to ask the screener) |  |  |  |
| 151. Out of target - outside the covered regions, firm moved abroad | 0 | 0 | 0 |
| 152. Out of target - firm moved abroad | 0 | 0 | 0 |

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

### 4.2. 1 Appropriate use of the weights

As discussed above, 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.

However, there is some discussion as to the use of weights in regressions (see Deaton, 1997, p.67; Lohr, 1999, chapter 11, Cochran, 1977, p. 150). There is not strong large sample econometric argument in favour 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 BEEPS as in most cases the objective is not only to obtain model-
unbiased estimates but also design-unbiased estimates (see also Cochran, 1977, p. 200 who favours the use of weighted OLS for a common population coefficient). ${ }^{3}$

For 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. ${ }^{4}$ If the models are developed as structural relationships or behavioural models that may vary for different parts of the population, then there is no reason to use weights.

## 5 Bibliography

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4. Lohr, Sharon L. Sampling: Design and Analysis. $1^{\text {st }}$ edition. Duxbury Press, 1999. 512 pages.
5. Schaeffer, Richard L., William Mendenhall and Lyman Ott. Elementary Survey Sampling, $5^{\text {th }}$ edition. Duxbury Press, 1996.
[^2]
## Annex A Country-specific information on BEEPS survey

## A. 1 Albania

## A.1.1. Sampling structure and implementation

The Enterprise Survey conducted for the World Bank in Albania in 2007/8 showed that a suitable second frame did not exist for the country. Instead, the design returned to first principles, using a blocks enumeration methodology. Detailed maps of major cities were obtained from aerial mappings projected to a usable scale. They served as the basis of a multistage approach: Each city was divided into "blocks" and then the blocks were classified into strata defined by the predominant spatial use, using local knowledge. The classifications used for the blocks included industrial, commercial, commercial/residential (mixed), and residential coding.

Before the enumerated establishments could be selected it was first necessary to remove any that had been selected for use in the World Bank Enterprise Survey 2007. Examination of the remaining establishments and the panel establishments showed that they would not be sufficient to obtain the target numbers of interviews. Therefore it was agreed that the numbers could be augmented by re-interviewing establishments interviewed for the World Bank Enterprise Survey 2007. Thus the selected sample had three components:

- The BEEPS 2005 sample that met eligibility criteria was used in its entirety.
- Then available enumerated blocks were selected.
- Finally establishments for re-interview were selected to make up any expected deficits from the first two components.

Regional stratification was defined in five regions. These regions are Tirana, Durres, Elbasan, Fier, and Vlora.

Sectors included in the sample:

| Original Sectors | Manufactures: 15 to 37 <br> Services: 52 <br> Residual: $45,50,51,55,60$ to 64,72 |
| :--- | :--- |
| Added Sectors | No |

Blocks were selected and enumerated; building by building, floor by floor. Each separate unit was identified, classified as to use and in the case of business establishments further details collected as to employee numbers, activity, name, and phone number. This enumeration was then employed to project to universe totals by reference to the screening results and the number of blocks in each stratum. The establishments enumerated in those blocks were then used as the frame for the selection of the Enterprise Survey 2007 sample. Additional enumeration was conducted in 2008 and details of that enumeration were sent to TNS's statistical team in London to combine the two sets and then to select the establishments for interview for BEEPS. The percentage of confirmed non-eligible units as a proportion of the total number of contacts to complete the survey was $26 \%$ ( 122 out of 476 establishments).

Fresh sample frame

|  |  | Sector |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Region | Employees | Manufacturing | 52 | Residual | Grand Total |
| Tirana | 1 to 19 | 55 | 76 | 141 | 272 |
|  | 20 to 99 | 47 | 10 | 48 | 105 |
|  | 100+ | 13 | 3 | 8 | 24 |
| Tirana Total |  | 115 | 89 | 197 | 401 |
| Durres | 1 to 19 | 4 | 4 | 13 | 21 |
|  | 20 to 99 | 7 | 0 | 8 | 15 |
|  | 100+ | 2 | 0 | 0 | 2 |
| Durres Total |  | 13 | 4 | 21 | 38 |
| Elbasan | 1 to 19 | 4 | 1 | 6 | 11 |
|  | 20 to 99 | 3 | 1 | 3 | 7 |
|  | 100+ | 0 | 0 | 0 | 0 |
| Elbasan Total |  | 7 | 2 | 9 | 18 |
| Fier | 1 to 19 | 13 | 1 | 3 | 17 |
|  | 20 to 99 | 4 | 0 | 1 | 5 |
|  | 100+ | 0 | 0 | 0 | 0 |
| Fier Total |  | 17 | 1 | 4 | 22 |
| Vlora | 1 to 19 | 10 | 5 | 10 | 25 |
|  | 20 to 99 | 7 | 1 | 1 | 9 |
|  | 100+ | 3 | 0 | 0 | 3 |
| Vlora Total |  | 20 | 6 | 11 | 37 |
| Grand T |  | 172 | 102 | 242 | 516 |

Sources: World Bank Enterprise Survey 2007 and Enumeration in 2008

Panel sample frame

|  |  | Sector |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Region | Employees | Manufacturing | 52 | Residual | Grand Total |
| Tirana | <5 |  | 1 | 1 | 2 |
|  | 5 to 19 | 8 | 1 | 17 | 26 |
|  | 20 to 99 | 10 | 1 | 12 | 23 |
|  | 100+ | 4 |  | 8 | 12 |
| Tirana T |  | 22 | 3 | 38 | 63 |
| Durres | <5 |  |  | 1 | 1 |
|  | 5 to 19 | 4 |  | 2 | 6 |
|  | 20 to 99 | 6 |  | 2 | 8 |
|  | 100+ | 1 |  | 1 | 2 |
| Durres |  | 11 | 0 | 6 | 17 |
|  | <5 |  |  |  | 0 |
| Elbasan | 5 to 19 | 1 | 1 | 6 | 8 |
|  | 20 to 99 | 2 |  | 3 | 5 |
|  | 100+ | 2 |  |  | 2 |
| Elbasan |  | 5 | 1 | 9 | 15 |
|  | <5 |  |  |  | 0 |
| Fier | 5 to 19 | 3 |  | 4 | 7 |
|  | 20 to 99 | 2 |  |  | 2 |
|  | 100+ | 1 |  |  | 1 |
| Fier Tot |  | 6 | 0 | 4 | 10 |
|  | <5 |  |  | 1 | 1 |
| Vlora | 5 to 19 | 2 | 1 | 1 | 4 |
|  | 20 to 99 | 2 |  |  | 2 |
|  | 100+ |  |  |  | 0 |
| Vlora Total |  | 4 | 1 | 2 | 7 |
| Grand Total |  | 48 | 5 | 59 | 112 |

Source: BEEPS 2005

Enterprise survey 2007 sample frame

|  |  | Sector |  |  |  |
| :--- | ---: | :--- | ---: | ---: | ---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual | Grand Total |
| Tirana | 5 to 19 | 36 | 40 | 48 | 124 |
|  | 20 to 99 | 26 | 6 | 31 | 63 |
|  | $100+$ | 13 | 2 | 4 | 19 |
| Tirana Total |  | 75 | 48 | 83 | 206 |
| Durres | 5 to 19 | 2 |  | 7 | 9 |
|  | 20 to 99 | 7 | 4 | 11 |  |
|  | $100+$ | 2 |  |  | 2 |
| Durres Total |  | 11 | 0 | 11 | 22 |
|  | 5 to 19 | 2 | 2 | 7 | 11 |
| Elbasan | 20 to 99 | 5 |  | 2 | 7 |
|  | $100+$ | 7 | 2 | 9 | 0 |
| Elbasan Total |  | 2 |  | 3 | 18 |
|  | 5 to 19 |  |  |  | 5 |
| Fier | 20 to 99 | $100+$ | 2 | 0 | 3 |

Source: Enterprise Survey 2007

## Original sample design

|  |  | Sector |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Region | Employees | Manufacturing | 52 | Residual | Grand Total |
| Tirana | 1 to 19 | 22 | 42 | 23 | 87 |
|  | 20 to 99 | 21 | 6 | 23 | 50 |
|  | 100+ | 7 | 2 | 4 | 13 |
| Tirana Total |  | 50 | 50 | 50 | 150 |
| Durres | 1 to 19 | 2 | 2 | 6 | 10 |
|  | 20 to 99 | 3 | 0 | 4 | 7 |
|  | 100+ | 1 | 0 | 0 | 1 |
| Durres Total |  | 6 | 2 | 10 | 18 |
| Elbasan | 1 to 19 | 2 | 0 | 3 | 5 |
|  | 20 to 99 | 1 | 0 | 1 | 2 |
|  |  | 0 | 0 | 0 | 0 |
| Elbasan Total |  | 3 | 0 | 4 | 7 |
| Fier | 1 to 19 | 6 | 0 | 1 | 7 |
|  | 20 to 99 | 2 | 0 | 0 | 2 |
|  | 100+ | 0 | 0 | 0 | 0 |
| Fier Total |  | 8 | 0 | 1 | 9 |
| Vlora | 1 to 19 | 4 | 3 | 5 | 12 |
|  | 20 to 99 | 3 | 0 | 0 | 3 |
|  | 100+ | 1 | 0 | 0 | 1 |
| Vlora Total |  | 8 | 3 | 5 | 16 |
| Grand Total |  | 75 | 55 | 70 | 200 |

## A.1.2. Status codes

## TOTAL

|  | Complete interviews (Total) | 175 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 20 |
|  | Elegible in process | 0 |
|  | Refusals | 132 |
|  | Out of target | 39 |
|  | Impossible to contact | 77 |
|  | Ineligible - coop. | 6 |
|  | Refusal to the Screener | 3 |
|  | Total | 452 |
|  | ELIGIBLES |  |
| $\frac{0}{0} \frac{0}{\sqrt[0]{\mid 1}}$ | 1.Elegible establishment (Correct name and address) | 327 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 0 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 0 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 0 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\frac{0}{0}$ | 5. The establishment has less than 5 permanent full time employees | 13 |
|  | 6. The firm discontinued businesses | 9 |
|  | 7. Not a business: private household | 0 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 17 |
|  | 91. No reply (after having called in different days of the week and in different business hours) | 69 |
|  | 92. Line out of order | 0 |
|  | 93. No tone | 3 |
|  | 10. Answering machine | 2 |
|  | 11. Fax line - data line | 0 |
|  | 12. Wrong address/ moved away and could not get the new references | 3 |
|  | 13. Refuses to answer the screener | 3 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 24 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 1 |
|  | 152. Out of target - firm moved abroad | 1 |
|  | Total | 476 |

PANEL

|  | Complete interviews (Total) | 17 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 0 |
|  | Elegible in process | 0 |
|  | Refusals | 7 |
|  | Out of target | 12 |
|  | Impossible to contact | 43 |
|  | Ineligible - coop. | 6 |
|  | Refusal to the Screener | 3 |
|  | Total | 88 |
|  | ELIGIBLES |  |
| $\frac{0}{0}$ | 1.Elegible establishment (Correct name and address) | 24 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 0 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 0 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 0 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{0}{0} \\ & \frac{0}{0} \\ & \hline \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 0 |
|  | 6. The firm discontinued businesses | 6 |
|  | 7. Not a business: private household | 0 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 6 |
| Unobtainable | 91. No reply (after having called in different days of the week and in different business hours) | 37 |
|  | 92. Line out of order | 0 |
|  | 93. No tone | 3 |
|  | 10. Answering machine | 0 |
|  | 11. Fax line - data line | 0 |
|  | 12. Wrong address/ moved away and could not get the new references | 3 |
|  | 13. Refuses to answer the screener | 3 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 9 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 1 |
|  | 152. Out of target - firm moved abroad | 5 |
|  | Total | 97 |

ENTERPRISE SURVEY 2007

|  | Complete interviews (Total) | 121 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 0 |
|  | Elegible in process | 0 |
|  | Refusals | 47 |
|  | Out of target | 2 |
|  | Impossible to contact | 18 |
|  | Ineligible - coop. | 0 |
|  | Refusal to the Screener | 0 |
|  | Total | 187 |
|  | ELIGIBLES |  |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{0}{00} \\ & \frac{10}{10} \end{aligned}$ | 1.Elegible establishment (Correct name and address) | 168 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 0 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 0 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 0 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\begin{aligned} & 0 \\ & \frac{0}{0} \\ & \frac{0}{0} \\ & \frac{0}{\Xi} \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 0 |
|  | 6. The firm discontinued businesses | 2 |
|  | 7. Not a business: private household | 0 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 0 |
|  | 91. No reply (after having called in different days of the week and in different business hours) | 16 |
|  | 92. Line out of order | 0 |
|  | 93. No tone | 0 |
|  | 10. Answering machine | 1 |
|  | 11. Fax line - data line | 0 |
|  | 12. Wrong address/ moved away and could not get the new references | 0 |
|  | 13. Refuses to answer the screener | 0 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 13 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 0 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 200 |

## FRESH

|  | Complete interviews (Total) | 37 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 20 |
|  | Elegible in process | 0 |
|  | Refusals | 78 |
|  | Out of target | 25 |
|  | Impossible to contact | 17 |
|  | Ineligible - coop. | 0 |
|  | Refusal to the Screener | 0 |
|  | Total | 177 |
|  | ELIGIBLES |  |
|  | 1.Elegible establishment (Correct name and address) | 135 |
| $\bigcirc$ | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 0 |
| $\begin{aligned} & 00 \\ & 0.00 \end{aligned}$ | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 0 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 0 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\bigcirc$ | 5. The establishment has less than 5 permanent full time employees | 13 |
| ? 0 | 6. The firm discontinued businesses | 1 |
| - $\overline{0}$ | 7. Not a business: private household | 0 |
| - | 8. Ineligible activity: education, agriculture, finances, governments... | 11 |
|  | 91. No reply (after having called in different days of the week and in different business hours) | 16 |
| - | 92. Line out of order | 0 |
| .ت్ర | 93. No tone | 0 |
| ० | 10. Answering machine | 1 |
| $\stackrel{\square}{\square}$ | 11. Fax line - data line | 0 |
|  | 12. Wrong address/ moved away and could not get the new references | 0 |
|  | 13. Refuses to answer the screener | 0 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 2 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 0 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 179 |

## A.1.3. Cell Weights and Universe estimates

## Individual cell weights

|  |  | Sector |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Region | Employees | Manufacturing | 52 | Residual |
| Tirana | 1 to 19 | 11 | 7 | 10 |
|  | 20 to 99 | 6 | 13 | 6 |
|  | 100+ | 19 |  | 6 |
| Durres | 1 to 19 | 2 |  | 11 |
|  | 20 to 99 | 17 |  | 4 |
|  | 100+ | 4 |  |  |
| Elbasan | 1 to 19 | 11 |  | 2 |
|  | 20 to 99 |  |  | 7 |
|  | 100+ |  |  |  |
| Fier | 1 to 19 | 21 |  |  |
|  | 20 to 99 | 5 |  |  |
|  | 100+ |  |  |  |
| Vlora | 1 to 19 | 13 | 20 | 14 |
|  | 20 to 99 | 4 |  |  |
|  | 100+ | 4 |  |  |

As blocks enumeration was used in Albania the calculation of universe estimates and weights made use of data from the enumeration rather than from the BEEPS response codes used for other countries. The enumerated totals were adjusted to take account of the establishments found to be ineligible when interviews were attempted. Then ratios of the total numbers of blocks of each type to the totals enumerated were formed. Those ratios were then applied to the eligible establishments enumerated to provide universe estimates.

The overall estimate of the number of establishments in Albania based on the block ratios is 1513 establishments.

## A.1.4. Survey and item non-response

The number of contacted establishments per realized interview was 2.58 . 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.

## A.1.5. Local agency team involved in the study and its comments on the implementation of the BEEPS

Local agency team involved in the survey

| Local agency | Name: IDRA Research \& Consulting <br> Country: Albania <br> Membership of international organisation: ESOMAR <br> Activities since: 2000 |
| :--- | :--- |
| Name of Project Manager | Florian Babameto |
| Name and position of other key <br> persons of the project | Fieldwork coordinator |
| Enumerators involved | Enumerators: 25 <br> Recruiters: Enumerators were in charge of the recruitment as well |
| Other staff involved | Editing: 1 <br> Data entry: 1 <br> Data processing: 1 |

## Sample Frame

| Characteristic of sample frame used | N/A |
| :--- | :--- |
| Source | BEEPS 2005 Panel, 2008 Block Enumeration, 2007 Enterprise Survey list of <br> establishments. |
| Year of publication | $2008-2009$ |
| Comments on the quality of the <br> sample frame | There were several changes in the contact information for the BEEPS 2005 <br> panel which made the process of contacting these specific companies very <br> difficult and in many cases the establishments could not be found. |
| Year and organisation that <br> conducted the last economic census | N/A |

## Sample

Comments/problems on sectors and regions selected in the sample

| Comments on the response rate |
| :--- |
| Comments on the sample design |
|  |

On sectors: Problematic finding the businesses in the retail sector. Most of businesses in the retail sector that operate in Albania have less than 5 employees. It was quite challenging finding eligible companies. Especially for this sector we used more than 3 contacts to get the interviews completed. As in the Enterprise Survey 2007, this was on of the main causes for not being able to reach the quotas for this sector (RETAIL). On regions: No major problems
Response rate from the Enterprise Survey 2007 contacts was quite good, above $50 \%$.
All sample frames used for this survey, except the BEEPS 2005 panel, were very good because the contact details (phone numbers, addresses) were accurate and up to date. They were built from the blocks enumerations conducted in 2007 and 2008.

Fieldwork

| Date of fieldwork | October 2008 - February 2009 |
| :--- | :--- |
| Country | Albania |
| Number of interviews | Manufacturing: 65 <br> Services (sector 52): 47 <br> Core: 63 |
| Problems found during fieldwork | The major problem was fixing an appointment with the target respondents. <br> We contacted firms more than 4 times in order to complete the interviews. |
| Other observations | No. |

## Questionnaires

| Problems for the understanding of <br> questions (write question number) | No major problems |
| :--- | :--- |
| Problems found in the navigability <br> of questionnaires (for example, skip <br> patterns) | No major problems |
| Comments on questionnaire length | No major problems |
| Suggestions or other comments on <br> the questionnaires | No major problems |

Database

| Data entry program chosen | PERTS |
| :--- | :--- |
| Comments on the data entry <br> program | None |
| Comments on the data cleaning | N/A |

Country situation

| General aspects of economic, <br> political or social situation of the <br> country that could affect the results <br> of the survey | Businesses in Albania usually operate with two balance sheets. They operate <br> in this way in order to evade taxes. They keep one balance sheet for the tax <br> purposes (the report they deliver to the tax office) and the other one for <br> themselves. So when it comes to questions regarding businesses turnover, <br> profit, expenditures, employees, etc, businesses sometimes provide the real <br> figures and sometimes they don't. As decided with TNS Opinion, we <br> recorded the answers as provided by the respondent. |
| :--- | :--- |
| Relevant country events that <br> occurred during fieldwork | None |
| Other aspects | None |

## A. 2 Armenia

## A.2.1. Sampling structure and implementation

Two sample frames were used. The first was supplied by the World Bank and EBRD and consisted of enterprises interviewed in BEEPS 2005. The World Bank and EBRD required that attempts should be made to re-interview establishments responding to the BEEPS 2005 survey where they were within the 3 selected geographical regions and met eligibility criteria. That sample is referred to as the Panel. The second sample frame consisted of files from the Armenian equivalent of "Yellow Pages", as it was not possible to obtain an official frame for the country. The "Yellow Pages" files were considered the most reliable that could be obtained. That frame was sent to the TNS statistical team in London to select the establishments for interview.

Regional stratification was defined in four regions. These regions are North, South East, South West, and Yerevan. Table below shows the grouping of official administrative regions into these four regions.

| Official administrative regions | Grouping used for stratification purposes in BEEPS IV |
| :---: | :---: |
| Yerevan | Yerevan |
| Lori | North |
| Shirak |  |
| Tavush |  |
| Aragatsotn | South West |
| Armavir |  |
| Kotayk |  |
| Ararat | South East |
| Gegharkunik |  |
| Syunik |  |
| Vayots Dzor |  |


| Original Sectors | Manufactures: 15 to 37 <br> Services: 52 <br> Residual: $45,50,51,55,60$ to 64,72 |
| :--- | :--- |
| Added Sectors | No |

The quality of the frame was assessed at the onset of the project. The frame proved to be useful though it showed positive rates of non-eligibility, repetition, non-existent units, etc. These problems are typical of establishment surveys, but given the impact these inaccuracies may have on the results, adjustments were needed when computing the appropriate weights for individual
observations. The percentage of confirmed non-eligible units as a proportion of the total number of contacts to complete the survey was $37 \%$ ( 328 out of 895 establishments).

## Fresh sample frame



Source: Yellow Pages of Armenia

Panel sample frame


Source: BEEPS 2005

## Original sample design

|  |  | Sector |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Region | Employees | Manufacturing | 52 | Residual | Grand Total |
| Yerevan | 5 to 19 | 26 | 69 | 25 | 120 |
|  | 16 to 50 | 17 | 30 | 24 | 71 |
|  | 20 to 99 |  | 1 | 2 | 3 |
|  | 51 to 250 | 17 | 9 | 14 | 40 |
|  | 100+ | 9 | 1 | 6 | 16 |
| Yerevan Total |  | 69 | 110 | 71 | 250 |
| South East | 5 to 19 | 11 | 7 | 13 | 31 |
|  | 16 to 50 | 2 |  | 4 | 6 |
|  | 20 to 99 | 6 | 1 | 6 | 13 |
|  | 51 to 250 | 2 |  | 2 | 4 |
|  | 100+ | 5 |  | 1 | 6 |
| South East Total |  | 26 | 8 | 26 | 60 |
| South West | 5 to 19 | 2 |  | 5 | 7 |
|  | 16 to 50 | 5 | 1 | 5 | 11 |
|  | 20 to 99 |  |  |  | 0 |
|  | 51 to 250 | 5 |  | 2 | 7 |
|  | 100+ | 5 |  |  | 5 |
| South West Total |  | 17 | 1 | 12 | 30 |
| North | 5 to 19 | 1 |  | 6 | 7 |
|  | 16 to 50 | 3 | 1 | 3 | 7 |
|  | 20 to 99 |  |  | 1 | 1 |
|  | 51 to 250 | 3 |  | 1 | 4 |
|  | 100+ | 1 |  |  | 1 |
| North Total |  | 8 | 1 | 11 | 20 |
| Grand Total |  | 120 | 120 | 120 | 360 |

A.2.2. Status codes

## TOTAL

|  | Complete interviews (Total) | 374 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 0 |
|  | Elegible in process | 0 |
|  | Refusals | 19 |
|  | Out of target | 134 |
|  | Impossible to contact | 109 |
|  | Ineligible - coop. | 85 |
|  | Refusal to the Screener | 174 |
|  | Total | 895 |
|  | ELIGIBLES |  |
| $\frac{0}{0}$ | 1.Elegible establishment (Correct name and address) | 365 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 6 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 6 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 13 |
|  | 16. Panel firm - now less than five employees | 3 |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{0.0}{0} \\ & \frac{1}{0} \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 30 |
|  | 6. The firm discontinued businesses | 51 |
|  | 7. Not a business: private household | 19 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 34 |
|  | 91. No reply (after having called in different days of the week and in different business hours) | 48 |
|  | 92. Line out of order | 32 |
|  | 93. No tone | 5 |
|  | 10. Answering machine | 4 |
|  | 11. Fax line - data line | 5 |
|  | 12. Wrong address/ moved away and could not get the new references | 15 |
|  | 13. Refuses to answer the screener | 174 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 2 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 85 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 897 |

PANEL

| Complete interviews (Total) | 99 |
| :--- | :---: |
| Incomplete interviews | 0 |
| Elegible in process | 0 |
| Refusals | 1 |
| Out of target | 54 |
| Impossible to contact | 49 |
| Ineligible - coop. | 5 |
| Refusal to the Screener | 23 |
| Total | 231 |


|  | ELIGIBLES |  |
| :---: | :---: | :---: |
| $\frac{0}{0} \frac{0}{00}$ | 1.Elegible establishment (Correct name and address) | 83 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 4 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 5 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 5 |
|  | 16. Panel firm - now less than five employees | 3 |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{00}{0} \\ & \frac{0}{0} \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 0 |
|  | 6. The firm discontinued businesses | 26 |
|  | 7. Not a business: private household | 16 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 12 |
| $\begin{aligned} & 0 \\ & 0 \\ & 0 \\ & \text { O } \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ | 91. No reply (after having called in different days of the week and in different business hours) | 15 |
|  | 92. Line out of order | 22 |
|  | 93. No tone | 3 |
|  | 10. Answering machine | 1 |
|  | 11. Fax line - data line | 0 |
|  | 12. Wrong address/ moved away and could not get the new references | 8 |
|  | 13. Refuses to answer the screener | 23 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 0 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 5 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 231 |

## FRESH

|  | Complete interviews (Total) | 275 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 0 |
|  | Elegible in process | 0 |
|  | Refusals | 18 |
|  | Out of target | 80 |
|  | Impossible to contact | 60 |
|  | Ineligible - coop. | 80 |
|  | Refusal to the Screener | 151 |
|  | Total | 664 |
|  | ELIGIBLES |  |
| $\frac{0}{0}$ | 1.Elegible establishment (Correct name and address) | 282 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 2 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 1 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 8 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\begin{aligned} & 0 \\ & 0.0 \\ & : 0 \\ & \stackrel{0}{0} \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 30 |
|  | 6. The firm discontinued businesses | 25 |
|  | 7. Not a business: private household | 3 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 22 |
|  | 91. No reply (after having called in different days of the week and in different business hours) | 33 |
|  | 92. Line out of order | 10 |
|  | 93. No tone | 2 |
|  | 10. Answering machine | 3 |
|  | 11. Fax line - data line | 5 |
|  | 12. Wrong address/ moved away and could not get the new references | 7 |
|  | 13. Refuses to answer the screener | 151 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 2 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 80 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 666 |

## A.2.3. Cell weights and universe estimates

## Individual cell weights (strict)

|  |  | Sector |  |  |
| :--- | ---: | :--- | ---: | ---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |
| Yerevan | 5 to 19 | 2 | 2 | 8 |
|  | 16 to 50 | 11 | 1 | 4 |
|  | 20 to 99 | 1 | 1 | 4 |
|  | 51 to 250 | 2 | 2 | 2 |
|  | $100+$ | 1 | 1 | 1 |
| South East | 5 to 19 | 1 | 1 | 2 |
|  | 16 to 50 | 1 |  | 1 |
|  | 20 to 99 | 1 |  | 2 |
|  | 51 to 250 | 1 |  | 1 |
|  | $100+$ | 3 |  |  |
| South West | 5 to 19 | 1 | 1 | 2 |
|  | 16 to 50 |  |  | 12 |
|  | 20 to 99 | 1 |  | 1 |
|  | 51 to 250 | $100+$ | 2 |  |
| North | 5 to 19 | 1 | 1 | 2 |
|  | 16 to 50 |  |  | 7 |
|  | 20 to 99 | 1 | 1 | 1 |
|  | 51 to 250 | $100+$ | 1 |  |

## Individual cell weights (median)

|  |  | Sector |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Region | Employees | Manufacturing | 52 | Residual |
| Yerevan | 5 to 19 | 3 | 3 | 11 |
|  | 16 to 50 | 18 | 2 | 6 |
|  | 20 to 99 | 1 | 1 | 5 |
|  | 51 to 250 | 4 | 3 | 3 |
|  | 100+ | 2 | 1 | 2 |
| South East | 5 to 19 | 1 | 2 | 2 |
|  | 16 to 50 | 1 |  | 1 |
|  | 20 to 99 | 1 |  | 2 |
|  | 51 to 250 | 1 |  | 1 |
|  | 100+ | 3 |  |  |
| South West | 5 to 19 | 1 | 1 | 2 |
|  | 16 to 50 |  |  | 13 |
|  | 20 to 99 | 1 |  | 1 |
|  | 51 to 250 |  |  | 6 |
|  | 100+ | 3 |  |  |
| North | 5 to 19 | 1 | 1 | 2 |
|  | 16 to 50 |  |  | 8 |
|  | 20 to 99 | 1 | 1 | 1 |
|  | 51 to 250 |  |  |  |
|  | 100+ | 1 |  | 1 |

## Individual cell weights (weak)

|  |  | Sector |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Region | Employees | Manufacturing | 52 | Residual |
| Yerevan | 5 to 19 | 4 | 3 | 13 |
|  | 16 to 50 | 23 | 2 | 6 |
|  | 20 to 99 | 1 | 1 | 6 |
|  | 51 to 250 | 5 | 3 | 3 |
|  | 100+ | 2 | 1 | 2 |
| South East | 5 to 19 | 2 | 2 | 3 |
|  | 16 to 50 | 1 |  | 1 |
|  | 20 to 99 | 2 |  | 2 |
|  | 51 to 250 | 2 |  | 1 |
|  | 100+ | 4 |  |  |
| South West | 5 to 19 | 2 | 1 | 2 |
|  | 16 to 50 |  |  | 15 |
|  | 20 to 99 | 1 |  | 1 |
|  | 51 to 250 |  |  | 7 |
|  | 100+ | 3 |  |  |
| North | 5 to 19 | 1 | 1 | 3 |
|  | 16 to 50 |  |  | 9 |
|  | $20 \text { to } 99$ | 1 | 1 | 1 |
|  | 51 to 250 |  |  |  |
|  | 100+ | 2 |  | 1 |

## Armenia universe estimates

| Strict individual cell weights | Median individual cell weights | Weak individual cell weights |
| :---: | :---: | :---: |
| 835 | 1221 | 1411 |

## A.2.4. Survey and item non-response

The number of contacted establishments per realized interview was 2.40 . 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.

## A.2.5. Local agency team involved in the study and its comments on the implementation of the BEEPS

## Local agency team involved in the survey

Local agency
Name: Marketing Communications LLC
Country: Armenia
Membership of international organisation: N/A

| Activities since: 2006 | Gayane Bakhshyan |
| :--- | :--- |
| Name of Project Manager | Recruiter and Project Assistant |
| Name and position of other key <br> persons of the project | Enumerators: 28 <br> Recruiters: 10 <br> In Yerevan, the capital city, recruitment was mostly done by a team of <br> recruiters. The enumerators did the appointments for some cases only. In the <br> regions, the regional supervisors were in charge of the recruitment. |
| Enumerators involved | Fieldwork coordinators: 16 <br> Editing: 24 <br> Data entry: data entry was done at the regional coordination centre in <br> Georgia, in charge of GORBI and not at the local office in Armenia. |
| Other staff involved |  |

## Sample Frame

| Characteristic of sample frame used | N/A |
| :--- | :--- |
| Source | Yellow Pages <br> State Statistical Department (universe figures) |
| Year of publication | $2007-2008$ |
| Comments on the quality of the <br> sample frame | None |
| Year and organisation that <br> conducted the last economic census | 2008, State Statistical Department |
| Other sources for companies <br> statistics | None |

## Sample

| Comments/problems on sectors and <br> regions selected in the sample | On sectors: No specific issues noticed <br> On regions: No specific issues noticed |
| :--- | :--- |
| Comments on the response rate | Most refusals were caused because the respondents distrusted the purpose of <br> the survey (and feared it was for the Government), diffidence, lack of time <br> and the target respondent being unreachable - away from the country, for <br> example- for the whole fieldwork period. |
| Comments on the sample design | No special comments |

## Fieldwork

| Date of fieldwork | October 2008 - February 2009 |
| :--- | :--- |
| Country | Armenia |
| Number of interviews | Manufacturing: 113 <br> Services (sector 52): 154 <br> Core: 107 |
| Problems found during fieldwork | The problem was that at first we were counting our target according to the <br> screener information |
| Other observations | Majority of the respondents who answered hard data questions didn't tell the <br> numbers from their annual financial books |

## Questionnaires

| Problems for the understanding of <br> questions (write question number) | No comments |
| :--- | :--- |
| Problems found in the navigability <br> of questionnaires (for example, skip <br> patterns) | No comments |
| Comments on questionnaire length | No comments |
| Suggestions or other comments on <br> the questionnaires | No comments |

Database

| Data entry program chosen | CONFIRMIT |
| :--- | :--- |
| Comments on the data entry <br> program | None |
| Comments on the data cleaning | TNS opinion was in charge of preparing data validation reports, which were <br> used as the basis for the data cleaning. |

## Country situation

General aspects of economic, political or social situation of the country that could affect the results of the survey

Relevant country events that occurred during fieldwork Other aspects

Fieldwork in Armenia coincided with the post-presidential elections period, which could have influenced in respondent's answers. The second aspect is that fieldwork was launched at the end of year when the establishments were busy finalising their financial books. The third aspect was the economic crisis, leading many organizations in Armenia to bankruptcy. New Year holidays, spreading from December to January. None

## A. 3 Azerbaijan

## A.3.1. Sampling structure and implementation

Two sample frames were used. The first was supplied by the World Bank and EBRD and consisted of enterprises interviewed in BEEPS 2005. The World Bank and EBRD required that attempts should be made to re-interview establishments responding to the BEEPS 2005 survey where they were within the selected geographical regions and met eligibility criteria. That sample is referred to as the Panel. The second frame for Azerbaijan was obtained from the State Statistical Committee of the Republic of Azerbaijan (AZSTAT). That frame was sent to the statistical team in London to select the establishments for interview.

The quality of the frame was assessed at the onset of the project. The frame proved to be useful though it showed positive rates of non-eligibility, repetition, non-existent units, etc. These problems are typical of establishment surveys, but given the impact these inaccuracies may have on the results, adjustments were needed when computing the appropriate weights for individual observations. The percentage of confirmed non-eligible units as a proportion of the total number of contacts to complete the survey was $49 \%$ ( 615 out of 1265 establishments).

Regional stratification was defined in four regions. These regions are "Baku \& Apsheronski", "Giandja-Kazakhski \& Sheki-Zakatalski", "Lenkoranski \& Kuba-Khachmazski", and "Aranski \& Gorno-Shirvanski". Table below shows the grouping of official administrative regions into these four regions.

| Official economic regions | Grouping used for stratification <br> purposes in BEEPS IV |
| :--- | :--- |
| Baku \& Apsheronski | Baku \& Apsheronski |
| Aranski | Aranski \& Gorno-Shirvanski |
| Gorno-Shirvanski (Daghlig Shirvan) | Giandja-Kazakhski \& Sheki- |
| Giandja-Kazakhski (Ganja-Gazakh) | Zakatalski |
| Sheki-Zakatalski (Shaki-Zaqatala) | Lenkoranski \& Kuba-Khachmazski |
| Lenkoranski | Not covered - landlocked exclave |
| Kuba-Khachmazski (Guba-Khachmaz) | Not covered - disputed region |
| Autonomous Republic of Nakhchivan | Not covered - controlled by Nagorno <br> Karabakh |
| Nagorno Karabakh |  |
| Kalbajar-Lachin |  |

Sectors included in the sample

| Original Sectors | Manufactures: 15 to 37 <br> Services: 52 <br> Residual: $45,50,51,55,60$ to 64,72 |
| :--- | :--- |
| Added Sectors | No |

Fresh sample frame

|  |  | Sector |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Region | Employees | Manufacturing | 52 | Residual | Grand Total |
| Baku \& Apsheronski | 5-19 | 458 | 235 | 1090 | 1783 |
|  | 20-99 | 251 | 51 | 471 | 773 |
|  | 100+ | 102 | 8 | 180 | 290 |
| Baku \& Apsheronski Total |  | 811 | 294 | 1741 | 2846 |
| Giandja-Kazakhski \& ShekiZakatalski | 5-19 | 87 | 63 | 204 | 354 |
|  | 20-99 | 57 | 12 | 111 | 180 |
|  | 100+ | 14 | 1 | 39 | 54 |
| Giandja-Kazakhski \& Sheki-Zakatalski Total |  | 158 | 76 | 354 | 588 |
| Lenkoranski \& KubaKhachmazski | 5-19 | 36 | 31 | 103 | 170 |
|  | 20-99 | 17 | 4 | 49 | 70 |
|  | 100+ | 6 |  | 11 | 17 |
| Lenkoranski \& Kuba-Khachmazski Total |  | 59 | 35 | 163 | 257 |
| Aranski \& Gorno-Shirvanski | 5-19 | 63 | 52 | 290 | 405 |
|  | 20-99 | 51 | 7 | 149 | 207 |
|  | 100+ | 17 | 2 | 33 | 52 |
| Aranski \& Gorno-Shirvanski Total |  | 131 | 61 | 472 | 664 |
| Grand Total |  | 1159 | 466 | 2730 | 4355 |

Source: State Statistical Committee of the Republic of Azerbaijan (AZSTAT)

## Panel sample frame



Source: BEEPS 2005.

Original sample design

|  |  | Sector |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Region | Employees | Manufacturing | 52 | Residual | Grand Total |
| Baku \& Apsheronski | 5-19 | 18 | 39 | 19 | 76 |
|  | 20-99 | 20 | 25 | 17 | 62 |
|  | 100+ | 27 | 8 | 25 | 60 |
| Baku \& Apsheronski Total |  | 65 | 72 | 61 | 198 |
| Giandja-Kazakhski \& ShekiZakatalski | 5-19 | 10 | 13 | 6 | 29 |
|  | 20-99 | 8 | 6 | 9 | 23 |
|  | 100+ | 5 | 1 | 7 | 13 |
| Giandja-Kazakhski \& Sheki-Zakatalski Total |  | 23 | 20 | 22 | 65 |
| Lenkoranski \& KubaKhachmazski | 5-19 | 6 | 6 | 5 | 17 |
|  | 20-99 | 4 | 4 | 7 | 15 |
|  | 100+ | 3 |  | 3 | 6 |
| Lenkoranski \& Kuba-Khachmazski Total |  | 13 | 10 | 15 | 38 |
| Aranski \& Gorno-Shirvanski | 5-19 | 8 | 11 | 8 | 27 |
|  | 20-99 | 6 | 5 | 9 | 20 |
|  | 100+ | 5 | 2 | 5 | 12 |
| Aranski \& Gorno-Shirvanski Total |  | 19 | 18 | 22 | 59 |
| Grand Total |  | 120 | 120 | 120 | 360 |

## A.3.2. Status codes

## TOTAL

| Complete interviews (Total) | 380 |
| :--- | :---: |
| Incomplete interviews | 0 |
| Elegible in process | 0 |
| Refusals | 0 |
| Out of target | 414 |
| Impossible to contact | 199 |
| Ineligible - coop. | 2 |
| Refusal to the Screener | 270 |
| Total | 1265 |


|  | ELIGIBLES |  |
| :---: | :---: | :---: |
| $\frac{0}{00}$ | 1.Elegible establishment (Correct name and address) | 215 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 64 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 29 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 72 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\frac{0}{0.0}$ | 5. The establishment has less than 5 permanent full time employees | 0 |
|  | 6. The firm discontinued businesses | 105 |
|  | 7. Not a business: private household | 32 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 277 |
|  | 91. No reply (after having called in different days of the week and in different business hours) | 133 |
|  | 92. Line out of order | 2 |
|  | 93. No tone | 38 |
|  | 10. Answering machine | 0 |
|  | 11. Fax line - data line | 1 |
|  | 12. Wrong address/ moved away and could not get the new references | 25 |
|  | 13. Refuses to answer the screener | 270 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 0 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 2 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 1265 |

PANEL

|  | Complete interviews (Total) | 106 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 0 |
|  | Elegible in process | 0 |
|  | Refusals | 0 |
|  | Out of target | 57 |
|  | Impossible to contact | 86 |
|  | Ineligible - coop. | 0 |
|  | Refusal to the Screener | 61 |
|  | Total | 310 |
|  | ELIGIBLES |  |
| $\frac{0}{0}$ | 1.Elegible establishment (Correct name and address) | 61 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 18 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 16 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 11 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{0}{0} \\ & \frac{0}{0} \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 0 |
|  | 6. The firm discontinued businesses | 24 |
|  | 7. Not a business: private household | 17 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 16 |
| 00000000 | 91. No reply (after having called in different days of the week and in different business hours) | 40 |
|  | 92. Line out of order | 1 |
|  | 93. No tone | 28 |
|  | 10. Answering machine | 0 |
|  | 11. Fax line - data line | 1 |
|  | 12. Wrong address/ moved away and could not get the new references | 16 |
|  | 13. Refuses to answer the screener | 61 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 0 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 0 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 310 |

## FRESH

|  | Complete interviews (Total) | 274 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 0 |
|  | Elegible in process | 0 |
|  | Refusals | 0 |
|  | Out of target | 357 |
|  | Impossible to contact | 113 |
|  | Ineligible - coop. | 2 |
|  | Refusal to the Screener | 209 |
|  | Total | 955 |
|  | ELIGIBLES |  |
|  | 1.Elegible establishment (Correct name and address) | 154 |
| $\bigcirc$ | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 46 |
| $0$ | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 13 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 61 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\bigcirc$ | 5. The establishment has less than 5 permanent full time employees | 0 |
| ? | 6. The firm discontinued businesses | 81 |
| - | 7. Not a business: private household | 15 |
| $\pm$ | 8. Ineligible activity: education, agriculture, finances, governments... | 261 |
|  | 91. No reply (after having called in different days of the week and in different business hours) | 93 |
| $\frac{0}{0}$ | 92. Line out of order | 1 |
| ...ヨ | 93. No tone | 10 |
| $0$ | 10. Answering machine | 0 |
| $\stackrel{\square}{\square}$ | 11. Fax line - data line | 0 |
|  | 12. Wrong address/ moved away and could not get the new references | 9 |
|  | 13. Refuses to answer the screener | 209 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 0 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 2 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 955 |

## A.3.3. Cell weights and universe estimates

## Individual cell weights (strict)

|  |  |  | Sector |  |
| :--- | ---: | ---: | ---: | ---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |
| Baku \& Apsheronski | $5-19$ | 8 | 3 | 12 |
|  | $20-99$ | 4 | 1 | 5 |
|  | $100+$ | 1 | 1 | 1 |
| Giandja-Kazakhski \& Sheki- | $5-19$ | 2 | 2 | 7 |
| Zakatalski | $20-99$ | 4 | 1 | 3 |
|  | $100+$ | 1 | 1 | 1 |
| Lenkoranski \& Kuba- | $5-19$ | 2 | 2 | 4 |
| Khachmazski | $20-99$ | 3 | 1 | 2 |
|  | $100+$ | 1 |  | 1 |
| Aranski \& Gorno-Shirvanski | $5-19$ | 3 | 2 | 8 |
|  | $20-99$ | 5 | 1 | 3 |
|  | $100+$ | 1 | 1 |  |

## Individual cell weights (median)

|  |  | Sector |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |
| Baku \& Apsheronski | $5-19$ | 14 | 4 | 23 |
|  | $20-99$ | 6 | 1 | 9 |
|  | $100+$ | 2 | 2 | 2 |
| Giandja-Kazakhski \& Sheki- | $5-19$ | 4 | 4 | 13 |
| Zakatalski | $20-99$ | 7 | 2 | 5 |
|  | $100+$ | 1 | 1 | 3 |
| Lenkoranski \& Kuba- | $5-19$ | 4 | 3 | 8 |
| Khachmazski | $20-99$ | 5 | 1 | 3 |
|  | $100+$ | 1 |  | 3 |
| Aranski \& Gorno-Shirvanski | $5-19$ | 4 | 3 | 14 |
|  | $20-99$ | 7 | 1 | 4 |
|  | $100+$ | 2 | 1 |  |

## Individual cell weights (weak)

|  |  |  | Sector |  |
| :--- | ---: | :--- | ---: | ---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |
| Baku \& Apsheronski | $5-19$ | 17 | 5 | 35 |
|  | $20-99$ | 9 | 1 | 16 |
|  | $100+$ | 3 | 3 | 3 |
| Giandja-Kazakhski \& Sheki- | $5-19$ | 4 | 3 | 15 |
| Zakatalski | $20-99$ | 8 | 2 | 7 |
|  | $100+$ | 1 | 1 | 3 |
| Lenkoranski \& Kuba- | $5-19$ | 4 | 3 | 10 |
| Khachmazski | $20-99$ | 7 | 1 | 5 |
|  | $100+$ | 1 |  | 4 |
| Aranski \& Gorno-Shirvanski | $5-19$ | 5 | 3 | 19 |
|  | $20-99$ | 10 | 2 | 6 |
|  | $100+$ | 2 | 1 |  |

## Azerbaijan universe estimates

| Strict individual cell weights | Median individual cell weights | Weak individual cell weights |
| :---: | :---: | :---: |
| 1286 | 2200 | 2977 |

## A.3.4. Survey and item non-response

The number of contacted establishments per realized interview was 3.33 . 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.

## A.3.5. Local agency team involved in the study and its comments on the implementation of the BEEPS

## Local agency team involved in the survey

| Local agency | Name: SORGU <br> Country: Azerbaijan <br> Membership of international organisation: N/A <br> Activities since: 1994 |
| :--- | :--- |
| Name of Project Manager | Tatyana Sulina |
| Name and position of other key <br> persons of the project | Fieldwork coordinator |


| Enumerators involved | Enumerators: 41 |
| :--- | :--- |
| Recruiters: 39 |  |
|  | Since fieldwork was progressing too slowly, we contacted our acquaintances |
| for some cases and asked them to get in touch with the selected respondents |  |
| to convince them to meet our interviewers. In other cases, they helped the |  |
| interviewers directly to get the appointment. In consequence, part of the |  |
| recruitment was done by the interviewers and part by recruiters. |  |
| Other staff involved | Fieldwork supervisors: 2 <br>  <br>  <br>  <br>  <br>  <br>  <br>  <br> Dditang: local supervisors <br> Data entry: GORBI <br> Data pressing: TNS Opinion |

## Sample Frame

| Characteristic of sample frame used | Both the panel and fresh samples had many inaccuracies in the contact details <br> and the establishment classification variables. |
| :--- | :--- |
| Source | State Committee of Statistics of Azerbaijan |
| Year of publication | 2006 |
| Comments on the quality of the <br> sample frame | The sample frame is of very low quality and unreliable |
| Year and organisation that <br> conducted the last economic census | State Committee of Statistics of Azerbaijan |
| Other sources for companies <br> statistics | No |

## Sample

| Comments/problems on sectors and <br> regions selected in the sample | On sectors: It often happened that a sector defined in the sample didn't <br> coincide with real activity of the establishment. This was particularly true for <br> the panel sample. <br> On regions: The selected establishments -and their replacements within a <br> same region were located far from each other, forcing the interviewers to <br> cover long distances to get the interviews. For this reason substantial <br> financial resources were needed for travel expenses for the interviewers. |
| :--- | :--- |
| Comments on the response rate | Often the respondents were suspicious about the usefulness of the study and <br> they were too busy to answer such a long questionnaire. These were the main <br> refusal reasons. |
| Comments on the sample design | More detailed instructions on how to follow up the achieved sample by <br> sectors should be provided in the future. |

## Fieldwork

| Date of fieldwork | September 2008 - February 2009 |
| :--- | :--- |
| Country | Azerbaijan |
| Number of interviews | Manufacturing: 120 <br> Services (sector 52): 144 <br> Core: 116 |
| Problems found during fieldwork | The main difficulty was meeting with respondents, as they were unavailable. <br> To receive the financial information was also a difficult obstacle to <br> overcome. |
| Other observations | No |

## Questionnaires

| Problems for the understanding of <br> questions (write question number) | No special problems encountered |
| :--- | :--- |
| Problems found in the navigability <br> of questionnaires (for example, skip <br> patterns) | No special problems encountered |
| Comments on questionnaire length | The interviews were very long; both respondents and interviewers were tired <br> as a result. |
| Suggestions or other comments on <br> the questionnaires | No special problems encountered |

## Database

| Data entry program chosen | CONFIRMIT |
| :--- | :--- |
| Comments on the data entry <br> program | Easy to punch the data |
| Comments on the data cleaning | The data cleaning process was done following the Data Validation Reports <br> (DVRs) prepared by TNS. Based on these reports we called back the <br> establishments to check their answers and complete or correct the data. |

## Country situation

| General aspects of economic, <br> political or social situation of the <br> country that could affect the results <br> of the survey | N/A |
| :--- | :--- |
| Relevant country events that <br> occurred during fieldwork | Presidential elections |
| Other aspects | N/A |

## A. 4 Belarus

## A.4.1. Sampling structure and implementation

Two sample frames were used. The first was supplied by the World Bank and EBRD and consisted of enterprises interviewed in BEEPS 2005. The World Bank and EBRD required that attempts should be made to re-interview establishments responding to the BEEPS 2005 survey where they were within the selected geographical regions and met eligibility criteria. That sample is referred to as the Panel. The second sample frame is from the Ministry of Statistics and Analyses - an electronic database "register-Belarus Enterprises—January 2008".

The quality of the frame was assessed at the onset of the project. The frame proved to be useful though it showed positive rates of non-eligibility, repetition, non-existent units, etc. These problems are typical of establishment surveys, but given the impact these inaccuracies may have on the results, adjustments were needed when computing the appropriate weights for individual observations. The percentage of confirmed non-eligible units as a proportion of the total number of contacts to complete the survey was $16 \%$ (116 out of 1013 establishments).

Regional stratification was defined in 7 regions. These regions are Minskaya, Vitebskaya, Brestskaya, Mogilevskaya, Gomelskaya, Grodnenskaya, and Minsk (official economic regions).

## Sectors included in the Sample:

| Original Sectors | Manufactures: 15, 17, 18, 24, 25, 26, 27, 28, |
| :--- | :--- |
|  | 29,31 |
|  | Services: 52 |
|  | Residual: 51, $72,55,50,45,60-64$ |
| Added Sectors |  |

Fresh sample frame

|  |  | Sector |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Region | Employees | Manufacturing | 52 | Residual | Grand Total |
| Minskaya | 5-19 | 240 | 662 | 730 | 1632 |
|  | 20-99 | 335 | 237 | 479 | 1051 |
|  | 100+ | 389 | 80 | 324 | 793 |
| Minskaya Total |  | 964 | 1533 | 979 | 3476 |
| Vitebskaya | 5-19 | 141 | 819 | 667 | 1627 |
|  | 20-99 | 239 | 308 | 405 | 952 |
|  | 100+ | 304 | 83 | 310 | 697 |
| Vitebskaya Total |  | 684 | 1382 | 1210 | 3276 |
| Brestskaya | 5-19 | 140 | 794 | 805 | 1739 |
|  | 20-99 | 257 | 368 | 492 | 1117 |
|  | 100+ | 346 | 124 | 380 | 850 |
| Brestskaya Total |  | 743 | 1677 | 1286 | 3706 |
| Mogilevskaya | 5-19 | 117 | 649 | 572 | 1338 |
|  | 20-99 | 199 | 333 | 444 | 976 |
|  | 100+ | 242 | 63 | 245 | 550 |
| Mogilevskaya Total |  | 558 | 1261 | 1045 | 2864 |
| Gomelskaya | 5-19 | 142 | 818 | 640 | 1600 |
|  | 20-99 | 207 | 348 | 466 | 1021 |
|  | 100+ | 357 | 109 | 367 | 833 |
| Gomelskaya Total |  | 706 | 1473 | 1275 | 3454 |
| Grodnenskaya | 5-19 | 296 | 2010 | 1040 | 3346 |
|  | 20-99 | 415 | 312 | 492 | 1219 |
|  | 100+ | 439 | 95 | 311 | 845 |
| Grodnenskaya Total |  | 1,150 | 1843 | 2417 | 5410 |
| Minsk | 5-19 | 1051 | 2000 | 5183 | 8234 |
|  | 20-99 | 945 | 1040 | 2748 | 4733 |
|  | 100+ | 436 | 198 | 623 | 1257 |
| Minsk Total |  | 2432 | 3238 | 8554 | 14224 |
| Grand Total |  | 7237 | 11450 | 17723 | 36410 |

Source: Register Belarus. Enterprises January 2008.

Panel sample frame

|  |  | Sector |  |  | Grand Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Region | Employees | Manufacturing | 52 | Residual |  |
| Minskaya | 2-49 |  |  | 10 | 10 |
|  | 50-99 |  | 8 |  | 8 |
|  | 100+ | 4 |  | 9 | 13 |
| Minskaya Total |  | 4 | 8 | 19 | 31 |
| Vitebskaya | 2-49 |  |  | 7 | 7 |
|  | 50-99 |  | 8 |  | 8 |
|  | 100+ | 5 |  | 14 | 19 |
| Vitebskaya Total |  | 5 | 8 | 21 | 34 |
| Brestskaya | 2-49 |  |  | 9 | 9 |
|  | 50-99 |  | 5 |  | 5 |
|  | 100+ | 9 |  | 13 | 22 |
| Brestskaya Total |  | 9 | 5 | 22 | 36 |
| Mogilevskaya | 2-49 |  |  | 4 | 4 |
|  | 50-99 |  | 2 |  | 2 |
|  | 100+ | 5 |  | 10 | 15 |
| Mogilevskaya Total |  | 5 | 2 | 14 | 21 |
| Gomelskaya | 2-49 |  |  | 6 | 6 |
|  | 50-99 |  | 4 |  | 4 |
|  | 100+ | 2 |  | 2 | 4 |
| Gomelskaya Total |  | 2 | 4 | 8 | 14 |
| Grodnenskaya | 2-49 |  |  | 1 | 1 |
|  | 50-99 |  | 2 |  | 2 |
|  | 100+ | 3 |  | 5 | 8 |
| Grodnenskaya Total |  | 3 | 2 | 6 | 11 |
| Minsk | 2-49 |  |  | 24 | 24 |
|  | 50-99 |  | 16 |  | 16 |
|  | 100+ | 12 |  | 15 | 27 |
| Minsk Total |  | 12 | 16 | 39 | 67 |
| Grand Total |  | 40 | 45 | 129 | 214 |

Source: BEEPS 2005.

Original sample design


## A.4.2. Status codes

## TOTAL

| Complete interviews (Total) | 273 |
| :--- | :---: |
| Incomplete interviews | 1 |
| Elegible in process | 0 |
| Refusals | 198 |
| Out of target | 161 |
| Impossible to contact | 57 |
| Ineligible - coop. | 4 |
| Refusal to the Screener | 319 |
| Total | 1013 |


|  | ELIGIBLES |  |
| :---: | :---: | :---: |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{00}{00} \\ & \frac{10}{10} \end{aligned}$ | 1.Elegible establishment (Correct name and address) | 466 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 4 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 2 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 0 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{0}{00} \\ & \frac{70}{0} \\ & \hline \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 0 |
|  | 6. The firm discontinued businesses | 10 |
|  | 7. Not a business: private household | 2 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 149 |
|  | 91. No reply (after having called in different days of the week and in different business hours) | 35 |
|  | 92. Line out of order | 0 |
|  | 93. No tone | 0 |
|  | 10. Answering machine | 1 |
|  | 11. Fax line - data line | 1 |
|  | 12. Wrong address/ moved away and could not get the new references | 20 |
|  | 13. Refuses to answer the screener | 319 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 0 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 4 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 1013 |

PANEL

|  | Complete interviews (Total) | 71 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 1 |
|  | Elegible in process | 0 |
|  | Refusals | 29 |
|  | Out of target | 15 |
|  | Impossible to contact | 27 |
|  | Ineligible - coop. | 2 |
|  | Refusal to the Screener | 30 |
|  | Total | 175 |
|  | ELIGIBLES |  |
| $\frac{0}{0}$ | 1.Elegible establishment (Correct name and address) | 98 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 2 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 1 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 0 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{0}{0} \\ & \frac{0}{0} \\ & \hline \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 0 |
|  | 6. The firm discontinued businesses | 3 |
|  | 7. Not a business: private household | 1 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 11 |
| Unobtainable | 91. No reply (after having called in different days of the week and in different business hours) | 10 |
|  | 92. Line out of order | 0 |
|  | 93. No tone | 0 |
|  | 10. Answering machine | 0 |
|  | 11. Fax line - data line | 0 |
|  | 12. Wrong address/ moved away and could not get the new references | 17 |
|  | 13. Refuses to answer the screener | 30 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 0 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 2 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 175 |

## FRESH

|  | Complete interviews (Total) | 202 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 0 |
|  | Elegible in process | 0 |
|  | Refusals | 169 |
|  | Out of target | 146 |
|  | Impossible to contact | 30 |
|  | Ineligible - coop. | 2 |
|  | Refusal to the Screener | 289 |
|  | Total | 838 |
|  | ELIGIBLES |  |
|  | 1.Elegible establishment (Correct name and address) | 368 |
| $\bigcirc$ | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 2 |
| $\begin{aligned} & 00 \\ & 0.00 \end{aligned}$ | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 1 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 0 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\bigcirc$ | 5. The establishment has less than 5 permanent full time employees | 0 |
| ? 0 | 6. The firm discontinued businesses | 7 |
| - $\overline{0}$ | 7. Not a business: private household | 1 |
| - | 8. Ineligible activity: education, agriculture, finances, governments... | 138 |
|  | 91. No reply (after having called in different days of the week and in different business hours) | 25 |
| - | 92. Line out of order | 0 |
| .ت్ర | 93. No tone | 0 |
| ० | 10. Answering machine | 1 |
| $\stackrel{\square}{\square}$ | 11. Fax line - data line | 1 |
|  | 12. Wrong address/ moved away and could not get the new references | 3 |
|  | 13. Refuses to answer the screener | 289 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 0 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 2 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 838 |

## A.4.3. Cell weights and universe estimates

## Collapsed cell weights (strict)

|  |  | Sector |  |  |
| :--- | ---: | :--- | ---: | ---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |
| Minskaya | $5-19$ | 18 | 65 | 556 |
|  | $20-99$ | 39 | 18 | 335 |
|  | $100+$ | 106 | 9 | 143 |
| Vitebskaya | $5-19$ | 10 | 64 |  |
|  | $20-99$ | 31 | 46 | 38 |
|  | $100+$ | 57 | 14 | 152 |
| Brestskaya | $5-19$ | 9 | 57 | 136 |
|  | $20-99$ | 28 | 72 | 61 |
|  | $100+$ | 43 | 7 | 61 |
| Mogilevskaya | $5-19$ | 18 | 112 | 94 |
|  | $20-99$ | 33 | 42 | 160 |
|  | $100+$ | 29 | 10 | 76 |
| Gomelskaya | $5-19$ | 12 | 128 | 47 |
|  | $20-99$ | 10 | 20 | 76 |
|  | $100+$ | 29 | 11 | 26 |
| Grodnenskaya | $5-19$ | 16 | 140 | 57 |
|  | $20-99$ | 29 | 13 | 36 |
|  | $100+$ | 39 | 8 | 19 |
| Minsk | $5-19$ | 96 | 126 | 556 |
|  | $20-99$ | 143 | 96 | 335 |
|  | $100+$ | 106 | 14 | 94 |

## Collapsed cell weights (median)

|  |  |  | Sector |  |  |  |
| :--- | ---: | :--- | ---: | ---: | :---: | :---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |  |  |
| Minskaya | $5-19$ | 24 | 93 | 808 |  |  |
|  | $20-99$ | 51 | 26 | 475 |  |  |
|  | $100+$ | 154 | 15 | 224 |  |  |
| Vitebskaya | $5-19$ | 12 | 81 |  |  |  |
|  | $20-99$ | 36 | 58 | 48 |  |  |
|  | $100+$ | 73 | 20 | 211 |  |  |
| Brestskaya | $5-19$ | 19 | 128 | 310 |  |  |
|  | $20-99$ | 57 | 160 | 136 |  |  |
|  | $100+$ | 97 | 17 | 151 |  |  |
| Mogilevskaya | $5-19$ | 22 | 148 | 124 |  |  |
|  | $20-99$ | 40 | 55 | 208 |  |  |
|  | $100+$ | 38 | 15 | 110 |  |  |
| Gomelskaya | $5-19$ | 24 | 271 | 101 |  |  |
|  | $20-99$ | 19 | 41 | 158 |  |  |
|  | $100+$ | 62 | 25 | 60 |  |  |
| Grodnenskaya | $5-19$ | 34 | 323 | 133 |  |  |
|  | $20-99$ | 60 | 30 | 81 |  |  |
|  | $100+$ | 92 | 20 | 49 |  |  |
| Minsk | $5-19$ | 129 | 183 | 808 |  |  |
|  | $20-99$ | 188 | 136 | 475 |  |  |
|  | $100+$ | 154 | 21 | 149 |  |  |

## Collapsed cell weights (weak)

|  |  | Sector |  |  |
| :--- | ---: | :--- | ---: | ---: |
| Region | Employees | Manufacturing | 52 | Residual |
| Minskaya | $5-19$ | 29 | 109 | 1001 |
|  | $20-99$ | 57 | 28 | 551 |
|  | $100+$ | 165 | 15 | 254 |
| Vitebskaya | $5-19$ | 15 | 94 |  |
|  | $20-99$ | 40 | 63 | 56 |
|  | $100+$ | 79 | 21 | 239 |
| Brestskaya | $5-19$ | 21 | 141 | 364 |
|  | $20-99$ | 59 | 165 | 150 |
|  | $100+$ | 99 | 17 | 161 |
| Mogilevskaya | $5-19$ | 23 | 156 | 140 |
|  | $20-99$ | 40 | 54 | 220 |
|  | $100+$ | 37 | 14 | 113 |
| Gomelskaya | $5-19$ | 28 | 311 | 124 |
|  | $20-99$ | 20 | 45 | 183 |
|  | $100+$ | 66 | 26 | 67 |
| Grodnenskaya | $5-19$ | 36 | 332 | 146 |
|  | $20-99$ | 59 | 29 | 84 |
|  | $100+$ | 87 | 18 | 49 |
| Minsk | $5-19$ | 151 | 209 | 1001 |
|  | $20-99$ | 205 | 146 | 551 |
|  | $100+$ | 165 | 22 | 166 |

Belarus universe estimates

| Strict collapsed cell weights | Median collapsed cell weights | Weak collapsed cell weights |
| :---: | :---: | :---: |
| 16774 | 27020 | 30180 |

## A.4.4. Survey and item non-response

The number of contacted establishments per realized interview was 3.71. 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 relatively low ratio of contacted establishments per realized interview (3.71) suggests that the main source of error in estimates in the Belarus may be selection bias and not frame inaccuracy.

## A.4.5. Local agency team involved in the study and its comments on the implementation of the BEEPS

Local agency team involved in the survey

| Local agency | Name: Centre of Political and Social Research <br> Country: Belarus <br> Membership of international organization: N/A <br> Activities since: 1997 |
| :--- | :--- |
| Name of Project Manager |  |
| Name and position of other key <br> persons of the project | Enumerators: 68 <br> Recruiters: 14 |
| Enumerators involved | Fieldwork Coordinators: 8 <br> Editing: 2 people <br> Data Entry: 1 person <br> Data Processing: 1 person |
| Other staff involved |  |

## Sample Frame

| Characteristic of sample frame used | Sample frame is based on official data from Ministry of Statistics and <br> analyses in Republic of Belarus published in 2007 and also based on e-guide <br> provided by data company "Komlev-Info" |
| :--- | :--- |
| Source | Sources of statistical information: <br> 1) Republic of Belarus regions - 2007. Statistical collection book - Minsk, <br> 2007; <br> 2) Statistical Yearbook Republic of Belarus - 2007. Minsk, 2007; <br> 3) Main factors of small enterprise activities in Republic of <br> Belarus - 2007. Minsk, 2007; <br> 4) Electronic database "Register-Belarus Enterprises - January 2008" |
| Year of publication | Data from Ministry of Statistics and Analysis is from 2006. Last e-base of <br> enterprises "Register - Belarus Enterprises" is from 2007. Databases updates <br> annually. |
| Comments on the quality of the <br> sample frame | There is data on about 46,000 all types enterprises in e- base of enterprises <br> "Register - Belarus. Enterprises". Methodology of sampled population <br> builing provided with reliability. |
| Year and organisation that <br> conducted the last economic census | Data from Ministry of Statistics and Analysis is from 2006. Last e-base of <br> enterprises "Register - Belarus. Enterprises" was made in 2007. Databases <br> updates annually. |

## Sample

| Comments/problems on sectors and <br> regions selected in the sample | On sectors: no <br> On regions: no |
| :--- | :--- |
| Comments on the response rate | Interviewers had a lot of difficulties due to respondents' reluctance to <br> participate in the survey. In addition, there was an issue with privacy when it <br> came to revealing information about financial situation as anticipated. A lot <br> of respondents referred to contract specifications regarding non-disclosure <br> about company's financial situation. Fieldwork period falling in summer time <br> also hampered response rate. |
| Comments on the sample design | N/A |

## Fieldwork

| Date of fieldwork | April - August 2008 |
| :--- | :--- |
| Country | Belarus |
| Number of interviews | Manufacturing: 84 <br> Services (sector 52): 126 <br> Core: 63 |
| Problems found during fieldwork | See comments on response rate |
| Other observations | No |

## Questionnaires

| Problems for the understanding of <br> questions (write question number) | Comments during pilot were reported. |
| :--- | :--- |
| Problems found in the navigability <br> of questionnaires (for example, skip <br> patterns) | No special problems encountered |
| Comments on questionnaire length | N/A |
| Suggestions or other comments on <br> the questionnaires | N/A |

## Database

| Data entry program chosen | PERTS |
| :--- | :--- |
| Comments on the data entry <br> program | None |
| Comments on the data cleaning | Sometimes the same questions in data cleaning came up more than once. <br> In the case of missing data when the interviewers tried to get the necessary <br> information, they were faced with categorical denials. |


| General aspects of economic, <br> political or social situation of the <br> country that could affect the results <br> of the survey | At the beginning of the year in Belarus entrepreneurs lead a protest action <br> which was connected with individual entrepreneurs' re-registration into <br> private unitary business. |
| :--- | :--- |
| Relevant country events that <br> occurred during fieldwork | None |
| Other aspects | N/A |

## A. 5 Bosnia and Herzegovina

## A.5.1. Sampling structure and implementation

Bosnia and Herzegovina is divided into two entities, the Federation of Bosnia and Herzegovina and the Republika Srpska. In addition, there is the Brcko District in the north of the country, which was created in 2000 out of land from both entities. It officially belongs to both, but is governed by neither, and functions under a decentralized system of local government. Sample frames were obtained from the official agencies, AFIP (Agencija za financijske, informaticke I posrednicke usluge) Federation of Bosnia and Herzegovina and APIF (Agencija za posrednicke, informaticke i finansijske usluge) Republika Srpska for the two entities. It was not possible to readily obtain a frame for the Brcko District. As the Brcko District represented only some 3\% of the country, it was agreed that it could be excluded. The AFIP and APIF frames were merged to form the first frame. That frame was sent to the TNS statistical team in London to select the establishments for interview. The second frame, supplied by the World Bank/EBRD, consisted of enterprises interviewed in BEEPS 2005. The World Bank and EBRD required that the attempts should be made to re-interview establishments responding to the BEEPS 2005 survey where they were within the selected geographical regions and met eligibility criteria. That sample is referred to as the Panel.

The quality of the frame was assessed at the onset of the project. The frame proved to be useful though it showed positive rates of non-eligibility, repetition, non-existent units, etc. These problems are typical of establishment surveys, but given the impact these inaccuracies may have on the results, adjustments were needed when computing the appropriate weights for individual observations. The percentage of confirmed non-eligible units as a proportion of the total number of contacts to complete the survey was $23 \%$ ( 157 out of 680 establishments).

Regions covered: Sarajevo, Bosna, Herzegovina, Republika Srpska. Table below shows the grouping of official regions into these four regions.

| Regions (official) | Grouping used for stratification purposes <br> in BEEPS IV |
| :--- | :--- |
| Bihac region | Bosna region |
| Tuzla region |  |
| Srednja Bosna region | Hercegovina region (Herzegovina-Neretva, <br> West Herzegovina) |
| Hercegovina region | Sarajevo region |
| Sarajevo region | Republika Srpska |
| Sjever Republika Srpska | Distrikt Brcko - was not covered |
| Istok Republika Srpska |  |
| Distrikt Brcko |  |

Sectors included in the Sample:

| Original Sectors | Manufactures: $15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33$, |
| :--- | :--- |
|  | $34,35,36,37$ |
|  | Services: 52 |
|  | Residual: $45,50,51,55,60,61,62,63$ |
| Added Sectors | No |

## Fresh sample frame

| Region | Employees | Sector |  |  | Grand Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Manufacturing | 52 | Residual |  |
| Bosna | 5 to 19 | 686 | 403 | 1290 | 2379 |
|  | 20 to 99 | 319 | 62 | 360 | 741 |
|  | 100+ | 98 | 6 | 47 | 151 |
| Bosna Total |  | 1103 | 471 | 1697 | 3271 |
| Hercegovina | 5 to 19 | 208 | 115 | 500 | 823 |
|  | 20 to 99 | 68 | 17 | 134 | 219 |
|  | 100+ | 19 | 2 | 16 | 37 |
| Hercegovina Total |  | 295 | 134 | 650 | 1079 |
| Republika Srpska | 5 to 19 | 691 | 362 | 1292 | 2345 |
|  | 20 to 99 | 370 | 108 | 379 | 857 |
|  | 100+ | 92 | 14 | 54 | 160 |
| Republika Srpska Total |  | 1153 | 484 | 1725 | 3362 |
| Sarajevo | 5 to 19 | 198 | 142 | 734 | 1074 |
|  | 20 to 99 | 104 | 37 | 221 | 362 |
|  | 100+ | 31 | 12 | 50 | 93 |
| Sarajevo Total |  | 333 | 191 | 1005 | 1529 |
| Grand Total |  | 2884 | 1280 | 5077 | 9241 |

Source: Agencija za finansijske, informaticke I posrednicke usluge d.d. (AFIP - Federation of BiH ) and Agencija za posrednicke, informaticke I finansijske usluge (APIF - Republika Srpska)

## Panel sample frame

| Region | Employees | Sector |  |  | Grand Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Manufacturing | 52 | Residual |  |
| Bosna | <5 | 1 |  |  | 1 |
|  | 5 to 19 |  | 1 |  | 1 |
|  | 20 to 99 | 3 |  | 3 | 6 |
|  | 100+ |  |  |  |  |
| Bosna Total |  | 4 | 1 | 3 | 8 |
| Hercegovina | <5 |  | 1 | 3 | 4 |
|  | 5 to 19 | 3 | 1 | 3 | 7 |
|  | 20 to 99 | 3 |  | 4 | 7 |
|  | 100+ | 3 |  | 5 | 8 |
| Hercegovina Total |  | 9 | 2 | 15 | 26 |
| Republika | <5 | 3 | 4 | 7 | 14 |
| Srpska | 5 to 19 | 10 | 3 | 8 | 21 |
|  | 20 to 99 | 11 | 1 | 7 | 19 |
|  | 100+ | 8 |  | 4 | 12 |
| Republika Srpska Total |  | 32 | 8 | 26 | 66 |
| Sarajevo | <5 | 3 | 6 | 5 | 14 |
|  | 5 to 19 | 3 | 4 | 9 | 16 |
|  | 20 to 99 | 6 | 2 | 7 | 15 |
|  | 100+ | 5 | 2 | 6 | 13 |
| Sarajevo Total |  | 17 | 14 | 27 | 58 |
| Grand Total |  | 62 | 25 | 71 | 158 |

Source: BEEPS 2005

Original sample design

| Region | Employees | Sector |  |  | Grand Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Manufacturing | 52 | Residual |  |
| Bosna | 5 to 19 | 15 | 21 | 13 | 49 |
|  | 20 to 99 | 15 | 14 | 13 | 42 |
|  | 100+ | 17 | 3 | 11 | 31 |
| Bosna Total |  | 47 | 38 | 37 | 122 |
| Hercegovina | 5 to 19 | 5 | 6 | 5 | 16 |
|  | 20 to 99 | 3 | 4 | 5 | 12 |
|  | 100+ | 3 | 1 | 4 | 8 |
| Hercegovina Total |  | 11 | 11 | 14 | 36 |
| Republika Srpska | 5 to 19 | 16 | 18 | 14 | 48 |
|  | 20 to 99 | 17 | 25 | 14 | 56 |
|  | 100+ | 15 | 7 | 13 | 35 |
| Republika Srpska Total |  | 48 | 50 | 41 | 139 |
| Sarajevo | 5 to 19 | 4 | 7 | 8 | 19 |
|  | 20 to 99 | 5 | 8 | 8 | 21 |
|  | 100+ | 5 | 6 | 12 | 23 |
| Sarajevo Total |  | 14 | 21 | 28 | 63 |
| Grand Total |  | 120 | 120 | 120 | 360 |

## A.5.2. Status codes

## TOTAL

| Complete interviews (Total) | 361 |
| :--- | :---: |
| Incomplete interviews | 0 |
| Elegible in process | 1 |
| Refusals | 21 |
| Out of target | 51 |
| Impossible to contact | 105 |
| Ineligible - coop. | 1 |
| Refusal to the Screener | 140 |
| Total | 680 |


|  | ELIGIBLES |  |
| :---: | :---: | :---: |
| $\frac{0}{0} \frac{0}{60}$ | 1.Elegible establishment (Correct name and address) | 383 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 0 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 0 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 0 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{00}{00} \\ & \frac{0}{0} \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 1 |
|  | 6. The firm discontinued businesses | 12 |
|  | 7. Not a business: private household | 34 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 4 |
| $\begin{aligned} & 0 \\ & 0 \\ & \text { O } \\ & \text {. } \\ & \text { I } \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ | 91. No reply (after having called in different days of the week and in different business hours) | 40 |
|  | 92. Line out of order | 36 |
|  | 93. No tone | 0 |
|  | 10. Answering machine | 2 |
|  | 11. Fax line - data line | 5 |
|  | 12. Wrong address/ moved away and could not get the new references | 22 |
|  | 13. Refuses to answer the screener | 140 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 14 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 0 |
|  | 152. Out of target - firm moved abroad | 1 |
|  | Total | 694 |

PANEL

|  | Complete interviews (Total) | 63 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 0 |
|  | Elegible in process | 1 |
|  | Refusals | 7 |
|  | Out of target | 17 |
|  | Impossible to contact | 35 |
|  | Ineligible - coop. | 0 |
|  | Refusal to the Screener | 35 |
|  | Total | 158 |
|  | ELIGIBLES |  |
| $\frac{0}{0}$ | 1.Elegible establishment (Correct name and address) | 71 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 0 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 0 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 0 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{0}{0} \\ & \frac{0}{0} \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 0 |
|  | 6. The firm discontinued businesses | 6 |
|  | 7. Not a business: private household | 8 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 3 |
| 00000000 | 91. No reply (after having called in different days of the week and in different business hours) | 22 |
|  | 92. Line out of order | 12 |
|  | 93. No tone | 0 |
|  | 10. Answering machine | 0 |
|  | 11. Fax line - data line | 1 |
|  | 12. Wrong address/ moved away and could not get the new references | 0 |
|  | 13. Refuses to answer the screener | 35 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 0 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 0 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 158 |

## FRESH

|  | Complete interviews (Total) | 298 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 0 |
|  | Elegible in process | 0 |
|  | Refusals | 14 |
|  | Out of target | 34 |
|  | Impossible to contact | 70 |
|  | Ineligible - coop. | 1 |
|  | Refusal to the Screener | 105 |
|  | Total | 522 |
|  | ELIGIBLES |  |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{0}{30} \\ & \frac{10}{10} \end{aligned}$ | 1.Elegible establishment (Correct name and address) | 312 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 0 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 0 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 0 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\begin{aligned} & \frac{0}{0} \\ & : 0 \\ & : 0 \\ & 0 \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 1 |
|  | 6. The firm discontinued businesses | 6 |
|  | 7. Not a business: private household | 26 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 1 |
|  | 91. No reply (after having called in different days of the week and in different business hours) | 18 |
|  | 92. Line out of order | 24 |
|  | 93. No tone | 0 |
|  | 10. Answering machine | 2 |
|  | 11. Fax line - data line | 4 |
|  | 12. Wrong address/ moved away and could not get the new references | 22 |
|  | 13. Refuses to answer the screener | 105 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 14 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 0 |
|  | 152. Out of target - firm moved abroad | 1 |
|  | Total | 536 |

## A.5.3. Cell weights and universe estimates

## Individual cell weights (strict)

| Region | Employees | Sector |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Manufacturing | 52 | Residual |
| Bosna | 5 to 19 | 26 | 7 | 55 |
|  | 20 to 99 | 20 | 3 | 26 |
|  | 100+ | 10 | 2 | 2 |
| Hercegovina | 5 to 19 | 9 | 14 | 36 |
|  | 20 to 99 | 18 | 2 | 22 |
|  | 100+ | 5 |  | 4 |
| Republika Srpska | 5 to 19 | 18 | 9 | 44 |
|  | 20 to 99 | 10 | 3 | 25 |
|  | 100+ | 5 | 3 | 4 |
| Sarajevo | 5 to 19 | 9 | 6 | 22 |
|  | 20 to 99 | 34 | 3 | 15 |
|  | 100+ | 7 | 2 | 3 |

## Individual cell weights (median)

| Region |  | Sector |  |  |
| :--- | ---: | :--- | ---: | ---: |
|  | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |
|  | 5 to 19 | 33 | 10 | 67 |
|  | 20 to 99 | 25 | 4 | 30 |
|  | $100+$ | 13 | 2 | 3 |
| Hercegovina | 5 to 19 | 17 | 28 | 60 |
|  | 20 to 99 | 30 | 4 | 34 |
|  | $100+$ | 9 |  | 5 |
| Republika Srpska | 5 to 19 | 24 | 12 | 53 |
|  | 20 to 99 | 13 | 4 | 29 |
|  | $100+$ | 7 | 4 | 5 |
| Sarajevo | 5 to 19 | 14 | 10 | 30 |
|  | 20 to 99 | 48 | 4 | 18 |
|  | $100+$ | 10 | 3 | 3 |

## Individual cell weights (weak)

|  |  | Sector |  |  |  |  |  |
| :--- | ---: | :--- | ---: | ---: | :---: | :---: | :---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |  |  |  |
| Bosna | 5 to 19 | 46 | 14 | 87 |  |  |  |
|  | 20 to 99 | 31 | 5 | 34 |  |  |  |
|  | $100+$ | 14 | 3 | 3 |  |  |  |
| Hercegovina | 5 to 19 | 20 | 34 | 67 |  |  |  |
|  | 20 to 99 | 32 | 4 | 34 |  |  |  |
|  | $100+$ | 9 |  | 5 |  |  |  |
| Republika Srpska | 5 to 19 | 32 | 17 | 68 |  |  |  |
|  | 20 to 99 | 15 | 5 | 32 |  |  |  |
|  | $100+$ | 7 | 5 | 5 |  |  |  |
| Sarajevo | 5 to 19 | 16 | 12 | 34 |  |  |  |
|  | 20 to 99 | 51 | 5 | 18 |  |  |  |
|  | $100+$ | 10 | 3 | 3 |  |  |  |

Bosnia and Herzegovina universe estimates

| Strict individual cell weights | Median individual cell weights | Weak individual cell weights |
| :---: | :---: | :---: |
| 5240 | 6948 | 8458 |

## A.5.4. Survey and item non-response

The number of contacted establishments per realized interview was 1.88 . 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.

## A.5.5. Local agency team involved in the study and its comments on the implementation of the BEEPS

Local agency team involved in the survey

| Local agency | Name: Puls d.o.o. Country: Bosnia and Herzegovina Membership of <br> international organisation: ESOMAR Activities since: 2000. |
| :--- | :--- |
| Name of Project Manager | Julijan Komšic |
| Name and position of other key <br> persons of the project | Fieldwork manager <br> Data entry <br> Programming / IT support |
| Enumerators involved | Enumerators: 30 <br> Recruiters: 16 |


| Other staff involved | Fieldwork Coordinators: 7 |
| :--- | :--- |
|  | Editing: 1 |
|  | Data Entry: 1 |
|  | Data Processing: 1 |

## Sample Frame

| Characteristic of sample frame used | Sample frame is bought from the institutions AFIP (Federation of BiH) and <br> APIF (Republic of Srpska) that gather financial data from companies each <br> year |
| :--- | :--- |
| Source | Agencija za finansijske, informatičke i posredničke usluge d.d (AFIP <br> Federation of BiH)); Agencija za posredničke, informatičke i finansijske <br> usluge (APIF Republic of Srpska) |
| Year of publication | 2007 |
| Comments on the quality of the <br> sample frame | Contacts (telephone numbers) of the establishments were mostly incorrect. |
| Year and organisation that <br> conducted the last economic census | N/A |
| Other sources for companies <br> statistics | N/A |

## Sample

| Comments/problems on sectors and <br> regions selected in the sample | On regions: Regions are not settled. Some regions that actually belong to <br> Federation BH are stated in sample frame to belong to Republic of Srpska <br> and vice versa. |
| :--- | :--- |
| Comments on the response rate | Considering size of questionnaire there were a lot of refusals by companies’ <br> top management. |
| Comments on the sample design | This was fine. |

Fieldwork

| Date of fieldwork | September 2008 - March 2009 |
| :--- | :--- |
| Country | Bosnia and Herzegovina |
| Number of interviews | Manufacturing: 110 <br> Services (sector 52): 111 <br> Core: 140 |
| Problems found during fieldwork | Large number of refusals |
| Other observations | Most respondents refused to answer questions about company finances. |

## Questionnaires

| Problems for the understanding of <br> questions (write question number) | N/A |
| :--- | :--- |
| Problems found in the navigability <br> of questionnaires (for example, skip <br> patterns) | N/A |
| Comments on questionnaire length | Questionnaire length was the main cause for large number of refusals. |
| Suggestions or other comments on <br> the questionnaires | N/A |

Database

| Data entry program chosen | CONFIRMIT |
| :--- | :--- |
| Comments on the data entry <br> program | None |
| Comments on the data cleaning | N/A |

Country situation

| General aspects of economic, <br> political or social situation of the <br> country that could affect the results <br> of the survey | Poor economic situation and unstable political situation. Usual state <br> inspections that respondents first associated with local institute team. |
| :--- | :--- |
| Relevant country events that <br> occurred during fieldwork | N/A |
| Other aspects | N/A |

## A. 6 Bulgaria

## A.6.1. Sampling structure and implementation

Three sample frames were used. The first was supplied by the World Bank and EBRD and consisted of enterprises interviewed in BEEPS 2005. The World Bank and EBRD required that attempts should be made to re-interview establishments responding to the BEEPS 2005 survey where they were within the selected geographical regions and met eligibility criteria. That sample is referred to as the Panel. The second sample frame used for the survey in Bulgaria was purchased from the Bulgarian National Statistical Institute (BNSI), which is the governmental statistical institution. The frame contained a full list of establishments with more than five employees in the target sectors of the survey. This was from the latest available version published in 2007, although it related to updates at the end of 2005. The third sample frame consisted of establishments interviewed in the World Bank Enterprise Survey 2007 and was used only in cases where the first two sample frames had insufficient number of contacts.

The quality of the frame was assessed at the onset of the project. The frame proved to be useful though it showed positive rates of non-eligibility, repetition, non-existent units, etc. These problems are typical of establishment surveys, but given the impact these inaccuracies may have on the results, adjustments were needed when computing the appropriate weights for individual observations. The percentage of confirmed non-eligible units as a proportion of the total number of contacts to complete the survey was $34 \%$ ( 249 out of 737 establishments).

Regional stratification was defined in six regions. These regions are Severozapaden, Severen Tsentralen, Severoiztochen, Yugozapaden, Yuzhen Tsentralen and Yugoiztochen (NUTS-2). Not all sub-regions within these regions were covered.

Sectors included in the Sample:

| Original Sectors | Manufactures: 15 to 37 <br> Services: 52 <br> Residual: 45 to 51,55 to 64 and 72 |
| :--- | :--- |
| Added Sectors | No |

Fresh sample frame

|  |  | Sector |  |  | Grand Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Region | Employees | Manufacturing | 52 | Residual |  |
| Severozapaden | 5-19 | 913 | 887 | 1450 | 3,250 |
|  | 20-99 | 481 | 66 | 309 | 856 |
|  | +100 | 147 | 1 | 31 | 179 |
| Severozapaden Total |  | 1541 | 954 | 1790 | 4285 |
| Severen Tsentralen | 5-19 | 1079 | 969 | 1983 | 4,031 |
|  | 20-99 | 645 | 109 | 442 | 1,196 |
|  | +100 | 202 | 4 | 50 | 256 |
| Severen Tsentralen Total |  | 1926 | 1082 | 2475 | 5483 |
| Severoiztochen | 5-19 | 858 | 970 | 2532 | 4,360 |
|  | 20-99 | 452 | 114 | 694 | 1,260 |
|  | +100 | 137 | 8 | 99 | 244 |
| Severoiztochen Total |  | 1447 | 1092 | 3325 | 5864 |
| Yugozapaden | 5-19 | 2259 | 2168 | 6538 | 10,965 |
|  | 20-99 | 1212 | 341 | 1961 | 3,514 |
|  | +100 | 368 | 47 | 354 | 769 |
| Yugozapaden Total |  | 3839 | 2556 | 8853 | 15248 |
| Yuzhen tsentralen | 5-19 | 2174 | 1407 | 3402 | 6,983 |
|  | 20-99 | 1075 | 150 | 817 | 2,042 |
|  | +100 | 279 | 5 | 90 | 374 |
| Yuzhen Tsentralen Total |  | 3528 | 1562 | 4309 | 9399 |
| Yugoiztochen | 5-19 | 1073 | 1074 | 2824 | 4,971 |
|  | 20-99 | 521 | 127 | 694 | 1,342 |
|  | +100 | 153 | 7 | 86 | 246 |
| Yugoiztochen Total |  | 1747 | 1208 | 3604 | 6559 |
| Grand Total |  | 14028 | 8454 | 24356 | 46838 |

Source: BNSI (Bulgarian National Statistics Institute) 2007

Panel sample frame


Source: BEEPS 2005.

Enterprise Survey 2007 sample frame

|  |  | Sector |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Region | Employees | Manufacturing | 52 | Residual | Grand Total |
| Severoiztochen | 5-19 | 55 | 14 | 18 | 87 |
|  | 20-99 | 49 | 12 | 10 | 71 |
|  | +100 | 24 | 6 | 7 | 37 |
| Severoiztochen Total |  | 128 | 32 | 35 | 195 |
| Yugozapaden | 5-19 | 81 | 17 | 86 | 184 |
|  | 20-99 | 85 | 29 | 53 | 167 |
|  | +100 | 51 | 21 | 21 | 93 |
| Yugozapaden Total |  | 217 | 67 | 160 | 444 |
| Yuzhen tsentralen | 5-19 | 83 | 13 | 14 | 110 |
|  | 20-99 | 116 | 9 | 12 | 137 |
|  | +100 | 58 | 3 | 6 | 67 |
| Yuzhen Tsentralen Total |  | 257 | 25 | 32 | 314 |
| Yugoiztochen | 5-19 | 12 | 3 |  | 15 |
|  | 20-99 | 18 | 6 |  | 24 |
|  | +100 | 3 | 2 |  | 5 |
| Yugoiztochen Total |  | 33 | 11 | 0 | 44 |
| Grand Total |  | 635 | 135 | 227 | 997 |

Source: Enterprise Survey 2007

## Original sample design

| Sector |  |  |  |  |  |
| :--- | ---: | :--- | ---: | ---: | ---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual | Grand Total |
| Severozapaden | $5-19$ | 3 | 3 | 2 | 8 |
|  | $20-99$ | +100 |  | 4 | 2 |

## A.6.2. Status codes

## TOTAL

|  | Complete interviews (Total) | 288 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 1 |
|  | Elegible in process | 2 |
|  | Refusals | 3 |
|  | Out of target | 44 |
|  | Impossible to contact | 172 |
|  | Ineligible - coop. | 6 |
|  | Refusal to the Screener | 199 |
|  | Total | 715 |
|  | ELIGIBLES |  |
| $\frac{0}{0} \frac{0}{\sqrt[0]{\mid 1}}$ | 1.Elegible establishment (Correct name and address) | 257 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 5 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 4 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 0 |
|  | 16. Panel firm - now less than five employees | 28 |
| $\frac{0}{00}$ | 5. The establishment has less than 5 permanent full time employees | 1 |
|  | 6. The firm discontinued businesses | 16 |
|  | 7. Not a business: private household | 2 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 25 |
|  | 91. No reply (after having called in different days of the week and in different business hours) | 50 |
|  | 92. Line out of order | 45 |
|  | 93. No tone | 0 |
|  | 10. Answering machine | 1 |
|  | 11. Fax line - data line | 10 |
|  | 12. Wrong address/ moved away and could not get the new references | 66 |
|  | 13. Refuses to answer the screener | 199 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 22 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 6 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 737 |

PANEL

|  | Complete interviews (Total) | 118 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 0 |
|  | Elegible in process | 0 |
|  | Refusals | 1 |
|  | Out of target | 20 |
|  | Impossible to contact | 23 |
|  | Ineligible - coop. | 0 |
|  | Refusal to the Screener | 52 |
|  | Total | 214 |
|  | ELIGIBLES |  |
| $\frac{0}{0}$ | 1.Elegible establishment (Correct name and address) | 83 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 4 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 4 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 0 |
|  | 16. Panel firm - now less than five employees | 28 |
| $\frac{0}{0}$ | 5. The establishment has less than 5 permanent full time employees | 0 |
|  | 6. The firm discontinued businesses | 11 |
|  | 7. Not a business: private household | 1 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 8 |
|  | 91. No reply (after having called in different days of the week and in different business hours) | 7 |
|  | 92. Line out of order | 5 |
|  | 93. No tone | 0 |
|  | 10. Answering machine | 0 |
|  | 11. Fax line - data line | 1 |
|  | 12. Wrong address/ moved away and could not get the new references | 10 |
|  | 13. Refuses to answer the screener | 52 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 0 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 0 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 214 |

ENTERPRISE SURVEY 2007

|  | Complete interviews (Total) | 7 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 0 |
|  | Elegible in process | 0 |
|  | Refusals | 1 |
|  | Out of target | 1 |
|  | Impossible to contact | 0 |
|  | Ineligible - coop. | 0 |
|  | Refusal to the Screener | 8 |
|  | Total | 17 |
|  | ELIGIBLES |  |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{0}{00} \\ & \frac{10}{10} \end{aligned}$ | 1.Elegible establishment (Correct name and address) | 8 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 0 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 0 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 0 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\begin{aligned} & 0 \\ & \stackrel{0}{0} \\ & \frac{0}{0} \\ & \underset{\Xi}{0} \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 0 |
|  | 6. The firm discontinued businesses | 1 |
|  | 7. Not a business: private household | 0 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 0 |
| O※ت0000 | 91. No reply (after having called in different days of the week and in different business hours) | 0 |
|  | 92. Line out of order | 0 |
|  | 93. No tone | 0 |
|  | 10. Answering machine | 0 |
|  | 11. Fax line - data line | 0 |
|  | 12. Wrong address/ moved away and could not get the new references | 0 |
|  | 13. Refuses to answer the screener | 8 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 0 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 0 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 17 |

## FRESH

|  | Complete interviews (Total) | 163 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 1 |
|  | Elegible in process | 2 |
|  | Refusals | 1 |
|  | Out of target | 23 |
|  | Impossible to contact | 149 |
|  | Ineligible - coop. | 6 |
|  | Refusal to the Screener | 139 |
|  | Total | 484 |
|  | ELIGIBLES |  |
|  | 1.Elegible establishment (Correct name and address) | 166 |
| $\bigcirc$ | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 1 |
| $\begin{aligned} & 00 \\ & 0.00 \end{aligned}$ | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 0 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 0 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\bigcirc$ | 5. The establishment has less than 5 permanent full time employees | 1 |
| ? | 6. The firm discontinued businesses | 4 |
| - $\overline{0}$ | 7. Not a business: private household | 1 |
| - | 8. Ineligible activity: education, agriculture, finances, governments... | 17 |
|  | 91. No reply (after having called in different days of the week and in different business hours) | 43 |
| त | 92. Line out of order | 40 |
| . | 93. No tone | 0 |
| $\stackrel{0}{0}$ | 10. Answering machine | 1 |
| $\stackrel{\square}{\square}$ | 11. Fax line - data line | 9 |
|  | 12. Wrong address/ moved away and could not get the new references | 56 |
|  | 13. Refuses to answer the screener | 139 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 22 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 6 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 506 |

## A.6.3. Cell weights and universe estimates

## Collapsed cell weights (strict)

|  |  |  | Sector |  |  |
| :--- | ---: | :--- | ---: | ---: | :---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |  |
| Severozapaden | $5-19$ | 161 | 67 | 98 |  |
|  | $20-99$ | 96 |  | 59 |  |
|  | +100 | 41 |  |  |  |
| Severen Tsentralen | $5-19$ | 186 | 90 | 230 |  |
|  | $20-99$ | 124 | 8 | 68 |  |
|  | +100 | 21 |  | 24 |  |
| Severoiztochen | $5-19$ | 186 | 90 | 230 |  |
|  | $20-99$ | 83 | 20 | 34 |  |
|  | +100 | 13 |  | 5 |  |
| Yugozapaden | $5-19$ | 161 | 67 | 109 |  |
|  | $20-99$ | 34 | 17 | 59 |  |
|  | +100 | 11 | 2 | 8 |  |
| Yuzhen Tsentralen | $5-19$ | 106 | 77 | 236 |  |
|  | $20-99$ | 39 | 17 | 45 |  |
|  | +100 | 85 |  | 22 |  |
| Yugoiztochen | $5-19$ | 88 | 31 | 236 |  |
|  | $20-99$ |  | 6 | 45 |  |
|  | +100 |  |  |  |  |

## Collapsed cell weights (medium)

|  |  |  |  | Sector |  |  |
| :--- | ---: | :--- | ---: | ---: | :---: | :---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |  |  |
| Severozapaden | $5-19$ | 261 | 98 | 106 |  |  |
|  | $20-99$ | 105 |  | 131 |  |  |
|  | +100 | 49 |  |  |  |  |
| Severen Tsentralen | $5-19$ | 276 | 119 | 398 |  |  |
|  | $20-99$ | 182 | 10 | 116 |  |  |
|  | +100 | 34 |  | 47 |  |  |
| Severoiztochen | $5-19$ | 276 | 119 | 398 |  |  |
|  | $20-99$ | 170 | 37 | 81 |  |  |
|  | +100 | 31 |  | 14 |  |  |
| Yugozapaden | $5-19$ | 261 | 98 | 230 |  |  |
|  | $20-99$ | 73 | 33 | 131 |  |  |
|  | +100 | 27 | 5 | 24 |  |  |
| Yuzhen Tsentralen | $5-19$ | 118 | 76 | 359 |  |  |
|  | $20-99$ | 51 | 20 | 81 |  |  |
|  | +100 | 127 |  | 38 |  |  |
| Yugoiztochen | $5-19$ | 173 | 54 | 359 |  |  |
|  | $20-99$ |  | 13 | 81 |  |  |
|  | +100 |  |  |  |  |  |

## Collapsed cell weights (weak)

| Sector |  |  |  |  |  |
| :--- | ---: | :--- | ---: | ---: | :---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |  |
| Severozapaden | $5-19$ | 343 | 143 | 113 |  |
|  | $20-99$ | 109 |  | 201 |  |
|  | +100 | 45 |  |  |  |
| Severen Tsentralen | $5-19$ | 298 | 143 | 471 |  |
|  | $20-99$ | 207 | 13 | 144 |  |
|  | +100 | 33 |  | 49 |  |
| Severoiztochen | $5-19$ | 298 | 143 | 471 |  |
|  | $20-99$ | 198 | 48 | 103 |  |
|  | +100 | 30 |  | 15 |  |
| Yugozapaden | $5-19$ | 343 | 143 | 343 |  |
|  | $20-99$ | 106 | 53 | 201 |  |
|  | +100 | 32 | 7 | 32 |  |
| Yuzhen Tsentralen | $5-19$ | 137 | 99 | 489 |  |
|  | $20-99$ | 63 | 27 | 117 |  |
|  | +100 | 131 |  | 43 |  |
| Yugoiztochen | $5-19$ | 240 | 84 | 489 |  |
|  | $20-99$ |  | 22 | 117 |  |
|  | +100 |  |  |  |  |

## Bulgaria universe estimates

| Strict collapsed cell weights | Median collapsed cell weights | Weak collapsed cell weights |
| :---: | :---: | :---: |
| 21031 | 33186 | 43392 |

## A.6.4. Survey and item non-response

The number of contacted establishments per realized interview was 2.48 . 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.

## A.6.5. Local agency team involved in the study and its comments on the implementation of the BEEPS

Local agency team involved in the survey

| Local agency | Name: TNS BBSS <br> Country: Bulgaria <br> Membership of international organisation: ESOMAR, Gallup International <br> Association <br> Activities since: 1991 |
| :--- | :--- |
| Name of Project Manager | Mrs Marchella Abrasheva - Regional Director and CEO of TNS BBSS |
| Name and position of other key <br> persons of the project | Deputy Regional Director <br> Head of Research Department <br> Fieldwork Supervisor <br> Deputy Fieldwork Manager <br> IT Specialist |
| Enumerators involved | Enumerators / recruiters: 40. The interviewers were in charge of setting the <br> appointments for the survey. |
| Other staff involved | Fieldwork Coordinators: 18 <br> Editing: 2 <br> Data Entry: 1 <br> Data Processing: 3 |

## Sample Frame

| Characteristic of sample frame used | Three sample frames used: Panel sample frame and ES 2007 sample frame, <br> provided by the World Bank and TNS Opinion. TNS BBSS purchased <br> samples for Blagoevgrad city, Haskovo city and Russe city, regions not <br> included in the previous ES 2007 survey. These contained the list of all the <br> enterprises in these regions and the respective economic sectors, with at least <br> 5 employees. Only the panel included establishments with less than five <br> employees. |
| :--- | :--- |
| Source | The panel sample was provided by the World Bank. The Bulgarian National <br> Statistical Institute provided the frame for the ES 2007 sample and the three <br> additionally purchased samples as mentioned above. |
| Year of publication | 2007 for the ES 2007 sample with revisions implemented during the ES <br> survey (2007) and 2008 for the three additionally purchased samples <br> (Blagoevgrad city, Haskovo city and Russe city) |
| Comments on the quality of the <br> sample frame | Overall good quality with comparatively higher amount of issues (outdated or <br> insufficient information) within the Panel sample |
| Year and organisation that <br> conducted the last economic census | Still no such census is conducted in Bulgaria. |
| Other sources for companies <br> statistics | Bulgarian National Statistical Institute |

## Sample

| Comments/problems on sectors and <br> regions selected in the sample | On sectors: No specific issues noticed <br> On regions: Higher level of refusals in South-Western region. |
| :--- | :--- |
| Comments on the response rate | Very good response rate, especially taking into account the target respondent <br> - top level manager or owner - and the interview length. |
| Comments on the sample design | No special comments |

## Fieldwork

| Date of fieldwork | September - December 2008 |
| :--- | :--- |
| Country | Bulgaria |
| Number of interviews | Manufacturing: 95 <br> Services (sector 52): 150 <br> Core: 43 |
| Problems found during fieldwork | Difficulties in reaching top level managers within the bigger companies. <br> There was an increased refusal rate, especially in comparison with several <br> years ago. Nevertheless, the refusal rate enumerated is still very good for <br> such type of survey. |
| Other observations | No |

## Questionnaires

| Problems for the understanding of <br> questions (write question number) | E11 - The respondents stated often that their company has "illegal" <br> competitors, but this, in many cases, actually means that there are "illegal" <br> companies in Bulgaria overall ECAj5a - This question needed clarification <br> each time it was asked. Many respondents stated that they cannot make such <br> a calculation or estimation. K2 - The different types seemed unclear and <br> undistinguishable for some of the respondents |
| :--- | :--- |
| Problems found in the navigability <br> of questionnaires (for example, skip <br> patterns) | No special problems encountered |
| Comments on questionnaire length | Too long - this is actually the biggest problem encountered. In many cases we <br> had to arrange several appointments with the same respondent in order to be <br> able to complete the questionnaire. It was very difficult to keep the <br> respondent's attention till the end of the questionnaire. |
| Suggestions or other comments on <br> the questionnaires | We would suggest shorter and fewer questions. Focus on fewer areas with <br> target of 20 minute average duration. The financial part - mainly the N <br> section - produces a lot of refusals. Maybe it could be shorter and asked in <br> different way - ranges as opposed to precise/exact figures. The wording/style <br> of the questionnaires is too heavy. We would suggest some revisions in order <br> to make it easier for managing and following both by respondents and <br> enumerators. |

Database

| Data entry program chosen | PERTS |
| :--- | :--- |
| Comments on the data entry <br> program | Big difficulties encountered during the data entry process. |
| Comments on the data cleaning | Concerning the process organized by TNS BBSS - each completed <br> questionnaire was checked on three levels - by the enumerator itself, by the <br> regional supervisor and by head-office team Concerning the data validation <br> checks prepared by TNS Opinion - no special comments, maybe just few of <br> the notifications seemed not applicable for the Bulgarian situation |

## Country situation

General aspects of economic, political or social situation of the country that could affect the results of the survey

The beginning of year 2007 was very optimistic and enthusiastic in Bulgaria joining EU was celebrated by almost all and was, actually, one of the only few points that were basis for public consensus in Bulgaria. Somewhere at the middle or even at the end of year 2007, the Bulgarians realized that the general economic and social situation will not change either dramatically or fast. Year 2008 started with more sober evaluations and expectations and continued with increase in pessimistic attitudes, especially after the first news and comments about the global crisis. Thus, at the end of year 2008, at the time of our survey, the most widespread feeling within the Bulgarians, employees and employers, was the uncertainty.
Relevant country events that
occurred during fieldwork

|  | actually a process, started maybe before a year, which is still not completed. <br> In the same time, there is still no effective sentence on any of the bigger <br> scandals. |
| :--- | :--- |
| Other aspects | Significant part of the EU funding targeted to Bulgaria was stopped after <br> revealed malpractices in Bulgaria. This was one other reason for increased <br> pessimism. Other public "burden" that add to the pessimistic attitudes is the <br> widespread believe that the corruption in the country is strong and presented <br> within all levels of government. | connected with the way of spending the money from EU funds. This is actually a process, started maybe before a year, which is still not completed. In the same time, there is still no effective sentence on any of the bigger scandals.

Significant part of the EU funding targeted to Bulgaria was stopped after realed malpractices in Bulgaria. This was one other reason for increased widespread believe that the corruption in the country is strong and presented within all levels of government.

## A. 7 Croatia

## A.7.1. Sampling structure and implementation

Three sample frames were used. The first was supplied by the World Bank and EBRD and consisted of enterprises interviewed in BEEPS 2005. The World Bank and EBRD required that attempts should be made to re-interview establishments responding to the BEEPS 2005 survey where they were within the selected geographical regions and met eligibility criteria. That sample is referred to as the Panel. The source of the second sample frame was Statistical Office of the Croatia - 2007- Organization database. The third sample frame consisted of establishments interviewed in the World Bank Enterprise Survey 2007.

The quality of the frame was assessed at the onset of the project. The frame proved to be useful though it showed positive rates of non-eligibility, repetition, non-existent units, etc. These problems are typical of establishment surveys, but given the impact these inaccuracies may have on the results, adjustments were needed when computing the appropriate weights for individual observations. The percentage of confirmed non-eligible units as a proportion of the total number of contacts to complete the survey was $35.2 \%$ ( 412 out of 1171 establishments).

Regional stratification was defined in 7 regions. These regions are Zagreb and surroundings, North Croatia, Slavonia, Lika and Banovina, Istria, Primorje and Gorski Kotar, and Dalmatia.

| Counties (official NUTS-3 <br> regions) | Regions (official <br> NUTS-2 regions) | Grouping used for <br> stratification purposes in <br> BEEPS IV <br> Grad Zagreb |
| :--- | :--- | :--- |
| Zagrebacka | Northwest Croatia |  |
| Krapinsko-zagorska |  |  |

Sectors included in the Sample:

| Original Sectors | Manufactures: $15,16,17,18,19,20,21,22,23,24,25,26$, |
| :--- | :--- |
|  | $27,28,29,30,31,32,33,34,35,36,37$ |
|  | Services: 52, |
|  | Residual: 45,50, 51, 55, 60, 61, 62, 63, 64, 72 |
| Added (top up) Sectors | None |

Fresh sample frame


Source: FINA, 2006

Panel sample frame


Source: BEEPS 2005

Enterprise Survey sample frame

| Survey sample frame |  | Sector |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Region | Employees | Manufacturing | 52 | Residual | Grand Total |
| Zagreb and surroundings | 5-19 | 40 |  |  | 40 |
|  | 20-99 | 15 | 9 |  | 24 |
|  | +100 | 24 | 9 | 10 | 43 |
| Zagreb and surroundings Total |  | 79 | 18 | 10 | 107 |
| North Croatia | 5-19 | 31 |  |  | 31 |
|  | 20-99 | 23 | 8 |  | 31 |
|  | +100 | 25 |  | 4 | 29 |
| North Croatia Total |  | 79 | 8 | 4 | 91 |
| Slavonia | 5-19 | 25 |  |  | 25 |
|  | 20-99 | 19 | 11 |  | 30 |
|  | +100 | 30 | 5 | 4 | 39 |
| Slavonia Total |  | 74 | 16 | 4 | 94 |
| Lika and Banovina | 5-19 | 10 |  |  | 10 |
|  | 20-99 | 6 | 9 |  | 15 |
|  | +100 | 9 |  | 3 | 12 |
| Lika and Banovina Total |  | 25 | 9 | 3 | 37 |
| Istria, Primorje And Gorski Kotar | 5-19 | 23 |  |  | 23 |
|  | 20-99 | 11 | 11 |  | 22 |
|  | +100 | 5 | 2 | 11 | 18 |
| Istria, Primorje And Gorski Kotar Total |  | 39 | 13 | 11 | 63 |
| Dalmatia | 5-19 | 34 |  |  | 34 |
|  | 20-99 | 11 | 12 |  | 23 |
|  | +100 | 18 | 3 | 7 | 28 |
| Dalmatia Total |  | 63 | 15 | 7 | 85 |
| Grand Total |  | 359 | 79 | 39 | 477 |

Source: Enterprise Survey 2007

Original sample design

|  |  | Sector |  |  |  |
| :--- | ---: | :--- | ---: | ---: | ---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual | Grand Total |
| Zagreb and surroundings | $5-19$ | 11 | 9 | 12 | 32 |
|  | $20-99$ | 10 | 9 | 12 | 31 |
|  | +100 |  | 8 | 9 | 12 |

## A.7.2. Status codes

## TOTAL

| Complete interviews (Total) | 160 |
| :--- | :---: |
| Incomplete interviews | 5 |
| Elegible in process | 0 |
| Refusals | 179 |
| Out of target | 110 |
| Impossible to contact | 302 |
| Ineligible - coop. | 0 |
| Refusal to the Screener | 415 |
| Total | 1171 |


|  | ELIGIBLES |  |
| :---: | :---: | :---: |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{00}{00} \\ & \frac{10}{10} \end{aligned}$ | 1.Elegible establishment (Correct name and address) | 285 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 3 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 7 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 22 |
|  | 16. Panel firm - now less than five employees | 27 |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{0}{00} \\ & \frac{70}{0} \\ & \hline \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 28 |
|  | 6. The firm discontinued businesses | 36 |
|  | 7. Not a business: private household | 28 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 18 |
|  | 91. No reply (after having called in different days of the week and in different business hours) | 230 |
|  | 92. Line out of order | 31 |
|  | 93. No tone | 3 |
|  | 10. Answering machine | 4 |
|  | 11. Fax line - data line | 5 |
|  | 12. Wrong address/ moved away and could not get the new references | 29 |
|  | 13. Refuses to answer the screener | 415 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 0 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 0 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 1171 |

PANEL


ENTERPRISE SURVEY 2007

|  | Complete interviews (Total) | 55 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 1 |
|  | Elegible in process | 0 |
|  | Refusals | 36 |
|  | Out of target | 7 |
|  | Impossible to contact | 45 |
|  | Ineligible - coop. | 0 |
|  | Refusal to the Screener | 77 |
|  | Total | 221 |
|  | ELIGIBLES |  |
| $\frac{0}{0}$ | 1.Elegible establishment (Correct name and address) | 84 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 0 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 2 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 6 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\begin{aligned} & \frac{0}{0} \\ & : 0 \\ & 0.0 \\ & 0 \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 0 |
|  | 6. The firm discontinued businesses | 5 |
|  | 7. Not a business: private household | 1 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 1 |
| O※.II000 | 91. No reply (after having called in different days of the week and in different business hours) | 38 |
|  | 92. Line out of order | 4 |
|  | 93. No tone | 0 |
|  | 10. Answering machine | 1 |
|  | 11. Fax line - data line | 0 |
|  | 12. Wrong address/ moved away and could not get the new references | 2 |
|  | 13. Refuses to answer the screener | 77 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 0 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 0 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 221 |

## FRESH

|  | Complete interviews (Total) | 54 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 4 |
|  | Elegible in process | 0 |
|  | Refusals | 98 |
|  | Out of target | 90 |
|  | Impossible to contact | 240 |
|  | Ineligible - coop. | 0 |
|  | Refusal to the Screener | 298 |
|  | Total | 784 |
|  | ELIGIBLES |  |
| $\frac{0}{0}$ | 1.Elegible establishment (Correct name and address) | 139 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 2 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 4 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 11 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\begin{aligned} & 0 \\ & 0.0 \\ & : 0 \\ & \stackrel{0}{0} \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 28 |
|  | 6. The firm discontinued businesses | 26 |
|  | 7. Not a business: private household | 27 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 9 |
|  | 91. No reply (after having called in different days of the week and in different business hours) | 178 |
|  | 92. Line out of order | 25 |
|  | 93. No tone | 3 |
|  | 10. Answering machine | 3 |
|  | 11. Fax line - data line | 5 |
|  | 12. Wrong address/ moved away and could not get the new references | 26 |
|  | 13. Refuses to answer the screener | 298 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 0 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 0 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 784 |

## A.7.3. Cell weights and universe estimates

## Collapsed cell weights (strict)

|  |  |  |  |  |  | Sector |  |  |
| :--- | ---: | :--- | ---: | ---: | :---: | :---: | :---: | :---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |  |  |  |  |
| Zagreb and | $5-19$ | 61 | 71 | 96 |  |  |  |  |
| surroundings | $20-99$ | 21 | 18 | 96 |  |  |  |  |
|  | +100 | 8 | 3 | 9 |  |  |  |  |
| North Croatia | $5-19$ | 109 | 71 | 96 |  |  |  |  |
|  | $20-99$ | 25 |  | 96 |  |  |  |  |
|  | +100 | 7 |  |  |  |  |  |  |
| Slavonia | $5-19$ | 75 | 71 | 96 |  |  |  |  |
|  | $20-99$ | 13 |  | 96 |  |  |  |  |
|  | +100 | 44 | 3 | 10 |  |  |  |  |
| Lika and Banovina | $5-19$ | 44 |  |  |  |  |  |  |
|  | $20-99$ | 20 |  | 96 |  |  |  |  |
|  | +100 | 20 |  | 8 |  |  |  |  |
| Istria, Primorje And | $5-19$ | 51 | 71 | 96 |  |  |  |  |
| Gorski Kotar | $20-99$ | 45 | 28 | 96 |  |  |  |  |
|  | +100 | 26 | 2 | 7 |  |  |  |  |
| Dalmatia | $5-19$ | 37 | 71 | 96 |  |  |  |  |
|  | $20-99$ | 14 | 33 | 96 |  |  |  |  |
|  | +100 | 29 | 7 | 12 |  |  |  |  |

## Collapsed cell weights (median)

|  |  |  |  |  |  | Sector |  |  |
| :--- | ---: | :--- | ---: | ---: | :---: | :---: | :---: | :---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |  |  |  |  |
| Zagreb and | $5-19$ | 115 | 121 | 202 |  |  |  |  |
| surroundings | $20-99$ | 41 | 35 | 202 |  |  |  |  |
|  | +100 | 17 | 6 | 22 |  |  |  |  |
| North Croatia | $5-19$ | 186 | 121 | 202 |  |  |  |  |
|  | $20-99$ | 45 |  | 202 |  |  |  |  |
|  | +100 | 13 |  |  |  |  |  |  |
| Slavonia | $5-19$ | 123 | 121 | 202 |  |  |  |  |
|  | $20-99$ | 22 |  | 202 |  |  |  |  |
|  | +100 | 70 | 3 | 22 |  |  |  |  |
| Lika and Banovina | $5-19$ | 62 |  |  |  |  |  |  |
|  | $20-99$ | 31 |  | 202 |  |  |  |  |
|  | +100 | 32 |  | 15 |  |  |  |  |
| Istria, Primorje And | $5-19$ | 75 | 121 | 202 |  |  |  |  |
| Gorski Kotar | $20-99$ | 70 | 44 | 202 |  |  |  |  |
|  | +100 | 45 | 3 | 15 |  |  |  |  |
| Dalmatia | $5-19$ | 63 | 121 | 202 |  |  |  |  |
|  | $20-99$ | 25 | 61 | 202 |  |  |  |  |
|  | +100 | 55 | 14 | 29 |  |  |  |  |

## Collapsed cell weights (weak)

|  |  |  |  | Sector |  |  |  |
| :--- | ---: | ---: | ---: | ---: | :---: | :---: | :---: |
| Region | Employees | Manufacturing |  |  |  |  |  |
| Zagreb and | $5-19$ | $\mathbf{5 2}$ | Residual |  |  |  |  |
| surroundings | $20-99$ | 127 | 139 | 220 |  |  |  |
|  | +100 | 43 | 38 | 220 |  |  |  |
|  | $5-19$ | 18 | 6 | 22 |  |  |  |
| North Croatia | $20-99$ | 199 | 139 | 220 |  |  |  |
|  | +100 | 46 |  | 220 |  |  |  |
|  | $5-19$ | 14 |  |  |  |  |  |
| Slavonia | 133 | 139 | 220 |  |  |  |  |
|  | $20-99$ | 23 |  | 220 |  |  |  |
|  | +100 | 72 | 3 | 22 |  |  |  |
| Lika and Banovina | $5-19$ | 68 |  |  |  |  |  |
|  | $20-99$ | 32 |  | 220 |  |  |  |
|  | +100 | 32 |  | 15 |  |  |  |
| Istria, Primorje And | $5-19$ | 87 | 139 | 220 |  |  |  |
| Gorski Kotar | $20-99$ | 76 | 50 | 220 |  |  |  |
|  | +100 | 48 | 3 | 16 |  |  |  |
| Dalmatia | $5-19$ | 71 | 139 | 220 |  |  |  |
|  | $20-99$ | 26 | 66 | 220 |  |  |  |
|  | +100 | 58 | 15 | 30 |  |  |  |

## Croatia universe estimates

| Strict collapsed cell weights | Median collapsed cell weights | Weak collapsed cell weights |
| :---: | :---: | :---: |
| 7763 | 15146 | 16553 |

## A.7.4. Survey and item non-response

The number of contacted establishments per realized interview was 7.32 . 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 relatively low ratio of contacted establishments per realized interview (7.32) suggests that the main source of error in estimates in the Croatia may be selection bias and not frame inaccuracy.

## A.7.5. Local agency team involved in the study and its comments on the implementation of the BEEPS

Local agency team involved in the survey

| Local agency | Name: Puls d.o.o. <br> Country: Croatia <br> Membership of international organization: ESOMAR, Gallup International <br> Association <br> Activities since: 1993 |
| :--- | :--- |
| Name of Project Manager |  |
| Name and position of other key <br> persons of the project |  |
| Enumerators involved | Enumerators: 42 <br> Recruiters: 28 |
| Other staff involved | Fieldwork Coordinators: 7 <br> Editing: 3 <br> Data Entry: 7 <br> Data Processing: 1 |

## Sample Frame

| Characteristic of sample frame used | All enterprises that submitted their financial report for year 2006 |
| :--- | :--- |
| Source | Financial agency (FINA) base of enterprises |
| Year of publication | 2006 |


| Comments on the quality of the <br> sample frame | This is the best base that exists in Croatia as „,Financial agency ${ }^{\text {ec }}$ is an <br> institution to which all active companies in Croatia are obliged to submit their <br> financial reports. |
| :--- | :--- |
| Year and organisation that <br> conducted the last economic census | There is no such census in Croatia |

## Sample

| Comments/problems on sectors and <br> regions selected in the sample | We had no problem regarding sectors or regions that were selected in the <br> sample. |
| :--- | :--- |
| Comments on the response rate | Response rate was in line with the usual range for this type of survey in <br> Croatia. |
| Comments on the sample design | The replacement rate for contacts was too low in terms of the number of <br> contacts made available in certain regions and sectors to be able to reach the <br> targets. In last two replacement batches, there were a lot of ineligible <br> companies and companies which were unreachable. |

## Fieldwork

| Date of fieldwork | September 2008 - March 2009 |
| :--- | :--- |
| Country | Croatia |
| Number of interviews | Manufacturing: 71 <br> Services (sector 52): 55 <br> Core: 33 |
| Problems found during fieldwork | Respondents weren't always willing to give answers to some of the hard data <br> questions, especially important questions from the productivity section. <br> Fieldwork was conducted during the holiday period and at the end of the year <br> when companies have a lot of work which contributed to the high refusal rate. |
| Other observations | None |

## Questionnaires

| Problems for the understanding of <br> questions (write question number) | No problems found. |
| :--- | :--- |
| Problems found in the navigability <br> of questionnaires (for example, skip <br> patterns) | No problems here. |
| Comments on questionnaire length | The questionnaire was found to be too long for some respondents. |
| Suggestions or other comments on <br> the questionnaires | A lot of information was asked which some respondents considered to be <br> strictly confidential and didn't want to share. |

## Database

| Data entry program chosen | CONFIRMIT |
| :--- | :--- |
| Comments on the data entry <br> program | None |
| Comments on the data cleaning | None |

## Country situation

General aspects of economic, political or social situation of the country that could affect the results of the survey

|  |
| :--- |
| Relevant country events that <br> occurred during fieldwork |
| Other aspects |

## A. 8 Czech Republic

## A.8.1. Sampling structure and implementation

The first sample frame was supplied by the World Bank and EBRD and consisted of enterprises interviewed in BEEPS 2005. The World Bank and EBRD required that attempts should be made to re-interview establishments responding to the BEEPS 2005 survey where they were within the selected geographical regions and met eligibility criteria. That sample is referred to as the Panel. The second frame for the Czech Republic was an official database known as Albertina data (Creditinfo Czech Republic), which is obtained from the complete Business Register [RES] of the Czech Statistical Office. An extract from that frame was sent to the TNS statistical team in London to select the establishments for interview.

The quality of the frame was assessed at the onset of the project. The frame proved to be useful though it showed positive rates of non-eligibility, repetition, non-existent units, etc. These problems are typical of establishment surveys, but given the impact these inaccuracies may have on the results, adjustments were needed when computing the appropriate weights for individual observations. The percentage of confirmed non-eligible units as a proportion of the total number of contacts to complete the survey was $28 \%$ ( 572 out of 2041 establishments).

Regional stratification was defined in eight regions. These regions are Praha, Stredni Cechy, Jihozapad, Severozapad, Severovychod, Jihovychod, Stredni Morava, and Moravskoslezsko (NUTS-2).

Sectors included in the Sample:

| Original Sectors | Manufactures: $15-37$ <br> Services: 52 <br> Residual: $45,50,51,55,60-64,72$ |
| :--- | :--- |
| Added Sectors | No |

Fresh sample frame

|  |  | Sector |  |  |  |
| :--- | ---: | :--- | ---: | ---: | ---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual | Grand Total |
| Praha | $5-19$ | 1011 | 1070 | 5195 | 7276 |
|  | $20-99$ | 643 | 283 | 1187 | 2113 |
|  | $100+$ | 210 | 83 | 323 | 616 |
| Praha Total |  | 1864 | 1436 | 6705 | 10005 |
| Stredni Cechy | $5-19$ | 941 | 661 | 2441 | 4043 |
|  | $20-99$ | 655 | 109 | 738 | 1502 |
| Stredni Cechy Total |  | $100+$ | 243 | 27 | 143 |

Source: Albertina data (Creditinfo Czech Republic) 2007

Panel sample frame


Source: BEEPS 2005

Original sample design

|  |  | Sector |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Regions | Employees | Manufacturing | 52 | Residual | Grand Total |
| Praha | 5-19 | 3 | 5 | 7 | 15 |
|  | 20-99 | 3 | 7 | 6 | 16 |
|  | 100+ | 3 | 11 | 9 | 23 |
| Praha Total |  | 9 | 23 | 22 | 54 |
| Stredni Cechy | 5-19 | 3 | 3 | 3 | 9 |
|  | 20-99 | 3 | 3 | 3 | 9 |
|  | 100+ | 3 | 4 | 4 | 11 |
| Stredni Cechy Total |  | 9 | 10 | 10 | 29 |
| Jihozapad | 5-19 | 4 | 3 | 3 | 10 |
|  | 20-99 | 4 | 3 | 3 | 10 |
|  | 100+ | 4 | 2 | 3 | 9 |
| Jihozapad Total |  | 12 | 8 | 9 | 29 |
| Severozapad | 5-19 | 3 | 3 | 3 | 9 |
|  | 20-99 | 3 | 3 | 2 | 8 |
|  | 100+ | 3 | 2 | 2 | 7 |
| Severozapad Total |  | 9 | 8 | 7 | 24 |
| Severovychod | 5-19 | 5 | 3 | 4 | 12 |
|  | 20-99 | 5 | 3 | 4 | 12 |
|  | 100+ | 5 | 3 | 3 | 11 |
| Severovychod Total |  | 15 | 9 | 11 | 35 |
| Jihovychod | 5-19 | 5 | 5 | 4 | 14 |
|  | 20-99 | 5 | 5 | 5 | 15 |
|  | 100+ | 5 | 4 | 4 | 13 |
| Jihovychod Total |  | 15 | 14 | 13 | 42 |
| Stredni Morava | 5-19 | 4 | 4 | 3 | 11 |
|  | 20-99 | 4 | 3 | 4 | 11 |
|  | 100+ | 4 | 2 | 3 | 9 |
| Stredni Morava Total |  | 12 | 9 | 10 | 31 |
| Moravskoslezsko | 5-19 | 3 | 4 | 3 | 10 |
|  | 20-99 | 3 | 3 | 3 | 9 |
|  | 100+ | 3 | 2 | 2 | 7 |
| Moravskoslezsko Total |  | 9 | 9 | 8 | 26 |
| Grand Total |  | 90 | 90 | 90 | 270 |

## A.8.2. Status codes

## TOTAL

|  | Complete interviews (Total) | 250 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 0 |
|  | Elegible in process | 109 |
|  | Refusals | 191 |
|  | Out of target | 87 |
|  | Impossible to contact | 482 |
|  | Ineligible - coop. | 3 |
|  | Refusal to the Screener | 919 |
|  | Total | 2041 |
|  | ELIGIBLES |  |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{0}{60} \\ & \frac{10}{10} \end{aligned}$ | 1.Elegible establishment (Correct name and address) | 543 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 4 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 1 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 2 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\begin{aligned} & 0 \\ & 0.0 \\ & : 0 \\ & 0.0 \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 0 |
|  | 6. The firm discontinued businesses | 16 |
|  | 7. Not a business: private household | 32 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 39 |
| Unobtainable | 91. No reply (after having called in different days of the week and in different business hours) | 171 |
|  | 92. Line out of order | 16 |
|  | 93. No tone | 16 |
|  | 10. Answering machine | 5 |
|  | 11. Fax line - data line | 8 |
|  | 12. Wrong address/ moved away and could not get the new references | 266 |
|  | 13. Refuses to answer the screener | 919 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 375 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 0 |
|  | 152. Out of target - firm moved abroad | 3 |
|  | Total | 2416 |

PANEL

|  | Complete interviews (Total) | 17 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 0 |
|  | Elegible in process | 5 |
|  | Refusals | 8 |
|  | Out of target | 6 |
|  | Impossible to contact | 34 |
|  | Ineligible - coop. | 0 |
|  | Refusal to the Screener | 39 |
|  | Total | 109 |
|  | ELIGIBLES |  |
| $\frac{0}{0}$ | 1.Elegible establishment (Correct name and address) | 29 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 0 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 0 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 1 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{0.0}{0} \\ & \frac{0}{E} \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 0 |
|  | 6. The firm discontinued businesses | 0 |
|  | 7. Not a business: private household | 3 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 3 |
| 00000000 | 91. No reply (after having called in different days of the week and in different business hours) | 6 |
|  | 92. Line out of order | 0 |
|  | 93. No tone | 0 |
|  | 10. Answering machine | 0 |
|  | 11. Fax line - data line | 0 |
|  | 12. Wrong address/ moved away and could not get the new references | 28 |
|  | 13. Refuses to answer the screener | 39 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 12 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 0 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 121 |

## FRESH

|  | Complete interviews (Total) | 233 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 0 |
|  | Elegible in process | 104 |
|  | Refusals | 183 |
|  | Out of target | 81 |
|  | Impossible to contact | 448 |
|  | Ineligible - coop. | 3 |
|  | Refusal to the Screener | 880 |
|  | Total | 1932 |
|  | ELIGIBLES |  |
| $\frac{0}{0.0}$ | 1.Elegible establishment (Correct name and address) | 514 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 4 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 1 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 1 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{0}{0} \\ & =0 \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 0 |
|  | 6. The firm discontinued businesses | 16 |
|  | 7. Not a business: private household | 29 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 36 |
|  | 91. No reply (after having called in different days of the week and in different business hours) | 165 |
|  | 92. Line out of order | 16 |
|  | 93. No tone | 16 |
|  | 10. Answering machine | 5 |
|  | 11. Fax line - data line | 8 |
|  | 12. Wrong address/ moved away and could not get the new references | 238 |
|  | 13. Refuses to answer the screener | 880 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 363 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 0 |
|  | 152. Out of target - firm moved abroad | 3 |
|  | Total | 2295 |

## A.8.3. Cell weights and universe estimates

## Individual cell weights (strict)

|  |  |  |  |  |  | Sector |  |  |  |
| :--- | ---: | :--- | ---: | ---: | :---: | :---: | :---: | :---: | :---: |
| Regions | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |  |  |  |  |  |
| Praha | $5-19$ | 80 | 23 | 208 |  |  |  |  |  |
|  | $20-99$ | 26 | 15 | 70 |  |  |  |  |  |
|  | $100+$ | 30 | 5 | 13 |  |  |  |  |  |
| Stredni Cechy | $5-19$ | 215 | 28 | 158 |  |  |  |  |  |
|  | $20-99$ | 59 | 7 | 56 |  |  |  |  |  |
|  | $100+$ | 22 | 7 | 11 |  |  |  |  |  |
| Jihozapad | $5-19$ | 141 | 57 | 245 |  |  |  |  |  |
|  | $20-99$ | 130 | 6 | 65 |  |  |  |  |  |
|  | $100+$ | 26 | 3 | 13 |  |  |  |  |  |
| Severozapad | $5-19$ | 186 | 35 | 205 |  |  |  |  |  |
|  | $20-99$ | 84 | 15 | 100 |  |  |  |  |  |
|  | $100+$ | 37 |  | 17 |  |  |  |  |  |
| Severovychod | $5-19$ | 151 | 47 | 385 |  |  |  |  |  |
|  | $20-99$ | 128 | 19 | 92 |  |  |  |  |  |
|  | $100+$ | 13 |  | 33 |  |  |  |  |  |
| Jihovychod | $5-19$ | 48 | 59 | 334 |  |  |  |  |  |
|  | $20-99$ | 51 | 13 | 64 |  |  |  |  |  |
|  | $100+$ | 16 | 3 | 35 |  |  |  |  |  |
| Stredni Morava | $5-19$ | 67 | 122 | 208 |  |  |  |  |  |
|  | $20-99$ | 42 | 19 | 48 |  |  |  |  |  |
|  | $100+$ | 44 | 6 | 4 |  |  |  |  |  |
| Moravskoslezsko | $5-19$ | 135 | 32 | 176 |  |  |  |  |  |
|  | $20-99$ | 109 | 6 | 70 |  |  |  |  |  |
|  | $100+$ | 38 | 3 | 14 |  |  |  |  |  |

Individual cell weights (median)

|  |  |  |  |  |  |  | Sector |  |  |
| :--- | ---: | :--- | ---: | ---: | :---: | :---: | :---: | :---: | :---: |
| Regions | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |  |  |  |  |  |
| Praha | $5-19$ | 225 | 69 | 712 |  |  |  |  |  |
|  | $20-99$ | 66 | 39 | 220 |  |  |  |  |  |
|  | $100+$ | 82 | 16 | 43 |  |  |  |  |  |
| Stredni Cechy | $5-19$ | 619 | 84 | 550 |  |  |  |  |  |
|  | $20-99$ | 156 | 19 | 180 |  |  |  |  |  |
|  | $100+$ | 62 | 20 | 38 |  |  |  |  |  |
| Jihozapad | $5-19$ | 378 | 157 | 794 |  |  |  |  |  |
|  | $20-99$ | 318 | 14 | 192 |  |  |  |  |  |
|  | $100+$ | 67 | 7 | 41 |  |  |  |  |  |
| Severozapad | $5-19$ | 525 | 102 | 702 |  |  |  |  |  |
|  | $20-99$ | 217 | 39 | 314 |  |  |  |  |  |
|  | $100+$ | 103 |  | 57 |  |  |  |  |  |
| Severovychod | $5-19$ | 363 | 116 | 1127 |  |  |  |  |  |
|  | $20-99$ | 283 | 44 | 248 |  |  |  |  |  |
|  | $100+$ | 30 |  | 94 |  |  |  |  |  |
| Jihovychod | $5-19$ | 141 | 181 | 1203 |  |  |  |  |  |
|  | $20-99$ | 139 | 36 | 213 |  |  |  |  |  |
|  | $100+$ | 48 | 8 | 123 |  |  |  |  |  |
| Stredni Morava | $5-19$ | 139 | 262 | 521 |  |  |  |  |  |
|  | $20-99$ | 80 | 38 | 110 |  |  |  |  |  |
|  | $100+$ | 88 | 13 | 10 |  |  |  |  |  |
| Moravskoslezsko | $5-19$ | 286 | 70 | 451 |  |  |  |  |  |
|  | $20-99$ | 211 | 13 | 165 |  |  |  |  |  |
|  | $100+$ | 79 | 6 | 35 |  |  |  |  |  |

## Individual cell weights (weak)

|  |  | Sector |  |  |
| :--- | ---: | :--- | ---: | ---: |
| Regions | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |
| Praha | $5-19$ | 324 | 101 | 1010 |
|  | $20-99$ | 88 | 53 | 286 |
|  | $100+$ | 99 | 19 | 51 |
| Stredni Cechy | $5-19$ | 918 | 127 | 801 |
|  | $20-99$ | 211 | 26 | 240 |
|  | $100+$ | 77 | 25 | 46 |
| Jihozapad | $5-19$ | 516 | 219 | 1066 |
|  | $20-99$ | 398 | 18 | 236 |
|  | $100+$ | 77 | 8 | 46 |
| Severozapad | $5-19$ | 760 | 151 | 998 |
|  | $20-99$ | 287 | 53 | 409 |
|  | $100+$ | 124 |  | 68 |
| Severovychod | $5-19$ | 481 | 158 | 1464 |
|  | $20-99$ | 342 | 54 | 294 |
|  | $100+$ | 33 |  | 102 |
| Jihovychod | $5-19$ | 202 | 266 | 1691 |
|  | $20-99$ | 182 | 48 | 274 |
|  | $100+$ | 58 | 10 | 145 |
| Stredni Morava | $5-19$ | 208 | 402 | 766 |
|  | $20-99$ | 110 | 53 | 148 |
|  | $100+$ | 111 | 16 | 12 |
| Moravskoslezsko | $5-19$ | 425 | 106 | 659 |
|  | $20-99$ | 287 | 18 | 221 |
|  | $100+$ | 99 | 8 | 42 |

Czech Republic Universe estimates

| Strict individual cell weights | Median individual cell weights | Weak individual cell weights |
| :---: | :---: | :---: |
| 14367 | 40211 | 55157 |

## A.8.4. Survey and item non-response

The number of contacted establishments per realized interview was 8.16 . 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.

## A.8.5. Local agency team involved in the study and its comments on the implementation of the BEEPS

## Local agency team involved in the survey

| Local agency 1 | Name: Factum Invenio, s.r.o. <br> Country: Czech Republic <br> Membership of international organisation: Factum Group, Esomar, British <br> Chamber of Commerce, Chambre de Commerce Franco - Tchèque <br> Activities since: 1991 |
| :--- | :--- |
| Name of Project Manager | Jan Nalezený |
| Name and position of other key <br> persons of the project | Country Manager <br> Field Work Manager |
| Enumerators involved | Enumerators: 120 <br> Recruiters: 5 <br> No enumerator worked on recruitment |
| Other staff involved | Fieldwork Coordinators: 1 <br> Editing: 4 <br> Data Entry: 2 <br> Data Processing: - |


| Local agency 2 | Name: TNS AISA, s.r.o. <br> Country: The Czech Republic <br> Membership of international organisation: TNS, WPP, ESOMAR, SIMAR <br> Activities since: 1990 |
| :--- | :--- |
| Name of Project Manager | Jana Rajsnerová |
| Name and position of other key <br> persons of the project | Project Executive <br> Project Executive <br> Executive Assistant F2F <br> Executive Assistant F2F |
| Enumerators involved | Enumerators: 111 <br> Recruiters: interviewers also involved in recruitment |
| Other staff involved | Fieldwork Coordinators: 2 <br> Editing: 0 <br> Data Entry: 0 <br> Data Processing: 3 |

## Sample Frame

| Characteristic of sample frame used | Database ALBERTINA (http://www.albertina.cz/czech/afm/p_poparo.html) |
| :--- | :--- |
| Source | Albertina - Creditinfo Czech Republic. Drawn from the complete RES <br> (database of the Czech Statistical Office) |
| Year of publication | 2007 |
| Comments on the quality of the | TNS AISA statistics: |
| sample frame | $18.2 \%$ wrong addresses |
|  | $4.4 \%$ unable to contact by telephone |
|  | $2.2 \%$ out of target |
| Year and organisation that | Czech Statistical Office |
| conducted the last economic census |  |

## Sample

| Comments/problems on sectors and <br> regions selected in the sample | Czech Republic was divided in accordance with NUTS2. Given the required <br> coverage, a large field-force was necessary which posed some challenges for <br> the field organization. |
| :--- | :--- |
| Comments on the response rate | Initially, the response rate was proving problematic. Respondents were often <br> very reluctant to participate a priori; the market is "over-surveyed" and <br> respondents claim to be too busy to find time to participate. Consequently, <br> TNS AISA was taken on board to help achieve the target number of <br> interviews. |
| Comments on the sample design | From an organisational point-of-view it was difficult to handle replacements <br> when 2nd and 3rd priorities of a record number were situated in other districts <br> or regions than 1st priority and thus for another team of interviewers. |

Fieldwork

| Date of fieldwork | September 2008 - March 2009 |
| :--- | :--- |
| Country | Czech Republic |
| Number of interviews | Manufacturing: 94 <br> Services (sector 52): 90 <br> Core: 66 |
| Problems found during fieldwork | Refusals caused mainly by respondents' lack of time. The length and depth of <br> the questionnaire and sampling method made the coordination of <br> interviewers' work generally demanding - especially when there was a <br> mistake or data missing in a questionnaire which required being sorted out by <br> call-backs. |
| Other observations | Respondents often interested in the survey |

## Questionnaires

| Problems for the understanding of <br> questions (write question number) | Factum found that respondents on occasion did not know answers during the <br> first interviewer's visit which involved several contacts. |
| :--- | :--- |
| Problems found in the navigability <br> of questionnaires (for example, skip <br> patterns) | No special problems encountered |
| Comments on questionnaire length | Average length in the Czech language is 89.6 minutes. Although the <br> questionnaire is unusually long, the most demanding point was in persuading <br> respondents to partake in the survey. The length of the questionnaire was then <br> accepted in most cases. |
| Suggestions or other comments on <br> the questionnaires | N/A |

## Database

| Data entry program chosen | CONFIRMIT (Factum) <br> NIPO ODIN scripting software (TNS AISA). |
| :--- | :--- |
| Comments on the data entry <br> program | Data inserted by the interviewer into programmed script directly during <br> interviewing (TNS AISA) |
| Comments on the data cleaning | In the case of CONFIRMIT, it would have been very helpful to have gotten <br> an export in EXCEL or other such format when doing the cleaning. |

## Country situation

| General aspects of economic, <br> political or social situation of the <br> country that could affect the results <br> of the survey | The global economic crisis influenced the level of respondents' willingness to <br> participate but there shouldn't be any bias in the data validity. February- <br> March was also difficult as it's the tax returns period. |
| :--- | :--- |
| Relevant country events that <br> occurred during fieldwork | None |
| Other aspects | N/A |

## A. 9 Estonia

## A.9.1. Sampling structure and implementation

The first sample frame was supplied by the World Bank and EBRD and consisted of enterprises interviewed in BEEPS 2005. The World Bank and EBRD required that attempts should be made to re-interview establishments responding to the BEEPS 2005 survey where they were within the selected geographical regions and met eligibility criteria. That sample is referred to as the Panel. The source of the second sample frame was the 2007 version of the Estonian Business Register produced by the Ministry of Justice.

The quality of the frame was assessed at the onset of the project. The frame proved to be useful though it showed positive rates of non-eligibility, repetition, non-existent units, etc. These problems are typical of establishment surveys, but given the impact these inaccuracies may have on the results, adjustments were needed when computing the appropriate weights for individual observations. The percentage of confirmed non-eligible units as a proportion of the total number of contacts to complete the survey was $18.8 \%$ (134 out of 712 establishments).

Regional stratification was defined in 5 regions. These regions are Põhja-Eesti, Lääne-Eesti, Kesk-Eesti, Kirde-Eesti, and Lõuna-Eesti (NUTS-3).

Sectors included in the Sample:

| Original Sectors | Manufactures: 15, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, |
| :--- | :--- |
|  | $29,31,32,33,34,35,36$ |
|  | Services: 52 |
| Residual: 45, 50, 51, 55, 60, 61, 63, 64, 72 |  |
| Added (top up) Sectors | None |

Fresh sample frame

| Region | Employees | Sector |  |  | Grand Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Manufacturing | 52 | Residual |  |
| Põhja-Eesti | 5-19 | 837 | 704 | 2775 | 4316 |
|  | 20-99 | 435 | 178 | 677 | 1290 |
|  | 100+ | 110 | 49 | 90 | 249 |
| Põhja-Eesti Total |  | 1382 | 931 | 3542 | 5855 |
| Lääne-Eesti | 5-19 | 191 | 130 | 522 | 843 |
|  | 20-99 | 122 | 19 | 118 | 259 |
|  | 100+ | 25 | 5 | 6 | 36 |
| Lääne-Eesti Total |  | 338 | 154 | 646 | 1138 |
| Kesk-Eesti | 5-19 | 146 | 95 | 338 | 579 |
|  | 20-99 | 93 | 16 | 83 | 192 |
|  | 100+ | 26 | 5 | 5 | 36 |
| Kesk-Eesti Total |  | 265 | 116 | 426 | 807 |
| Kirde-Eesti | 5-19 | 109 | 124 | 272 | 505 |
|  | 20-99 | 68 | 21 | 91 | 180 |
|  | 100+ | 30 | 0 | 12 | 42 |
| Kirde-Eesti Total |  | 207 | 145 | 375 | 727 |
| Lõuna-Eesti | 5-19 | 368 | 216 | 951 | 1535 |
|  | 20-99 | 230 | 35 | 256 | 521 |
|  | 100+ | 57 | 10 | 14 | 81 |
| Lõuna-Eesti Total |  | 655 | 261 | 1221 | 2137 |
| Grand Total |  | 2847 | 1607 | 6210 | 10664 |

Source: Centre of Registers by Ministry of Justice

Panel sample frame

| Region | Employees | Sector |  |  | Grand Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Manufacturing | 52 | Residual |  |
| Põhja-Eesti | <5 | 1 | 3 | 4 | 8 |
|  | 5-19 | 5 | 4 | 13 | 22 |
|  | 20-99 | 4 | 3 | 12 | 19 |
|  | 100+ | 5 |  | 12 | 17 |
| Põhja-Eesti Total |  | 15 | 10 | 41 | 66 |
| Lääne-Eesti | <5 | 1 | 1 | 1 | 3 |
|  | 5-19 |  | 1 | 3 | 4 |
|  | 20-99 | 2 |  | 3 | 5 |
|  | 100+ |  |  |  | 0 |
| Lääne-Eesti Total |  | 3 | 2 | 7 | 12 |
| Kesk-Eesti | <5 |  | 2 | 1 | 3 |
|  | 5-19 |  | 1 | 4 | 5 |
|  | 20-99 | 2 | 1 | 2 | 5 |
|  | 100+ |  |  |  | 0 |
| Kesk-Eesti Total |  | 2 | 4 | 7 | 13 |
| Kirde-Eesti | <5 |  |  | 1 | 1 |
|  | 5-19 | 1 |  | 1 | 2 |
|  | 20-99 | 1 |  | 2 | 3 |
|  | 100+ |  |  | 1 | 1 |
| Kirde-Eesti Total |  | 2 | 0 | 5 | 7 |
| Lõuna-Eesti | <5 | 1 | 2 | 8 | 11 |
|  | 5-19 | 2 | 5 | 5 | 12 |
|  | 20-99 |  |  | 5 | 5 |
|  | 100+ | 3 | 1 |  | 4 |
| Lõuna-Eesti Total |  | 6 | 8 | 18 | 32 |
| Grand Total |  | 28 | 24 | 78 | 130 |

Source: BEEPS 2005

Original sample design

| Region | Employees | Sector |  |  | Grand Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Manufacturing | 52 | Residual |  |
| Põhja-Eesti | 5-19 | 10 | 5 | 5 | 20 |
|  | 20-99 | 10 | 4 | 3 | 17 |
|  | 100+ | 10 | 5 | 5 | 20 |
| Põhja-Eesti Total |  | 30 | 14 | 13 | 57 |
| Lääne-Eesti | 5-19 | 5 | 7 | 10 | 22 |
|  | 20-99 | 4 | 7 | 10 | 21 |
|  | 100+ | 5 | 5 | 16 | 26 |
| Lääne-Eesti Total |  | 14 | 19 | 36 | 69 |
| Kesk-Eesti | 5-19 | 5 | 5 | 5 | 15 |
|  | 20-99 | 4 | 3 | 4 | 11 |
|  | 100+ | 3 | 3 | 0 | 6 |
| Kesk-Eesti Total |  | 12 | 11 | 9 | 32 |
| Kirde-Eesti | 5-19 | 7 | 15 | 5 | 27 |
|  | 20-99 | 6 | 8 | 5 | 19 |
|  | 100+ | 5 | 18 | 2 | 25 |
| Kirde-Eesti Total |  | 18 | 41 | 12 | 71 |
| Lõuna-Eesti | 5-19 | 5 | 5 | 7 | 17 |
|  | 20-99 | 5 | 5 | 5 | 15 |
|  | 100+ | 2 | 4 | 3 | 9 |
| Lõuna-Eesti Total |  | 12 | 14 | 15 | 41 |
| Grand Total |  | 86 | 99 | 85 | 270 |

## A.9.2. Status codes

## TOTAL

| Complete interviews (Total) | 273 |
| :--- | :---: |
| Incomplete interviews | 0 |
| Elegible in process | 2 |
| Refusals | 25 |
| Out of target | 63 |
| Impossible to contact | 43 |
| Ineligible - coop. | 28 |
| Refusal to the Screener | 231 |
| Total | 665 |


|  | ELIGIBLES |  |
| :---: | :---: | :---: |
| $\frac{0}{0} \frac{0}{60}$ | 1.Elegible establishment (Correct name and address) | 291 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 2 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 4 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 3 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{00}{00} \\ & \frac{0}{0} \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 30 |
|  | 6. The firm discontinued businesses | 27 |
|  | 7. Not a business: private household | 0 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 6 |
|  | 91. No reply (after having called in different days of the week and in different business hours) | 35 |
|  | 92. Line out of order | 1 |
|  | 93. No tone | 1 |
|  | 10. Answering machine | 3 |
|  | 11. Fax line - data line | 0 |
|  | 12. Wrong address/ moved away and could not get the new references | 3 |
|  | 13. Refuses to answer the screener | 231 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 47 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 1 |
|  | 152. Out of target - firm moved abroad | 27 |
|  | Total | 712 |

PANEL

|  | Complete interviews (Total) | 66 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 0 |
|  | Elegible in process | 0 |
|  | Refusals | 7 |
|  | Out of target | 8 |
|  | Impossible to contact | 9 |
|  | Ineligible - coop. | 2 |
|  | Refusal to the Screener | 37 |
|  | Total | 129 |
|  | ELIGIBLES |  |
| $\frac{0}{0.0}$ | 1.Elegible establishment (Correct name and address) | 66 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 1 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 3 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 3 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\begin{aligned} & \frac{0}{0} \\ & : 0 \\ & 0.0 \\ & =0 \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 0 |
|  | 6. The firm discontinued businesses | 5 |
|  | 7. Not a business: private household | 0 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 3 |
|  | 91. No reply (after having called in different days of the week and in different business hours) | 6 |
|  | 92. Line out of order | 0 |
|  | 93. No tone | 0 |
|  | 10. Answering machine | 1 |
|  | 11. Fax line - data line | 0 |
|  | 12. Wrong address/ moved away and could not get the new references | 2 |
|  | 13. Refuses to answer the screener | 37 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 1 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 0 |
|  | 152. Out of target - firm moved abroad | 2 |
|  | Total | 130 |

## FRESH

|  | Complete interviews (Total) | 207 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 0 |
|  | Elegible in process | 2 |
|  | Refusals | 18 |
|  | Out of target | 55 |
|  | Impossible to contact | 34 |
|  | Ineligible - coop. | 26 |
|  | Refusal to the Screener | 194 |
|  | Total | 536 |
|  | ELIGIBLES |  |
|  | 1.Elegible establishment (Correct name and address) | 225 |
| $\bigcirc$ | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 1 |
| $\begin{aligned} & 00 \\ & 0.00 \end{aligned}$ | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 1 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 0 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\bigcirc$ | 5. The establishment has less than 5 permanent full time employees | 30 |
| ? 0 | 6. The firm discontinued businesses | 22 |
| - $\overline{0}$ | 7. Not a business: private household | 0 |
| - | 8. Ineligible activity: education, agriculture, finances, governments... | 3 |
|  | 91. No reply (after having called in different days of the week and in different business hours) | 29 |
| त | 92. Line out of order | 1 |
| . | 93. No tone | 1 |
| $\stackrel{0}{0}$ | 10. Answering machine | 2 |
| $\stackrel{\square}{\square}$ | 11. Fax line - data line | 0 |
|  | 12. Wrong address/ moved away and could not get the new references | 1 |
|  | 13. Refuses to answer the screener | 194 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 46 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 1 |
|  | 152. Out of target - firm moved abroad | 25 |
|  | Total | 582 |

## A.9.3. Cell weights and universe estimates

## Collapsed cell weights (strict)

|  |  | Sector |  |  |  |
| :--- | ---: | :--- | ---: | ---: | :---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |  |
| Põhja-Eesti | $5-19$ | 43 | 30 | 76 |  |
|  | $20-99$ | 24 | 7 | 20 |  |
|  | $100+$ | 4 | 2 | 2 |  |
| Lääne-Eesti | $5-19$ | 43 | 15 | 45 |  |
|  | $20-99$ | 7 | 2 | 14 |  |
|  | $100+$ | 2 | 3 | 1 |  |
| Kesk-Eesti | $5-19$ | 25 | 6 | 76 |  |
|  | $20-99$ | 17 | 2 | 11 |  |
|  | $100+$ | 2 |  | 3 |  |
| Kirde-Eesti | $5-19$ | 12 | 29 | 19 |  |
|  | $20-99$ | 6 | 2 | 14 |  |
|  | $100+$ | 5 |  | 6 |  |
| Lõuna-Eesti | $5-19$ | 27 | 10 | 36 |  |
|  | $20-99$ | 25 | 7 | 22 |  |
|  | $100+$ | 6 | 1 | 2 |  |

Collapsed cell weights (median)

|  |  | Sector |  |  |  |
| :--- | ---: | :--- | ---: | ---: | :---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |  |
| Põhja-Eesti | $5-19$ | 77 | 56 | 128 |  |
|  | $20-99$ | 46 | 15 | 39 |  |
|  | $100+$ | 7 | 3 | 4 |  |
| Lääne-Eesti | $5-19$ | 71 | 26 | 74 |  |
|  | $20-99$ | 13 | 4 | 24 |  |
|  | $100+$ | 3 | 5 | 3 |  |
| Kesk-Eesti | $5-19$ | 35 | 8 | 128 |  |
|  | $20-99$ | 26 | 3 | 17 |  |
|  | $100+$ | 4 |  | 4 |  |
| Kirde-Eesti | $5-19$ | 21 | 53 | 34 |  |
|  | $20-99$ | 12 | 4 | 27 |  |
|  | $100+$ | 10 |  | 11 |  |
| Lõuna-Eesti | $5-19$ | 41 | 15 | 54 |  |
|  | $20-99$ | 41 | 11 | 37 |  |
|  | $100+$ | 11 | 2 | 3 |  |

## Collapsed cell weights (weak)

| Region |  | Sector |  |  |
| :--- | ---: | ---: | ---: | ---: |
|  | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |
| Põhja-Eesti | $5-19$ | 84 | 60 | 145 |
|  | $20-99$ | 50 | 16 | 44 |
|  | $100+$ | 7 | 3 | 4 |
| Lääne-Eesti | $5-19$ | 81 | 29 | 87 |
|  | $20-99$ | 15 | 5 | 28 |
|  | $100+$ | 3 | 5 | 3 |
| Kesk-Eesti | $5-19$ | 38 | 9 | 145 |
|  | $20-99$ | 28 | 3 | 18 |
|  | $100+$ | 4 |  | 4 |
| Kirde-Eesti | $5-19$ | 24 | 57 | 39 |
|  | $20-99$ | 14 | 4 | 30 |
|  | $100+$ | 10 |  | 12 |
| Lõuna-Eesti | $5-19$ | 44 | 16 | 60 |
|  | $20-99$ | 44 | 12 | 40 |
|  | $100+$ | 11 | 2 | 3 |

Estonia universe estimates

| Strict collapsed cell weights | Median collapsed cell weights | Weak collapsed cell weights |
| :---: | :---: | :---: |
| 4781 | 8207 | 9058 |

## A.9.4. Survey and item non-response

The number of contacted establishments per realized interview was 2.44 . 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 relatively low ratio of contacted establishments per realized interview (2.44) suggests that the main source of error in estimates in the Estonia may be selection bias and not frame inaccuracy.

## A.9.5. Local agency team involved in the study and its comments on the implementation of the BEEPS

Local agency team involved in the survey

| Local agency | Name: TNS Emor <br> Country: Estonia <br> Membership of international organization: <br> Activities since: 1990 |
| :--- | :--- |
| Name of Project Manager |  |
| Name and position of other key <br> persons of the project | Enumerators: 42 <br> Recruiters: The interviewers were also in charge of the recruitment |
| Enumerators involved | Fieldwork Coordinators: 1 <br> Programming: 1 <br> Data Processing: 2 |
| Other staff involved |  |

## Sample Frame

| Characteristic of sample frame used | Estonian Business Register |
| :--- | :--- |
| Source | Estonian Business Register by Ministry of Justice |
| Year of publication | 2006 |
| Comments on the quality of the <br> sample frame | Official Register, good quality |


| Year and organisation that <br> conducted the last economic census | None |
| :--- | :--- |

Sample

| Comments/problems on sectors and <br> regions selected in the sample | On sectors: None <br> On regions: None |
| :--- | :--- |
| Comments on the response rate | There were quite a big number of refusals to complete the survey. |
| Comments on the sample design | The replacement system (by preference number) and the limited number of <br> contacts per target interview made this survey's fieldwork extremely difficult <br> to co-ordinate |
| Other comments | There were very specific and restricted target per samples cell. Background <br> data - size and ISIC quotas didn't apply to the reality |

Fieldwork

| Date of fieldwork | August - October 2008 |
| :--- | :--- |
| Country | Estonia |
| Number of interviews | Manufacturing: 90 <br> Services (sector 52): 124 <br> Core: 59 |
| Problems found during fieldwork | In the sample, there were many size groups and field of activities that were <br> different in the reality. |
| Other observations | None |

## Questionnaires

Problems for the understanding of questions (write question number)

G30B, L11A, ECAG9 were the most difficult questions for respondents. The World Bank and EBRD might need to look into the possibility of changing them in the future.
The questionnaire changed before the fieldwork several times, which meant for us that we had to change the script several times.

The questionnaire is too long, in particular for these target respondents. Using different logics for the panel and fresh samples classifications complicated survey implementation. For example, in the panel some companies were under service, but in case of fresh sample these would have been under residual.

Database

| Data entry program chosen | CAPI, programmed following TNS opinion data map and instructions |
| :--- | :--- |
| Comments on the data entry <br> program | None |
| Comments on the data cleaning | None |

## Country situation

General aspects of economic, political or social situation of the country that could affect the results of the survey
Relevant country events that occurred during fieldwork

| Other aspects | N/A |
| :--- | :--- |

## A. 10 FYR Macedonia

## A.10.1. Sampling structure and implementation

The first sample frame was supplied by the World Bank and EBRD and consisted of enterprises interviewed in BEEPS 2005. The World Bank and EBRD required that attempts should be made to re-interview establishments responding to the BEEPS 2005 survey where they were within the selected geographical regions and met eligibility criteria. That sample is referred to as the Panel. The source of the second sample frame was the Central Registry of Macedonia.

The quality of the frame was assessed at the onset of the project. The frame proved to be useful though it showed positive rates of non-eligibility, repetition, non-existent units, etc. These problems are typical of establishment surveys, but given the impact these inaccuracies may have on the results, adjustments were needed when computing the appropriate weights for individual observations. The percentage of confirmed non-eligible units as a proportion of the total number of contacts to complete the survey was $15.98 \%$ ( 90 out of 563 establishments).

Regional stratification was defined in 4 regions. These regions are Eastern, North-West \& West, Skopje, and South. Table below shows the municipalities included in each of these four regions.

| NUTS-3 <br> Ntatistical <br> regions | Municipalities included | Grouping used for <br> stratification purposes <br> in BEEPS IV |
| :--- | :--- | :--- |
| Skopje | Greater Skopje (municipalities of Aerodrom, <br> Butel, Cair, Centar, Gazi Baba, Gjorce Petrov, <br> Karpos, Kisela Voda, Saraj, Suto Orizari), <br> Arcinovo, Cucer Sandevo, Ilinden, Petrovec, <br> Sopiste, Studenicani, Zelenikovo, | Skopje |
| Eastern | Berovo, Cesinovo-Oblesevo, Delcevo, Karbinci, <br> Kocani, Makedonska Kamenica, Pehcevo, <br> Probistip, Stip, Vinica, Zrnovci |  |
| North Eastern | Kratovo, Kriva Palanka, Kumanovo, Lipkovo, <br> Rankovce, Staro Nagoricane | Eastern Macedonia |
| South Eastern | Bogdanci, Bosilovo, Gevgelija, Konce, Novo <br> Selo, Radovis, Star Dojran, Strumica, Valandovo, <br> Vasilevo |  |
| South <br> Western | Centar Zupa, Debar, Debarca, Drugovo, Kicevo, <br> Makedonski Brod, Ohrid, Oslomej, Plasnica, <br> Struga, Vevcani, Vranestica, Zajas | North-West \& West |
| Poloski | Bogovinje, Brvenica, Gostivar, Jegunovce, <br> Marovo i Rostusa, Tearce, Tetovo, Vrapciste, <br> Zelino |  |
| Varedonia |  |  |

Sectors included in the sample:

| Original sectors | Manufacturing: 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, |
| :--- | :--- |
|  | $25,26,27,30,31,33,34,35,36,37$ |
|  | Services: 52 |
|  | Residual: 45, 50, 51, 55, 60, 62, 63, 64, 72 |
| Added (top up) sectors | None |

## Fresh sample frame

|  |  | Sector |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Region | $\frac{\text { Employees }}{5-19}$ | Manufacturing | 52 | Residual | Grand Total |
| Skopje |  |  | 466 | 1051 | 1,939 |
|  | 20-99 | 136 | 54 | 203 | 393 |
|  | 100+ | 47 | 10 | 42 | 99 |
| Skopje Total |  | 605 | 530 | 1296 | 2,431 |
| Eastern | 5-19 | 468 | 368 | 417 | 1,253 |
| Macedonia | 20-99 | 283 | 23 | 81 | 387 |
|  | 100+ | 89 | 0 | 8 | 97 |
| Eastern Macedonia Total |  | 840 | 391 | 506 | 1,737 |
| North-West \& | 5-19 | 195 | 287 | 305 | 787 |
| West | 20-99 | 96 | 23 | 49 | 168 |
|  | 100+ | 23 | 1 | 6 | 30 |
| North-West \& West Total |  | 314 | 311 | 360 | 985 |
| South | 5-19 | 205 | 246 | 299 | 750 |
|  | 20-99 | 103 | 24 | 53 | 180 |
|  | 100+ | 63 | 2 | 11 | 76 |
| South Total |  | 371 | 272 | 363 | 1,006 |
| Grand Total |  | 2130 | 1504 | 2525 | 6159 |

## Source: Central Registry of Macedonia

## Panel sample frame

|  |  | Sector |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Region | Employees | Manufacturing | 52 | Residual | Grand Total |
| Skopje | <5 | 4 | 10 | 15 | 29 |
|  | 5-19 | 6 | 4 | 8 | 18 |
|  | 20-99 | 6 | 2 | 7 | 15 |
|  | 100+ | 4 | 1 | 5 | 10 |
| Skopje Total |  | 20 | 17 | 35 | 72 |
| Eastern | <5 |  | 2 | 1 | 3 |
| Macedonia | 5-19 | 2 | 2 | 3 | 7 |
|  | 20-99 | 3 |  |  | 3 |
|  | 100+ | 1 |  | 2 | 3 |
| Eastern Macedonia Total |  | 6 | 4 | 6 | 16 |
| North-West \& West | <5 |  | 1 |  | 1 |
|  | 5-19 | 1 | 2 | 3 | 6 |
|  | 20-99 | 4 |  | 2 | 6 |
|  |  | 4 |  |  | 4 |
| North-West \& West Total |  | 9 | 3 | 5 | 17 |
| South | <5 | 2 | 2 | 2 | 6 |
|  | 5-19 | 2 | 1 | 2 | 5 |
|  | 20-99 | 6 | 1 | 2 | 9 |
|  | 100+ | 4 |  | 1 | 5 |
| South Total |  | 14 | 4 | 7 | 25 |
| Grand Total |  | 49 | 28 | 53 | 130 |

Source: BEEPS 2005

Original sample design

|  |  | Sector |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Region | Employees | Manufacturing | 52 | Residual | Grand Total |
| Skopje | 5-19 | 13 | 20 | 22 | 55 |
|  | 20-99 | 9 | 25 | 23 | 57 |
|  | 100+ | 9 | 5 | 21 | 35 |
| Skopje Total |  | 31 | 50 | 66 | 147 |
| Eastern Macedonia | 5-19 | 15 | 15 | 9 | 39 |
|  | 20-99 | 18 | 11 | 9 | 38 |
|  | $100+$ | 16 |  | 4 | 20 |
| Eastern Macedonia Total |  | 49 | 26 | 22 | 97 |
| North-West \& West | 5-19 | 6 | 12 | 7 | 25 |
|  | 20-99 | 6 | 10 | 5 | 21 |
|  | 100+ | 4 |  | 3 | 7 |
| North-West \& West Total |  | 16 | 22 | 15 | 53 |
| South | 5-19 | 6 | 10 | 6 | 22 |
|  | 20-99 | 7 | 11 | 6 | 24 |
|  | 100+ | 11 | 1 | 5 | 17 |
| South Total |  | 24 | 22 | 17 | 63 |
| Grand Total |  | 120 | 120 | 120 | 360 |

## A.10.2. Status codes

## TOTAL

| Complete interviews (Total) | 366 |
| :--- | :---: |
| Incomplete interviews | 3 |
| Elegible in process | 1 |
| Refusals | 17 |
| Out of target | 26 |
| Impossible to contact | 64 |
| Ineligible - coop. | 0 |
| Refusal to the Screener | 77 |
| Total | 554 |


|  | ELIGIBLES |  |
| :---: | :---: | :---: |
| $\frac{0}{0} \frac{0}{60}$ | 1.Elegible establishment (Correct name and address) | 386 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 0 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 0 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 1 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{00}{00} \\ & \frac{0}{0} \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 2 |
|  | 6. The firm discontinued businesses | 16 |
|  | 7. Not a business: private household | 2 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 6 |
|  | 91. No reply (after having called in different days of the week and in different business hours) | 7 |
|  | 92. Line out of order | 0 |
|  | 93. No tone | 0 |
|  | 10. Answering machine | 0 |
|  | 11. Fax line - data line | 0 |
|  | 12. Wrong address/ moved away and could not get the new references | 57 |
|  | 13. Refuses to answer the screener | 77 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 9 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 0 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 563 |

PANEL

|  | Complete interviews (Total) | 87 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 1 |
|  | Elegible in process | 0 |
|  | Refusals | 9 |
|  | Out of target | 8 |
|  | Impossible to contact | 10 |
|  | Ineligible - coop. | 0 |
|  | Refusal to the Screener | 15 |
|  | Total | 130 |
|  | ELIGIBLES |  |
| $\frac{0}{0.0}$ | 1.Elegible establishment (Correct name and address) | 97 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 0 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 0 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 0 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\begin{aligned} & \frac{0}{0} \\ & : 0 \\ & 0.0 \\ & =0 \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 0 |
|  | 6. The firm discontinued businesses | 6 |
|  | 7. Not a business: private household | 2 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 0 |
|  | 91. No reply (after having called in different days of the week and in different business hours) | 0 |
|  | 92. Line out of order | 0 |
|  | 93. No tone | 0 |
|  | 10. Answering machine | 0 |
|  | 11. Fax line - data line | 0 |
|  | 12. Wrong address/ moved away and could not get the new references | 10 |
|  | 13. Refuses to answer the screener | 15 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 0 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 0 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 130 |

## FRESH

|  | Complete interviews (Total) | 279 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 2 |
|  | Elegible in process | 1 |
|  | Refusals | 8 |
|  | Out of target | 18 |
|  | Impossible to contact | 54 |
|  | Ineligible - coop. | 0 |
|  | Refusal to the Screener | 62 |
|  | Total | 424 |
|  | ELIGIBLES |  |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{0}{30} \\ & \frac{10}{10} \end{aligned}$ | 1.Elegible establishment (Correct name and address) | 289 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 0 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 0 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 1 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\frac{0}{0}$ | 5. The establishment has less than 5 permanent full time employees | 2 |
|  | 6. The firm discontinued businesses | 10 |
|  | 7. Not a business: private household | 0 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 6 |
| 0000000 | 91. No reply (after having called in different days of the week and in different business hours) | 7 |
|  | 92. Line out of order | 0 |
|  | 93. No tone | 0 |
|  | 10. Answering machine | 0 |
|  | 11. Fax line - data line | 0 |
|  | 12. Wrong address/ moved away and could not get the new references | 47 |
|  | 13. Refuses to answer the screener | 62 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 9 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 0 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 433 |

## A.10.3. Cell weights and universe estimates

## Collapsed cell weights (strict)

|  |  | Sector |  |  |  |
| :--- | ---: | :--- | ---: | ---: | :---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |  |
| Skopje | $5-19$ | 38 | 27 | 44 |  |
|  | $20-99$ | 14 | 4 | 24 |  |
|  | $100+$ | 2 |  | 5 |  |
| Eastern | $5-19$ | 38 | 24 | 44 |  |
| Macedonia | $20-99$ | 14 | 2 | 11 |  |
|  | $100+$ | 18 |  | 2 |  |
| North-West \& | $5-19$ | 10 | 10 | 6 |  |
| West | $20-99$ | 8 | 1 | 1 |  |
|  | $100+$ | 2 | 1 | 1 |  |
| South | $5-19$ | 38 | 23 | 44 |  |
|  | $20-99$ | 14 | 2 | 5 |  |
|  | $100+$ | 4 | 1 | 1 |  |

## Collapsed cell weights (median)

|  |  | Sector |  |  |  |
| :--- | ---: | :--- | ---: | ---: | :---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |  |
| Skopje | $5-19$ | 38 | 30 | 47 |  |
|  | $20-99$ | 15 | 4 | 26 |  |
|  | $100+$ | 3 |  | 6 |  |
| Eastern | $5-19$ | 38 | 27 | 47 |  |
| Macedonia | $20-99$ | 15 | 2 | 13 |  |
|  | $100+$ | 21 |  | 3 |  |
| North-West \& | $5-19$ | 12 | 13 | 7 |  |
| West | $20-99$ | 10 | 1 | 2 |  |
|  | $100+$ | 2 | 1 | 1 |  |
| South | $5-19$ | 38 | 25 | 47 |  |
|  | $20-99$ | 15 | 2 | 6 |  |
|  | $100+$ | 5 | 2 | 2 |  |

## Collapsed cell weights (weak)

|  |  | Sector |  |  |  |
| :--- | ---: | :--- | ---: | ---: | :---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |  |
| Skopje | $5-19$ | 47 | 38 | 54 |  |
|  | $20-99$ | 17 | 5 | 28 |  |
|  | $100+$ | 3 |  | 6 |  |
| Eastern | $5-19$ | 47 | 33 | 54 |  |
| Macedonia | $20-99$ | 17 | 3 | 14 |  |
|  | $100+$ | 22 |  | 3 |  |
| North-West \& | $5-19$ | 15 | 16 | 8 |  |
| West | $20-99$ | 12 | 1 | 2 |  |
|  | $100+$ | 3 | 1 | 1 |  |
| South | $5-19$ | 47 | 31 | 54 |  |
|  | $20-99$ | 17 | 2 | 6 |  |
|  | $100+$ | 5 | 2 | 2 |  |

FYR of Macedonia universe estimates

| Strict collapsed cell weights | Median collapsed cell weights | Weak collapsed cell weights |
| :---: | :---: | :---: |
| 4612 | 5069 | 5961 |

## A.10.4. Survey and item non-response

The number of contacted establishments per realized interview was 1.51 . 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 relatively low ratio of contacted establishments per realized interview (1.51) suggests that the main source of error in estimates in the Macedonia may be selection bias and not frame inaccuracy.

## A.10.5. Local agency team involved in the study and its comments on the implementation of the BEEPS

Local agency team involved in the survey

| Local agency | Name: Brima <br> Country: Macedonia <br> Membership of international organization Gallup International, TNS |
| :--- | :--- |
| Name of Project Manager |  |
| Name and position of other key <br> persons of the project |  |


| Enumerators involved | Enumerators: 25 <br> Recruiters: $2 *$ The recruitment was done mostly by the same interviewers <br> that conducted the interviews and additionally by our office - by our field <br> force manager and for companies the project manager on this project |
| :--- | :--- |
| Other staff involved | Fieldwork Coordinators: 5 <br> Data Entry: 1 <br> Data Processing: 1 |

## Sample Frame

| Characteristic of sample frame used | The list used contained all relevant stratification variables: name of the <br> establishment, contact details, region, city and municipality, ISIC codes, <br> employee number. |
| :--- | :--- |
| Source | Central Registry of Macedonia |
| Year of publication | 2008 |
| Comments on the quality of the <br> sample frame | One of the biggest difficulties was the fact that the establishments did not <br> inform the CR of their new addresses and the information was not up-to-date <br> with the current addresses - the city, municipality and region of the <br> establishment was not always correct. Other information that was not always <br> correct were the number of employees and the activity of the establishment. <br> Also because this data base did not contain phone numbers, the recruitment <br> was more difficult. |
| Year and organisation that <br> conducted the last economic census | In Macedonia there never was an economic census <br> Other sources for companies <br> information <br> The Central Registry in Macedonia is the only official place to get <br> information on company statistics, as every company has to register and <br> report any data that have been changed - so their data base is updated daily <br> and has the most recent information regarding the company status, activity, <br> address etc and has no phone numbers. |

## Sample

| Comments/problems on sectors and <br> regions selected in the sample | On sectors: None <br> On regions: Since some of the addresses of the establishment were wrong (as <br> given by the Central Registry), the results was that our first preference <br> establishments were sometimes done in a different municipality and region <br> than planed, but still within and eligible region. |
| :--- | :--- |
| Comments on the response rate | We did not have many problems with the refusals; the refusal rate was as <br> expected from our previous experiences. We managed to convince some of <br> the respondents that refused to participate, but still some refusals were <br> definite. The refusals were not related to any specific region, sector of <br> activity and interviewer. |
| Comments on the sample design | None |

## Fieldwork

| Date of fieldwork | September 2008 - January 2009 |
| :--- | :--- |
| Country | FYR Macedonia |
| Number of interviews | Manufacturing: 115 <br> Services (sector 52): 142 <br> Core: 109 |
| Problems found during fieldwork | The issues we had to deal with during fieldwork were expected and since we <br> have experience in the B2B surveys and skilled interviews on the filed, we <br> managed to solve the problems efficiently. Those issues referred to the <br> following: <br> - recruitment process, <br> - ensuring responses to more delicate issues <br> $-\quad$ locating the establishment in cases where the addresses were wrong and <br> there was no phone number |
| Other observations | None |

## Questionnaires

| Problems for the understanding of <br> questions (write question number) | ECAg12: respondents gave answers for all the licences as a sum, and not an <br> average value. <br> a18 and p4: there was a bit of confusion, when there were other people <br> present during the interview - the answer on a18 would be 1 and on p4 would <br> be 2,3 or four, because of other people present during the interview, despite <br> the respondent. |
| :--- | :--- |
| Problems found in the navigability <br> of questionnaires (for example, skip <br> patterns) | No problems here |
| Comments on questionnaire length | The interviews lasted an hour on average or more and of course respondents <br> were not very comfortable with the length of questionnaire. Some interviews <br> had to be done in 2 visits. |
| Suggestions or other comments on <br> the questionnaires | None |

## Database

| Data entry program chosen | PERTS |
| :--- | :--- |
| Comments on the data entry <br> program | None |
| Comments on the data cleaning | Data cleaning was done following the validation reports sent by TNS <br> Opinion. |

## Country situation

| General aspects of economic, <br> political or social situation of the <br> country that could affect the results <br> of the survey | In the past 15 years, Macedonia is going through a transition period during <br> which unemployment, poverty and overall difficult economic situation are the <br> biggest problems the country is facing today. On the other hand in Macedonia <br> the response rate is usually high, since the culture is hospitable and <br> welcoming. |
| :--- | :--- |
| Relevant country events that <br> occurred during fieldwork | No relevant events during the fieldwork that would affect the results of the <br> survey or the fieldwork. |
| Other aspects | None |

## A. 11 Georgia

## A.11.1. Sampling structure and implementation

The first sample frame was supplied by the World Bank and EBRD and consisted of enterprises interviewed in BEEPS 2005. The World Bank and EBRD required that attempts should be made to re-interview establishments responding to the BEEPS 2005 survey where they were within the selected geographical regions and met eligibility criteria. That sample is referred to as the Panel. The second sample frame is based on official data from department of Statistics of Ministry of Economic Development of Georgia 2007.

The quality of the frame was assessed at the onset of the project. The frame proved to be useful though it showed positive rates of non-eligibility, repetition, non-existent units, etc. These problems are typical of establishment surveys, but given the impact these inaccuracies may have on the results, adjustments were needed when computing the appropriate weights for individual observations. The percentage of confirmed non-eligible units as a proportion of the total number of contacts to complete the survey was $20 \%$ ( 137 out of 697 establishments).

Regional stratification was defined in 6 regions. These regions are Tblisi, Kvemo Kartli, Kakheti, Mmtskheta-Mtianeti, Imereti, and Shida Kartli.

| Region (Mkhare) | Districts | Grouping used for stratification purposes in BEEPS IV |
| :---: | :---: | :---: |
| Tbilisi | Tbilisi | Tbilisi |
| Imereti | Baghdati, Chiatura, <br> Kharagauli, Khoni, Kutaisi, <br> Sachkhere, Samtredia, <br> Terjola, Tkibuli, Tskaltubo, <br> Vani, Zestaponi | Imereti |
| Kakheti | Akhmeta, Dedoplistskaro, Gurjaani, Kvareli, Lagodekhi, Sagarejo, Sighnagi, Telavi | Kakheti |
| Kvemo Kartli | Bolnisi, Dmanisi, <br> Gardabani, Marneuli, <br> Rustavi, Tetritskaro, Tsalka | Kvemo Kartli |
| Mtskheta-Mtianeti | Akhalgori, Dusheti, Kazbegi, Mtskheta, Tianeti | Mtskheta-Mtianeti |
| Shida Kartli | Gori, Java, Kareli, Kaspi, Khashuri, Tskhinvali | Shida Kartli |
| Adjara | Batumi, Keda, Khelvachauri, Khulo, Kobuleti, Shuakhevi | Not covered |
| Guria | Chokhatauri, Lanchkhuti, Ozurgeti | Not covered |
| Racha-Lechkhumi and Kvemo Svaneti | Ambrolauri, Lentekhi, Oni, Tsageri | Not covered |
| Samegrelo and Zemo Svaneti | Abasha, Chkorotsku, Khobi, Martvili, Mestia, Poti, Senaki, Tsalenjikha, Zugdidi | Not covered |
| Samtskhe-Javakheti | Adigeni, $\quad$ Akhalkalaki, Akhaltsikhe, Aspindza, Borjomi, Ninotsminda | Not covered |
| Abkhazia | Gagra, Gali,Gudauta, <br> Gulripshi, <br> Ochamchire,, | Not covered |

Sectors included in the sample:

| Original sectors | Manufacturing: 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, |
| :--- | :--- |
|  | $26,27,28,29,30,31,32,33,34,35,36,37$ |
|  | Services: 52 |
|  | Residual: $45,50,51,55,60,61,62,63,64$ |
| Added (top up) sectors | None |

Fresh sample frame

|  |  | Sector |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Region | Employees | Manufacturing | 52 | Residual | Grand Total |
| Tbilisi | 5-19 | 493 | 489 | 1186 | 2168 |
|  | 20-99 | 175 | 71 | 479 | 725 |
|  | 100+ | 44 | 17 | 118 | 179 |
| Tbilisi Total |  | 712 | 577 | 1783 | 3072 |
| Kvemo Kartli | 5-19 | 80 | 101 | 182 | 363 |
|  | 20-99 | 34 | 6 | 43 | 83 |
|  | 100+ | 13 | 1 | 3 | 17 |
| Kvemo Kartli Total |  | 127 | 108 | 228 | 463 |
| Kakheti | 5-19 | 102 | 61 | 82 | 245 |
|  | 20-99 | 32 | 4 | 23 | 59 |
|  | 100+ | 7 |  | 2 | 9 |
| Kakheti Total |  | 141 | 65 | 107 | 313 |
| MmtskhetaMtianeti | 5-19 | 18 | 4 | 39 | 61 |
|  | 20-99 | 4 |  | 17 | 21 |
|  | 100+ | 3 |  | 5 | 8 |
| Mmtskheta-Mtianeti Total |  | 25 | 4 | 61 | 90 |
| Imereti | 5-19 | 203 | 119 | 241 | 563 |
|  | 20-99 | 37 | 9 | 64 | 110 |
|  | 100+ | 4 |  | 10 | 14 |
| Imereti Total |  | 244 | 128 | 315 | 687 |
| Shida Kartli | 5-19 | 83 | 41 | 92 | 216 |
|  | 20-99 | 20 | 5 | 25 | 50 |
|  | 100+ | 8 |  | 8 | 16 |
| Shida Kartli Total |  | 111 | 46 | 125 | 282 |
| Grand Total |  | 1360 | 928 | 2619 | 4907 |

Source: Department of Statistics of Georgia

Panel sample frame


Source: BEEPS 2005

Original sample design


## A.11.2. Status codes

## TOTAL

| Complete interviews (Total) | 373 |
| :--- | :---: |
| Incomplete interviews | 6 |
| Elegible in process | 2 |
| Refusals | 43 |
| Out of target | 137 |
| Impossible to contact | 64 |
| Ineligible - coop. | 4 |
| Refusal to the Screener | 64 |
| Total | 693 |


|  | ELIGIBLES |  |
| :---: | :---: | :---: |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{00}{00} \\ & \frac{10}{10} \end{aligned}$ | 1.Elegible establishment (Correct name and address) | 382 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 1 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 9 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 23 |
|  | 16. Panel firm - now less than five employees | 9 |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{0}{00} \\ & \frac{70}{0} \\ & \hline \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 10 |
|  | 6. The firm discontinued businesses | 100 |
|  | 7. Not a business: private household | 14 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 13 |
|  | 91. No reply (after having called in different days of the week and in different business hours) | 11 |
|  | 92. Line out of order | 0 |
|  | 93. No tone | 1 |
|  | 10. Answering machine | 0 |
|  | 11. Fax line - data line | 0 |
|  | 12. Wrong address/ moved away and could not get the new references | 52 |
|  | 13. Refuses to answer the screener | 64 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 4 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 2 |
|  | 152. Out of target - firm moved abroad | 2 |
|  | Total | 697 |

PANEL

|  | Complete interviews (Total) | 68 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 2 |
|  | Elegible in process | 1 |
|  | Refusals | 9 |
|  | Out of target | 21 |
|  | Impossible to contact | 1 |
|  | Ineligible - coop. | 0 |
|  | Refusal to the Screener | 8 |
|  | Total | 110 |
|  | ELIGIBLES |  |
| $\frac{0}{0}$ | 1.Elegible establishment (Correct name and address) | 67 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 0 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 0 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 4 |
|  | 16. Panel firm - now less than five employees | 9 |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{0.0}{0} \\ & \frac{0}{E} \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 0 |
|  | 6. The firm discontinued businesses | 18 |
|  | 7. Not a business: private household | 1 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 2 |
| 00000000 | 91. No reply (after having called in different days of the week and in different business hours) | 0 |
|  | 92. Line out of order | 0 |
|  | 93. No tone | 0 |
|  | 10. Answering machine | 0 |
|  | 11. Fax line - data line | 0 |
|  | 12. Wrong address/ moved away and could not get the new references | 1 |
|  | 13. Refuses to answer the screener | 8 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 1 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 0 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 111 |

## FRESH

|  | Complete interviews (Total) | 305 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 4 |
|  | Elegible in process | 1 |
|  | Refusals | 34 |
|  | Out of target | 116 |
|  | Impossible to contact | 63 |
|  | Ineligible - coop. | 4 |
|  | Refusal to the Screener | 56 |
|  | Total | 583 |
|  | ELIGIBLES |  |
| $\frac{0}{0.0}$ | 1.Elegible establishment (Correct name and address) | 315 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 1 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 9 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 19 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{0}{0} \\ & =0 \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 10 |
|  | 6. The firm discontinued businesses | 82 |
|  | 7. Not a business: private household | 13 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 11 |
|  | 91. No reply (after having called in different days of the week and in different business hours) | 11 |
|  | 92. Line out of order | 0 |
|  | 93. No tone | 1 |
|  | 10. Answering machine | 0 |
|  | 11. Fax line - data line | 0 |
|  | 12. Wrong address/ moved away and could not get the new references | 51 |
|  | 13. Refuses to answer the screener | 56 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 3 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 2 |
|  | 152. Out of target - firm moved abroad | 2 |
|  | Total | 586 |

## A.11.3. Cell weights and universe estimates

## Collapsed cell weights (strict)

|  |  | Sector |  |  |  |
| :--- | ---: | :--- | ---: | ---: | :---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |  |
| Tbilisi | $5-19$ | 21 | 10 | 57 |  |
|  | $20-99$ | 16 | 3 | 24 |  |
|  | $100+$ | 9 | 2 | 12 |  |
| Kvemo Kartli | $5-19$ | 21 | 10 | 57 |  |
|  | $20-99$ | 2 | 3 | 3 |  |
|  | $100+$ | 1 | 1 | 2 |  |
| Kakheti | $5-19$ | 5 | 2 | 6 |  |
|  | $20-99$ | 3 | 1 | 1 |  |
|  | $100+$ | 1 |  | 2 |  |
| Mmtskheta-Mtianeti | $5-19$ | 1 | 1 | 2 |  |
|  | $20-99$ | 1 |  | 1 |  |
|  | $100+$ | 1 |  | 1 |  |
| Imereti | $5-19$ | 12 | 6 | 20 |  |
|  | $20-99$ | 3 | 1 | 5 |  |
|  | $100+$ | 3 |  | 1 |  |
| Shida Kartli | $5-19$ | 5 | 1 | 8 |  |
|  | $20-99$ | 2 | 1 | 2 |  |
|  | $100+$ | 1 |  | 1 |  |

## Collapsed cell weights (median)

|  |  | Sector |  |  |  |
| :--- | ---: | :--- | ---: | ---: | :---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |  |
| Tbilisi | $5-19$ | 24 | 12 | 67 |  |
|  | $20-99$ | 19 | 3 | 29 |  |
|  | $100+$ | 11 | 3 | 15 |  |
| Kvemo Kartli | $5-19$ | 24 | 12 | 67 |  |
|  | $20-99$ | 2 | 4 | 4 |  |
|  | $100+$ | 1 | 1 | 2 |  |
| Kakheti | $5-19$ | 5 | 2 | 6 |  |
|  | $20-99$ | 3 | 1 | 2 |  |
|  | $100+$ | 1 |  | 2 |  |
| Mmtskheta-Mtianeti | $5-19$ | 1 | 1 | 2 |  |
|  | $20-99$ | 1 |  | 1 |  |
|  | $100+$ | 1 |  | 1 |  |
| Imereti | $5-19$ | 13 | 7 | 22 |  |
|  | $20-99$ | 3 | 1 | 5 |  |
|  | $100+$ | 4 |  | 2 |  |
| Shida Kartli | $5-19$ | 5 | 2 | 8 |  |
|  | $20-99$ | 2 | 1 | 2 |  |
|  | $100+$ | 1 |  | 1 |  |

## Collapsed cell weights (weak)

|  |  | Sector |  |  |
| :--- | ---: | :--- | ---: | ---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |
| Tbilisi | $5-19$ | 30 | 15 | 87 |
|  | $20-99$ | 20 | 3 | 32 |
|  | $100+$ | 11 | 3 | 15 |
| Kvemo Kartli | $5-19$ | 30 | 15 | 87 |
|  | $20-99$ | 3 | 5 | 6 |
|  | $100+$ | 2 | 1 | 3 |
| Kakheti | $5-19$ | 6 | 3 | 7 |
|  | $20-99$ | 4 | 1 | 2 |
|  | $100+$ | 1 |  | 2 |
| Mmtskheta-Mtianeti | $5-19$ | 2 | 1 | 2 |
|  | $20-99$ | 2 |  | 2 |
|  | $100+$ | 1 |  | 1 |
| Imereti | $5-19$ | 15 | 8 | 26 |
|  | $20-99$ | 3 | 1 | 6 |
|  | $100+$ | 4 |  | 2 |
| Shida Kartli | $5-19$ | 7 | 2 | 10 |
|  | $20-99$ | 2 | 1 | 2 |
|  | $100+$ | 1 |  | 2 |

## Georgia universe estimates

| Strict collapsed cell weights | Median collapsed cell weights | Weak collapsed cell weights |
| :---: | :---: | :---: |
| 2833 | 3307 | 3878 |

## A.11.4. Survey and item non-response

The number of contacted establishments per realized interview was 1.86 . 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 relatively low ratio of contacted establishments per realized interview (1.86) suggests that the main source of error in estimates in the Georgia may be selection bias and not frame inaccuracy.

## A.11.5. Local agency team involved in the study and its comments on the implementation of the BEEPS

Local agency team involved in the survey

| Local agency | Name: GORBI <br> Country: GEORGIA <br> Membership of international organization: <br> Member of Gallup international <br> Activities since: 1991 |
| :--- | :--- |
| Name of Project Manager |  |
| Name and position of other key <br> persons of the project | Enumerators: 19 <br> Recruiters: <br> Recruiters and interviewers are the same persons in Georgia. |
| Enumerators involved | Fieldwork Coordinators: 1 <br> Editing: 0 <br> Data Entry: 5 people <br> Data Processing: 2 people |
| Other staff involved |  |

## Sample Frame

| Characteristic of sample frame used | Sample frame is based on official data from department of <br> Statistics of Ministry of Economic Development of Georgia that was <br> provided to GORBI at the end of 2007. The Data <br> Base was provided only with the requested data that was necessary for <br> BEEPS project. |
| :--- | :--- |
| Source | Department of Statistics, Georgia |
| Year of publication | 2008 |
| Comments on the quality of the <br> sample frame | During validation process out of 100 contacts, 68 had <br> correct telephone numbers and 59 addresses were valid |
| Year and organisation that <br> conducted the last economic census | Department of Statistics, Georgia |
| Other sources for companies <br> statistics | NAP |

## Sample

| Comments/problems on sectors and <br> regions selected in the sample | On sectors: None <br> On regions: The most problematic regions were Mtskheta- <br> Mtianeti and Kvemo Kartli. In these two regions there were lots of problems <br> to find establishments and to convince top managers to participate in the <br> survey which is why we reached targets for both with interviews from <br> neighbouring regions. |
| :--- | :--- |
| Comments on the response rate | In general respondents were reluctant and often even refused to give answers <br> to hard data questions. |
| Comments on the sample design | In panel progress report there were many cases when the region was not <br> identified correctly. Also, in other cases, the region was determined correctly, <br> but the city wasn't defined correctly. |
| Other comments | The larger the establishment and the larger the size of locality the more <br> seriously respondents took this survey. |

Fieldwork

| Date of fieldwork | April - August 2008 |
| :--- | :--- |
| Country | Georgia |
| Number of interviews | Manufacturing: 121 <br> Services (sector 52): 139 <br> Core: 113 |
| Problems found during fieldwork | No particular problems were found. The addresses of some organizations <br> were not indicated correctly. The local institute managed to retrieve some. <br> The end of field work was difficult due to the vacation period. |
| Other observations |  |

## Questionnaires

| Problems for the understanding of <br> questions (write question number) | n4a: The meaning of word compensation in Georgia is perceived as "payment <br> for recovery of damages" and not as "monthly income" or "monthly salary". <br> The enumerators were instructed that this should be understood in terms of <br> compensation. |
| :--- | :--- |
| Problems found in the navigability <br> of questionnaires (for example, skip <br> patterns) | No special problems encountered |
| Comments on questionnaire length | Most of the respondents were complaining about the length of questionnaires. |
| Suggestions or other comments on <br> the questionnaires | Preferable if questionnaires could be shorter. |

## Database

| Data entry program chosen | CONFIRMIT |
| :--- | :--- |
| Comments on the data entry <br> program | None |
| Comments on the data cleaning |  |

Country situation

| General aspects of economic, <br> political or social situation of the <br> country that could affect the results <br> of the survey | These aspects were moderate and did not have a dramatic impact on the <br> survey process (fieldwork was completed just before the war broke out in <br> Georgia). |
| :--- | :--- |
| Relevant country events that <br> occurred during fieldwork | Parliamentary Elections took place on May 21st. Pre-election <br> and election period created some obstacles for interviewers |
| Other aspects |  |

## A. 12 Hungary

## A.12.1. Sampling structure and implementation

The first sample frame was supplied by the World Bank and EBRD and consisted of enterprises interviewed in BEEPS 2005. The World Bank and EBRD required that attempts should be made to re-interview establishments responding to the BEEPS 2005 survey where they were within the selected geographical regions and met eligibility criteria. That sample is referred to as the Panel. The second sample frame for Hungary was the Dun \& Bradstreet database, which was considered the most reliable for the country. That frame was sent to the TNS statistical team in London to select the establishments for interview.

The quality of the frame was assessed at the onset of the project. The frame proved to be useful though it showed positive rates of non-eligibility, repetition, non-existent units, etc. These problems are typical of establishment surveys, but given the impact these inaccuracies may have on the results, adjustments were needed when computing the appropriate weights for individual observations. The percentage of confirmed non-eligible units as a proportion of the total number of contacts to complete the survey was $4.6 \%$ ( 29 out of 630 establishments).

Regional stratification was defined in three regions. These regions are Central Hungary, West Hungary and East Hungary (NUTS-1).

Sectors included in the sample:

| Original sectors | Manufacturing: 15-37 <br> Services: 52 <br> Residual: 45, 50, 51, 55, 60, 64, 72 |
| :--- | :--- |
| Added (top up) sectors | None |

Fresh sample frame

|  |  | Sector |  |  | Grand Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Region | Employees | Manufacturing | 52 | Residual |  |
| Central Hungary | 5-19 | 1318 | 825 | 3049 | 5192 |
|  | 20-99 | 822 | 301 | 1401 | 2524 |
|  | 100+ | 241 | 91 | 261 | 593 |
| Central Hungary Total |  | 2381 | 1217 | 4711 | 8309 |
| Transdanubia | 5-19 | 1036 | 537 | 1588 | 3161 |
|  | 20-99 | 713 | 175 | 657 | 1545 |
|  | 100+ | 342 | 40 | 77 | 459 |
| Transdanubia Total |  | 2091 | 752 | 2322 | 5165 |
| Northern Hungary \& Great Plain | 5-19 | 846 | 577 | 1417 | 2840 |
|  | $20-99$ | 913 | 228 | 693 | 1834 |
|  | 100+ | 335 | 52 | 103 | 490 |
| Northern Hungary \& Great Plain Total |  | 2094 | 857 | 2213 | 5164 |
| Grand Total |  | 6566 | 2826 | 9246 | 18638 |

Source: Dun \& Bradstreet Database 2008

Panel sample frame


Source: BEEPS 2005

## Original sample design



## A.12.2. Status codes

TOTAL

|  | Complete interviews (Total) | 291 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 20 |
|  | Elegible in process | 33 |
|  | Refusals | 0 |
|  | Out of target | 16 |
|  | Impossible to contact | 2 |
|  | Ineligible - coop. | 11 |
|  | Refusal to the Screener | 257 |
|  | Total | 630 |
|  | ELIGIBLES |  |
| $\frac{0}{0}$ | 1.Elegible establishment (Correct name and address) | 325 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 19 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 0 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 0 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\frac{0}{0}$ | 5. The establishment has less than 5 permanent full time employees | 0 |
|  | 6. The firm discontinued businesses | 15 |
|  | 7. Not a business: private household | 0 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 1 |
|  | 91. No reply (after having called in different days of the week and in different business hours) | 2 |
|  | 92. Line out of order | 0 |
|  | 93. No tone | 0 |
|  | 10. Answering machine | 0 |
|  | 11. Fax line - data line | 0 |
|  | 12. Wrong address/ moved away and could not get the new references | 0 |
|  | 13. Refuses to answer the screener | 257 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 538 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 11 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 1168 |

PANEL

|  | Complete interviews (Total) | 62 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 3 |
|  | Elegible in process | 6 |
|  | Refusals | 0 |
|  | Out of target | 14 |
|  | Impossible to contact | 1 |
|  | Ineligible - coop. | 3 |
|  | Refusal to the Screener | 45 |
|  | Total | 134 |
|  | ELIGIBLES |  |
| $\frac{0}{0.0}$ | 1.Elegible establishment (Correct name and address) | 68 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 3 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 0 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 0 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{00}{0} \\ & \stackrel{0}{0} \\ & 0 \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 0 |
|  | 6. The firm discontinued businesses | 13 |
|  | 7. Not a business: private household | 0 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 1 |
|  | 91. No reply (after having called in different days of the week and in different business hours) | 1 |
|  | 92. Line out of order | 0 |
|  | 93. No tone | 0 |
|  | 10. Answering machine | 0 |
|  | 11. Fax line - data line | 0 |
|  | 12. Wrong address/ moved away and could not get the new references | 0 |
|  | 13. Refuses to answer the screener | 45 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 26 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 3 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 160 |

## FRESH

|  | Complete interviews (Total) | 229 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 17 |
|  | Elegible in process | 27 |
|  | Refusals | 0 |
|  | Out of target | 2 |
|  | Impossible to contact | 1 |
|  | Ineligible - coop. | 8 |
|  | Refusal to the Screener | 212 |
|  | Total | 496 |
|  | ELIGIBLES |  |
| $\frac{0}{0}$ | 1.Elegible establishment (Correct name and address) | 257 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 16 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 0 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 0 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\begin{aligned} & 0 \\ & \frac{0}{0.0} \\ & \stackrel{0}{0} \\ & \frac{0}{6} \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 0 |
|  | 6. The firm discontinued businesses | 2 |
|  | 7. Not a business: private household | 0 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 0 |
| Unobtainable | 91. No reply (after having called in different days of the week and in different business hours) | 1 |
|  | 92. Line out of order | 0 |
|  | 93. No tone | 0 |
|  | 10. Answering machine | 0 |
|  | 11. Fax line - data line | 0 |
|  | 12. Wrong address/ moved away and could not get the new references | 0 |
|  | 13. Refuses to answer the screener | 212 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 512 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 8 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 1008 |

## A.12.3. Cell weights and universe estimates

## Collapsed cell weights (strict)

|  |  | Sector |  |  |
| :--- | ---: | :--- | ---: | ---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |
| Central Hungary | $5-19$ | 81 | 48 | 91 |
|  | $20-99$ | 51 | 20 | 50 |
|  | $100+$ | 13 | 3 | 14 |
| Transdanubia | $5-19$ | 63 | 27 | 58 |
|  | $20-99$ | 44 | 10 | 55 |
|  | $100+$ | 25 | 2 | 7 |
| Northern Hungary \& Great | $5-19$ | 81 | 17 | 91 |
| Plain | $20-99$ | 40 | 5 | 50 |
|  | $100+$ | 17 | 7 | 6 |

Collapsed cell weights (median)

|  |  | Sector |  |  |
| :--- | ---: | :--- | ---: | ---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |
| Central Hungary | $5-19$ | 93 | 76 | 114 |
|  | $20-99$ | 48 | 36 | 73 |
|  | $100+$ | 12 | 6 | 13 |
| Transdanubia | $5-19$ | 95 | 84 | 96 |
|  | $20-99$ | 76 | 34 | 104 |
|  | $100+$ | 41 | 8 | 12 |
| Northern Hungary \& Great | $5-19$ | 93 | 60 | 114 |
| Plain | $20-99$ | 79 | 20 | 73 |
|  | $100+$ | 32 | 25 | 12 |

Collapsed cell weights (weak)

|  |  | Sector |  |  |
| :--- | ---: | :--- | ---: | ---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |
| Central Hungary | $5-19$ | 100 | 80 | 119 |
|  | $20-99$ | 51 | 38 | 75 |
|  | $100+$ | 13 | 6 | 14 |
| Transdanubia | $5-19$ | 97 | 83 | 95 |
|  | $20-99$ | 77 | 34 | 102 |
|  | $100+$ | 42 | 8 | 12 |
| Northern Hungary \& Great | $5-19$ | 100 | 61 | 119 |
| Plain | $20-99$ | 83 | 21 | 75 |
|  | $100+$ | 34 | 26 | 13 |

Hungary universe estimates

| Strict collapsed cell weights | Median collapsed cell weights | Weak collapsed cell weights |
| :---: | :---: | :---: |
| 11830 | 17219 | 17794 |

## A.12.4. Survey and item non-response

The number of contacted establishments per realized interview was 2.16 . 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.

## A.12.5. Local agency team involved in the study and its comments on the implementation of the BEEPS

## Local agency team involved in the survey

| Local agency | Name: James \& Tailor Consulting <br> Country: Hungary <br> Membership of international organisation: ESOMAR <br> Activities since: 1997 |
| :--- | :--- |
| Name of Project Manager | Jenő Tóth |
| Name and position of other key <br> persons of the project | Deputy Project Manager |
| Enumerators involved | Enumerators: 56 <br> Recruiters: 8 (Enumerators' and recruiters' jobs were separated) |
| Other staff involved | Fieldwork Coordinators: 2 <br> Editing: 1 <br> Data Entry: 1 <br> Data Processing: - |

## Sample Frame

| Characteristic of sample frame used | Database of more than 59,000 companies |
| :--- | :--- |
| Source | Dun \& Bradstreet |
| Year of publication | 2008 |
| Comments on the quality of the <br> sample frame | The quality of sample frame was appropriate, only data on number of <br> employees were not precise enough. |
| Year and organisation that <br> conducted the last economic census | Central Statistical Office (2006) |
| Other sources for companies <br> statistics | N/A |

## Sample

Comments/problems on sectors and regions selected in the sample Comments on the response rate Comments on the sample design

Construction companies were very difficult to be recruited as they operate in grey economy mainly.
Response rate was similar to a normal b2b survey.
For some cases, it was difficult to handle the replacements (2nd and 3rd priorities) of a target company as these were situated in a region different from the 1st priority and thus belong to other supervisors and interviewers.

Fieldwork

| Date of fieldwork | August 2008 -February 2009 |
| :--- | :--- |
| Country | Hungary |
| Number of interviews | Manufacturing: 103 <br> Services (sector 52): 105 <br> Core: 83 |
| Problems found during fieldwork | Experience shows that the management of this project is most effective when <br> centralised with a core team of supervisors and interviewers. Respondents <br> were reluctant to share figures from the accounts. Although this is public <br> data, the majority of respondents are reluctant to share this data. (This is the <br> usual attitude in Hungary in b2b sector). |
| Other observations | No. |

## Questionnaires

| Problems for the understanding of <br> questions (write question number) | n4a in Manufacturing questionnaires: the Hungarian translation used for <br> 'including benefits when applicable' could be ambiguous and interpreted in <br> the sense of 'reward for good performance'. |
| :--- | :--- |
| Problems found in the navigability <br> of questionnaires (for example, skip <br> patterns) | None |
| Comments on questionnaire length | No, it was manageable. |
| Suggestions or other comments on <br> the questionnaires | N/A |

Database

| Data entry program chosen | CONFIRMIT |
| :--- | :--- |
| Comments on the data entry <br> program | N/A |
| Comments on the data cleaning | N/A |

## Country situation

| General aspects of economic, <br> political or social situation of the <br> country that could affect the results <br> of the survey | Impact of credit crunch and the consequential economic crisis reduced <br> commitment of respondents to the survey. |
| :--- | :--- |
| Relevant country events that <br> occurred during fieldwork | Credit crunch. |
| Other aspects | N/A |

## A. 13 Kazakhstan

## A.13.1. $\quad$ Sampling structure and implementation

The first sample frame was supplied by the World Bank and EBRD and consisted of enterprises interviewed in BEEPS 2005. The World Bank and EBRD required that attempts should be made to re-interview establishments responding to the BEEPS 2005 survey where they were within the selected geographical regions and met eligibility criteria. That sample is referred to as the Panel. The second sample frame for Kazakhstan was a file of establishments obtained from the Agency of Statistics of the Republic of Kazakhstan. A copy of that frame was sent to the statistical team in London to select the establishments for interview.

The quality of the frame was assessed at the onset of the project. The frame proved to be useful though it showed positive rates of non-eligibility, repetition, non-existent units, etc. These problems are typical of establishment surveys, but given the impact these inaccuracies may have on the results, adjustments were needed when computing the appropriate weights for individual observations. The percentage of confirmed non-eligible units as a proportion of the total number of contacts to complete the survey was $36 \%$ ( 609 out of 1686 establishments).

Regional stratification was defined in five regions. These regions are North, West, East, South, and Central. Table below shows the grouping of oblasts into these five regions.

| Regions | Grouping used for stratification purposes in BEEPS IV (oblasts in brackets) |
| :--- | :--- |
| Centre | Centre (Karagandinskaya) |
| East | East (Vostochno-Kazakhstanskaya) |
| North | North (Astana, Akmolinskaya, Severo-Kazakhstanskaya, Kostanayskaya, <br> Pavlodarskaya) |
| South | South (Almaty, Kyzylordinskaya, Zhambylskaya, Yuzhno-Kazakhstanskaya, <br> Almatinskaya) |
| West | West (Mangistauskaya, Atyrauskaya, Aktyubinskaya, Zapadno- <br> Kazakhstanskaya) |

Sectors included in the sample:

| Original sectors | Manufacturing: 15-37 <br> Services: 52 <br>  <br> Residual: 45, 50, 51, 55, 60, 61, 62, 63, 64, 72 |
| :--- | :--- |
| Added (top up) sectors | None |

Fresh sample frame

| Region |  | Sector |  |  | Grand Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Employees | Manufacturing | 52 | Residual |  |
| North | 5-19 | 549 | 373 | 2553 | 3475 |
|  | 20-99 | 402 | 124 | 954 | 1480 |
|  | 100+ | 163 | 19 | 251 | 433 |
| North Total |  | 1114 | 516 | 3758 | 5388 |
| West | 5-19 | 208 | 107 | 1252 | 1567 |
|  | 20-99 | 163 | 44 | 705 | 912 |
|  | 100+ | 79 | 8 | 162 | 249 |
| West Total |  | 450 | 159 | 2119 | 2728 |
| East | 5-19 | 199 | 156 | 616 | 971 |
|  | 20-99 | 123 | 41 | 267 | 431 |
|  | 100+ | 81 | 11 | 68 | 160 |
| East Total |  | 403 | 208 | 951 | 1562 |
| South | 5-19 | 918 | 446 | 2733 | 4097 |
|  | 20-99 | 657 | 163 | 1436 | 2256 |
|  | 100+ | 271 | 57 | 343 | 671 |
| South Total |  | 1846 | 666 | 4512 | 7024 |
| Center | 5-19 | 176 | 114 | 609 | 899 |
|  | 20-99 | 125 | 28 | 250 | 403 |
|  | 100+ | 67 | 5 | 58 | 130 |
| Center Total |  | 368 | 147 | 917 | 1432 |
| Grand Total |  | 4181 | 1696 | 12257 | 18134 |

Source: Agency of Statistics of the Republic of Kazakhstan, 2007

Panel sample frame

|  |  | Sector |  |  |  |
| :--- | ---: | :--- | :--- | ---: | ---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual | Grand Total |
| North | $<5$ | 6 | 2 | 1 | 9 |
|  | $5-19$ | 22 | 6 | 5 | 33 |
|  | $20-99$ | 18 | 1 | 4 | 23 |
|  | $100+$ | 10 | 2 | 5 | 17 |
| North Total |  | 56 | 11 | 15 | 82 |
| West | $<5$ |  |  |  |  |
|  | $5-19$ |  |  | 1 | 1 |

Source: BEEPS 2005

Original sample design

| Region |  | Sector |  |  | Grand Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Employees | Manufacturing | 52 | Residual |  |
| North | 5-19 | 14 | 18 | 14 | 46 |
|  | 20-99 | 14 | 19 | 18 | 51 |
|  | 100+ | 13 | 8 | 15 | 36 |
| North Total |  | 41 | 45 | 47 | 133 |
| West | 5-19 | 11 | 11 | 16 | 38 |
|  | 20-99 | 11 | 11 | 15 | 37 |
|  | 100+ | 11 | 4 | 16 | 31 |
| West Total |  | 33 | 26 | 47 | 106 |
| East | 5-19 | 12 | 13 | 11 | 36 |
|  | 20-99 | 12 | 15 | 11 | 38 |
|  | 100+ | 13 | 5 | 14 | 32 |
| East Total |  | 37 | 33 | 36 | 106 |
| South | 5-19 | 16 | 17 | 9 | 42 |
|  | 20-99 | 16 | 17 | 9 | 42 |
|  | 100+ | 15 | 25 | 9 | 49 |
| South Total |  | 47 | 59 | 27 | 133 |
| Center | 5-19 | 6 | 4 | 5 | 15 |
|  | 20-99 | 6 | 7 | 6 | 19 |
|  | 100+ | 7 | 3 | 8 | 18 |
| Center Total |  | 19 | 14 | 19 | 52 |
| Grand Total |  | 177 | 177 | 176 | 530 |

## A.13.2. Status codes

TOTAL

|  | Complete interviews (Total) | 554 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 0 |
|  | Elegible in process | 33 |
|  | Refusals | 415 |
|  | Out of target | 127 |
|  | Impossible to contact | 480 |
|  | Ineligible - coop. | 2 |
|  | Refusal to the Screener | 85 |
|  | Total | 1686 |
|  | ELIGIBLES |  |
| $\frac{0}{0}$ | 1.Elegible establishment (Correct name and address) | 979 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 0 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 5 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 5 |
|  | 16. Panel firm - now less than five employees | 3 |
| $\frac{\stackrel{0}{0}}{\frac{0}{0 .}}$ | 5. The establishment has less than 5 permanent full time employees | 2 |
|  | 6. The firm discontinued businesses | 33 |
|  | 7. Not a business: private household | 52 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 40 |
| 00※ت000 | 91. No reply (after having called in different days of the week and in different business hours) | 103 |
|  | 92. Line out of order | 11 |
|  | 93. No tone | 133 |
|  | 10. Answering machine | 2 |
|  | 11. Fax line - data line | 3 |
|  | 12. Wrong address/ moved away and could not get the new references | 228 |
|  | 13. Refuses to answer the screener | 85 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 89 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 1 |
|  | 152. Out of target - firm moved abroad | 1 |
|  | Total | 1775 |

PANEL

|  | Complete interviews (Total) | 77 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 0 |
|  | Elegible in process | 6 |
|  | Refusals | 31 |
|  | Out of target | 23 |
|  | Impossible to contact | 57 |
|  | Ineligible - coop. | 0 |
|  | Refusal to the Screener | 8 |
|  | Total | 202 |
|  | ELIGIBLES |  |
| $\frac{0}{0}$ | 1.Elegible establishment (Correct name and address) | 107 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 0 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 4 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 0 |
|  | 16. Panel firm - now less than five employees | 3 |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{0.0}{0} \\ & \frac{0}{E} \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 0 |
|  | 6. The firm discontinued businesses | 3 |
|  | 7. Not a business: private household | 5 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 15 |
| 00000000 | 91. No reply (after having called in different days of the week and in different business hours) | 24 |
|  | 92. Line out of order | 4 |
|  | 93. No tone | 11 |
|  | 10. Answering machine | 0 |
|  | 11. Fax line - data line | 1 |
|  | 12. Wrong address/ moved away and could not get the new references | 17 |
|  | 13. Refuses to answer the screener | 8 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 6 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 0 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 208 |

## FRESH

|  | Complete interviews (Total) | 467 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 0 |
|  | Elegible in process | 27 |
|  | Refusals | 384 |
|  | Out of target | 104 |
|  | Impossible to contact | 423 |
|  | Ineligible - coop. | 2 |
|  | Refusal to the Screener | 77 |
|  | Total | 1484 |
|  | ELIGIBLES |  |
| $\frac{0}{0}$ | 1.Elegible establishment (Correct name and address) | 872 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 0 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 1 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 5 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{00}{0} \\ & \stackrel{0}{0} \\ & 0 \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 2 |
|  | 6. The firm discontinued businesses | 30 |
|  | 7. Not a business: private household | 47 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 25 |
|  | 91. No reply (after having called in different days of the week and in different business hours) | 79 |
|  | 92. Line out of order | 7 |
|  | 93. No tone | 122 |
|  | 10. Answering machine | 2 |
|  | 11. Fax line - data line | 2 |
|  | 12. Wrong address/ moved away and could not get the new references | 211 |
|  | 13. Refuses to answer the screener | 77 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 83 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 1 |
|  | 152. Out of target - firm moved abroad | 1 |
|  | Total | 1567 |

## A.13.3. Cell weights and universe estimates

## Collapsed cell weights (strict)

| Region |  | Sector |  |  |  |
| :--- | ---: | :--- | ---: | ---: | :---: |
|  | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |  |
|  | $5-19$ | 14 | 14 | 89 |  |
|  | $20-99$ | 10 | 3 | 26 |  |
|  | $100+$ | 6 | 2 | 13 |  |
| West | $5-19$ | 12 | 6 | 88 |  |
|  | $20-99$ | 13 | 3 | 39 |  |
|  | $100+$ | 6 | 2 | 7 |  |
| East | $5-19$ | 10 | 13 | 89 |  |
|  | $20-99$ | 7 | 2 | 26 |  |
|  | $100+$ | 5 | 3 | 4 |  |
| South | $5-19$ | 22 | 12 | 88 |  |
|  | $20-99$ | 12 | 6 | 39 |  |
|  | $100+$ | 7 | 3 | 15 |  |
| Center | $5-19$ | 22 | 14 | 63 |  |
|  | $20-99$ | 22 | 4 | 14 |  |
|  | $100+$ | 6 | 1 | 3 |  |

Collapsed cell weights (median)

| Region |  | Sector |  |  |
| :--- | ---: | :--- | ---: | ---: |
|  | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |
|  | $5-19$ | 15 | 15 | 95 |
|  | $20-99$ | 12 | 3 | 28 |
|  | $100+$ | 7 | 2 | 15 |
| West | $5-19$ | 12 | 6 | 93 |
|  | $20-99$ | 15 | 3 | 43 |
|  | $100+$ | 7 | 2 | 8 |
| East | $5-19$ | 11 | 13 | 95 |
|  | $20-99$ | 7 | 2 | 28 |
|  | $100+$ | 5 | 3 | 4 |
| South | $5-19$ | 25 | 12 | 93 |
|  | $20-99$ | 13 | 6 | 43 |
|  | $100+$ | 8 | 3 | 17 |
| Center | $5-19$ | 25 | 15 | 69 |
|  | $20-99$ | 26 | 4 | 15 |
|  | $100+$ | 7 | 1 | 4 |

## Collapsed cell weights (weak)

| Region |  | Sector |  |  |
| :--- | ---: | :--- | ---: | ---: |
|  | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |
|  | $5-19$ | 26 | 22 | 148 |
|  | $20-99$ | 18 | 5 | 41 |
|  | $100+$ | 11 | 3 | 23 |
| West | $5-19$ | 17 | 7 | 151 |
|  | $20-99$ | 19 | 4 | 64 |
|  | $100+$ | 8 | 3 | 10 |
| East | $5-19$ | 14 | 15 | 148 |
|  | $20-99$ | 9 | 2 | 41 |
|  | $100+$ | 6 | 3 | 5 |
| South | $5-19$ | 45 | 20 | 151 |
|  | $20-99$ | 23 | 9 | 64 |
|  | $100+$ | 13 | 4 | 28 |
| Center | $5-19$ | 38 | 21 | 107 |
|  | $20-99$ | 37 | 5 | 23 |
|  | $100+$ | 10 | 2 | 5 |

## Kazakhstan universe estimates

| Strict collapsed cell weights | Median collapsed cell weights | Weak collapsed cell weights |
| :---: | :---: | :---: |
| 9869 | 10680 | 16450 |

## A.13.4. Survey and item non-response

The number of contacted establishments per realized interview was 2.48 . 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.

## A.13.5. Local agency team involved in the study and its comments on the implementation of the BEEPS

Local agency team involved in the survey

| Local agency | Name: BRIF Research Group LLP <br> Country: Kazakhstan <br> Membership of international organisation: ESOMAR, IRIS <br> Activities since: 1991 |
| :--- | :--- |
| Name of Project Manager | Aynur Akhmatullina |
| Name and position of other key <br> persons of the project | Head of Quantitative Department |
| Enumerators involved | Enumerators: 57 <br> Recruiters: 57 All interviewers acted as both recruiters and interviewers. |
| Other staff involved | Fieldwork Coordinators: 1 fieldwork supervisor <br> Editing: 3 <br> Data Entry: <br> Data Processing: Head of Data Processing Department |

## Sample Frame

Characteristic of sample frame used

[^3]| Source | Agency of Statistics of RK |
| :--- | :--- |
| Year of publication | 2007 |
| Comments on the quality of the <br> sample frame | More than a half the enterprises were impossible to contact mainly due to the <br> following reasons: <br> - the establishment moved away and new contacts were not found <br> $-\quad$ line out of order <br> - nobody replied after calling several times different days and times |
| Year and organisation that <br> conducted the last economic census | Agency of Statistics of RK, 2007 |
| Other sources for companies <br> statistics | None |

Sample

| Comments/problems on sectors and <br> regions selected in the sample | On sectors: None. <br> On regions: In the West we faced some problems as there are a lot of closed <br> establishments where one cannot go in without special permission. |
| :--- | :--- |
| Comments on the response rate | There were a lot of refusals: almost a half of all eligible establishments. |
| Comments on the sample design | According to TNS' estimations, the number of establishment that needed to <br> be interviewed in the West should have been less according to its share in the <br> universe. |

Fieldwork

| Date of fieldwork | September 2008 - February 2009 |
| :--- | :--- |
| Country | Kazakhstan |
| Number of interviews | Manufacturing: 181 <br> Services (sector 52): 203 <br> Core: 160 |
| Problems found during fieldwork | There were cases when substitutions for firms for a particular record number <br> were in different cities, even though they were in one region. However one <br> region included several big cities and supervisors from different cities had to <br> be in regular communication with each other. This also had an influence on <br> the length of the fieldwork. |
| Other observations | No. |

## Questionnaires

| Problems for the understanding of <br> questions (write question number) | None |
| :--- | :--- |
| Problems found in the navigability <br> of questionnaires (for example, skip <br> patterns) | None |
| Comments on questionnaire length | A lot of respondents found the questionnaire too long. |
| Suggestions or other comments on <br> the questionnaires | None |

Database

| Data entry program chosen | PERTS |
| :--- | :--- |
| Comments on the data entry <br> program | No comments. Any problems that appeared were solved with TNS opinion <br> before the data entry process started |
| Comments on the data cleaning | None |

## Country situation

General aspects of economic, political or social situation of the country that could affect the results of the survey
Relevant country events that occurred during fieldwork Other aspects

The financial crisis: - A lot of people lost their jobs, especially in the finance and construction sectors; - Some enterprises were in liquidation when interviewers contacted them - Interviewers claim that this year there were much more refusals than in other surveys.
None
None

## A. 14 Kosovo under UNSCR 1244

## A.14.1. Sampling structure and implementation

The source of the sample frame was the Association for Business Registration (ARBK http://www.arbk.org). No panel sample frame was available.

The quality of the frame was assessed at the onset of the project. The frame proved to be useful though it showed positive rates of non-eligibility, repetition, non- existent units, etc. These problems are typical of establishment surveys, but given the impact these inaccuracies may have on the results, adjustments were needed when computing the appropriate weights for individual observations. The percentage of confirmed non-eligible units as a proportion of the total number of contacts to complete the survey was $26.28 \%$ ( 113 out of 430 establishments).

Regional stratification was defined in 7 regions. These regions are Dakovica, Gnjilane, Kosovska Mitrovica, Pec, Pristina, Prizren, and Urosevac. Table below lists the municipalities in each region.

| Grouping used for stratification purposes in BEEPS IV (municipalities in <br> brackets) |
| :--- |
| Đakovica / Gjakovë (Đakovica/ Gjakovë, Dečani/ Deçan, Orahovac/ Rahovec) |
| Gnjilane (Gnjilane/ Gjilan, Kosovska Kamenica/ Kamenicë, Vitina/Viti) |
| Kosovska Mitrovica/Mitrovicë (Mitrovica, Leposavić/ Albanik, Srbica/ Skënderaj, <br> Vučitrn/ Vushtrri, Zubin Potok, Zvečan/ Zveçan) |
| Peć / Pejë (Peć/ Pejë, Istok/ Burim, Klina/ Klinë) |
| Pristina/Prishtina (Pristina, Glogovac/ Gllogovc, Kosovo Polje/ Fushë Kosovë, |
| Lipljan/Lipjan, Novo Brdo/ Novobërdë, Obilič/Kastriot, Podujevo/ Podujevë) |
| Prizren (Prizren, Dragaš/Dragash, Suva Reka/ Suharekë, Mališevo/ Malishevë) |
| Uroševac/Ferizaj (Uroševac, Štimlje/ Shtime, Kačanik/ Kaçanik, Štrpce/ Shtërpcë) |


| Original sectors | Manufacturing: 15-37 <br> Services: 52 <br> Residual: 45, 50, 51, 55, 60, 61, 62, 63, 64, 72 |
| :--- | :--- |
| Added (top up) sectors | None |

Fresh sample frame


Source: Association for Business Registration (ARBK)

Original sample design

|  |  | Sector |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Region | Employees | Manufacturing | 52 | Residual | Grand Total |
| Dakovica | 5-19 | 26 | 15 | 13 | 54 |
|  | 20-99 | 4 |  | 6 | 10 |
|  | 100+ | 1 |  | 1 | 2 |
| Dakovica Total |  | 31 | 15 | 20 | 66 |
| Gnjilane | 5-19 | 4 | 2 | 2 | 8 |
|  | 20-99 |  |  | 1 | 1 |
|  | 100+ | 1 |  |  | 1 |
| Gnjilane Total |  | 5 | 2 | 3 | 10 |
| Kosovska Mitrovica | 5-19 | 11 | 2 | 13 | 26 |
|  | 20-99 |  |  | 3 | 3 |
|  | 100+ |  |  |  | 0 |
| Kosovska Mitrovica Total |  | 11 | 2 | 16 | 29 |
| Pec | 5-19 | 14 | 5 | 7 | 26 |
|  | 20-99 | 2 |  | 2 | 4 |
|  | 100+ |  |  |  | 0 |
| Pec Total |  | 16 | 5 | 9 | 30 |
| Pristina | 5-19 | 15 | 21 | 20 | 56 |
|  | 20-99 | 5 | 2 | 19 | 26 |
|  |  |  |  | 2 | 2 |
| Pristina Total |  | 20 | 23 | 41 | 84 |
| Prizren | 5-19 | 11 | 4 | 5 | 20 |
|  | 20-99 | 5 | 2 | 8 | 15 |
|  |  |  |  |  | 0 |
| Prizren Total |  | 16 | 6 | 13 | 35 |
| Urosevac | 5-19 | 5 | 3 | 3 | 11 |
|  | 20-99 | 4 |  | 1 | 5 |
|  |  |  |  |  | 0 |
| Urosevac Total |  | 9 | 3 | 4 | 16 |
| Grand Total |  | 108 | 56 | 106 | 270 |

## A.14.2. Status codes

## TOTAL

| Complete interviews (Total) | 270 |
| :--- | :---: |
| Incomplete interviews | 1 |
| Elegible in process | 9 |
| Refusals | 16 |
| Out of target | 41 |
| Impossible to contact | 52 |
| Ineligible - coop. | 20 |
| Refusal to the Screener | 5 |
| Total | 414 |


|  | ELIGIBLES |  |
| :---: | :---: | :---: |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{0}{00} \\ & \frac{10}{101} \end{aligned}$ | 1.Elegible establishment (Correct name and address) | 295 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 0 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 1 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 0 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\begin{aligned} & \frac{0}{0} \\ & \stackrel{0}{00} \\ & \overrightarrow{0} \\ & 0 \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 1 |
|  | 6. The firm discontinued businesses | 30 |
|  | 7. Not a business: private household | 0 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 10 |
|  | 91. No reply (after having called in different days of the week and in different business hours) | 0 |
|  | 92. Line out of order | 0 |
|  | 93. No tone | 0 |
|  | 10. Answering machine | 0 |
|  | 11. Fax line - data line | 0 |
|  | 12. Wrong address/ moved away and could not get the new references | 52 |
|  | 13. Refuses to answer the screener | 5 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 16 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 20 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 430 |

## A.14.3. Cell weights and universe estimates

## Individual cell weights (strict)

|  |  | Sector |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Region | Employees | Manufacturing | 52 | Residual |
| Dakovica | 5-19 | 2 | 1 | 11 |
|  | 20-99 | 2 |  | 1 |
|  | 100+ | 1 |  | 1 |
| Gnjilane | 5-19 | 3 | 3 | 14 |
|  | 20-99 |  |  | 4 |
|  | 100+ | 1 |  |  |
| Kosovska Mitrovica | 5-19 | 5 | 7 | 19 |
|  | 20-99 |  |  | 2 |
|  | 100+ |  |  |  |
| Pec | 5-19 | 1 | 1 | 12 |
|  | 20-99 | 1 |  | 2 |
|  | 100+ |  |  |  |
| Pristina | 5-19 | 5 | 3 | 30 |
|  | 20-99 | 3 | 5 | 1 |
|  | 100+ |  |  | 1 |
| Prizren | 5-19 | 4 | 1 | 32 |
|  | 20-99 | 1 | 1 | 1 |
|  | 100+ |  |  |  |
| Urosevac | 5-19 | 2 | 1 | 15 |
|  | 20-99 | 1 |  | 1 |
|  | 100+ |  |  |  |

## Individual cell weights (median)



Individual cell weights (weak)

|  |  | Sector |  |  |  |
| :--- | ---: | :--- | ---: | ---: | :---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |  |
| Dakovica | $5-19$ | 2 | 1 | 11 |  |
|  | $20-99$ | 2 |  | 1 |  |
|  | $100+$ | 2 |  | 1 |  |
| Gnjilane | $5-19$ | 3 | 3 | 15 |  |
|  | $20-99$ |  |  | 4 |  |
|  | $100+$ | 1 |  |  |  |
| Kosovska Mitrovica | $5-19$ | 5 | 7 | 19 |  |
|  | $20-99$ |  |  | 2 |  |
|  | $100+$ |  |  |  |  |
| Pec | $5-19$ | 3 | 2 | 28 |  |
|  | $20-99$ | 3 |  | 4 |  |
|  | $100+$ | $5-19$ | 4 | 3 |  |

Kosovo under UNSCR 1244 universe estimates

| Strict individual cell weights | Median individual cell weights | Weak individual cell weights |
| :---: | :---: | :---: |
| 1439 | 1448 | 1692 |

## A.14.4. Survey and item non-response

The number of contacted establishments per realized interview was 1.59 . 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 relatively low ratio of contacted establishments per realized interview (1.59) suggests that the main source of error in estimates in the Kosovo under UNSCR 1244 may be selection bias and not frame inaccuracy.

## A.14.5. Local agency team involved in the study and its comments on the implementation of the BEEPS

Local agency team involved in the survey

| Local agency | Name: Strategic Puls Research <br> Location: Kosovo under UNSCR 1244 <br> Membership of international organisation: N/A <br> Activities since: 2006 |
| :--- | :--- |
| Name of Project Manager |  |
| Name and position of other key <br> persons of the project | Enumerators: 17 <br> Recruiters: 6 |
| Enumerators involved | Fieldwork Coordinators: 3 <br> Editing: 2 <br> Data Entry: 3 <br> Data Processing: 2 |
| Other staff involved |  |

## Sample Frame

| Characteristic of sample frame used |  |
| :--- | :--- |
| Source | Association for Business Registration (ARBK - http://www.arbk.org) |
| Year of publication | 2008,2009 |
| Comments on the quality of the <br> sample frame | The sample frame was outdated. There was a great amount of nonexistent <br> businesses. The telephone numbers were not available in the frame and most <br> addresses weren't available either and/or were incorrect. |
| Year and organisation that <br> conducted the last economic census | N/A |

## Sample

| Comments/problems on sectors and <br> regions selected in the sample | On sectors: None <br> On regions: Some businesses were not categorized properly in their regions. <br> Some Serbian areas were excluded due to security issues in those areas; <br> however this issue did not affect the overall sample regional <br> representativeness. |
| :--- | :--- |
| Comments on the response rate | The response rate was hindered mainly because of sensitive inquiries in the <br> questionnaire (financial questions, corruption issues), and/or the length of the <br> questionnaire. |
| Comments on the sample design | None. |
| Other comments | There were a lot of problems when interviewing in the municipality of <br> Mitrovica. An armed conflict started during the survey period, forcing <br> fieldwork to stop due to security issues. |

Fieldwork

| Date of fieldwork | October 2008 - February 2009 |
| :--- | :--- |
| Country | Kosovo under UNSCR 1244 |
| Number of interviews | Manufacturing: 98 <br> Services (sector 52): 63 <br> Core: 109 |
| Problems found during fieldwork | High reluctance to disclose financial information. The fieldwork was <br> implemented during the end of the year coinciding with the time when <br> inspections are done. |
| Other observations | None. |

## Questionnaires

| Problems for the understanding of <br> questions (write question number) | A lot of confusion was caused with the questions regarding the fiscal years <br> $(\mathrm{d} 2, \mathrm{n} 2, \mathrm{n} 3, \mathrm{i} 1, \mathrm{i} 2)$. Often respondents misunderstood which year the question <br> referred to. |
| :--- | :--- |
| Problems found in the navigability <br> of questionnaires (for example, skip <br> patterns) | No problems here |
| Comments on questionnaire length | Quite a few respondents felt frustrated by the length of the interview. |
| Suggestions or other comments on <br> the questionnaires | Questions regarding fiscal years could possibly be worded more elegantly to <br> avoid misinterpretation. |

## Database

| Data entry program chosen | CONFIRMIT |
| :--- | :--- |
| Comments on the data entry <br> program | None. |
| Comments on the data cleaning | No comments. |


| General aspects of economic, <br> political or social situation of the <br> country that could affect the results <br> of the survey | Since Kosovo under UNSCR 1244 declared its independence in February <br> 2008, the local government has been unstable and it has also been accused of <br> corruption. There is a lack of rule of law, which resulted in increased <br> contraband with the neighboring countries. The fieldwork was conducted at <br> the same time when the government inspections are held, at the end of the <br> year. |
| :--- | :--- |
| Relevant country events that <br> occurred during fieldwork | Numerous armed conflicts in the region (Mitrovica) heavily populated by the <br> Serb minority. |
| Other aspects | None. |

## A. 15 Kyrgyz Republic

## A.15.1. $\quad$ Sampling structure and implementation

The first sample frame was supplied by the World Bank and EBRD and consisted of enterprises interviewed in BEEPS 2005. The World Bank and EBRD required that attempts should be made to re-interview establishments responding to the BEEPS 2005 survey where they were within the selected geographical regions and met eligibility criteria. That sample is referred to as the Panel. The second sample frame used for the survey was a file of establishments purchased from the Statistical Office of the Kyrgyz Republic. A copy of that frame was sent to the TNS statistical team in London to select the establishments for interview.

The quality of the frame was assessed at the onset of the project. The frame proved to be useful though it showed positive rates of non-eligibility, repetition, non-existent units, etc. These problems are typical of establishment surveys, but given the impact these inaccuracies may have on the results, adjustments were needed when computing the appropriate weights for individual observations. The percentage of confirmed non-eligible units as a proportion of the total number of contacts to complete the survey was $65 \%$ ( 1205 out of 1865 establishments).

Regional stratification was defined in five regions. These regions are Bishkek City, Chui Oblast, Issyk-Kul Oblast, Jalalabad, and Osh Oblast.

| Official regions | Grouping used for stratification purposes in <br> BEEPS IV (municipalities in brackets) |
| :--- | :--- |
| Bishkek city | Bishkek |
| Chui oblast | Chui oblast |
| Jalalabad oblast | Jalalabad oblast |
| Osh oblast | Osh oblast |
| Issyk - Kul oblast | Issyk - Kul oblast |
| Batken Oblasty | Not covered |
| Naryn Oblasty | Not covered |
| Talas Oblasty | Not covered |

Sectors included in the sample:

| Original sectors | Manufacturing: 15-37 <br> Services: 52 <br> Residual: 45, 50, 51, 55, 60, 61, 62, 63, 64, 72 |
| :--- | :--- |
| Added (top up) sectors | None |

Fresh sample frame


Source: Statistical Office of the Kyrgyz Republic

Panel sample frame


Source: BEEPS 2005

Original sample design

|  |  | Sector |  |  |  |
| :--- | ---: | :--- | ---: | ---: | ---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual | Grand Total |
| Chui oblast | $5-19$ | 19 | 15 | 27 | 61 |
|  | $20-99$ | $100+$ | 24 | 3 | 23 |

## A.15.2. Status codes

TOTAL

|  | Complete interviews (Total) | 235 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 0 |
|  | Elegible in process | 0 |
|  | Refusals | 0 |
|  | Out of target | 472 |
|  | Impossible to contact | 724 |
|  | Ineligible - coop. | 9 |
|  | Refusal to the Screener | 425 |
|  | Total | 1865 |
|  | ELIGIBLES |  |
| $\frac{0}{0}$ | 1.Elegible establishment (Correct name and address) | 235 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 0 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 0 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 0 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\frac{\stackrel{0}{0}}{\frac{0}{0 .}}$ | 5. The establishment has less than 5 permanent full time employees | 39 |
|  | 6. The firm discontinued businesses | 214 |
|  | 7. Not a business: private household | 67 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 152 |
|  | 91. No reply (after having called in different days of the week and in different business hours) | 244 |
|  | 92. Line out of order | 31 |
|  | 93. No tone | 54 |
|  | 10. Answering machine | 2 |
|  | 11. Fax line - data line | 25 |
|  | 12. Wrong address/ moved away and could not get the new references | 268 |
|  | 13. Refuses to answer the screener | 425 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 1 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 8 |
|  | 152. Out of target - firm moved abroad | 1 |
|  | Total | 1866 |

PANEL

|  | Complete interviews (Total) | 71 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 0 |
|  | Elegible in process | 0 |
|  | Refusals | 0 |
|  | Out of target | 17 |
|  | Impossible to contact | 15 |
|  | Ineligible - coop. | 0 |
|  | Refusal to the Screener | 35 |
|  | Total | 138 |
|  | ELIGIBLES |  |
| $\frac{0}{0.0}$ | 1.Elegible establishment (Correct name and address) | 71 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 0 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 0 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 0 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{00}{0} \\ & \stackrel{0}{0} \\ & 0 \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 0 |
|  | 6. The firm discontinued businesses | 11 |
|  | 7. Not a business: private household | 1 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 5 |
| $\begin{aligned} & \text { 0 } \\ & \text { I } \\ & \text { B } \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ | 91. No reply (after having called in different days of the week and in different business hours) | 4 |
|  | 92. Line out of order | 0 |
|  | 93. No tone | 0 |
|  | 10. Answering machine | 1 |
|  | 11. Fax line - data line | 0 |
|  | 12. Wrong address/ moved away and could not get the new references | 10 |
|  | 13. Refuses to answer the screener | 35 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 0 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 0 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 138 |

## FRESH

|  | Complete interviews (Total) | 164 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 0 |
|  | Elegible in process | 0 |
|  | Refusals | 0 |
|  | Out of target | 455 |
|  | Impossible to contact | 709 |
|  | Ineligible - coop. | 9 |
|  | Refusal to the Screener | 390 |
|  | Total | 1727 |
|  | ELIGIBLES |  |
| $\frac{0}{0}$ | 1.Elegible establishment (Correct name and address) | 164 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 0 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 0 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 0 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{0.0}{0} \\ & \frac{0}{E} \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 39 |
|  | 6. The firm discontinued businesses | 203 |
|  | 7. Not a business: private household | 66 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 147 |
| Unobtainable | 91. No reply (after having called in different days of the week and in different business hours) | 240 |
|  | 92. Line out of order | 31 |
|  | 93. No tone | 54 |
|  | 10. Answering machine | 1 |
|  | 11. Fax line - data line | 25 |
|  | 12. Wrong address/ moved away and could not get the new references | 358 |
|  | 13. Refuses to answer the screener | 390 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 1 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 8 |
|  | 152. Out of target - firm moved abroad | 1 |
|  | Total | 1728 |

## A.15.3. Cell weights and universe estimates

## Individual cell weights (strict)

|  |  |  | Sector |  |
| :--- | ---: | :--- | ---: | ---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |
| Chui oblast | $5-19$ | 5 | 1 | 2 |
|  | $20-99$ | 3 |  | 1 |
|  | $100+$ | 1 |  |  |
| Osh oblast | $5-19$ | 7 | 1 | 2 |
|  | $20-99$ | 1 | 3 | 1 |
|  | $100+$ | 1 |  | 1 |
| Jalalabad oblast | $5-19$ | 3 | 1 | 3 |
|  | $20-99$ | 1 | 1 | 3 |
|  | $100+$ | 1 |  | 2 |
| Issyk-Kul oblast | $5-19$ | 2 | 2 | 4 |
|  | $20-99$ | 1 |  | 3 |
|  | $100+$ | 1 |  | 1 |
| Bishkek city | $5-19$ | 2 | 1 | 3 |
|  | $20-99$ | $100+$ | 1 | 2 |

## Individual cell weights (median)

|  |  | Sector |  |  |
| :--- | ---: | :--- | ---: | ---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |
| Chui oblast | $5-19$ | 29 | 4 | 12 |
|  | $20-99$ | 16 |  | 8 |
|  | $100+$ | 3 |  |  |
| Osh oblast | $5-19$ | 8 | 1 | 2 |
|  | $20-99$ | 1 | 4 | 2 |
|  | $100+$ | 1 |  | 1 |
| Jalalabad oblast | $5-19$ | 3 | 1 | 4 |
|  | $20-99$ | 1 | 2 | 3 |
|  | $100+$ | 1 |  | 2 |
| Issyk-Kul oblast | $5-19$ | 5 | 4 | 10 |
|  | $20-99$ | 2 |  | 9 |
|  | $100+$ | 3 |  | 4 |
| Bishkek city | $5-19$ | 7 | 3 | 13 |
|  | $20-99$ | 3 | 8 | 3 |
|  | $100+$ | 3 |  | 4 |

## Individual cell weights (weak)

|  |  |  | Sector |  |  |  |  |
| :--- | ---: | :--- | ---: | ---: | :---: | :---: | :---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |  |  |  |
| Chui oblast | $5-19$ | 127 | 11 | 45 |  |  |  |
|  | $20-99$ | 60 |  | 24 |  |  |  |
|  | $100+$ | 11 |  |  |  |  |  |
| Osh oblast | $5-19$ | 19 | 2 | 4 |  |  |  |
|  | $20-99$ | 3 | 5 | 3 |  |  |  |
|  | $100+$ | 3 |  | 2 |  |  |  |
| Jalalabad oblast | $5-19$ | 7 | 2 | 8 |  |  |  |
|  | $20-99$ | 3 | 2 | 6 |  |  |  |
|  | $100+$ | 2 |  | 3 |  |  |  |
| Issyk-Kul oblast | $5-19$ | 9 | 5 | 15 |  |  |  |
|  | $20-99$ | 3 |  | 12 |  |  |  |
|  | $100+$ | 4 |  | 5 |  |  |  |
| Bishkek city | $5-19$ | 15 | 4 | 25 |  |  |  |
|  | $20-99$ | 6 | 11 | 6 |  |  |  |
|  | $100+$ | 5 |  | 6 |  |  |  |

## Kyrgyz Republic universe estimates

| Strict individual cell weights | Median individual cell weights | Weak individual cell weights |
| :---: | :---: | :---: |
| 390 | 1035 | 2139 |

## A.15.4. Survey and item non-response

The number of contacted establishments per realized interview was 7.94 . 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.

## A.15.5. Local agency team involved in the study and its comments on the implementation of the BEEPS

## Local agency team involved in the survey

| Local agency | Name: Center for Public Opinion Study «El-Pikir» <br> Country: Kyrgyz Republic <br> Membership of international organisation:No <br> Activities since: 1999 |
| :--- | :--- |
| Name of Project Manager | Ilibezova Elvira Kojomberdievna |
| Name and position of other key <br> persons of the project | Coordinator |
| Enumerators involved | Enumerators: 31 <br> Recruiters: 10 <br> Only 5 interviewers also did part of the recruitment |
| Other staff involved | Fieldwork Coordinators: 1 <br> Editing: 1 <br> Data Entry: 1, mainly done by GORBI co-coordination centre in Georgia. |

## Sample Frame

| Characteristic of sample frame used | N/A |
| :--- | :--- |
| Source | Statistical Office of the Kyrgyz Republic |
| Year of publication | 2008 |
| Comments on the quality of the <br> sample frame | The quality of the sample was not good. There were too many wrong <br> addresses and telephone numbers. |
| Year and organisation that <br> conducted the last economic census | Statistical Office of the Kyrgyz Republic |
| Other sources for companies <br> statistics | None |

## Sample

| Comments/problems on sectors and <br> regions selected in the sample | On sectors: None <br> On regions: None |
| :--- | :--- |
| Comments on the response rate | The refusal rate was particularly high in Bishkek city, Chui oblast and Issik <br> kul regions. |
| Comments on the sample design | No special comments |

Fieldwork

| Date of fieldwork | September 2008 - March 2009 |
| :--- | :--- |
| Country | Kyrgyz Republic |
| Number of interviews | Manufacturing: 92 <br> Services (sector 52): 82 <br> Core: 61 |
| Problems found during fieldwork | Wrong addresses, refusals and distrust from the target respondents on who <br> was conducting the survey and what the results would be used for. |
| Other observations | No. |
| Questionnaires No. <br> Problems for the understanding of <br> questions (write question number) No. <br> Problems found in the navigability <br> of questionnaires (for example, skip <br> patterns)  <br> Comments on questionnaire length No. <br> Suggestions or other comments on <br> the questionnaires No. |  |

Database

| Data entry program chosen | CONFIRMIT |
| :--- | :--- |
| Comments on the data entry <br> program | None. |
| Comments on the data cleaning | We just made call backs to the establishments based on the Data Validation <br> Reports (DVRs) prepared by TNS. |

## Country situation

| General aspects of economic, <br> political or social situation of the <br> country that could affect the results <br> of the survey | In comparison with last year and two years ago the situation in the country <br> changed to the worst. In the country there are electricity outages which last <br> between 12pm and 4pm every day. This has affected businesses to a large <br> extent. It also had a negative influence on the response rate. |
| :--- | :--- |
| Relevant country events that <br> occurred during fieldwork | Daily electricity outages |
| Other aspects | None. |

## A. 16 Latvia

## A.16.1. Sampling structure and implementation

The first sample frame was supplied by the World Bank and EBRD and consisted of enterprises interviewed in BEEPS 2005. The World Bank and EBRD required that attempts should be made to re-interview establishments responding to the BEEPS 2005 survey where they were within the selected geographical regions and met eligibility criteria. That sample is referred to as the Panel. The source of the second sample frame was the January 2008 version of the Business Register of the Central Statistical Bureau of Latvia.

The quality of the frame was assessed at the onset of the project. The frame proved to be useful though it showed positive rates of non-eligibility, repetition, non-existent units, etc. These
problems are typical of establishment surveys, but given the impact these inaccuracies may have on the results, adjustments were needed when computing the appropriate weights for individual observations. The percentage of confirmed non-eligible units as a proportion of the total number of contacts to complete the survey was $26.32 \%$ ( 195 out of 741 establishments).

Regional stratification was defined in 6 regions. These regions are Riga, Pieriga, Vidzeme, Kurzeme, Zemgale, and Latgale (NUTS-3).

Sectors included in the sample:

| Original sectors | Manufacturing: 15-37 <br> Services: 52 <br> Residual: 45, 50, 51, 55, 60, 61, 62, 63, 64, 72 |
| :--- | :--- |
| Added (top up) sectors | None |

## Fresh sample frame

|  |  | Sector |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { Region } \\ & \hline \text { Riga } \end{aligned}$ | Employees | Manufacturing | 52 | Residual | Grand Total |
|  | 5-19 | 1010 | 1604 | 4780 | 7394 |
|  | 20-99 | 415 | 316 | 1447 | 2178 |
|  | 100+ | 117 | 70 | 205 | 392 |
| Riga Total |  | 1542 | 1990 | 6432 | 9964 |
| Pieriga | 5-19 | 423 | 506 | 1034 | 1963 |
|  | 20-99 | 192 | 69 | 256 | 517 |
|  | 100+ | 50 | 14 | 32 | 96 |
| Pieriga Total |  | 665 | 589 | 1322 | 2576 |
| Vidzeme | 5-19 | 219 | 294 | 539 | 1052 |
|  | 20-99 | 147 | 79 | 128 | 354 |
|  | 100+ | 27 | 7 | 15 | 49 |
| Vidzeme Total |  | 393 | 380 | 682 | 1455 |
| Kurzeme | 5-19 | 266 | 420 | 705 | 1391 |
|  | 20-99 | 172 | 63 | 236 | 471 |
|  | 100+ | 39 | 6 | 35 | 80 |
| Kurzeme Total |  | 477 | 489 | 976 | 1942 |
| Zemgale | 5-19 | 190 | 335 | 541 | 1066 |
|  | 20-99 | 110 | 70 | 150 | 330 |
|  | 100+ | 39 | 12 | 14 | 65 |
| Zemgale Total |  | 339 | 417 | 705 | 1461 |
| Latgale | 5-19 | 234 | 444 | 549 | 1227 |
|  | 20-99 | 125 | 72 | 177 | 374 |
|  | 100+ | 33 | 8 | 20 | 61 |
| Latgale Total |  | 392 | 524 | 746 | 1662 |
| Grand Total |  | 3808 | 4389 | 10863 | 19060 |

Source: Central Statistical Bureau of Latvia - Business Register, January 2008

Panel sample frame

|  |  | Sector |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Region | Employees | Manufacturing | 52 | Residual | Grand Total |
| Riga | 1-4 | 2 | 14 | 11 | 27 |
|  | 5-19 | 7 | 10 | 10 | 27 |
|  | 20-99 | 2 | 3 | 8 | 13 |
|  | 100+ | 4 |  | 7 | 11 |
| Riga Total |  | 15 | 27 | 36 | 78 |
| Pieriga | 1-4 |  |  | 4 | 4 |
|  | 5-19 |  | 1 | 3 | 4 |
|  | 20-99 |  |  | 1 | 1 |
|  | 100+ | 1 |  |  | 1 |
| Pieriga Total |  | 1 | 1 | 8 | 10 |
| Vidzeme | 1-4 | 1 | 2 |  | 3 |
|  | 5-19 |  | 2 | 2 | 4 |
|  | 20-99 | 2 |  |  | 2 |
|  | 100+ |  | 2 | 1 | 3 |
| Vidzeme Total |  | 3 | 6 | 3 | 12 |
| Kurzeme | 1-4 |  | 3 | 4 | 7 |
|  | 5-19 |  | 1 | 1 | 2 |
|  | 20-99 | 1 |  |  | 1 |
|  | 100+ | 2 | 2 | 1 | 5 |
| Kurzeme Total |  | 3 | 6 | 6 | 15 |
| Zemgale | 1-4 |  | 3 | 2 | 5 |
|  | 5-19 | 2 |  | 2 | 4 |
|  | 20-99 |  | 1 | 1 | 2 |
|  | 100+ | 2 |  | 1 | 3 |
| Zemgale Total |  | 4 | 4 | 6 | 14 |
| Latgale | 1-4 |  | 2 |  | 2 |
|  | 5-19 | 1 | 1 | 3 | 5 |
|  | 20-99 |  |  | 2 | 2 |
|  | 100+ |  |  |  |  |
| Latgale Total |  | 1 | 3 | 5 | 9 |
| Grand Total |  | 27 | 47 | 64 | 138 |

Source: BEEPS 2005

Original sample design

|  |  | Sector |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Region | Employees | Manufacturing | 52 | Residual | Grand Total |
| Riga | 5-19 | 13 | 13 | 17 | 43 |
|  | 20-99 | 11 | 14 | 18 | 43 |
|  | 100+ | 11 | 18 | 19 | 48 |
| Riga Total |  | 35 | 45 | 54 | 134 |
| Pieriga | 5-19 | 5 | 4 | 4 | 13 |
|  | 20-99 | 5 | 3 | 3 | 11 |
|  | 100+ | 5 | 4 | 3 | 12 |
| Pieriga Total |  | 15 | 11 | 10 | 36 |
| Vidzeme | 5-19 | 3 | 2 | 2 | 7 |
|  | 20-99 | 4 | 4 | 2 | 10 |
|  | 100+ | 3 | 2 | 2 | 7 |
| Vidzeme Total |  | 10 | 8 | 6 | 24 |
| Kurzeme | 5-19 | 3 | 4 | 3 | 10 |
|  | 20-99 | 4 | 3 | 3 | 10 |
|  | 100+ | 4 | 1 | 3 | 8 |
| Kurzeme Total |  | 11 | 8 | 9 | 28 |
| Zemgale | 5-19 | 3 | 3 | 2 | 8 |
|  | 20-99 | 3 | 3 | 2 | 8 |
|  | 100+ | 4 | 3 | 1 | 8 |
| Zemgale Total |  | 10 | 9 | 5 | 24 |
| Latgale | 5-19 | 3 | 4 | 2 | 9 |
|  | 20-99 | 3 | 3 | 2 | 8 |
|  | 100+ | 3 | 2 | 2 | 7 |
| Latgale Total |  | 9 | 9 | 6 | 24 |
| Grand Total |  | 90 | 90 | 90 | 270 |

## A.16.2. Status codes

TOTAL

| Complete interviews (Total) | 271 |
| :--- | :---: |
| Incomplete interviews | 1 |
| Elegible in process | 3 |
| Refusals | 1 |
| Out of target | 54 |
| Impossible to contact | 115 |
| Ineligible - coop. | 26 |
| Refusal to the Screener | 266 |
| Total | 737 |


|  | ELIGIBLES |  |
| :---: | :---: | :---: |
| $\frac{0}{0} \frac{0}{60}$ | 1.Elegible establishment (Correct name and address) | 266 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 0 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 3 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 1 |
|  | 16. Panel firm - now less than five employees | 6 |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{00}{00} \\ & \frac{0}{0} \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 0 |
|  | 6. The firm discontinued businesses | 47 |
|  | 7. Not a business: private household | 0 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 7 |
| $\begin{aligned} & 0 \\ & 0 \\ & \text { O } \\ & \text {. } \\ & \text { I } \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ | 91. No reply (after having called in different days of the week and in different business hours) | 93 |
|  | 92. Line out of order | 5 |
|  | 93. No tone | 0 |
|  | 10. Answering machine | 0 |
|  | 11. Fax line - data line | 2 |
|  | 12. Wrong address/ moved away and could not get the new references | 16 |
|  | 13. Refuses to answer the screener | 266 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 4 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 9 |
|  | 152. Out of target - firm moved abroad | 17 |
|  | Total | 741 |

PANEL

|  | Complete interviews (Total) | 57 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 0 |
|  | Elegible in process | 0 |
|  | Refusals | 0 |
|  | Out of target | 17 |
|  | Impossible to contact | 16 |
|  | Ineligible - coop. | 2 |
|  | Refusal to the Screener | 29 |
|  | Total | 121 |
|  | ELIGIBLES |  |
| $\frac{0}{0}$ | 1.Elegible establishment (Correct name and address) | 49 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 0 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 1 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 1 |
|  | 16. Panel firm - now less than five employees | 6 |
| $\frac{0}{0.0}$ | 5. The establishment has less than 5 permanent full time employees | 0 |
|  | 6. The firm discontinued businesses | 15 |
|  | 7. Not a business: private household | 0 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 2 |
| 00000000 | 91. No reply (after having called in different days of the week and in different business hours) | 10 |
|  | 92. Line out of order | 1 |
|  | 93. No tone | 0 |
|  | 10. Answering machine | 0 |
|  | 11. Fax line - data line | 1 |
|  | 12. Wrong address/ moved away and could not get the new references | 4 |
|  | 13. Refuses to answer the screener | 29 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 0 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 1 |
|  | 152. Out of target - firm moved abroad | 1 |
|  | Total | 121 |

## FRESH

| Complete interviews (Total) |  | 214 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 1 |
|  | Elegible in process | 3 |
|  | Refusals | 1 |
|  | Out of target | 37 |
|  | Impossible to contact | 99 |
|  | Ineligible - coop. | 24 |
|  | Refusal to the Screener | 237 |
|  | Total | 616 |
|  | ELIGIBLES |  |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{0}{00} \\ & \frac{1015}{} \end{aligned}$ | 1.Elegible establishment (Correct name and address) | 217 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 0 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 2 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 0 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{00}{0} \\ & \stackrel{0}{0} \\ & 0 \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 0 |
|  | 6. The firm discontinued businesses | 32 |
|  | 7. Not a business: private household | 0 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 5 |
|  | 91. No reply (after having called in different days of the week and in different business hours) | 83 |
|  | 92. Line out of order | 4 |
|  | 93. No tone | 0 |
|  | 10. Answering machine | 0 |
|  | 11. Fax line - data line | 1 |
|  | 12. Wrong address/ moved away and could not get the new references | 11 |
|  | 13. Refuses to answer the screener | 237 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 4 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 8 |
|  | 152. Out of target - firm moved abroad | 16 |
|  | Total | 620 |

## A.16.3. Cell weights and universe estimates

## Collapsed cell weights (strict)

|  |  | Sector |  |  |
| :--- | ---: | :--- | ---: | ---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |
| Riga | $5-19$ | 24 | 59 | 81 |
|  | $20-99$ | 13 | 9 | 30 |
|  | $100+$ | 3 | 2 | 4 |
| Pieriga | $5-19$ | 38 | 59 | 81 |
|  | $20-99$ | 36 | 9 | 36 |
|  | $100+$ | 4 | 2 | 6 |
| Vidzeme | $5-19$ | 35 | 54 | 117 |
|  | $20-99$ | 15 | 6 | 25 |
|  | $100+$ | 6 | 2 | 3 |
| Kurzeme | $5-19$ | 42 | 36 | 54 |
|  | $20-99$ | 17 | 9 | 45 |
|  | $100+$ | 3 | 1 | 7 |
| Zemgale | $5-19$ | 17 | 50 | 47 |
|  | $20-99$ | 18 | 13 | 49 |
|  | $100+$ | $5-19$ | 2 | 2 |
| Latgale | $20-99$ | 20 | 54 | 117 |
|  | $100+$ | 27 | 11 | 37 |
|  | 7 | 4 | 3 |  |

## Collapsed cell weights (median)

|  |  | Sector |  |  |
| :--- | ---: | :--- | ---: | ---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |
| Riga | $5-19$ | 45 | 101 | 158 |
|  | $20-99$ | 26 | 17 | 65 |
|  | $100+$ | 7 | 4 | 11 |
| Pieriga | $5-19$ | 54 | 101 | 158 |
|  | $20-99$ | 54 | 12 | 57 |
|  | $100+$ | 7 | 3 | 11 |
| Vidzeme | $5-19$ | 66 | 91 | 224 |
|  | $20-99$ | 29 | 11 | 54 |
|  | $100+$ | 12 | 3 | 7 |
| Kurzeme | $5-19$ | 76 | 64 | 108 |
|  | $20-99$ | 33 | 17 | 96 |
|  | $100+$ | 7 | 3 | 16 |
| Zemgale | $5-19$ | 35 | 100 | 108 |
|  | $20-99$ | 41 | 28 | 119 |
|  | $100+$ | 11 | 4 | 6 |
| Latgale | $5-19$ | 32 | 91 | 224 |
|  | $20-99$ | 46 | 19 | 69 |
|  | $100+$ | 14 | 7 | 6 |

## Collapsed cell weights (weak)

|  |  | Sector |  |  |
| :--- | ---: | :--- | ---: | ---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |
| Riga | $5-19$ | 66 | 140 | 223 |
|  | $20-99$ | 33 | 20 | 79 |
|  | $100+$ | 8 | 4 | 11 |
| Pieriga | $5-19$ | 73 | 140 | 223 |
|  | $20-99$ | 61 | 13 | 63 |
|  | $100+$ | 7 | 3 | 11 |
| Vidzeme | $5-19$ | 88 | 125 | 313 |
|  | $20-99$ | 33 | 12 | 59 |
|  | $100+$ | 13 | 3 | 7 |
| Kurzeme | $5-19$ | 106 | 85 | 146 |
|  | $20-99$ | 38 | 19 | 108 |
|  | $100+$ | 7 | 3 | 17 |
| Zemgale | $5-19$ | 51 | 138 | 152 |
|  | $20-99$ | 49 | 32 | 140 |
|  | $100+$ | 12 | 4 | 7 |
| Latgale | $5-19$ | 50 | 125 | 313 |
|  | $20-99$ | 60 | 23 | 87 |
|  | $100+$ | 16 | 8 | 7 |

Latvia universe estimates

| Strict collapsed cell weights | Median collapsed cell weights | Weak collapsed cell weights |
| :---: | :---: | :---: |
| 6689 | 12727 | 16894 |

## A.16.4. Survey and item non-response

The number of contacted establishments per realized interview was 2.72 . 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 relatively low ratio of contacted establishments per realized interview (2.72) suggests that the main source of error in estimates in the Latvia may be selection bias and not frame inaccuracy.

## A.16.5. Local agency team involved in the study and its comments on the implementation of the BEEPS

Local agency team involved in the survey

| Local agency | Name: TNS Latvia <br> Country: Latvia <br> Membership of international organization: ESOMAR <br> Activities since: 2004 |
| :--- | :--- |
| Name of Project Manager |  |
| Name and position of other key <br> persons of the project | Enumerators: 37 <br> Recruiters: All enumerators did the recruitment |
| Enumerators involved | Fieldwork Coordinators: 1 <br> Editing: 2 <br> Data Entry: 1 <br> Data Processing: 1 |
| Other staff involved |  |

## Sample Frame

Characteristic of sample frame used Business register of Central Statistical Bureau of Latvia, which contains
information about establishments. This Business register is active and
regularly updated.

| Source | Central Statistical Bureau of Latvia. |
| :--- | :--- |
| Year of publication | January 2008 |
| Comments on the quality of the <br> sample frame | The Business register from the Central statistical Bureau is regularly updated <br> (by quarterly bases). The information is available and reliable. |
| Year and organisation that <br> conducted the last economic census | Central Statistical Bureau of Latvia. |

## Sample

| Comments/problems on sectors and <br> regions selected in the sample | On sectors: None <br> On regions: None <br> On Employee size: Due to the global and local crisis situation, many <br> establishments had experienced a decrease of employees. This meant that <br> some enterprises originally classified as large companies moved from the <br> bigger level of size to the smaller one. |
| :--- | :--- |
| Comments on the response rate | None. |
| Comments on the sample design | The sample frame was ordered to the Business register following TNS <br> opinion's instructions. For future waves of the BEEPS, getting the sample <br> should be done more efficiently, perhaps having all information, provided at <br> once during the first stages of the survey implementation in the country and <br> not in different batches. |

## Fieldwork

| Date of fieldwork | September - December 2008 |
| :--- | :--- |
| Country | Latvia |
| Number of interviews | Manufacturing: 89 <br> Services (sector 52): 111 <br> Core: 71 |
| Problems found during fieldwork | The selected sample was widely dispersed, forcing interviewers to travel long <br> distances between one preference and its replacements. This made the <br> transportation and other related fieldwork costs higher than originally <br> expected. |
| Other observations | None. |

## Questionnaires

| Problems for the understanding of <br> questions (write question number) | -Understanding the concept of the typical month or week was difficult. We <br> suggest putting the explanation in the questionnaire, so the respondent can <br> read it as well, not only in the manual for the interviewers or to use an <br> easier definition. <br> The hardest points of the questionnaire were hard data questions. Also, in <br> some questions the respondents were asked to estimate in days, in a <br> typical week, in a typical month or during the last fiscal year in total. Our <br> suggestion is to use more universal time period for the counting of times <br> in all cases where it is possible. <br> We suggest putting in the questionnaire more definitions, so the <br> respondents see them. This will help to better to understand the question <br> and to get more precise and homogeneous answers. |
| :--- | :--- |
| Problems found in the navigability <br> of questionnaires (for example, skip <br> patterns) | The question numbering in case of being paper interview is not a good <br> solution. It is hard sometimes to find the question, after a skip pattern for <br> example, as there is no specific rule for numbering the questions. |
| Comments on questionnaire length | The interview length is more than one hour, which for the target group - the <br> highest level of the enterprise management- is too long. |
| Suggestions or other comments on <br> the questionnaires | None |

## Database

| Data entry program chosen | PERTS |
| :--- | :--- |
| Comments on the data entry <br> program | This was not a user friendly program. Receiving updates of the program made <br> things more difficult. |
| Comments on the data cleaning | None. |


| General aspects of economic, <br> political or social situation of the <br> country that could affect the results <br> of the survey | The survey was conducted when the global financial crisis was starting in the <br> country, which could have impact on the survey results, but only marginally. |
| :--- | :--- |
| Relevant country events that <br> occurred during fieldwork | None. |
| Other aspects | None. |

## A. 17 Lithuania

## A.17.1. Sampling structure and implementation

The first sample frame was supplied by the World Bank and EBRD and consisted of enterprises interviewed in BEEPS 2005. The World Bank and EBRD required that attempts should be made to re-interview establishments responding to the BEEPS 2005 survey where they were within the selected geographical regions and met eligibility criteria. That sample is referred to as the Panel. The source of the second sample frame was Creditreform Lietuva - 2008- Organization database.

The quality of the frame was assessed at the onset of the project. The frame proved to be useful though it showed positive rates of non-eligibility, repetition, non-existent units, etc. These problems are typical of establishment surveys, but given the impact these inaccuracies may have on the results, adjustments were needed when computing the appropriate weights for individual observations. The percentage of confirmed non-eligible units as a proportion of the total number of contacts to complete the survey was $25.1 \%$ ( 446 out of 1777 establishments).

Regional stratification was defined in 4 regions. These regions are Coast and West, North East, South West and Vilniaus. Table below shows the grouping of NUTS-3 regions into these four regions.

| NUTS-3 <br> regions | Grouping used for stratification purposes in <br> BEEPS IV (municipalities in brackets) |
| :--- | :--- |
| Vilniaus | Vilniaus |
| Klaipedos | Coast+West |
| Taurages |  |
| Telsiu | North-East |
| Panevezio |  |
| Siauliu | South-West |
| Utenos |  |
| Alytaus |  |
| Kauno |  |
| Marijampoles |  |

Sectors included in the sample:

| Original sectors | Manufacturing: 15-37 <br> Services: 52 <br> Residual: 45, 50, 51, 55, 60, 61, 62, 63, 64, 72 |
| :--- | :--- |
| Added (top up) sectors | None |

Fresh sample frame


Source: Creditreform Lietuva database

## Panel sample frame

|  |  | Sector |  |  |  |
| :--- | ---: | :--- | ---: | ---: | ---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual | Grand Total |
| Vilniaus | $5-19$ | 4 | 4 | 15 | 23 |
|  | $20-99$ | 4 | 2 | 9 | 15 |
|  | $100+$ | 2 | 1 | 8 | 11 |
| Vilniaus Total |  |  | 10 | 7 | 32 |
| Coast \& West |  | $5-19$ | 1 | 1 | 4 |

Source: BEEPS 2005

Original sample design


## A.17.2. Status codes

TOTAL

|  | Complete interviews (Total) | 276 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 1 |
|  | Elegible in process | 18 |
|  | Refusals | 169 |
|  | Out of target | 83 |
|  | Impossible to contact | 363 |
|  | Ineligible - coop. | 0 |
|  | Refusal to the Screener | 474 |
|  | Total | 1657 |
|  | ELIGIBLES |  |
| $\frac{0}{0}$ | 1.Elegible establishment (Correct name and address) | 391 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 0 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 4 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 69 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\frac{\stackrel{0}{0}}{\frac{0}{0 .}}$ | 5. The establishment has less than 5 permanent full time employees | 27 |
|  | 6. The firm discontinued businesses | 32 |
|  | 7. Not a business: private household | 10 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 14 |
| Unobtainable | 91. No reply (after having called in different days of the week and in different business hours) | 201 |
|  | 92. Line out of order | 0 |
|  | 93. No tone | 0 |
|  | 10. Answering machine | 31 |
|  | 11. Fax line - data line | 19 |
|  | 12. Wrong address/ moved away and could not get the new references | 112 |
|  | 13. Refuses to answer the screener | 747 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 120 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 0 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 1777 |

PANEL

|  | Complete interviews (Total) | 45 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 0 |
|  | Elegible in process | 0 |
|  | Refusals | 9 |
|  | Out of target | 9 |
|  | Impossible to contact | 20 |
|  | Ineligible - coop. | 0 |
|  | Refusal to the Screener | 42 |
|  | Total | 125 |
|  | ELIGIBLES |  |
| $\frac{0}{00}$ | 1.Elegible establishment (Correct name and address) | 46 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 0 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 3 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 5 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{0.0}{0} \\ & \frac{0}{E} \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 0 |
|  | 6. The firm discontinued businesses | 2 |
|  | 7. Not a business: private household | 1 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 6 |
| Unobtainable | 91. No reply (after having called in different days of the week and in different business hours) | 11 |
|  | 92. Line out of order | 0 |
|  | 93. No tone | 0 |
|  | 10. Answering machine | 6 |
|  | 11. Fax line - data line | 0 |
|  | 12. Wrong address/ moved away and could not get the new references | 3 |
|  | 13. Refuses to answer the screener | 42 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 10 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 0 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 135 |

## FRESH

|  | Complete interviews (Total) | 231 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 1 |
|  | Elegible in process | 18 |
|  | Refusals | 160 |
|  | Out of target | 74 |
|  | Impossible to contact | 343 |
|  | Ineligible - coop. | 0 |
|  | Refusal to the Screener | 705 |
|  | Total | 1532 |
|  | ELIGIBLES |  |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{0}{30} \\ & \frac{10}{10} \end{aligned}$ | 1.Elegible establishment (Correct name and address) | 345 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 0 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 1 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 64 |
|  | 16. Panel firm - now less than five employees | 0 |
|  | 5. The establishment has less than 5 permanent full time employees | 27 |
|  | 6. The firm discontinued businesses | 30 |
|  | 7. Not a business: private household | 9 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 8 |
|  | 91. No reply (after having called in different days of the week and in different business hours) | 190 |
|  | 92. Line out of order | 0 |
|  | 93. No tone | 0 |
|  | 10. Answering machine | 25 |
|  | 11. Fax line - data line | 19 |
|  | 12. Wrong address/ moved away and could not get the new references | 109 |
|  | 13. Refuses to answer the screener | 705 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 110 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 0 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 1642 |

## A.17.3. Cell weights and universe estimates

## Individual cell weights (strict)

|  |  | Sector |  |  |
| :--- | ---: | :--- | ---: | ---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |
| Vilniaus | $5-19$ | 33 | 24 | 97 |
|  | $20-99$ | 15 | 7 | 42 |
|  | $100+$ | 3 | 4 | 7 |
| Coast \& West | $5-19$ | 19 | 20 | 33 |
|  | $20-99$ | 10 | 5 | 21 |
|  | $100+$ | 2 | 1 | 3 |
| North East | $5-19$ | 17 | 24 | 63 |
|  | $20-99$ | 20 | 5 | 59 |
|  | $100+$ | 5 |  | 3 |
| South West | $5-19$ | 24 | 36 | 83 |
|  | $20-99$ | 22 | 7 | 44 |
|  | $100+$ | 5 | 5 | 7 |

## Individual cell weights (median)

|  |  | Sector |  |  |  |
| :--- | ---: | :--- | ---: | ---: | :---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |  |
| Vilniaus | $5-19$ | 78 | 62 | 260 |  |
|  | $20-99$ | 39 | 18 | 121 |  |
|  | $100+$ | 8 | 10 | 19 |  |
| Coast \& West | $5-19$ | 48 | 55 | 93 |  |
|  | $20-99$ | 28 | 16 | 63 |  |
|  | $100+$ | 7 | 1 | 8 |  |
| North East | $5-19$ | 39 | 60 | 167 |  |
|  | $20-99$ | 50 | 15 | 166 |  |
|  | $100+$ | 13 |  | 9 |  |
| South West | $5-19$ | 60 | 97 | 237 |  |
|  | $20-99$ | 60 | 19 | 134 |  |
|  | $100+$ | 15 | 15 | 21 |  |

Individual cell weights (weak)

|  |  | Sector |  |  |
| :--- | ---: | :--- | ---: | ---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |
| Vilniaus | $5-19$ | 112 | 78 | 376 |
|  | $20-99$ | 51 | 21 | 160 |
|  | $100+$ | 11 | 12 | 26 |
| Coast \& West | $5-19$ | 64 | 65 | 126 |
|  | $20-99$ | 34 | 17 | 77 |
|  | $100+$ | 8 | 2 | 10 |
| North East | $5-19$ | 52 | 70 | 226 |
|  | $20-99$ | 61 | 16 | 204 |
|  | $100+$ | 16 |  | 11 |
| South West | $5-19$ | 80 | 115 | 321 |
|  | $20-99$ | 72 | 21 | 165 |
|  | $100+$ | 18 | 17 | 27 |

## Lithuania universe estimates

| Strict individual cell weights | Median individual cell weights | Weak individual cell weights |
| :---: | :---: | :---: |
| 6050 | 16375 | 21357 |

## A.17.4. Survey and item non-response

The number of contacted establishments per realized interview was 6.44 . 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 relatively low ratio of contacted establishments per realized interview (6.44) suggests that the main source of error in estimates in the Lithuania may be selection bias and not frame inaccuracy.

## A.17.5. Local agency team involved in the study and its comments on the implementation of the BEEPS

Local agency team involved in the survey

| Local agency | Name: RAIT Ltd. <br> Country: Lithuania <br>  <br> Membership of international organization: <br> ESOMAR, Factum group / MSPA ("Mystery Shopper" <br> providers association) <br> Activities since: 2002 |
| :--- | :--- |
| Name of Project Manager |  |


| Name and position of other key <br> persons of the project |  |
| :--- | :--- |
| Enumerators involved | Enumerators: 68 <br> Recruiters: 10 |
| Other staff involved | Fieldwork Coordinators: 3 <br> Editing: 0 <br>  <br>  <br>  <br> Data Entry: 3 <br> Data Processing: 0 |

## Sample Frame

| Characteristic of sample frame used | The sample frame was bought from data bases supplier Creditreform Lietuva. |
| :--- | :--- |
| Source | "Creditreform Lietuva". Since 1993 this company works on credit reports <br> (companies and persons credit limit evaluation and rating-scoring systems), <br> debt collection, marketing information and on-line databases production <br> areas. |
| Year of publication | 2008 |
| Comments on the quality of the <br> sample frame | None |
| Year and organisation that <br> conducted the last economic census | 2001 (Last Population census), Department of Lithuanian Statistics |

## Sample

| Comments/problems on sectors and <br> regions selected in the sample | On sectors: None <br> On regions: None |
| :--- | :--- |
| Comments on the response rate | Low response rate due to difficult target group (managers), the interview <br> length ( $\sim 40-60$ min.) and the methodology (face-to-face). |
| Comments on the sample design | None. |
| Other comments | The sample provided was too small for completing the total number of <br> interviews requested in the sample design. The additional sample batches sent <br> by TNS opinion to top up the original sample were helpful to finish the target. <br> But if all the sample had been provided at the beginning of the fieldwork, the <br> fieldwork could have finished earlier. |

## Fieldwork

| Date of fieldwork | September 2008 - March 2009 |
| :--- | :--- |
| Country | Lithuania |
| Number of interviews | Manufacturing: 97 <br> Services (sector 52): 113 <br> Core: 66 |
| Problems found during fieldwork | Difficulties to persuade managers to participate in the survey -face-to-face <br> and to provide "sensitive" information about the establishment such as the <br> financial information. |
| Other observations | None |

## Questionnaires

| Problems for the understanding of <br> questions (write question number) | No problems found. |
| :--- | :--- |
| Problems found in the navigability <br> of questionnaires (for example, skip <br> patterns) | No problems here. |
| Comments on questionnaire length | The questionnaires are too long, even for a face-to-face interview. |
| Suggestions or other comments on <br> the questionnaires | For future waves we recommend using CATI interviews. Also, that the <br> interview length should not go beyond 30 minutes. |

Database

| Data entry program chosen | CONFIRMIT |
| :--- | :--- |
| Comments on the data entry <br> program | N/A |
| Comments on the data cleaning | None. |

Country situation

| General aspects of economic, <br> political or social situation of the <br> country that could affect the results <br> of the survey | Economic crisis. It started to be felt in the Lithuanian business sector in <br> November 2008. |
| :--- | :--- |
| Relevant country events that <br> occurred during fieldwork | None. |
| Other aspects | None. |

## A. 18 Moldova

## A.18.1. Sampling structure and implementation

The first sample frame was supplied by the World Bank and EBRD and consisted of enterprises interviewed in BEEPS 2005. The World Bank and EBRD required that attempts should be made to re-interview establishments responding to the BEEPS 2005 survey where they were within the selected geographical regions and met eligibility criteria. That sample is referred to as the Panel. The source of the second sample frame was the National Bureau of Statistics of the Republic of Moldova.

The quality of the frame was assessed at the onset of the project. The frame proved to be useful though it showed positive rates of non-eligibility, repetition, non-existent units, etc. These problems are typical of establishment surveys, but given the impact these inaccuracies may have on the results, adjustments were needed when computing the appropriate weights for individual observations. The percentage of confirmed non-eligible units as a proportion of the total number of contacts to complete the survey was $30.8 \%$ ( 337 out of 1094 establishments.

Regional stratification was defined in 4 regions. These regions are North, Centre, South, and South East (Transnistria). Table below shows the grouping of municipalities and raions into these 4 regions.

[^4]Sectors included in the sample:

| Original sectors | Manufacturing: 15-37 <br> Services: 52 <br> Residual: 45, 50, 51, 55, 60, 61, 62, 63, 64, 72 |
| :--- | :--- |
| Added (top up) sectors | None |

## Fresh sample frame



Source: National Bureau of Statistics of the Republic of Moldova

## Panel sample frame

|  |  | Sector |  |  |  |
| :--- | ---: | :--- | ---: | ---: | ---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Services | Grand Total |
| North | $<5$ | 11 | 3 | 1 | 15 |
|  | $5-19$ | 21 | 12 | 9 | 42 |
|  | $20-99$ | 25 | 4 | 6 | 35 |
|  | $100+$ | 16 | 3 | 3 | 22 |
| North Total |  |  | 73 | 22 | 19 |

Source: BEEPS 2005

Original sample design


## A.18.2. Status codes

TOTAL

|  | Complete interviews (Total) | 363 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 12 |
|  | Elegible in process | 14 |
|  | Refusals | 72 |
|  | Out of target | 222 |
|  | Impossible to contact | 114 |
|  | Ineligible - coop. | 1 |
|  | Refusal to the Screener | 259 |
|  | Total | 1057 |
|  | ELIGIBLES |  |
| $\frac{0}{0}$ | 1.Elegible establishment (Correct name and address) | 429 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 2 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 0 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 30 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\frac{\stackrel{0}{0}}{\frac{0}{0 .}}$ | 5. The establishment has less than 5 permanent full time employees | 8 |
|  | 6. The firm discontinued businesses | 68 |
|  | 7. Not a business: private household | 39 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 107 |
| 00※ت000 | 91. No reply (after having called in different days of the week and in different business hours) | 13 |
|  | 92. Line out of order | 1 |
|  | 93. No tone | 2 |
|  | 10. Answering machine | 1 |
|  | 11. Fax line - data line | 3 |
|  | 12. Wrong address/ moved away and could not get the new references | 94 |
|  | 13. Refuses to answer the screener | 259 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 37 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 1 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 1094 |

PANEL

|  | Complete interviews (Total) | 128 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 6 |
|  | Elegible in process | 3 |
|  | Refusals | 26 |
|  | Out of target | 48 |
|  | Impossible to contact | 36 |
|  | Ineligible - coop. | 0 |
|  | Refusal to the Screener | 44 |
|  | Total | 291 |
|  | ELIGIBLES |  |
| $\frac{0}{0}$ | 1.Elegible establishment (Correct name and address) | 139 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 1 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 0 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 23 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{0.0}{0} \\ & \frac{0}{E} \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 0 |
|  | 6. The firm discontinued businesses | 34 |
|  | 7. Not a business: private household | 6 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 8 |
| Unobtainable | 91. No reply (after having called in different days of the week and in different business hours) | 0 |
|  | 92. Line out of order | 0 |
|  | 93. No tone | 1 |
|  | 10. Answering machine | 0 |
|  | 11. Fax line - data line | 1 |
|  | 12. Wrong address/ moved away and could not get the new references | 34 |
|  | 13. Refuses to answer the screener | 44 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 4 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 0 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 295 |

## FRESH

|  | Complete interviews (Total) | 235 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 6 |
|  | Elegible in process | 11 |
|  | Refusals | 46 |
|  | Out of target | 174 |
|  | Impossible to contact | 78 |
|  | Ineligible - coop. | 1 |
|  | Refusal to the Screener | 215 |
|  | Total | 766 |
|  | ELIGIBLES |  |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{0}{30} \\ & \frac{10}{10} \end{aligned}$ | 1.Elegible establishment (Correct name and address) | 290 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 1 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 0 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 7 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\begin{aligned} & 0 \\ & 0.00 \\ & : 0 \\ & \stackrel{0}{0} \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 8 |
|  | 6. The firm discontinued businesses | 34 |
|  | 7. Not a business: private household | 33 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 99 |
| 0000000 | 91. No reply (after having called in different days of the week and in different business hours) | 13 |
|  | 92. Line out of order | 1 |
|  | 93. No tone | 1 |
|  | 10. Answering machine | 1 |
|  | 11. Fax line - data line | 2 |
|  | 12. Wrong address/ moved away and could not get the new references | 60 |
|  | 13. Refuses to answer the screener | 215 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 33 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 1 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 799 |

## A.18.3. Cell weights and universe estimates

## Individual cell weights (strict)

|  |  | Sector |  |  |
| :--- | ---: | :--- | ---: | ---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |
| North | $5-19$ | 11 | 13 | 58 |
|  | $20-99$ | 4 | 4 | 8 |
|  | $100+$ | 4 | 1 | 3 |
| Centre | $5-19$ | 26 | 17 | 41 |
|  | $20-99$ | 8 | 3 | 14 |
|  | $100+$ | 3 | 1 | 2 |
| South | $5-19$ | 24 | 14 | 35 |
|  | $20-99$ | 6 | 3 | 7 |
|  | $100+$ | 3 |  | 2 |
| South East (Transnistria) | $5-19$ | 3 | 3 | 2 |
|  | $20-99$ | 4 |  | 1 |
|  | $100+$ |  |  |  |

## Individual cell weights (median)

|  |  | Sector |  |  |
| :--- | ---: | :--- | ---: | ---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |
| North | $5-19$ | 16 | 20 | 87 |
|  | $20-99$ | 5 | 5 | 12 |
|  | $100+$ | 6 | 2 | 6 |
| Centre | $5-19$ | 39 | 26 | 67 |
|  | $20-99$ | 12 | 4 | 23 |
|  | $100+$ | 5 | 2 | 3 |
| South | $5-19$ | 29 | 17 | 45 |
|  | $20-99$ | 8 | 4 | 9 |
|  | $100+$ | 4 |  | 2 |
| South East (Transnistria) | $5-19$ | 4 | 4 | 3 |
|  | $20-99$ | 6 |  | 1 |
|  | $100+$ |  |  |  |

Individual cell weights (weak)

|  |  | Sector |  |  |
| :--- | ---: | :--- | ---: | ---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |
| North | $5-19$ | 21 | 24 | 112 |
|  | $20-99$ | 6 | 6 | 14 |
|  | $100+$ | 7 | 2 | 7 |
| Centre | $5-19$ | 48 | 31 | 82 |
|  | $20-99$ | 14 | 5 | 26 |
|  | $100+$ | 6 | 2 | 4 |
| South | $5-19$ | 32 | 19 | 51 |
|  | $20-99$ | 8 | 4 | 9 |
|  | $100+$ | 4 |  | 2 |
| South East (Transnistria) | $5-19$ | 5 | 5 | 4 |
|  | $20-99$ | 8 |  | 2 |
|  | $100+$ |  |  |  |

Moldova universe estimates

| Strict individual cell weights | Median individual cell weights | Weak individual cell weights |
| :---: | :---: | :---: |
| 4152 | 6449 | 7637 |

## A.18.4. Survey and item non-response

The number of contacted establishments per realized interview was 3.01 . 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 relatively low ratio of contacted establishments per realized interview (3.01) suggests that the main source of error in estimates in the Moldova may be selection bias and not frame inaccuracy.

## A.18.5. Local agency team involved in the study and its comments on the implementation of the BEEPS

## Local agency team involved in the survey

| Local agency | Name: IMAS-INC SRL <br> Country: Republic of Moldova <br> Membership of international organization: ESOMAR <br> Activities since: 2001 |
| :--- | :--- |
| Name of Project Manager |  |
| Name and position of other key <br> persons of the project |  |


| Enumerators involved | Enumerators: 53 <br> Recruiters: 52 <br> 10 enumerators also did part of the recruitment |
| :--- | :--- |
| Other staff involved | Fieldwork Coordinators: Diana Chiricuta <br>  <br>  <br>  <br>  <br>  <br>  <br>  <br>  <br> Datiting: Entry: GORervisors <br> Data Processing: TNS |

## Sample Frame

| Characteristic of sample frame used | N/A |
| :--- | :--- |
| Source | National Bureau of Statistics of the Republic of Moldova |
| Year of publication | N/A |
| Comments on the quality of the <br> sample frame | Around 50\% of the database had invalid or missing contact details. Many of <br> the listed contacts belonged to ineligible organizations, private households, <br> wrong address, non working telephone numbers, etc. Because of this, we <br> were compelled to update the contact data from other sources. |
| Year and organisation that <br> conducted the last economic census | 2004 IMAS-INC SRL |

## Sample

| Comments/problems on sectors and <br> regions selected in the sample | On sectors: None <br> On regions: For some contacts the region or municipality was wrongly <br> registered. |
| :--- | :--- |
| Comments on the response rate | In order to get an interview it was necessary to contact each establishment <br> several times. More than $40 \%$ of the establishments we re-contacted for an <br> interview after a first refusal. |
| Comments on the sample design | None. |
| Other comments | None. |

Fieldwork

| Date of fieldwork | September 2008 - February 2009 |
| :--- | :--- |
| Country | Republic of Moldova |
| Number of interviews | Manufacturing: 110 <br> Services (sector 52): 149 <br> Core: 104 |
| Problems found during fieldwork | - Invalid contact data. <br> - Settled appointments were postponed several times before actually <br> achieving an interview. |
| Other observations | None. |

## Questionnaires

| Problems for the understanding of <br> questions (write question number) | None. |
| :--- | :--- |
| Problems found in the navigability <br> of questionnaires (for example, skip <br> patterns) | No problems here. |
| Comments on questionnaire length | Respondents answering the manufacturing questionnaire complained that the <br> questionnaire was too long. |
| Suggestions or other comments on <br> the questionnaires | Respondents were concerned about disclosing financial data. |

## Database

| Data entry program chosen | CONFIRMIT |
| :--- | :--- |
| Comments on the data entry <br> program | None. |
| Comments on the data cleaning | Data cleaning was done following the validation reports sent by TNS- <br> opinion. |

Country situation

| General aspects of economic, | - country in the transition towards a market economy |
| :--- | :--- |
| political or social situation of the | - poverty, |
| country that could affect the results | - migration, |
| of the survey | - corruption |
|  | - fear of the authorities (economic, legal, political) |
| Relevant country events that | The first effects of the economic crisis had started to be felt: negative effects |
| occurred during fieldwork | on exports, in the sector of transport services, currency. |
| Other aspects | None. |

## A. 19 Mongolia

## A.19.1. Sampling structure and implementation

The source of the sample frame was the Mongolian National Statistical Office - Register of Establishments. No panel sample frame was available.

The quality of the frame was assessed at the onset of the project. The frame proved to be useful though it showed positive rates of non-eligibility, repetition, non-existent units, etc. These problems are typical of establishment surveys, but given the impact these inaccuracies may have on the results, adjustments were needed when computing the appropriate weights for individual observations. The percentage of confirmed non-eligible units as a proportion of the total number of contacts to complete the survey was $38.90 \%$ ( 298 out of 766 establishments).

Regional stratification was defined in 5 regions. These regions are Central, West, Khangai, East, and Ulaanbaatar.

| Regions | Grouping used for stratification purposes in BEEPS IV <br> (aimags in brackets) |
| :--- | :--- |
| Central (incl. <br> Ulaanbaatar) | Central (Gobisumber, Darkhan-Uul, Dornogobi, Dundgobi, <br> Omnogobi, Selenge, Tov) |
|  | Ulaanbaatar |
| East | East (Dornod, Sukhbaatar, Khentii) |
| Khangai | Khangai (Arkhangai, Bayankhongor, Bulgan, Orkhon, <br> Ovorkhangai, Khuvgul ) |
| West | West (Bayan-Ulgii, Gobi-Altai, Zavkhan, Uvs, Khovd ) |

Sectors included in the sample:

| Original sectors | Manufacturing: 15-37 <br> Services: 52 <br> Residual: 45, 50, 51, 55, 60, 72 |
| :--- | :--- |
| Added (top up) sectors | None |

Fresh sample frame

|  |  | Sector |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Region | Employees | Manufacturing | 52 | Residual | Grand Total |
| Central | 5-19 | 86 | 106 | 201 | 393 |
|  | 20-99 | 45 | 7 | 58 | 110 |
|  | 100+ | 10 | 4 | 3 | 17 |
| Central Total |  | 141 | 117 | 262 | 520 |
| West | 5-19 | 57 | 70 | 116 | 243 |
|  | 20-99 | 23 | 4 | 56 | 83 |
|  | 100+ | 4 |  | 2 | 6 |
| West Total |  | 84 | 74 | 174 | 332 |
| Khangai | 5-19 | 97 | 72 | 169 | 338 |
|  | 20-99 | 29 | 9 | 59 | 97 |
|  | 100+ | 4 |  | 6 | 10 |
| Khangai Total |  | 130 | 81 | 234 | 445 |
| East | 5-19 | 24 | 33 | 50 | 107 |
|  | 20-99 | 1 | 7 | 21 | 29 |
|  | 100+ | 1 |  |  | 1 |
| East Total |  | 26 | 40 | 71 | 137 |
| Ulaanbaatar | 5-19 | 463 | 317 | 1285 | 2,065 |
|  | 20-99 | 154 | 36 | 406 | 596 |
|  | 100+ | 50 | 3 | 82 | 135 |
| Ulaanbaatar Total |  | 667 | 356 | 1773 | 2796 |
| Grand Total |  | 1048 | 668 | 2514 | 4230 |

Source: Mongolian National Statistics Office - Register of Establishments
Original sample design


## A.19.2. Status codes

## TOTAL

|  | Complete interviews (Total) | 362 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 14 |
|  | Elegible in process | 7 |
|  | Refusals | 52 |
|  | Out of target | 179 |
|  | Impossible to contact | 114 |
|  | Ineligible - coop. | 5 |
|  | Refusal to the Screener | 27 |
|  | Total | 760 |
|  | ELIGIBLES |  |
| $\frac{0}{0} \frac{0}{\sqrt[0]{\mid 1}}$ | 1.Elegible establishment (Correct name and address) | 423 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 6 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 5 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 1 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\begin{aligned} & \frac{0}{0} \\ & : 00 \\ & 00 \\ & 0 \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 11 |
|  | 6. The firm discontinued businesses | 72 |
|  | 7. Not a business: private household | 57 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 39 |
|  | 91. No reply (after having called in different days of the week and in different business hours) | 56 |
|  | 92. Line out of order | 7 |
|  | 93. No tone | 2 |
|  | 10. Answering machine | 0 |
|  | 11. Fax line - data line | 0 |
|  | 12. Wrong address/ moved away and could not get the new references | 49 |
|  | 13. Refuses to answer the screener | 27 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 6 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 4 |
|  | 152. Out of target - firm moved abroad | 1 |
|  | Total | 766 |

## A.19.3. Cell weights and universe estimates

## Collapsed cell weights (strict)

|  |  |  | Sector |  |  |  |
| :--- | ---: | :--- | ---: | ---: | :---: | :---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |  |  |
| Central | $5-19$ | 6 | 3 | 30 |  |  |
|  | $20-99$ | 4 | 2 | 7 |  |  |
|  | $100+$ | 1 | 1 | 2 |  |  |
| West | $5-19$ | 6 | 2 | 10 |  |  |
|  | $20-99$ | 2 | 2 | 10 |  |  |
|  | $100+$ | 1 |  | 1 |  |  |
| Khangai | $5-19$ | 7 | 3 | 11 |  |  |
|  | $20-99$ | 4 | 3 | 9 |  |  |
|  | $100+$ | 1 |  | 1 |  |  |
| East | $5-19$ | 3 | 2 | 4 |  |  |
|  | $20-99$ |  |  | 12 |  |  |
|  | $100+$ | 1 |  |  |  |  |
| Ulaanbaatar | $5-19$ | 11 | 3 | 30 |  |  |
|  | $20-99$ | 6 | 3 | 11 |  |  |
|  | $100+$ | 1 | 1 | 2 |  |  |

## Collapsed cell weights (median)

|  |  |  | Sector |  |  |  |
| :--- | ---: | :--- | ---: | ---: | :---: | :---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |  |  |
| Central | $5-19$ | 6 | 4 | 32 |  |  |
|  | $20-99$ | 4 | 2 | 8 |  |  |
|  | $100+$ | 1 | 1 | 2 |  |  |
| West | $5-19$ | 7 | 3 | 11 |  |  |
|  | $20-99$ | 3 | 2 | 11 |  |  |
|  | $100+$ | 1 |  | 1 |  |  |
| Khangai | $5-19$ | 8 | 3 | 12 |  |  |
|  | $20-99$ | 4 | 3 | 10 |  |  |
|  | $100+$ | 1 |  | 1 |  |  |
| East | $5-19$ | 4 | 3 | 5 |  |  |
|  | $20-99$ |  |  | 15 |  |  |
|  | $100+$ | 1 |  |  |  |  |
| Ulaanbaatar | $5-19$ | 11 | 4 | 32 |  |  |
|  | $20-99$ | 6 | 3 | 12 |  |  |
|  | $100+$ | 1 | 1 | 2 |  |  |

Collapsed cell weights (weak)

|  |  |  | Sector |  |  |
| :--- | ---: | :--- | ---: | ---: | :---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |  |
| Central | $5-19$ | 8 | 5 | 42 |  |
|  | $20-99$ | 5 | 3 | 9 |  |
|  | $100+$ | 1 | 1 | 2 |  |
| West | $5-19$ | 8 | 4 | 15 |  |
|  | $20-99$ | 3 | 3 | 13 |  |
|  | $100+$ | 1 |  | 1 |  |
| Khangai | $5-19$ | 9 | 4 | 14 |  |
|  | $20-99$ | 4 | 4 | 11 |  |
|  | $100+$ | 1 |  | 1 |  |
| East | $5-19$ | 4 | 4 | 7 |  |
|  | $20-99$ |  |  | 19 |  |
|  | $100+$ | 1 |  |  |  |
| Ulaanbaatar | $5-19$ | 14 | 5 | 42 |  |
|  | $20-99$ | 7 | 4 | 14 |  |
|  | $100+$ | 1 | 1 | 2 |  |

## Mongolia universe estimates

| Strict collapsed cell weights | Median collapsed cell weights | Weak collapsed cell weights |
| :---: | :---: | :---: |
| 2441 | 2583 | 3280 |

## A.19.4. Survey and item non-response

The number of contacted establishments per realized interview was 2.12 . 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 relatively low ratio of contacted establishments per realized interview (2.12) suggests that the main source of error in estimates in the Mongolia may be selection bias and not frame inaccuracy.

## A.19.5. Local agency team involved in the study and its comments on the implementation of the BEEPS

Local agency team involved in the survey

| Local agency | Name: Institute of Finance and Economics (IFE) <br> Country: Mongolia <br> Membership of international organization: No <br> Activities since: March 2008 |
| :--- | :--- |
| Name of Project Manager |  |
| Name and position of other key <br> persons of the project | Enumerators: 23 <br> Recruiters: 3 |
| Enumerators involved | Fieldwork Coordinators: 2 <br> Editing: 1 <br> Data Entry: 1; Data Processing: 1 |
| Other staff involved |  |

## Sample Frame

| Characteristic of sample frame used |  |
| :--- | :--- |
| Source | Mongolian National Statistical Office - Register of Establishments |
| Year of publication | $2006-2008$ |
| Comments on the quality of the <br> sample frame | The quality of the sample frame was adequate. |
| Year and organisation that <br> conducted the last economic census | N/A |

## Sample

| Comments/problems on sectors and <br> regions selected in the sample | On sectors: Across all sectors, establishments with 100 employees or more <br> were most difficult to achieve due to limited sample. <br> On regions: In all regions, except Ulaanbaatar, it was difficult to secure <br> interviews with organizations with more than 100 or more employees. Some <br> organizations which are registered in the provinces carried out their business <br> activities in Ulaanbaatar which is the specific feature of Mongolia. |
| :--- | :--- |
| Comments on the response rate | We tried our best to reach the response rate of 100\%. |
| Comments on the sample design | It was excellent. |

Fieldwork

| Date of fieldwork | November 2008 - February 2009 |
| :--- | :--- |
| Country | Mongolia |
| Number of interviews | Manufacturing: 132 <br> Services (sector 52): 86 <br> Core: 144 |
| Problems found during fieldwork | In some provinces we could not travel to remote villages because of the <br> snow. To some interviewees the questions were too general and did not touch <br> on the issue that concerns them most. Organizations with more than 100 <br> employees tend to refuse to share financial data. |
| Other observations | There were a considerable number of interviewees interested in extending the <br> interview. Questions on the lines of the following were frequently asked <br> "How have you found out about our organization?" or "What concrete benefit <br> will we get from this interview?"" |

## Questionnaires

| Problems for the understanding of <br> questions (write question number) | For example, g30a. |
| :--- | :--- |
| Problems found in the navigability <br> of questionnaires (for example, skip <br> patterns) | There were some problems when navigating from g2 to g30a. |
| Comments on questionnaire length | It was normal. |
| Suggestions or other comments on <br> the questionnaires | It would be more effective if the questions of the questionnaire were written <br> more in the style of spoken language. |

## Database

| Data entry program chosen | CONFIRMIT |
| :--- | :--- |
| Comments on the data entry <br> program | None. |
| Comments on the data cleaning | No comments. |

## Country situation

| General aspects of economic, <br> political or social situation of the <br> country that could affect the results <br> of the survey | When asked about business activities of 2007, there was a tendency among <br> interviewees to answer from the view of 2008. And, especially during the last <br> month of the interview, the economic crisis could be felt in the answers <br> given. |
| :--- | :--- |
| Relevant country events that <br> occurred during fieldwork | No. |
| Other aspects | None. |

## A. 20 Montenegro

## A.20.1. Sampling structure and implementation

The first sample frame was supplied by the World Bank and EBRD and consisted of enterprises interviewed in BEEPS 2005. The World Bank and EBRD required that attempts should be made
to re-interview establishments responding to the BEEPS 2005 survey where they were within the selected geographical regions and met eligibility criteria. That sample is referred to as the Panel. The source of the second sample frame was the Montenegro Statistical Office (MONSTAT) Administrative Business Register.

The quality of the frame was assessed at the onset of the project. The frame proved to be useful though it showed positive rates of non-eligibility, repetition, non-existent units, etc. These problems are typical of establishment surveys, but given the impact these inaccuracies may have on the results, adjustments were needed when computing the appropriate weights for individual observations. The percentage of confirmed non-eligible units as a proportion of the total number of contacts to complete the survey was $56 \%$ ( 340 out of 607 establishments).

Regional stratification was defined in 3 regions. These regions are Centre and South, Coast, and North. Table below shows the municipalies in each of these three regions.

| Grouping used for stratification purposes in BEEPS IV (municipalities in brackets) |
| :--- |
| North: Plevlja, Plužine, Bijelo Polje, Žabljak, Šavnik, Mojkovac |
| Centre and South: Nikšić, Danilovgrad, Podgorica, Kolašin, Andrijevica, Plav, Berane, <br> Rožaje, Cetinje |
| Coast: Herceg Novi, Kotor, Tivat, Budva, Bar, Ulcinj |

Sectors included in the sample:

| Original sectors | Manufacturing: 15-37 <br> Services: 52 <br> Residual: 45, 50, 51, 55, 60, 61, 62, 63, 64, 72 |
| :--- | :--- |
| Added (top up) sectors | None |

Fresh sample frame


Source: Montenegro Statistical Office (MONSTAT) - Administrative Business Register

Panel sample frame

|  |  | Sector |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Region | Employees | Manufacturing | 52 | Residual | Grand Total |
| Centre \& | <5 | 1 | 1 | 2 | 4 |
| South | 5-19 |  | 1 | 3 | 4 |
|  | 20-99 |  | 1 |  | 1 |
|  | 100+ | 2 |  | 1 | 3 |
| Centre \& South Total |  | 3 | 3 | 6 | 12 |
| Grand Total |  | 3 | 3 | 6 | 12 |

Source: BEEPS 2005

## Original sample design

|  |  | Sector |  |  |  |
| :--- | ---: | :--- | ---: | ---: | ---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual | Grand Total |
| Centre and | $5-19$ | 9 | 13 | 10 | 32 |
| South | $20-99$ | 9 | 9 | 11 | 29 |
|  | $100+$ | 8 | 0 | 3 | 11 |
| Centre and South Total |  | 26 | 22 | 24 | 72 |
| Coast | $5-19$ | 4 | 11 | 5 | 20 |
|  | $20-99$ | 3 | 3 | 4 | 10 |
|  | $100+$ | 0 | 1 | 4 | 5 |
| Coast Total |  |  | 7 | 15 | 13 |

## A.20.2. Status codes

TOTAL

|  | Complete interviews (Total) | 120 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 5 |
|  | Elegible in process | 5 |
|  | Refusals | 27 |
|  | Out of target | 53 |
|  | Impossible to contact | 287 |
|  | Ineligible - coop. | 0 |
|  | Refusal to the Screener | 67 |
|  | Total | 564 |
|  | ELIGIBLES |  |
| $\frac{0}{0}$ | 1.Elegible establishment (Correct name and address) | 157 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 0 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 0 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 0 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\frac{0}{0}$ | 5. The establishment has less than 5 permanent full time employees | 0 |
|  | 6. The firm discontinued businesses | 38 |
|  | 7. Not a business: private household | 0 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 15 |
|  | 91. No reply (after having called in different days of the week and in different business hours) | 1 |
|  | 92. Line out of order | 1 |
|  | 93. No tone | 0 |
|  | 10. Answering machine | 0 |
|  | 11. Fax line - data line | 0 |
|  | 12. Wrong address/ moved away and could not get the new references | 285 |
|  | 13. Refuses to answer the screener | 67 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 43 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 0 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 607 |

PANEL

| Complete interviews (Total) | 5 |
| :--- | :--- |
| Incomplete interviews | 0 |
| Elegible in process | 0 |
| Refusals | 0 |
| Out of target | 0 |
| Impossible to contact | 2 |
| Ineligible - coop. | 0 |
| Refusal to the Screener | 2 |
| Total | 9 |


|  | ELIGIBLES |  |
| :---: | :---: | :---: |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{0}{00} \\ & \frac{10}{10} \end{aligned}$ | 1.Elegible establishment (Correct name and address) | 5 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 0 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 0 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 0 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\begin{aligned} & \frac{0}{0} \\ & \stackrel{00}{0} \\ & \stackrel{0}{0} \\ & \hline \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 0 |
|  | 6. The firm discontinued businesses | 0 |
|  | 7. Not a business: private household | 0 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 0 |
|  | 91. No reply (after having called in different days of the week and in different business hours) | 1 |
|  | 92. Line out of order | 1 |
|  | 93. No tone | 0 |
|  | 10. Answering machine | 0 |
|  | 11. Fax line - data line | 0 |
|  | 12. Wrong address/ moved away and could not get the new references | 0 |
|  | 13. Refuses to answer the screener | 2 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 3 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 0 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 12 |

## FRESH

|  | Complete interviews (Total) | 111 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 9 |
|  | Elegible in process | 5 |
|  | Refusals | 27 |
|  | Out of target | 53 |
|  | Impossible to contact | 285 |
|  | Ineligible - coop. | 0 |
|  | Refusal to the Screener | 65 |
|  | Total | 555 |
|  | ELIGIBLES |  |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{0}{30} \\ & \frac{10}{10} \end{aligned}$ | 1.Elegible establishment (Correct name and address) | 152 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 0 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 0 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 0 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\frac{0}{0}$ | 5. The establishment has less than 5 permanent full time employees | 0 |
|  | 6. The firm discontinued businesses | 38 |
|  | 7. Not a business: private household | 0 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 15 |
| 0000000 | 91. No reply (after having called in different days of the week and in different business hours) | 0 |
|  | 92. Line out of order | 0 |
|  | 93. No tone | 0 |
|  | 10. Answering machine | 0 |
|  | 11. Fax line - data line | 0 |
|  | 12. Wrong address/ moved away and could not get the new references | 285 |
|  | 13. Refuses to answer the screener | 65 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 40 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 0 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 595 |

## A.20.3. Cell weights and universe estimates

## Individual cell weights (strict)

|  |  | Sector |  |  |
| :--- | ---: | :--- | ---: | ---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |
| Centre and | $5-19$ | 7 | 8 | 21 |
| South | $20-99$ | 3 | 2 | 4 |
|  | $100+$ | 1 |  | 2 |
| Coast | $5-19$ | 3 | 6 | 37 |
|  | $20-99$ | 2 | 2 | 5 |
|  | $100+$ | 1 | 1 | 2 |
| North | $5-19$ | 5 | 5 | 28 |
|  | $20-99$ | 2 |  | 5 |
|  | $100+$ | 2 |  | 1 |

## Individual cell weights (median)

|  |  | Sector |  |  |
| :--- | ---: | :--- | ---: | ---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |
| Centre and | $5-19$ | 9 | 11 | 32 |
| South | $20-99$ | 4 | 2 | 6 |
|  | $100+$ | 2 |  | 3 |
| Coast | $5-19$ | 4 | 8 | 56 |
|  | $20-99$ | 3 | 3 | 8 |
|  | $100+$ | 2 | 1 | 4 |
| North | $5-19$ | 7 | 7 | 46 |
|  | $20-99$ | 3 |  | 9 |
|  | $100+$ | 3 |  | 2 |

Individual cell weights (weak)

|  |  |  | Sector |  |
| :--- | ---: | :--- | ---: | ---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |
| Centre and | $5-19$ | 26 | 25 | 70 |
| South | $20-99$ | 10 | 4 | 11 |
|  | $100+$ | 4 |  | 6 |
| Coast | $5-19$ | 12 | 16 | 123 |
|  | $20-99$ | 7 | 6 | 15 |
|  | $100+$ | 5 | 3 | 7 |
| North | $5-19$ | 18 | 16 | 91 |
|  | $20-99$ | 6 |  | 15 |
|  | $100+$ | 6 |  | 4 |

Montenegro universe estimates

| Strict individual cell weights | Median individual cell weights | Weak individual cell weights |
| :---: | :---: | :---: |
| 809 | 1170 | 2608 |

## A.20.4. Survey and item non-response

The number of contacted establishments per realized interview was 5.06. 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 relatively low ratio of contacted establishments per realized interview (5.06) suggests that the main source of error in estimates in the Montenegro may be selection bias and not frame inaccuracy.

## A.20.5. Local agency team involved in the study and its comments on the implementation of the BEEPS

Local agency team involved in the survey

| Local agency | Name: Strategic Marketing <br> Country: Montenegro <br> Membership of international organisation: None <br> Activities since: 2005 |
| :--- | :--- |
| Name of Project Manager |  |
| Name and position of other key <br> persons of the project | Enumerators: 23 <br> Recruiters: 1 <br> Enumerators did not do any recruitment |
| Enumerators involved |  |


| Other staff involved | Fieldwork Coordinators: 3 |
| :--- | :--- |
|  | Editing: 1 |
|  | Data Entry: 7 |
|  | Data Processing: 2 |
|  | Note: Editing, data entry and data processing were conducted in Serbia . |

## Sample Frame

| Characteristic of sample frame used | EBRD provided sample from MONSTAT. |
| :--- | :--- |
| Source | Montenegrin Statistical Office - MONSTAT |
| Year of publication | N/A |
| Comments on the quality of the <br> sample frame | Low quality. Large number of non existing enterprises. |
| Year and organisation that <br> conducted the last economic census | N/A |

## Sample

| Comments/problems on sectors and <br> regions selected in the sample | On sectors: We had problems with low response rate for firms bigger than 50 <br> employees. |
| :--- | :--- |
| Comments on the response rate | None. |
| Comments on the sample design | None. |

## Fieldwork

| Date of fieldwork | September 2008 - February 2009 |
| :--- | :--- |
| Country | Montenegro |
| Number of interviews | Manufacturing: 37 <br> Services (sector 52): 44 <br> Core: 35 |
| Problems found during fieldwork | Low \% of eligible firms. |
| Other observations | None. |

## Questionnaires

| Problems for the understanding of <br> questions (write question number) | None. |
| :--- | :--- |
| Problems found in the navigability <br> of questionnaires (for example, skip <br> patterns) | No problems here. |
| Comments on questionnaire length | Very long and demanding. The respondents were reluctant to answer it all <br> and lost interest in the survey. |
| Suggestions or other comments on <br> the questionnaires | The questionnaires have many very detailed questions about financial figures <br> and the quality of the answers for these questions is usually very low. Many <br> firms refused to answer or did not have the exact data for section P and F. |

## Database

| Data entry program chosen | CONFIRMIT |
| :--- | :--- |
| Comments on the data entry <br> program | Very slow for data punching. The data entering took longer than expected. |
| Comments on the data cleaning | None. |

## Country situation

| General aspects of economic, <br> political or social situation of the <br> country that could affect the results <br> of the survey | N/A |
| :--- | :--- |
| Relevant country events that <br> occurred during fieldwork | N/A |
| Other aspects | N/A |

## A. 21 Poland

## A.21.1. Sampling structure and implementation

The first sample frame was supplied by the World Bank and EBRD and consisted of enterprises interviewed in BEEPS 2005. The World Bank and EBRD required that attempts should be made to re-interview establishments responding to the BEEPS 2005 survey where they were within the selected geographical regions and met eligibility criteria. That sample is referred to as the Panel. The second sample frame for Poland was the database of Polskie Firmy.

The quality of the frame was assessed at the onset of the project. The frame proved to be useful though it showed positive rates of non-eligibility, repetition, non-existent units, etc. These problems are typical of establishment surveys, but given the impact these inaccuracies may have on the results, adjustments were needed when computing the appropriate weights for individual observations. The percentage of confirmed non-eligible units as a proportion of the total number of contacts to complete the survey was $16 \%$ ( 559 out of 3,523 establishments).

Regional stratification was defined in six regions. These regions are Central, Southern, Eastern, North-Western, South-Western, and Northern (NUTS-1).

| Original sectors | Manufacturing: 15-37 <br> Services: 52 <br> Residual: 45, 50, 51, 55, 60, 61, 62, 63, 64, 72 |
| :--- | :--- |
| Added (top up) sectors | None |

## Fresh sample frame



Source: Polskie Firmy database

Panel sample frame

|  |  | Sector |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Region | Employees | Manufacturing | 52 | Residual | Grand Total |
| Central | <5 | 20 | 9 | 12 | 41 |
|  | 5-19 | 25 | 4 | 12 | 41 |
|  | 20-99 | 20 | 1 | 6 | 27 |
|  | 100+ | 1 | 5 | 6 | 12 |
| Central Total |  | 66 | 19 | 36 | 121 |
| Eastern | <5 | 1 | 4 | 5 | 10 |
|  | 5-19 | 1 | 1 | 1 | 3 |
|  | 20-99 | 2 |  | 3 | 5 |
|  | 100+ | 3 | 1 | 3 | 7 |
| Eastern Total |  | 7 | 6 | 12 | 25 |
| Northern | <5 |  | 4 | 3 | 7 |
|  | 5-19 | 1 | 1 | 2 | 4 |
|  | 20-99 | 1 |  | 4 | 5 |
|  | 100+ | 1 |  | 1 | 2 |
| Northern Total |  | 3 | 5 | 10 | 18 |
| North-Western | <5 | 20 | 4 | 9 | 33 |
|  | 5-19 | 14 | 2 | 6 | 22 |
|  | 20-99 | 12 |  | 4 | 16 |
|  | 100+ | 4 |  | 2 | 6 |
| North-Western Total |  | 50 | 6 | 21 | 77 |
| Southern | <5 | 17 | 5 | 5 | 27 |
|  | 5-19 | 16 | 2 | 3 | 21 |
|  | 20-99 | 12 |  | 5 | 17 |
|  | 100+ | 9 | 1 | 4 | 14 |
| Southern Total |  | 54 | 8 | 17 | 79 |
| South-Western | <5 | 3 | 2 |  | 5 |
|  | 5-19 | 3 |  |  | 3 |
|  | 20-99 | 3 |  | 2 | 5 |
|  | 100+ |  |  |  |  |
| South-Western Total |  | 9 | 2 | 2 | 13 |
| Grand Total |  | 189 | 46 | 98 | 333 |

Source: BEEPS 2005

Original sample design

| 硣 |  | Sector |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Region | Employees | Manufacturing | 52 | Residual | Grand Total |
| Central | 5-19 | 15 | 13 | 12 | 40 |
|  | 20-99 | 12 | 13 | 13 | 38 |
|  | 100+ | 11 | 17 | 16 | 44 |
| Central Total |  | 38 | 43 | 41 | 122 |
| Eastern | 5-19 | 8 | 9 | 9 | 26 |
|  | 20-99 | 9 | 12 | 8 | 29 |
|  | 100+ | 9 | 9 | 9 | 27 |
| Eastern Total |  | 26 | 30 | 26 | 82 |
| Northern | 5-19 | 12 | 10 | 12 | 34 |
|  | 20-99 | 12 | 10 | 11 | 33 |
|  | 100+ | 11 | 7 | 9 | 27 |
| Northern Total |  | 35 | 27 | 32 | 94 |
| North-Western | 5-19 | 9 | 9 | 9 | 27 |
|  | 20-99 | 11 | 10 | 10 | 31 |
|  | 100+ | 12 | 9 | 9 | 30 |
| North-Western Total |  | 32 | 28 | 28 | 88 |
| Southern | 5-19 | 12 | 14 | 13 | 39 |
|  | 20-99 | 11 | 10 | 13 | 34 |
|  | 100+ | 11 | 12 | 12 | 35 |
| Southern Total |  | 34 | 36 | 38 | 108 |
| South-Western | 5-19 | 4 | 5 | 5 | 14 |
|  | 20-99 | 5 | 5 | 5 | 15 |
|  | 100+ | 6 | 6 | 5 | 17 |
| South-Western Total |  | 15 | 16 | 15 | 46 |
| Grand Total |  | 180 | 180 | 180 | 540 |

## A.21.2. Status codes

## TOTAL

|  | Complete interviews (Total) | 533 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 0 |
|  | Elegible in process | 0 |
|  | Refusals | 2034 |
|  | Out of target | 235 |
|  | Impossible to contact | 172 |
|  | Ineligible - coop. | 152 |
|  | Refusal to the Screener | 142 |
|  | Total | 3268 |
|  | ELIGIBLES |  |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{0}{60} \\ & \frac{10}{10} \end{aligned}$ | 1.Elegible establishment (Correct name and address) | 2567 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 0 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 0 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 0 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\begin{aligned} & 0 \\ & \frac{0}{0} \\ & : 0 \\ & 0.0 \\ & 0 \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 0 |
|  | 6. The firm discontinued businesses | 52 |
|  | 7. Not a business: private household | 11 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 172 |
|  | 91. No reply (after having called in different days of the week and in different business hours) | 72 |
|  | 92. Line out of order | 0 |
|  | 93. No tone | 0 |
|  | 10. Answering machine | 3 |
|  | 11. Fax line - data line | 11 |
|  | 12. Wrong address/ moved away and could not get the new references | 86 |
|  | 13. Refuses to answer the screener | 142 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 0 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 152 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 2567 |

PANEL

|  | Complete interviews (Total) | 79 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 0 |
|  | Elegible in process | 0 |
|  | Refusals | 33 |
|  | Out of target | 38 |
|  | Impossible to contact | 72 |
|  | Ineligible - coop. | 2 |
|  | Refusal to the Screener | 109 |
|  | Total | 333 |
|  | ELIGIBLES |  |
| $\frac{0}{0.0}$ | 1.Elegible establishment (Correct name and address) | 112 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 0 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 0 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 0 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\begin{aligned} & \frac{0}{0} \\ & : 0 \\ & 0.0 \\ & 0 \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 0 |
|  | 6. The firm discontinued businesses | 19 |
|  | 7. Not a business: private household | 3 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 16 |
|  | 91. No reply (after having called in different days of the week and in different business hours) | 28 |
|  | 92. Line out of order | 0 |
|  | 93. No tone | 0 |
|  | 10. Answering machine | 3 |
|  | 11. Fax line - data line | 11 |
|  | 12. Wrong address/ moved away and could not get the new references | 30 |
|  | 13. Refuses to answer the screener | 109 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 0 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 2 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 333 |

## FRESH

|  | Complete interviews (Total) | 454 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 0 |
|  | Elegible in process | 0 |
|  | Refusals | 2001 |
|  | Out of target | 197 |
|  | Impossible to contact | 100 |
|  | Ineligible - coop. | 150 |
|  | Refusal to the Screener | 33 |
|  | Total | 2935 |
|  | ELIGIBLES |  |
| $\frac{0}{0}$ | 1.Elegible establishment (Correct name and address) | 2455 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 0 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 0 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 0 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{00}{0} \\ & \stackrel{0}{0} \\ & 0 \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 0 |
|  | 6. The firm discontinued businesses | 33 |
|  | 7. Not a business: private household | 8 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 156 |
|  | 91. No reply (after having called in different days of the week and in different business hours) | 44 |
|  | 92. Line out of order | 0 |
|  | 93. No tone | 0 |
|  | 10. Answering machine | 0 |
|  | 11. Fax line - data line | 0 |
|  | 12. Wrong address/ moved away and could not get the new references | 56 |
|  | 13. Refuses to answer the screener | 33 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 0 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 150 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 2935 |

## A.21.3. Universe estimates

Poland universe estimates

|  | Strict collapsed cell <br> weights | Median collapsed cell <br> weights | Weak collapsed cell <br> weights |
| :---: | :---: | :---: | :---: |
| First wave | 66632 | 71432 | 76081 |
| First wave+additional <br> interviews | 47426 | 53608 | 55323 |

Note that the universe estimates are significantly lower when all the completed interviews are taken into account (using weights wstrict2, wmedian 2 , and wweak2).

## A.21.4. Survey and item non-response

The number of contacted establishments per realized interview was 7.74 in the first wave, and 6.13 overall. 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.

## A.21.5. Local agency team involved in the study and its comments on the implementation of the BEEPS

Local agency team involved in the survey

| Local agency | Name: TNS OBOP <br> Country: Poland <br> Membership of international organisation: ESOMAR <br> Activities since: 1958 |
| :--- | :--- |
| Name of Project Manager | Agata Zadrożna |
| Name and position of other key <br> persons of the project | Fieldwork Manager |
| Enumerators involved | Enumerators: 77 <br> Recruiters: 80 <br> In Poland enumerators worked as recruiters because in the second part of the <br> fieldwork we changed the recruitment technique from telephone to face-to- <br> face. The number of telephone recruiters was 3. |
| Other staff involved | Fieldwork Coordinators: 21 <br> Editing: 1 <br> Data Entry: - <br> Data Processing: 1 |

## Sample Frame

| Characteristic of sample frame used | Data base of Polskie Firmy contain the most active companies and business <br> addresses in Poland, including commercial (manufacturing, trade, services) <br> and non-commercial (administration, education, societies) activities. It is <br> created by a private company from various sources and is updated regularly. |
| :--- | :--- |
| Source | Potskie Firmy - Warszawa |
| Year of publication | 2008 |
| Comments on the quality of the <br> sample frame | Quality of the sample frame is relatively good (worse for small companies). <br> However, in the sample there were 52 inactive firms, 11 households and 86 <br> firms which address cannot be found. |
| Year and organisation that <br> conducted the last economic census | There were no economic censuses in Poland. |
| Other sources for companies <br> statistics | Central Statistical Office keeps National Official Business Register <br> http://www.stat.gov.pl/bip/regon_ENG_HTML.htm. |

## Sample

| Comments/problems on sectors and regions selected in the sample | On sectors: <br> - Many companies are officially production but in fact they are services; <br> - State-owned companies and co-operatives were out of target but were not excluded from the sample. During the fieldwork 172 cases of out of target companies were encountered (the most often in Northern and Northwestern region). <br> On regions: <br> - We had more problems in big cities like Warsaw (Central region), Poznań (Northern-western region), Cracow (Southern region or Wrocław (Southwestern region) - appointments were rescheduled most often there. <br> - It was much easier to conduct interviews in smaller towns; in smaller towns and in smaller companies people have more time. |
| :---: | :---: |
| Comments on the response rate | - Lots of refusals (2076 out of 454 successful interviews); <br> - Lack of time was the most common reason for refusal. Appointments are re-scheduled many times. It sometimes happened that an appointment was set but when the interviewer came to the firm there was no contact with respondent (respondents even refused to answer phone calls). |
| Comments on the sample design | - In the first phase of the survey (when respondents were recruited by phone) sample design with three preferences was the reason for a very slow progress. It takes lot of time to get in touch with potential respondents with preference one and during that period preferences two and three cannot be contacted. <br> - Placing emphasis on response rate (generally low among companies in Poland) has proven to be ineffective in terms of time. |

## Fieldwork

| Date of fieldwork | August 2008 - March 2009, and July 2009 - September 2009 |
| :--- | :--- |
| Country | Poland |
| Number of interviews | Manufacturing: 172 |
|  | Services (sector 52): 175 |
|  | Core: 186 |


| Problems found during fieldwork | - In December and January it was very difficult to conduct any interviews (it is year end and start and companies are busy with financial issues). Respondents refused to accept an appointment during this period; <br> - Respondents do not believe in confidentiality and even if they do, they are still afraid of saying too much. If an establishment was part of a bigger firm the interviewer was sent to the central location; <br> - In bigger companies interviewers had problems reaching a potential respondent as they were not let into the buildings. Everything had to be settled through the reception desk. It often happened that it is the receptionist/secretary who refuses to let the interviewer in (calling by phone is not very helpful here as receptionists do not want to put the recruiter through to top manager); <br> - In general the target group for the BEEPS survey was very difficult to reach; <br> - In big companies several respondents had to be involved in the interview. One person cannot answer all questions. It caused problems in cases where the respondent was not willing to consult with other colleagues. |
| :---: | :---: |
| Other observations | - Respondents wanted to know the questions before the interview. Because of the methodology we were not able to tell them before the interview what questions were in the questionnaire. This made getting consent for the interview difficult; <br> - Many respondents proposed to fill in the questionnaire themselves if it could have been sent by e-mail. It is much easier to interview respondents in firms by phone and it is really difficult to get consent for a face-to-face interview. |

## Questionnaires

| Problems for the understanding of questions (write question number) | - In a4b respondents had lot of problems to correctly identify company sector; <br> - In d1a2 respondents had problems with ISIC code. In some cases their activities involves both production of certain goods and selling them. List was not complete enough for needs of some and codes given from outside the list; <br> - In d1a1x it was difficult to indicate main product especially when company produces several products; <br> - In d2 it was not automatically clear for some respondents whether it is net value or gross value figure that was required; <br> - Questions b4 and ECAb7a are sensitive and respondents did not understand their purpose; <br> - b5, b6 - some comprehension problems occurred with differences between starting operations and being registered; <br> - The scale for the obstacles questions was difficult to use for respondents; <br> - f1-question is not clear. Respondents did not immediately understand the concept of capacity utilization; <br> - In 110 it is difficult to understand the notion of "formal training"; <br> - n2i respondents sometimes mixed this up with the value requested in d 2 . |
| :---: | :---: |
| Problems found in the navigability of questionnaires (for example, skip patterns) | In Poland CAPI was used so no such problems occurred. |
| Comments on questionnaire length | According to many respondents (and interviewers) the questionnaire was too long. The average length of the interview was about 57 minutes. |
| Suggestions or other comments on the questionnaires | - There were problems with differences between licences, permits and certificates; <br> - Respondents felt that the questionnaire contains too many questions about facts and figures and not enough about their situation and barriers. |

Database

| Data entry program chosen | In Poland CAPI was used so no data entry was needed. |
| :--- | :--- |
| Comments on the data entry <br> program | As in Poland CAPI was used there were no problems with skip patterns. <br> Some problems occurred in financial questions with number " 0 ". |
| Comments on the data cleaning | SPSS 14.0 PL for Windows was used for cleaning the data. |

Country situation

| General aspects of economic, <br> political or social situation of the <br> country that could affect the results <br> of the survey | During the fieldwork the economic crisis started to be an issue in Poland, but <br> it seems not to have had an influence on the fieldwork. |
| :--- | :--- |
| Relevant country events that <br> occurred during fieldwork | None. |
| Other aspects | None. |

## A. 22 Romania

## A.22.1. Sampling structure and implementation

The first sample frame was supplied by the World Bank and EBRD and consisted of enterprises interviewed in BEEPS 2005. The World Bank and EBRD required that attempts should be made to re-interview establishments responding to the BEEPS 2005 survey where they were within the selected geographical regions and met eligibility criteria. That sample is referred to as the Panel. The second sample frame used in Romania was the Trade Register of Romania. The full frame was not made available. Instead an extract was selected in Romania according to instructions from the TNS statistical team in London.

The quality of the frame was assessed at the onset of the project. The frame proved to be useful though it showed positive rates of non-eligibility, repetition, non-existent units, etc. These problems are typical of establishment surveys, but given the impact these inaccuracies may have on the results, adjustments were needed when computing the appropriate weights for individual observations. The percentage of confirmed non-eligible units as a proportion of the total number of contacts to complete the survey was $37 \%$ ( 414 out of 1,115 establishments).

Regional stratification was defined in eight regions. These regions are Nord-Est, Sud-Est, SudMuntenia, Vest, Nord-Vest, Bucuresti-Ilfov-Ilfov, Sud-Vest Oltenia, and Centru (NUTS-2).

| Original sectors | Manufacturing: 15-37 <br> Services: 52 <br> Residual: 45, 50, 51, 55, 60, 61, 62, 63, 64, 72 |
| :--- | :--- |
| Added (top up) sectors | None |

Fresh sample frame

|  |  | Sector |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Region | Employees | Manufacturing | 52 | Residual | Grand Total |
| Nord-Est | 5-19 | 1935 | 2762 | 3309 | 8006 |
|  | 20-99 | 1009 | 296 | 944 | 2249 |
|  | 100+ | 349 | 24 | 148 | 521 |
| Nord-Est Total |  | 3293 | 3082 | 4401 | 10776 |
| Sud-Est | 5-19 | 1566 | 2545 | 3662 | 7773 |
|  | 20-99 | 873 | 253 | 1051 | 2177 |
|  | 100+ | 282 | 15 | 210 | 507 |
| Sud-Est Total |  | 2721 | 2813 | 4923 | 10457 |
| Sud- <br> Muntenia | 5-19 | 1534 | 2448 | 2994 | 6976 |
|  | 20-99 | 944 | 236 | 927 | 2107 |
|  | 100+ | 339 | 18 | 163 | 520 |
| Sud-Muntenia Total |  | 2817 | 2702 | 4084 | 9603 |
| Sud-Vest Oltenia | 5-19 | 1021 | 1607 | 2200 | 4828 |
|  | 20-99 | 487 | 190 | 581 | 1258 |
|  | 100+ | 178 | 13 | 96 | 287 |
| Sud-Vest Oltenia Total |  | 1686 | 1810 | 2877 | 6373 |
| Vest | 5-19 | 1572 | 1919 | 3370 | 6861 |
|  | 20-99 | 940 | 205 | 866 | 2011 |
|  | 100+ | 330 | 15 | 131 | 476 |
| Vest Total |  | 2842 | 2139 | 4367 | 9348 |
| Nord-Vest | 5-19 | 2570 | 2223 | 3809 | 8602 |
|  | 20-99 | 1305 | 258 | 1048 | 2611 |
|  | 100+ | 426 | 19 | 158 | 603 |
| Nord-Vest Total |  | 4301 | 2500 | 5015 | 11816 |
| Centru | 5-19 | 2438 | 2383 | 4364 | 9185 |
|  | 20-99 | 1274 | 303 | 1143 | 2720 |
|  | 100+ | 460 | 18 | 164 | 642 |
| Centru Total |  | 4172 | 2704 | 5671 | 12547 |
| BucurestiIlfov | 5-19 | 2513 | 2586 | 7303 | 12402 |
|  | 20-99 | 1221 | 352 | 2235 | 3808 |
|  | 100+ | 446 | 82 | 496 | 1024 |
| Bucuresti-IlfovTotal |  | 4180 | 3020 | 10034 | 17234 |
| Grand Total |  | 26012 | 20770 | 41372 | 88154 |

Source: Trade Register of Romania

Panel sample frame

|  |  | Sector |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Region | Employees | Manufacturing | 52 | Residual | Grand Total |
| Nord-Est | <5 | 9 | 3 |  | 12 |
|  | 5-19 | 24 | 3 | 5 | 32 |
|  | 20-99 | 32 | 3 | 8 | 43 |
|  | 100+ | 17 |  | 5 | 22 |
| Nord-Est Total |  | 82 | 9 | 18 | 109 |
| Sud-Est | <5 | 3 |  | 3 | 6 |
|  | 5-19 | 13 | 3 | 7 | 23 |
|  | 20-99 | 20 | 2 | 7 | 29 |
|  | 100+ | 7 | 1 | 1 | 9 |
| Sud-Est Total |  | 43 | 6 | 18 | 67 |
| Sud- <br> Muntenia | <5 | 4 | 2 |  | 7 |
|  | 5-19 | 13 | 3 | 6 | 22 |
|  | 20-99 | 11 | 2 | 7 | 20 |
|  | 100+ | 20 | 1 | 3 | 24 |
| Sud-Muntenia Total |  | 48 | 8 | 17 | 73 |
| Sud-Vest <br> Oltenia | <5 |  |  |  | 0 |
|  | 5-19 |  |  |  | 0 |
|  | 20-99 |  |  |  | 0 |
|  | 100+ |  |  |  | 0 |
| Sud-Vest Oltenia Total |  | 0 | 0 | 0 | 0 |
| Vest | <5 | 3 | 1 | 3 | 7 |
|  | 5-19 | 18 | 1 | 6 | 25 |
|  | 20-99 | 9 | 2 | 3 | 14 |
|  | 100+ | 6 |  | 3 | 9 |
| Vest Total |  | 36 | 4 | 15 | 55 |
| Nord-Vest | <5 | 15 | 2 | 2 | 19 |
|  | 5-19 | 22 | 2 | 4 | 28 |
|  | 20-99 | 24 | 3 | 5 | 32 |
|  | 100+ | 13 | 1 | 2 | 16 |
| Nord-Vest Total |  | 74 | 8 | 13 | 95 |
| Centru | <5 |  |  |  | 0 |
|  | 5-19 |  |  |  | 0 |
|  | 20-99 |  |  |  | 0 |
|  | 100+ |  |  |  | 0 |
| Centru Total |  | 0 | 0 | 0 | 0 |
| BucurestiIlfov | <5 | 4 | 3 | 1 | 8 |
|  | 5-19 | 11 |  | 5 | 16 |
|  | 20-99 | 12 | 6 | 7 | 25 |
|  | 100+ | 13 | 1 | 2 | 16 |
| Bucuresti-IlfovTotal |  | 40 | 10 | 15 | 65 |
| Grand Total |  | 323 | 45 | 96 | 464 |

Source: BEEPS 2005

Original sample design

| 龶 |  | Sector |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Region | Employees | Manufacturing | 52 | Residual | Grand Total |
| Nord-Est | 5-19 | 8 | 9 | 6 | 23 |
|  | 20-99 | 8 | 9 | 7 | 24 |
|  | 100+ | 7 | 7 | 6 | 20 |
| Nord-Est Total |  | 23 | 25 | 19 | 67 |
| Sud-Est | 5-19 | 6 | 8 | 7 | 21 |
|  | 20-99 | 6 | 7 | 7 | 20 |
|  | 100+ | 6 | 5 | 8 | 19 |
| Sud-Est Total |  | 18 | 20 | 22 | 60 |
| Sud- <br> Muntenia | 5-19 | 6 | 8 | 6 | 20 |
|  | 20-99 | 7 | 7 | 6 | 20 |
|  | 100+ | 7 | 5 | 6 | 18 |
| Sud-Muntenia Total |  | 20 | 20 | 18 | 58 |
| Sud-Vest Oltenia | 5-19 | 4 | 5 | 4 | 13 |
|  | 20-99 | 4 | 5 | 4 | 13 |
|  | 100+ | 4 | 4 | 4 | 12 |
| Sud-Vest Oltenia Total |  | 12 | 14 | 12 | 38 |
| Vest | 5-19 | 6 | 6 | 7 | 19 |
|  | 20-99 | 7 | 6 | 6 | 19 |
|  | 100+ | 7 | 4 | 5 | 16 |
| Vest Total |  | 20 | 16 | 18 | 54 |
| Nord-Vest | 5-19 | 10 | 7 | 7 | 24 |
|  | 20-99 | 10 | 7 | 7 | 24 |
|  | 100+ | 9 | 6 | 6 | 21 |
| Nord-Vest Total |  | 29 | 20 | 20 | 69 |
| Centru | 5-19 | 10 | 8 | 9 | 27 |
|  | 20-99 | 9 | 9 | 8 | 26 |
|  | 100+ | 10 | 5 | 6 | 21 |
| Centru Total |  | 29 | 22 | 23 | 74 |
| BucurestiIlfov | 5-19 | 10 | 9 | 14 | 33 |
|  | 20-99 | 9 | 10 | 15 | 34 |
|  | 100+ | 10 | 24 | 19 | 53 |
| Bucuresti-IlfovTotal |  | 29 | 43 | 48 | 120 |
| Grand Total |  | 180 | 180 | 180 | 540 |

## A.22.2. Status codes

## TOTAL

| Complete interviews (Total) | 541 |
| :--- | :---: |
| Incomplete interviews | 6 |
| Elegible in process | 32 |
| Refusals | 43 |
| Out of target | 64 |
| Impossible to contact | 326 |
| Ineligible - coop. | 1 |
| Refusal to the Screener | 106 |
| Total | 1119 |


|  | ELIGIBLES |  |
| :---: | :---: | :---: |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{00}{00} \\ & \frac{10}{10} \end{aligned}$ | 1.Elegible establishment (Correct name and address) | 528 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 1 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 1 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 69 |
|  | 16. Panel firm - now less than five employees | 23 |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{0}{00} \\ & \frac{70}{0} \\ & \hline \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 0 |
|  | 6. The firm discontinued businesses | 18 |
|  | 7. Not a business: private household | 28 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 18 |
|  | 91. No reply (after having called in different days of the week and in different business hours) | 159 |
|  | 92. Line out of order | 41 |
|  | 93. No tone | 56 |
|  | 10. Answering machine | 12 |
|  | 11. Fax line - data line | 16 |
|  | 12. Wrong address/ moved away and could not get the new references | 42 |
|  | 13. Refuses to answer the screener | 106 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 0 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 0 |
|  | 152. Out of target - firm moved abroad | 1 |
|  | Total | 1119 |

PANEL


## FRESH

|  | Complete interviews (Total) | 449 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 3 |
|  | Elegible in process | 0 |
|  | Refusals | 19 |
|  | Out of target | 18 |
|  | Impossible to contact | 85 |
|  | Ineligible - coop. | 0 |
|  | Refusal to the Screener | 82 |
|  | Total | 656 |
|  | ELIGIBLES |  |
| $\frac{0}{0}$ | 1.Elegible establishment (Correct name and address) | 449 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 1 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 0 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 21 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\begin{aligned} & 0 \\ & 0.0 \\ & : 0 \\ & \stackrel{0}{0} \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 0 |
|  | 6. The firm discontinued businesses | 6 |
|  | 7. Not a business: private household | 7 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 5 |
|  | 91. No reply (after having called in different days of the week and in different business hours) | 43 |
|  | 92. Line out of order | 5 |
|  | 93. No tone | 16 |
|  | 10. Answering machine | 4 |
|  | 11. Fax line - data line | 3 |
|  | 12. Wrong address/ moved away and could not get the new references | 14 |
|  | 13. Refuses to answer the screener | 82 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 0 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 0 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 656 |

## A.22.3. Cell weights and universe estimates

## Individual cell weights (strict)

|  |  | Sector |  |  |
| :--- | ---: | :--- | ---: | ---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |
| Nord-Est | $5-19$ | 65 | 244 | 346 |
|  | $20-99$ | 22 | 48 | 15 |
|  | $100+$ | 16 | 8 | 2 |
| Sud-Est | $5-19$ | 109 | 363 | 387 |
|  | $20-99$ | 39 | 116 | 24 |
|  | $100+$ | 18 | 30 | 1 |
| Sud-Muntenia | $5-19$ | 106 | 218 | 319 |
|  | $20-99$ | 73 | 88 | 34 |
|  | $100+$ | 34 | 14 | 3 |
| Sud-Vest | $5-19$ | 151 | 398 | 248 |
| Oltenia | $20-99$ | 100 | 116 | 48 |
|  | $100+$ | 31 | 19 | 3 |
| Vest | $5-19$ | 87 | 228 | 155 |
|  | $20-99$ | 45 | 114 | 14 |
|  | $100+$ | 38 | 37 | 2 |
| Nord-Vest | $5-19$ | 119 | 341 | 203 |
|  | $20-99$ | 67 | 104 | 18 |
|  | $100+$ | 29 | 20 | 2 |
| Centru | $5-19$ | 221 | 484 | 166 |
|  | $20-99$ | 205 | 113 | 43 |
|  | $100+$ | 44 | 27 | 6 |
| Bucuresti-Ilfov | $5-19$ | 257 | 366 | 78 |
|  | $20-99$ | 79 | 138 | 13 |
|  | $100+$ | 24 | 12 | 2 |

Individual cell weights (median)

|  |  |  | Sector |  |  |  |
| :--- | ---: | :--- | ---: | ---: | :---: | :---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |  |  |
| Nord-Est | $5-19$ | 106 | 399 | 528 |  |  |
|  | $20-99$ | 36 | 76 | 23 |  |  |
|  | $100+$ | 25 | 13 | 3 |  |  |
| Sud-Est | $5-19$ | 127 | 421 | 417 |  |  |
|  | $20-99$ | 44 | 129 | 25 |  |  |
|  | $100+$ | 21 | 34 | 1 |  |  |
| Sud-Muntenia | $5-19$ | 129 | 264 | 360 |  |  |
|  | $20-99$ | 85 | 102 | 37 |  |  |
|  | $100+$ | 40 | 17 | 3 |  |  |
| Sud-Vest | $5-19$ | 168 | 440 | 256 |  |  |
| Oltenia | $20-99$ | 107 | 116 | 48 |  |  |
|  | $100+$ | 34 | 19 | 3 |  |  |
| Vest | $5-19$ | 119 | 313 | 197 |  |  |
|  | $20-99$ | 60 | 151 | 17 |  |  |
|  | $100+$ | 51 | 50 | 2 |  |  |
| Nord-Vest | $5-19$ | 136 | 387 | 215 |  |  |
|  | $20-99$ | 74 | 114 | 19 |  |  |
|  | $100+$ | 32 | 22 | 3 |  |  |
| Centru | $5-19$ | 244 | 533 | 170 |  |  |
|  | $20-99$ | 218 | 114 | 43 |  |  |
|  | $100+$ | 48 | 27 | 6 |  |  |
| Bucuresti-Ilfov | $5-19$ | 345 | 490 | 97 |  |  |
|  | $20-99$ | 103 | 178 | 16 |  |  |
|  | $100+$ | 32 | 16 | 3 |  |  |

Individual cell weights (weak)

|  |  | Sector |  |  |
| :--- | ---: | :--- | ---: | ---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |
| Nord-Est | $5-19$ | 197 | 636 | 868 |
|  | $20-99$ | 61 | 112 | 35 |
|  | $100+$ | 41 | 18 | 5 |
| Sud-Est | $5-19$ | 202 | 576 | 590 |
|  | $20-99$ | 65 | 164 | 33 |
|  | $100+$ | 29 | 41 | 1 |
| Sud-Muntenia | $5-19$ | 220 | 385 | 541 |
|  | $20-99$ | 134 | 138 | 52 |
|  | $100+$ | 60 | 21 | 4 |
| Sud-Vest | $5-19$ | 195 | 440 | 263 |
| Oltenia | $20-99$ | 115 | 115 | 46 |
|  | $100+$ | 35 | 19 | 3 |
| Vest | $5-19$ | 209 | 468 | 305 |
|  | $20-99$ | 96 | 209 | 24 |
|  | $100+$ | 78 | 65 | 3 |
| Nord-Vest | $5-19$ | 222 | 542 | 311 |
|  | $20-99$ | 112 | 148 | 25 |
|  | $100+$ | 46 | 26 | 3 |
| Centru | $5-19$ | 286 | 536 | 117 |
|  | $20-99$ | 237 | 111 | 41 |
|  | $100+$ | 49 | 27 | 6 |
| Bucuresti-Ilfov | $5-19$ | 579 | 705 | 144 |
|  | $20-99$ | 159 | 238 | 22 |
|  | $100+$ | 47 | 20 | 4 |

Romania universe estimates

| Strict individual cell weights | Median individual cell weights | Weak individual cell weights |
| :---: | :---: | :---: |
| 51438 | 61381 | 83519 |

## A.22.4. Survey and item non-response

The number of contacted establishments per realized interview was 2.06 . 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.

## A.22.5. Local agency team involved in the study and its comments on the implementation of the BEEPS

Local agency team involved in the survey

| Local agency | Name: Center for Urban and Regional Sociology - CURS <br> Country: Romania <br> Membership of international organisation: - <br> Activities since: 1990 |
| :--- | :--- |
| Name of Project Manager | Catalin Augustin Stoica |
| Name and position of other key <br> persons of the project | Enumerators: 55 <br> Recruiters: 56 (most of the interviewers did the recruitment themselves. For <br> the panel sample, the recruitment was conducted from our central <br> headquarters). <br> Enumerators involved <br> interviewers did not carry out screeners 3 recruiters didn't carry out <br> complete interviews |


| Other staff involved | Fieldwork Coordinators: 51-8 at the regional level and 42 at county levels |
| :--- | :--- |
|  | Editing: 4 |
|  | Data Entry: 5 |
| Data Processing: 2 |  |

## Sample Frame

\begin{tabular}{|l|l|}

\hline Characteristic of sample frame used \& | Panel sample provided by the World Bank and EBRD - 464 establishments; |
| :--- |
| Fresh sample of 3570 establishment bought from The National Trade |
| Register Office and selected by The National Trade Register Office |
| specialists` based on the instructions provided by TNS Opinion | <br>

\hline Source \& The National Trade Register Office - official source
\end{tabular}

## Sample

| Comments/problems on sectors and <br> regions selected in the sample | On sectors: None <br> On regions: None |
| :--- | :--- |
| Comments on the response rate | Quite low rate because of the length and structure of the questionnaire |
| Comments on the sample design | The ample design was quite complicated, strict and didn't allow us much <br> flexibility, which in Romania is very much appreciated due to the economic <br> environment. Many firms appear and disappear from one year to the other, <br> the refusal rate for such surveys is generally quite high, and many of the <br> selected firms were from rural far areas that were not easy at all to access. |

Fieldwork
\(\left.$$
\begin{array}{|l|l|}\hline \text { Date of fieldwork } & \text { August 2008 - December } 2008 \\
\hline \text { Country } & \text { Romania } \\
\hline \text { Number of interviews } & \begin{array}{l}\text { Manufacturing: 193 } \\
\text { Services (sector 52): } 192 \\
\text { Core: } 156\end{array} \\
\hline \text { Problems found during fieldwork } & \begin{array}{l}\text { Many respondents initially agreed to complete the interview when they were } \\
\text { screened but later, when they saw how long the questionnaire was, refused to } \\
\text { do it. Some of the respondents became bored during the interview and refused } \\
\text { to continue. }\end{array} \\
& \begin{array}{l}\text { Some of them rescheduled the interview and then were unreachable (didn't } \\
\text { answer the phone, didn't respect the meeting times and dates). However, } \\
\text { most of them categorically refused to carry on with the interview. }\end{array}
$$ <br>
Due to the low flexibility level of this survey and the limited sample given by <br>
TNS London, some of our interviewers had to carry repeated visits of over <br>
200 km’s (back and forth) to far rural villages for one single questionnaire, <br>

fact which was pretty annoying and increased our costs considerably.\end{array}\right\}\)| Difficulties signalled in talking to several different managers (HR, Finance, |
| :--- |
| etc.) for getting the required answers for one single questionnaire. |

## Questionnaires

| Problems for the understanding of <br> questions (write question number) | Some of the questions were quite complicated and were not very well <br> understood by the respondents (see repeated DK/NA answers). |
| :--- | :--- |
| Problems found in the navigability <br> of questionnaires (for example, skip <br> patterns) | None. |
| Comments on questionnaire length | The questionnaire was considered to be too long by us, our coordinators, our <br> interviewers and the respondents. One of our regional coordinators even <br> refused to work with such a long questionnaire so we had to find another one <br> for that specific region. |
| Suggestions or other comments on <br> the questionnaires | None. |

## Database

| Data entry program chosen | CONFIRMIT |
| :--- | :--- |
| Comments on the data entry <br> program | The interface was not very user-friendly and not very fast for data entry. For <br> optimum results, our data-entry operators had to use both the keyboard and <br> the mouse and this increased the overall time spent on punching in the data. <br> Everything would have worked much faster and smoother if we would have <br> used our own data entry software and deliver the database in <br> SPSS/Excel/whatever. |
| Comments on the data cleaning | We had no direct access to the database so we weren't able to run any filters <br> or cleaning programs on it. The cleaning process took longer because all <br> corrections needed to be implemented in excel files (data validation reports) <br> provided by TNS Opinion. |


| General aspects of economic, <br> political or social situation of the <br> country that could affect the results <br> of the survey | The answers for questions regarding informal payments were hardly obtained <br> and sometimes the interviewers signaled that the respondents didn't seem to <br> be very sincere when answering such questions. <br> From our previous experience, due to various reasons - fiscal, political, grey- <br> market economy - we can say that large multinational and national companies <br> in Romania have quite strict rules regarding answering such surveys and <br> some of them definitely refuse to participate due to internal regulations. |
| :--- | :--- |
| Relevant country events that <br> occurred during fieldwork | Christmas and New Year Holidays; parliamentary election on November 28 |
| Other aspects | None. |

## A. 23 Russia

## A.23.1. Sampling structure and implementation

The first sample frame was supplied by the World Bank and EBRD and consisted of enterprises interviewed in BEEPS 2005. The World Bank and EBRD required that attempts should be made to re-interview establishments responding to the BEEPS 2005 survey where they were within the selected geographical regions and met eligibility criteria. That sample is referred to as the Panel. The second frame for Russia was compiled in 2007 and obtained from the National Statistics Agency (GosKomStat). The frame did not show the number of employees for establishments. It did however, show turnover values. Estimates were obtained which related turnover to size. They suggested that to qualify for the usual size criterion the turnover should be at least 1 million roubles. In addition, as Russia is a very large country spanning eleven time zones, the frame would cover many cities. Therefore, for cost efficiency reasons, it was decided that an extract should be purchased that covered only an agreed set of cities for establishments with turnover in excess of 1 million roubles. That extract, selected to instructions of the TNS statistical team, was sent to the TNS statistical team in London to select the establishments for interview. The third sample frame, BCD, was compiled in 2007 and was supplied by ROMIR for the follow-up survey to achieve the target sample size. BCD database has information on the size of the company for some of the companies, but does not include information about annual turnover.

The quality of the frame was assessed at the onset of the project. The frame proved to be useful though it showed positive rates of non-eligibility, repetition, non-existent units, etc. These problems are typical of establishment surveys, but given the impact these inaccuracies may have on the results, adjustments were needed when computing the appropriate weights for individual observations. The percentage of confirmed non-eligible units as a proportion of the total number of contacts to complete the survey was $44 \%$ ( 2468 out of 5559 establishments) for the initial survey.

Regional stratification was defined in seven regions. These regions are North West, Central, South, Ural, Siberia, Volgo-Viatsky, and Far East (federal districts).

Sectors included in the sample:

| Original sectors | Manufacturing: 15-37 <br> Services: 52 <br> Residual: 45, 50, 51, 55, 60, 61, 62, 63, 64, 72 |
| :--- | :--- |
| Added (top up) sectors | None |

Fresh sample frame

|  |  | Sector |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Region | Size | 15 | 18 | 24 | 27-28 | 29 | 52 | Other Manufacturing | Residual | Grand Total |
| North | <60m RUB | 166 | 74 | 147 | 450 | 410 | 1886 | 1383 | 10588 | 15,105 |
| West | 60m-299m RUB | 77 | 15 | 42 | 79 | 90 | 137 | 400 | 1827 | 2,667 |
|  | 300 m RUB+ | 62 | 4 | 17 | 21 | 33 | 101 | 280 | 1570 | 2,088 |
| North West Total |  | 305 | 93 | 206 | 550 | 533 | 2124 | 2063 | 13985 | 19859 |
| Central | <60m RUB | 591 | 365 | 570 | 858 | 1115 | 6462 | 4527 | 49549 | 64,036 |
|  | 60m-299m RUB | 166 | 40 | 121 | 184 | 239 | 731 | 1581 | 11706 | 14,768 |
|  | 300m RUB+ | 155 | 16 | 56 | 52 | 57 | 228 | 1262 | 5211 | 7,038 |
| Central Total |  | 912 | 421 | 747 | 1094 | 1411 | 7421 | 7370 | 66466 | 85842 |
| South | <60m RUB | 103 | 40 | 35 | 132 | 124 | 1611 | 448 | 4584 | 7,076 |
|  | 60m-299m RUB | 49 | 1 | 6 | 19 | 31 | 186 | 146 | 1550 | 1,989 |
|  | 300m RUB+ | 22 | 2 | 3 | 8 | 11 | 34 | 70 | 452 | 602 |
| South Total |  | 174 | 43 | 44 | 160 | 166 | 1831 | 663 | 6586 | 9667 |
| Ural | <60m RUB | 70 | 37 | 50 | 171 | 202 | 893 | 498 | 5409 | 7,330 |
|  | 60m-299m RUB | 28 | 4 | 4 | 35 | 33 | 71 | 143 | 1064 | 1,383 |
|  | 300m RUB+ | 20 | 1 | 7 | 32 | 34 | 65 | 110 | 532 | 800 |
| Ural Total |  | 119 | 42 | 62 | 237 | 268 | 1029 | 751 | 7005 | 9513 |
| Siberia | <60m RUB | 119 | 35 | 51 | 128 | 143 | 1439 | 561 | 4935 | 7,412 |
|  | 60m-299m RUB | 30 | 0 | 11 | 23 | 29 | 206 | 155 | 873 | 1,327 |
|  | 300m RUB+ | 23 | 1 | 5 | 18 | 19 | 9 | 50 | 645 | 772 |
| Siberia Total |  | 172 | 36 | 67 | 170 | 191 | 1654 | 767 | 6454 | 9511 |
| VolgoViatsky | <60m RUB | 158 | 89 | 178 | 333 | 402 | 2578 | 1065 | 10240 | 15,043 |
|  | 60m-299m RUB | 75 | 6 | 41 | 73 | 88 | 200 | 423 | 2837 | 3,742 |
|  | 300m RUB+ | 47 | 0 | 39 | 19 | 43 | 92 | 269 | 1604 | 2,113 |
| Volgo-Viatsky Total |  | 280 | 95 | 257 | 425 | 533 | 2870 | 1757 | 14681 | 20898 |
| Far East | <60m RUB | 46 | 15 | 6 | 20 | 20 | 705 | 184 | 1983 | 2,979 |
|  | 60m-299m RUB | 11 | 0 | 1 | 4 | 3 | 49 | 26 | 350 | 444 |
|  | 300m RUB+ | 17 | 0 | 0 | 1 | 1 | 16 | 2 | 292 | 329 |
| Far East Total |  | 74 | 15 | 7 | 25 | 24 | 770 | 212 | 2625 | 3752 |
| Grand Total |  | 2,036 | 745 | 1390 | 2661 | 3126 | 17699 | 13583 | 117802 | 159042 |

Source: GosKomStat - National Statistics Agency, 2007 and BCD, 2007

Panel sample frame

|  |  | Sector |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Region | Employees | 15 | 18 | 24 | 27-28 | 29 | 52 | Other Manufacturing | Residual | Grand Total |
| North | <5 |  |  |  |  |  |  |  | 2 | 2 |
| West | 5-19 |  |  |  |  | 1 | 5 | 5 | 11 | 22 |
|  | 20-99 |  |  | 1 |  | 1 | 2 | 1 | 11 | 16 |
|  | 100+ | 2 |  | 1 |  |  |  | 2 | 6 | 11 |
| North West Total |  | 2 | 0 | 2 | 0 | 2 | 7 | 8 | 30 | 51 |
| Central | <5 |  | 2 |  |  |  | 11 | 1 | 4 | 18 |
|  | 5-19 | 1 | 5 | 1 |  | 1 | 22 | 12 | 24 | 66 |
|  | 20-99 | 8 |  |  |  |  | 8 | 6 | 43 | 65 |
|  | 100+ | 3 | 3 | 1 |  | 3 | 6 | 17 | 28 | 61 |
| Central Total |  | 12 | 10 | 2 |  | 4 | 47 | 36 | 99 | 210 |
| South | <5 |  |  |  |  |  |  | 3 |  | 3 |
|  | 5-19 |  |  |  |  |  | 2 | 1 | 6 | 9 |
|  | 20-99 |  | 1 | 1 |  | 1 | 1 | 2 | 8 | 14 |
|  | 100+ |  |  |  |  | 1 |  | 3 | 3 | 7 |
| South Total |  | 0 | 1 | 1 | 0 | 2 | 3 | 9 | 17 | 33 |
| Ural | <5 |  |  |  |  |  |  |  |  |  |
|  | 5-19 |  | 2 |  |  |  | 2 | 1 | 6 | 11 |
|  | 20-99 |  |  |  |  |  |  | 3 | 3 | 6 |
|  | 100+ | 1 |  |  |  |  |  |  | 3 | 4 |
| Ural Total |  | 1 | 2 | 0 | 0 | 0 | 2 | 4 | 12 | 21 |
| Siberia | <5 |  |  |  |  |  | 4 | 1 |  | 5 |
|  | 5-19 |  |  |  |  |  | 3 | 1 | 2 | 6 |
|  | 20-99 | 2 |  |  |  |  | 2 | 5 | 7 | 16 |
|  | 100+ |  |  |  |  |  |  | 2 | 3 | 5 |
| Siberia Total |  | 2 |  |  |  |  | 9 | 9 | 12 | 32 |
| VolgoViatsky | <5 |  | 1 |  |  |  | 1 |  | 1 | 3 |
|  | 5-19 |  | 1 |  |  |  | 6 | 3 | 7 | 17 |
|  | 20-99 | 1 | 1 |  |  |  | 1 | 2 | 10 | 15 |
|  | 100+ |  |  |  |  | 1 | 1 | 4 | 5 | 11 |
| Volgo-Viatsky |  | 1 | 3 | 0 | 0 | 1 | 9 | 9 | 23 | 46 |
| Far East | <5 |  |  |  |  |  |  |  |  | 0 |
|  | 5-19 |  |  |  |  |  |  |  |  | 0 |
|  | 20-99 |  |  |  |  |  |  |  |  | 0 |
|  | 100+ |  |  |  |  |  |  |  |  | 0 |
| Far East Total |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Grand Total |  | 18 | 16 | 5 | 0 | 9 | 77 | 75 | 193 | 393 |

Source: BEEPS 2005

Original sample design

|  |  | Sector |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Region | Employees | 15 | 18 | 24 | 27-28 | 29 | 52 | Other <br> Manufacturing | Residual | Grand Total |
| North | 5-19 | 8 | 15 | 7 | 11 | 9 | 6 | 7 | 5 | 68 |
| West | 20-99 | 10 | 7 | 11 | 12 | 10 | 4 | 6 | 4 | 64 |
|  | 100+ | 9 | 2 | 7 | 7 | 8 | 5 | 6 | 6 | 50 |
| North West Total |  | 27 | 24 | 25 | 30 | 27 | 15 | 19 | 15 | 182 |
| Central | 5-19 | 27 | 67 | 30 | 22 | 26 | 20 | 21 | 23 | 236 |
|  | 20-99 | 21 | 16 | 29 | 21 | 24 | 22 | 22 | 23 | 178 |
|  | 100+ | 24 | 8 | 22 | 17 | 14 | 8 | 25 | 20 | 138 |
| Central Total |  | 72 | 91 | 81 | 60 | 64 | 50 | 68 | 66 | 552 |
| South | 5-19 | 5 | 8 | 2 | 4 | 3 | 5 | 2 | 2 | 31 |
|  | 20-99 | 6 |  | 1 | 3 | 4 | 6 | 2 | 3 | 25 |
|  | 100+ | 3 | 1 | 1 | 3 | 3 | 2 | 1 | 2 | 16 |
| South Total |  | 14 | 9 | 4 | 10 | 10 | 13 | 5 | 7 | 72 |
| Ural | 5-19 | 3 | 7 | 3 | 5 | 5 | 3 | 2 | 3 | 31 |
|  | 20-99 | 4 | 2 | 1 | 5 | 4 | 2 | 2 | 2 | 22 |
|  | 100+ | 3 |  | 3 | 11 | 9 | 5 | 2 | 2 | 35 |
| Ural Total |  | 10 | 9 | 7 | 21 | 18 | 10 | 6 | 7 | 88 |
| Siberia | 5-19 | 5 | 7 | 3 | 4 | 3 | 5 | 3 | 2 | 32 |
|  | 20-99 | 4 |  | 3 | 4 | 3 | 7 | 2 | 2 | 25 |
|  | 100+ | 4 |  | 2 | 6 | 5 |  | 1 | 3 | 21 |
| Siberia Total |  | 13 | 7 | 8 | 14 | 11 | 12 | 6 | 7 | 78 |
| VolgoViatsky | 5-19 | 7 | 17 | 10 | 9 | 9 | 9 | 5 | 5 | 71 |
|  | 20-99 | 10 | 3 | 10 | 10 | 10 | 6 | 6 | 6 | 61 |
|  | 100+ | 7 |  | 15 | 6 | 11 | 5 | 5 | 7 | 56 |
| Volgo-Viatsky Total |  | 24 | 20 | 35 | 25 | 30 | 20 | 16 | 18 | 188 |
| Far East | 5-19 | 12 | 4 | 2 | 3 | 6 | 20 | 16 | 10 | 73 |
|  | 20-99 | 3 |  |  | 1 | 1 | 2 | 5 | 4 | 16 |
|  | 100+ | 4 |  |  |  |  | 2 |  | 5 | 11 |
| Far East Total |  | 19 | 4 | 2 | 4 | 7 | 24 | 21 | 19 | 100 |
| Grand Total |  | 179 | 164 | 162 | 164 | 167 | 144 | 141 | 139 | 1260 |

## A.23.2. Status codes

## TOTAL

|  | Complete interviews (Total) | 1258 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 27 |
|  | Elegible in process | 106 |
|  | Refusals | 915 |
|  | Out of target | 324 |
|  | Impossible to contact | 3080 |
|  | Ineligible - coop. | 10 |
|  | Refusal to the Screener | 1450 |
|  | Total | 11161 |
|  | ELIGIBLES |  |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{0}{\sqrt[0]{0}} \\ & \frac{101}{2} \end{aligned}$ | 1.Elegible establishment (Correct name and address) | 2233 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 7 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 12 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 50 |
|  | 16. Panel firm - now less than five employees | 4 |
| $\begin{aligned} & 0 \\ & \frac{0}{0} \\ & : 0 \\ & 0.0 \\ & 0 \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 41 |
|  | 6. The firm discontinued businesses | 127 |
|  | 7. Not a business: private household | 68 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 88 |
| Unobtainable | 91. No reply (after having called in different days of the week and in different business hours) | 1577 |
|  | 92. Line out of order | 202 |
|  | 93. No tone | 20 |
|  | 10. Answering machine | 17 |
|  | 11. Fax line - data line | 40 |
|  | 12. Wrong address/ moved away and could not get the new references | 1224 |
|  | 13. Refuses to answer the screener | 1441 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 761 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 10 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 7922 |

PANEL

|  | Complete interviews (Total) | 57 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 4 |
|  | Elegible in process | 6 |
|  | Refusals | 26 |
|  | Out of target | 19 |
|  | Impossible to contact | 135 |
|  | Ineligible - coop. | 8 |
|  | Refusal to the Screener | 30 |
|  | Total | 285 |
|  | ELIGIBLES |  |
| $\frac{0}{0}$ | 1.Elegible establishment (Correct name and address) | 77 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 1 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 3 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 10 |
|  | 16. Panel firm - now less than five employees | 2 |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{0.0}{0} \\ & \frac{0}{E} \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 1 |
|  | 6. The firm discontinued businesses | 12 |
|  | 7. Not a business: private household | 0 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 6 |
| Unobtainable | 91. No reply (after having called in different days of the week and in different business hours) | 47 |
|  | 92. Line out of order | 24 |
|  | 93. No tone | 1 |
|  | 10. Answering machine | 0 |
|  | 11. Fax line - data line | 4 |
|  | 12. Wrong address/ moved away and could not get the new references | 59 |
|  | 13. Refuses to answer the screener | 30 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 46 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 8 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 331 |

FRESH FIRST WAVE

|  | Complete interviews (Total) | 949 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 18 |
|  | Elegible in process | 100 |
|  | Refusals | 686 |
|  | Out of target | 254 |
|  | Impossible to contact | 2050 |
|  | Ineligible - coop. | 2 |
|  | Refusal to the Screener | 1215 |
|  | Total | 5274 |
|  | ELIGIBLES |  |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{10}{01} \\ & \frac{11}{10} \end{aligned}$ | 1.Elegible establishment (Correct name and address) | 1707 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 2 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 5 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 37 |
|  | 16. Panel firm - now less than five employees | 2 |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{0}{0} \\ & \frac{0}{0} \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 34 |
|  | 6. The firm discontinued businesses | 113 |
|  | 7. Not a business: private household | 28 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 79 |
| Unobtainable | 91. No reply (after having called in different days of the week and in different business hours) | 786 |
|  | 92. Line out of order | 164 |
|  | 93. No tone | 19 |
|  | 10. Answering machine | 13 |
|  | 11. Fax line - data line | 30 |
|  | 12. Wrong address/ moved away and could not get the new references | 1038 |
|  | 13. Refuses to answer the screener | 1215 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 579 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 2 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 5853 |

FRESH SECOND WAVE

|  | Complete interviews (Total) | 252 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 5 |
|  | Elegible in process | 0 |
|  | Refusals | 203 |
|  | Out of target | 51 |
|  | Impossible to contact | 895 |
|  | Ineligible - coop. | 0 |
|  | Refusal to the Screener | 196 |
|  | Total | 1602 |
|  | ELIGIBLES |  |
| $\frac{0}{0.0}$ | 1.Elegible establishment (Correct name and address) | 449 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 4 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 4 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 3 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{0}{0} \\ & =0 \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 6 |
|  | 6. The firm discontinued businesses | 2 |
|  | 7. Not a business: private household | 40 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 3 |
|  | 91. No reply (after having called in different days of the week and in different business hours) | 744 |
|  | 92. Line out of order | 14 |
|  | 93. No tone | 0 |
|  | 10. Answering machine | 4 |
|  | 11. Fax line - data line | 6 |
|  | 12. Wrong address/ moved away and could not get the new references | 127 |
|  | 13. Refuses to answer the screener | 196 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 136 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 0 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 1738 |

## A.23.3. Cell weights and universe estimates

Russia universe estimates

|  | Strict collapsed cell <br> weights | Median collapsed cell <br> weights | Weak collapsed cell <br> weights |
| :---: | :---: | :---: | :---: |
| First wave | 57069 | 87925 | 147074 |
| First wave + additional <br> interviews | 47086 | 71295 | 141870 |

Note that the universe estimates are significantly lower when all the completed interviews are taken into account (using weights wstrict 2 , wmedian 2 , and wweak2).

## A.23.4. Survey and item non-response

The number of contacted establishments per realized interview was 6.14. 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.

## A.23.5. Local agency team involved in the study and its comments on the implementation of the BEEPS

## Local agency team involved in the survey

| Local agency 1 | Name: TNS MIC <br> Country: Russia <br> Membership of international organisation: ESOMAR <br> Activities since: 1990 (part of TNS since 2001) |
| :--- | :--- |
| Name of Project Manager | Boris Khatutsky |
| Name and position of other key <br> persons of the project | Head of Research Group <br> Manager |
| Enumerators involved | Enumerators: 88 <br> Recruiters: 77 <br> 49 people were both enumerators and recruiters. |
| Other staff involved | Fieldwork Coordinators: 1 <br> Field Manager: 1 <br> Editing: 1 <br> Data Entry: 1 <br> Data Processing: |


| Local agency 2 | Name: ROMIR <br> Country: Russia <br> Membership of international organisation: Gallup International, Global NR, <br> Open World and Worldwide Independent Network (WIN) <br> Activities since: 1987 |
| :--- | :--- |
| Name of Project Manager | Belackovskaya Natalia |
| Name and position of other key <br> persons of the project | Customer service manager |
| Enumerators involved | Enumerators: 67 interviewers and 9 supervisors <br> Recruiters: Interviewers also did recruitment. |
| Other staff involved | Fieldwork Coordinators: 1 <br> Editing: <br> Data Entry: 1 <br> Data Processing: 1 |

## Sample Frame

| Characteristic of sample frame used | GosKomStat is an official source of information. The information is based on <br> the financial statements of the companies (book-keeping reports). |
| :--- | :--- |
| Source | GosKomStat - National Statistics Agency |
| Year of publication | Beginning of 2007 |
| Comments on the quality of the <br> sample frame | Many incorrect telephone numbers and addresses for the reason that most <br> companies have different official address than the actual location of the <br> establishments' activities. GosKomStat's base includes official addresses <br> only. The local institutes had to check every second contact and much time <br> was dedicated to searching for updated contact information. However, this is <br> the unique source of information available in Russia in order to have a data <br> base which is representative of the target universe. |
| Year and organisation that <br> conducted the last economic census | It is updated yearly. The version used was updated at the beginning of 2007 <br> so the contact information refers to 2006. |
| Other sources for companies <br> statistics | Online search for actual addresses and telephone numbers (including the <br> website: http://yellowpages.ru), several subcontractors used their own data <br> bases to find appropriate information about firms from the sample (in some <br> regions). This approach was used in all the cases when we could reach <br> companies using the contact information from the initial sample frame. |


| Characteristic of sample frame used | Includes size of the company for some of the companies. |
| :--- | :--- |
| Source | BCD Base |
| Year of publication | 2007 |
| Comments on the quality of the <br> sample frame | Many incorrect telephone numbers and addresses for the reason that most <br> companies have different official address than the actual location of the <br> establishments' activities. |

## Sample

| Comments/problems on sectors and <br> regions selected in the sample | On sectors: Industry classification used in the sample frame has a different <br> name (OKVED) however it is the same as ISIC. <br> On regions: Central region was the most difficult one because of the large <br> target sample. The region is mostly represented by Moscow city only so <br> many interviews had to be done in Moscow. |
| :--- | :--- |
| Comments on the response rate | Only 14,000 contacts were eligible for purchase from the GosKomStat <br> sample frame for the 53 cities targeted. The poor quality of the sample frame <br> in terms of the contact information contributed to a low response rate. |
| Comments on the sample design | Size of establishment was estimated from the turnover as it was not indicated <br> in the initial sample frame. |
| Other comments | All establishments which have their own financial statements are included <br> given that the criterion to be included in the GosKomStat base is to report <br> financial statements. |

Fieldwork

| Date of fieldwork | August 2008 - March 2009 |
| :--- | :--- |
| Country | Russia |
| Number of interviews | Manufacturing: 630 |
|  | Services (sector 52): 151 |
|  | Core: 250 |


| Date of fieldwork | July 2009 - October 2009 |
| :--- | :--- |
| Country | Russia |
| Number of interviews | Manufacturing: 130 |
|  | Services (sector 52): 55 |
|  | Core: 66 |


| Problems found during fieldwork | - The low quality of the sample frame (too many companies which do not <br> exist or contact information is inaccurate). <br> Respondents did not see how participation in the study will be <br> advantageous for them; they do not believe that the World Bank's policy <br> will help them directly. |
| :--- | :--- | :--- |
|  | -The interview is very lengthy. <br> Giving financial information during the interview was a real barrier for <br> cooperation in spite of interviewers' efforts to reassure respondents that <br> their responses would never be related back to them individually. <br> Respondents were fearful nonetheless and considered that it was their <br> 'company secret'. Sometimes it was a reason for refusal at the very <br> beginning of the interview. <br> Other observations <br> -Second wave of fieldwork was conducted during the summer, which had <br> an impact on the response rates. <br> The financial crisis in Russia influenced the response rate. All the <br> companies' top-managers were preoccupied with company business and <br> had neither the time nor the wish to participate. Generally-speaking they <br> are not confident in the future. Given their focus on resolving problems <br> which the financial crisis brings to their company, they were unwilling to <br> dedicate time to an interview. <br> There were some cases when respondents were willing to complete the <br> questionnaire themselves and send it by e-mail. Many respondents were <br> willing to answer all the questions during a telephone call but not to meet <br> the interviewer. |

## Questionnaires

| Problems for the understanding of <br> questions (write question number) | Sometimes there was confusion surrounding the questions on unofficial gifts. <br> No additional explanation was given by the interviewer given the sensitivity <br> of such questions and the question was read exactly as it appeared on the <br> questionnaire. Talking about water supply costs, costs for electricity etc. was <br> problematic in numerous cases. In cases where the establishment does not <br> have its own premises but rents a premises or office respondents could not <br> identify the individual costs for all statements as the costs for renting includes <br> costs for water supply, electricity and others. |
| :--- | :--- |
| Problems found in the navigability <br> of questionnaires (for example, skip <br> patterns) | No problems. Perhaps questions about financial statements should be asked <br> earlier (in the middle of interview). Sometimes people have no patience to <br> complete the full interview and moreover share the company's financial <br> information. |
| Comments on questionnaire length | The interview is lengthy and sometimes it was difficult to reach the end of the <br> interview. |
| Suggestions or other comments on <br> the questionnaires | As the questionnaire length is very long self-completion could perhaps be <br> considered in the future. |

## Database

| Data entry program chosen | CONFIRMIT (TNS MIC) \& CENTRY (ROMIR) |
| :--- | :--- |
| Comments on the data entry <br> program | CONFIRMIT: On the one hand the fact that it's impossible to skip answers is <br> very useful for data entry department as they can't miss any answer. On the <br> other hand, the local institute faced the challenge of quantitative questions, <br> sometimes respondent gave an answer that contains strange numbers in terms <br> of CONFIRMIT (e.g. amount of certificates, licence, etc.). Additional data <br> checking instructions were implemented. The advantage of the programme <br> was that it could identify the mistakes at the very moment the questionnaire <br> was entered or show the list of errors after it was entered. In that case we <br> could make the call-backs and corrections immediately and not wait for the <br> data validation report. <br> CENTRY: None |
| Comments on the data cleaning | Comments from TNS MIC: Working with the data validation reports was a <br> difficult and time consuming process. <br> Comments from ROMIR: None |


| General aspects of economic, <br> political or social situation of the <br> country that could affect the results <br> of the survey | During the fieldwork and even prior to commencing, many Russian factories <br> were closed because of the global financial crisis. |
| :--- | :--- |
| Relevant country events that <br> occurred during fieldwork | A lot of employees were fired in many companies, so the information about <br> the number of employees was rapidly evolving. |
| Other aspects | None. |

## A. 24 Serbia

## A.24.1. Sampling structure and implementation

The first sample frame was supplied by the World Bank and EBRD and consisted of enterprises interviewed in BEEPS 2005. The World Bank and EBRD required that attempts should be made to re-interview establishments responding to the BEEPS 2005 survey where they were within the selected geographical regions and met eligibility criteria. That sample is referred to as the Panel. The second frame used in Serbia was the Balance Sheet 2006, which was issued by National Bank of Serbia. That frame (referred to as the Fresh) was sent to TNS in London to select the establishments for interview.

The quality of the frame was assessed at the onset of the project. The frame proved to be useful though it showed positive rates of non-eligibility, repetition, non-existent units, etc. These problems are typical of establishment surveys, but given the impact these inaccuracies may have on the results, adjustments were needed when computing the appropriate weights for individual observations. The percentage of confirmed non-eligible units as a proportion of the total number of contacts to complete the survey was $24 \%$ ( 199 out of 830 establishments).

Regional stratification was defined in six regions. These regions are Belgrade, Central, East, South East, Vojvodina, and West. Table below shows the districts and municipalies in each of these six regions, as well as correspondence with NUTS-2 regions.

| Grouping used for stratification purposes in BEEPS IV | District | Municipality | Official statistical regions (NUTS-2) |
| :---: | :---: | :---: | :---: |
| Belgrade | City of Belgrade | Barajevo, Čukarica, Grocka, Lazarevac, Mladenovac, Novi Beograd, Obrenoovac, Palilula, Rakovica, Savski venac, Sopot, Stari Grad, Voždovac, Vračar, Zemun, Zvezdara | City of Belgrade |
| Central | Moravica | Čačak, Gornji Milanovac, Ivanjica, Lučani | Šumadija and Western Serbia |
|  | Pomoravlje | Ćuprija, Despotovac, Paraćin, Rekovac, Jagodina, Svilajnac |  |
|  | Rasina | Aleksandrovac, Brus, Ćićevac, Kruševac, Trstenik, Varvarin |  |
|  | Raška | Kraljevo, Novi Pazar, Raška, Tutin, Vrnjačka Banja |  |
|  | Šumadija | Aranđelovac, Batočina, Knić, Kragujevac, Lapovo, Rača, Topola |  |


| East | Bor | Bor, Kladovo, Majdanpek, Negotin | Southern and Eastern Serbia |
| :---: | :---: | :---: | :---: |
|  | Braničevo | Golubac, Kučevo, Malo Crniće, Petrovac, Požarevac, Veliko Gradište, Žabari, Žagubica |  |
|  | Podunavlje | Smederevo, Smederevska Palanka, Velika Plana |  |
|  | Zaječar | Boljevac, Knjaževac, Sokobanja, Zaječar |  |
| South East | Jablanica | Bojnik, Crna Trava, Lebane, Leskovac, Medveđa, Vlasotince | Southern and Eastern Serbia |
|  | Nišava | Aleksinac, Doljevac, Gadžin Han, Merošina, Niš, Niš-Crveni Krst, Niška Banja, Niš-Medijana, Niš-Palilula, NišPantelej, Ražanj, Svrljig |  |
|  | Pčinja | Bosilegrad, Bujanovac, Preševo, Surdulica, Trgovište, Vladičin Han, Vranje |  |
|  | Pirot | Babušnica, Bela Palanka, Dimitrovgrad, Pirot |  |
|  | Toplica | Blace, Kuršumlija, Prokuplje, Žitorađa |  |
| Vojvodina | Central Banat | Nova Crnja, Novi Bečej, Sečanj, Žitište, Zrenjanin | Vojvodina |
|  | North Bačka | Bačka Topola, Mali Iđoš, Subotica |  |
|  | North Banat | Ada, Čoka, Kanjiža, Kikinda, Novi Kneževac, Senta |  |
|  | South Bačka | Bač, Bačka Palanka, Bački Petrovac, Bečej, Beočin, Novi Sad, Srbobran, Sremski Karlovci, Temerin, Titel, Vrbas, Žabalj |  |
|  | South Banat | Alibunar, Bela Crkva, Kovačica, Kovin, Opovo, Pančevo, Plandište, Vršac |  |
|  | Srem | Inđija, Irig, Pećinci, Ruma, Sremska Mitrovica, Stara Pazova, Šid |  |
|  | West Bačka | Apatin, Kula, Ođzaci, Sombor |  |
| West | Kolubara | Lajkovac, Ljig, Mionica, Osečina, Ub, Valjevo | Šumadija and Western Serbia |
|  | Mačva | Bogatić, Koceljeva, Krupanj, Ljubovija, Loznica, Mali Zvornik, Šabac, Vladimirci |  |
|  | Zlatibor | Arilje, Bajina Bašta, Čajetina, Kosjerić, Nova Varoš, Požega, Priboj, Prijepolje, Sjenica, Užice |  |

Sectors included in the sample:

| Original sectors | Manufacturing: 15-37 <br> Services: 52 <br> Residual: 45, 50, 51, 55, 60, 61, 62, 63, 64, 72 |
| :--- | :--- |
| Added (top up) sectors | None |

Fresh sample frame


Source: Balance Sheet 2007, issued by National Bank of Serbia

Panel sample frame

|  |  | Sector |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Region | Employees | Manufacturing | 52 | Residual | Grand Total |
| Belgrade | <5 | 2 | 6 | 10 | 18 |
|  | 5-19 | 6 | 2 | 11 | 19 |
|  | 20-99 | 5 | 1 | 9 | 15 |
|  | 100+ | 8 | 2 | 15 | 25 |
| Belgrade Total |  | 21 | 11 | 46 | 77 |
| Central | <5 | 1 | 1 |  | 2 |
|  | 5-19 | 1 |  | 2 | 3 |
|  | 20-99 | 1 | 1 | 1 | 3 |
|  | 100+ | 3 |  | 1 | 4 |
| Central Total |  | 6 | 2 | 4 | 12 |
| East | <5 |  |  | 2 | 2 |
|  | 5-19 |  |  |  | 0 |
|  | 20-99 | 1 |  | 1 | 2 |
|  | 100+ |  |  | 1 | 1 |
| East Total |  | 1 | 0 | 4 | 5 |
| South East | <5 | 2 | 6 | 11 | 19 |
|  | 5-19 | 4 | 1 | 6 | 11 |
|  | 20-99 | 5 | 2 | 3 | 10 |
|  | 100+ | 9 |  | 3 | 12 |
| South East Total |  | 20 | 9 | 23 | 52 |
| Vojvodina | <5 |  | 5 | 4 | 9 |
|  | 5-19 | 5 | 2 | 7 | 14 |
|  | 20-99 | 2 |  | 4 | 6 |
|  | 100+ | 9 |  | 2 | 11 |
| Vojvodina Total |  | 16 | 7 | 17 | 40 |
| West | <5 |  |  |  |  |
|  | 5-19 |  |  | 1 | 1 |
|  | 20-99 |  |  | 1 | 1 |
|  | 100+ | 6 |  |  | 6 |
| West Total |  | 6 |  | 2 | 8 |
| Grand Total |  | 70 | 29 | 95 | 194 |

Source: BEEPS 2005

Original sample design


## A.24.2. Status codes

## TOTAL

|  | Complete interviews (Total) | 389 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 6 |
|  | Elegible in process | 3 |
|  | Refusals | 73 |
|  | Out of target | 104 |
|  | Impossible to contact | 86 |
|  | Ineligible - coop. | 9 |
|  | Refusal to the Screener | 127 |
|  | Total | 797 |
|  | ELIGIBLES |  |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{0}{00} \\ & \frac{1010}{1} \end{aligned}$ | 1.Elegible establishment (Correct name and address) | 455 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 3 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 4 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 9 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\begin{aligned} & 00 \\ & 0.0 \\ & \stackrel{0}{0} \\ & 0 \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 9 |
|  | 6. The firm discontinued businesses | 62 |
|  | 7. Not a business: private household | 5 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 28 |
|  | 91. No reply (after having called in different days of the week and in different business hours) | 47 |
|  | 92. Line out of order | 3 |
|  | 93. No tone | 2 |
|  | 10. Answering machine | 0 |
|  | 11. Fax line - data line | 3 |
|  | 12. Wrong address/ moved away and could not get the new references | 31 |
|  | 13. Refuses to answer the screener | 127 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 33 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 9 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 830 |

PANEL


## FRESH

|  | Complete interviews (Total) | 276 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 6 |
|  | Elegible in process | 2 |
|  | Refusals | 65 |
|  | Out of target | 72 |
|  | Impossible to contact | 76 |
|  | Ineligible - coop. | 5 |
|  | Refusal to the Screener | 112 |
|  | Total | 614 |
|  | ELIGIBLES |  |
| $\frac{0}{0}$ | 1.Elegible establishment (Correct name and address) | 339 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 3 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 1 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 6 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\begin{aligned} & 0 \\ & 0.0 \\ & : 0 \\ & \stackrel{0}{0} \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 9 |
|  | 6. The firm discontinued businesses | 40 |
|  | 7. Not a business: private household | 3 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 20 |
|  | 91. No reply (after having called in different days of the week and in different business hours) | 42 |
|  | 92. Line out of order | 3 |
|  | 93. No tone | 1 |
|  | 10. Answering machine | 0 |
|  | 11. Fax line - data line | 3 |
|  | 12. Wrong address/ moved away and could not get the new references | 27 |
|  | 13. Refuses to answer the screener | 112 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 23 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 5 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 637 |

## A.24.3. Cell weights and universe estimates

## Collapsed cell weights (strict)

|  |  | Sector |  |  |  |  |
| :--- | ---: | :--- | ---: | ---: | :---: | :---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |  |  |
| Belgrade | $5-19$ | 52 | 11 | 80 |  |  |
|  | $20-99$ | 25 | 3 | 23 |  |  |
|  | $100+$ | 9 | 1 | 4 |  |  |
| Central | $5-19$ | 52 | 21 | 80 |  |  |
|  | $20-99$ | 50 | 4 | 64 |  |  |
|  | $100+$ | 32 | 4 | 22 |  |  |
| East | $5-19$ | 87 | 21 | 83 |  |  |
|  | $20-99$ | 92 | 6 | 58 |  |  |
|  | $100+$ | 53 | 3 |  |  |  |
| South East | $5-19$ | 105 | 19 | 83 |  |  |
|  | $20-99$ | 45 | 4 | 30 |  |  |
|  | $100+$ | 11 | 9 | 21 |  |  |
| Vojvodina | $5-19$ | 21 | 4 | 15 |  |  |
|  | $20-99$ | 12 | 2 | 7 |  |  |
|  | $100+$ | 5 | 1 | 4 |  |  |
| West | $5-19$ | 29 | 14 | 55 |  |  |
|  | $20-99$ | 21 | 4 | 56 |  |  |
|  | $100+$ | 4 | 6 | 5 |  |  |

## Collapsed cell weights (median)

|  |  | Sector |  |  |
| :--- | ---: | :--- | ---: | ---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |
| Belgrade | $5-19$ | 67 | 16 | 116 |
|  | $20-99$ | 36 | 4 | 38 |
|  | $100+$ | 13 | 2 | 6 |
| Central | $5-19$ | 67 | 25 | 116 |
|  | $20-99$ | 56 | 5 | 81 |
|  | $100+$ | 36 | 4 | 27 |
| East | $5-19$ | 92 | 23 | 93 |
|  | $20-99$ | 102 | 7 | 72 |
|  | $100+$ | 57 | 4 |  |
| South East | $5-19$ | 102 | 19 | 93 |
|  | $20-99$ | 46 | 5 | 34 |
|  | $100+$ | 11 | 9 | 23 |
| Vojvodina | $5-19$ | 23 | 5 | 19 |
|  | $20-99$ | 13 | 2 | 10 |
|  | $100+$ | 5 | 2 | 5 |
| West | $5-19$ | 34 | 17 | 72 |
|  | $20-99$ | 26 | 5 | 76 |
|  | $100+$ | 5 | 8 | 7 |

## Collapsed cell weights (weak)

|  |  | Sector |  |  |  |  |
| :--- | ---: | :--- | ---: | ---: | :---: | :---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |  |  |
| Belgrade | $5-19$ | 81 | 20 | 141 |  |  |
|  | $20-99$ | 40 | 5 | 43 |  |  |
|  | $100+$ | 14 | 2 | 7 |  |  |
| Central | $5-19$ | 81 | 31 | 141 |  |  |
|  | $20-99$ | 63 | 6 | 92 |  |  |
|  | $100+$ | 38 | 5 | 29 |  |  |
| East | $5-19$ | 103 | 27 | 108 |  |  |
|  | $20-99$ | 106 | 7 | 76 |  |  |
|  | $100+$ | 57 | 4 |  |  |  |
| South East | $5-19$ | 118 | 23 | 108 |  |  |
|  | $20-99$ | 49 | 5 | 37 |  |  |
|  | $100+$ | 11 | 10 | 24 |  |  |
| Vojvodina | $5-19$ | 27 | 6 | 23 |  |  |
|  | $20-99$ | 15 | 2 | 11 |  |  |
|  | $100+$ | 6 | 2 | 5 |  |  |
| West | $5-19$ | 41 | 21 | 87 |  |  |
|  | $20-99$ | 29 | 6 | 86 |  |  |
|  | $100+$ | 5 | 9 | 7 |  |  |

## Serbia universe estimates

| Strict collapsed cell weights | Median collapsed cell weights | Weak collapsed cell weights |
| :---: | :---: | :---: |
| 10167 | 12975 | 15135 |

## A.24.4. Survey and item non-response

The number of contacted establishments per realized interview was 2.05 . 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.

## A.24.5. Local agency team involved in the study and its comments on the implementation of the BEEPS

## Local agency team involved in the survey

| Local agency | Name: Strategic Marketing <br> Country: Serbia <br> Membership of international organization: <br> Activities since: 1997 |
| :--- | :--- |
| Name of Project Manager | Snežana Savić |
| Name and position of other key <br> persons of the project | Researchers, Enumerators, Recruiters |
| Enumerators involved | Enumerators: 75 <br> Recruiters: 74 <br> Enumerators were part of recruitment |
| Other staff involved | Fieldwork Coordinators: 8 <br> Editing: 2 <br> Data Entry: 7 <br> Data Processing: 2 |

## Sample Frame

| Characteristic of sample frame used | Balance Sheet 2006; issued by National Bank of Serbia Sample frame was <br> aggregated from the Balance Sheet |
| :--- | :--- |
| Source | Issued by National Bank of Serbia |
| Year of publication | 2006 |


| Comments on the quality of the <br> sample frame | Quality very good. The biggest weaknesses are the contact details; missing <br> phone numbers and old addresses. |
| :--- | :--- |
| Year and organisation that <br> conducted the last economic census | None. |

## Sample

| Comments/problems on sectors and <br> regions selected in the sample | On sectors: Scarcity of establishments in retail trade (bigger enterprises <br> because we have in whole country a few big retail trade chains). Due to this, <br> problems experienced in reaching targets for this quota. <br> On regions: |
| :--- | :--- |
| Comments on the response rate | None. |
| Comments on the sample design | None. |

## Fieldwork

| Date of fieldwork | August 2008 - December 2008 |
| :--- | :--- |
| Country | Serbia |
| Number of interviews | Manufacturing: 132 <br> Services (sector 52): 158 <br> Core: 98 |
| Problems found during fieldwork | None. |
| Other observations | None. |

## Questionnaires

| Problems for the understanding of <br> questions (write question number) | None. |
| :--- | :--- |
| Problems found in the navigability <br> of questionnaires (for example, skip <br> patterns) | Questionnaire is long and very detailed. |
| Comments on questionnaire length | Very long and demanding. The respondents were reluctant and lose interest in <br> the survey. Some respondents are getting nervous after 45 minutes and begin <br> to lose their patience. Also respondents' concentration tends to wane and they <br> weren't as interested as at the beginning. On the whole, most questions are <br> easy understandable for well-educated managers. However, some questions <br> are not easy to understand for managers, CEO, owners who are not as well up <br> on managerial matters (small firms where the owners or managers have <br> gained knowledge solely from sector of industry). They had particular <br> problems understanding questions from sections P, G \& N. |
| Suggestions or other comments on <br> the questionnaires | Many details especially for financial figures negatively effect the contact with <br> respondents and lowers their willingness to continue the interview. |

## Database

| Data entry program chosen | CONFIRMIT |
| :--- | :--- |
| Comments on the data entry <br> program | Data entry took longer than expected. |
| Comments on the data cleaning | None. |

## Country situation

| General aspects of economic, <br> political or social situation of the <br> country that could affect the results <br> of the survey | None. |
| :--- | :--- |
| Relevant country events that <br> occurred during fieldwork | None. |
| Other aspects | None. |

## A. 25 Slovak Republic

## A.25.1. Sampling structure and implementation

The first sample frame was supplied by the World Bank and EBRD and consisted of enterprises interviewed in BEEPS 2005. The World Bank and EBRD required that attempts should be made to re-interview establishments responding to the BEEPS 2005 survey where they were within the selected geographical regions and met eligibility criteria. That sample is referred to as the Panel. The source of the second sample frame was Statistical Office of the Slovak Republic - 2007Organization database.

The quality of the frame was assessed at the onset of the project. The frame proved to be useful though it showed positive rates of non-eligibility, repetition, non-existent units, etc. These problems are typical of establishment surveys, but given the impact these inaccuracies may have on the results, adjustments were needed when computing the appropriate weights for individual observations. The percentage of confirmed non-eligible units as a proportion of the total number of contacts to complete the survey was $33.5 \%$ ( 344 out of 1027 establishments).

Regional stratification was defined in 4 regions. These regions are Bratislava, Západné Slovensko, Stredné Slovensko, and Východné Slovensko (NUTS-2).

Sectors included in the sample:

| Original sectors | Manufacturing: $15,17,18,19,20,22,23,24,25,26,27$, |
| :--- | :--- |
|  | $28,29,30,31,32,33,34,35,36$ |
|  | Services: 52 |
|  | Residual: 45, 50, 51, 55, $60,61,63,72$ |
| Added (top up) sectors | None |

Fresh sample frame

|  |  | Sector |  |  | Grand Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Region | Employees | Manufacturing | 52 | Residual |  |
| Bratislava | 5-19 | 2843 | 360 | 4286 | 7489 |
|  | 20-99 | 607 | 46 | 749 | 1402 |
|  | 100+ | 187 | 13 | 124 | 324 |
| Bratislava Total |  | 3637 | 419 | 5159 | 9215 |
| Západné Slovensko | 5-19 | 5740 | 457 | 5437 | 11634 |
|  | 20-99 | 1378 | 76 | 1021 | 2475 |
|  | 100+ | 456 | 20 | 174 | 650 |
| Západné Slovensko Total |  | 7574 | 553 | 6632 | 14759 |
| Stredné Slovensko | 5-19 | 3507 | 459 | 4428 | 8394 |
|  | 20-99 | 864 | 64 | 758 | 1686 |
|  | 100+ | 255 | 22 | 133 | 410 |
| Stredné Slovensko Total |  | 4626 | 545 | 5319 | 10490 |
| Východné | 5-19 | 4709 | 312 | 3718 | 8739 |
| Slovensko | 20-99 | 1013 | 43 | 631 | 1687 |
|  | 100+ | 294 | 19 | 109 | 422 |
| Východné Slovensko Total |  | 6016 | 374 | 4458 | 10848 |
| Grand Total |  | 21853 | 1891 | 21568 | 45312 |

Source: Statistical Office of the Slovak Republic, Organization database 2007

Panel sample frame

|  |  | Sector |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Region | Employees | Manufacturing | 52 | Residual | Grand Total |
| Bratislava | <5 | 1 | 2 | 6 | 9 |
|  | 5-19 | 2 | 7 | 10 | 19 |
|  | 20-99 | 5 |  | 7 | 12 |
|  | 100+ | 3 |  | 4 | 7 |
| Bratislava Total |  | 11 | 9 | 27 | 47 |
| Západné Slovensko | <5 |  |  | 4 | 4 |
|  | 5-19 |  | 1 | 5 | 6 |
|  | 20-99 | 1 |  |  | 1 |
|  | 100+ | 2 |  | 1 | 3 |
| Západné Slovensko Total |  | 3 | 1 | 10 | 14 |
| Stredné Slovensko | <5 |  | 1 | 3 | 4 |
|  | 5-19 | 2 |  | 5 | 7 |
|  | 20-99 | 1 |  | 5 | 6 |
|  | 100+ | 3 |  | 1 | 4 |
| Stredné Slovensko Total |  | 6 | 1 | 14 | 20 |
| Východné Slovensko | <5 |  | 2 | 3 | 5 |
|  | 5-19 | 1 | 2 | 6 | 9 |
|  | 20-99 | 1 |  | 4 | 5 |
|  | 100+ | 1 |  | 2 | 3 |
| Východné Slovensko Total |  | 3 | 4 | 15 | 22 |
| Grand Total |  | 23 | 15 | 66 | 104 |

Source: BEEPS 2005

## Original sample design



## A.25.2. Status codes

## TOTAL

| Complete interviews (Total) | 275 |
| :--- | :---: |
| Incomplete interviews | 5 |
| Elegible in process | 18 |
| Refusals | 17 |
| Out of target | 113 |
| Impossible to contact | 223 |
| Ineligible - coop. | 8 |
| Refusal to the Screener | 138 |
| Total | 797 |


|  | ELIGIBLES |  |
| :---: | :---: | :---: |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{00}{00} \\ & \frac{10}{10} \end{aligned}$ | 1.Elegible establishment (Correct name and address) | 294 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 1 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 1 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 19 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{0}{00} \\ & \frac{70}{0} \\ & \hline \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 18 |
|  | 6. The firm discontinued businesses | 41 |
|  | 7. Not a business: private household | 15 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 39 |
|  | 91. No reply (after having called in different days of the week and in different business hours) | 85 |
|  | 92. Line out of order | 31 |
|  | 93. No tone | 11 |
|  | 10. Answering machine | 11 |
|  | 11. Fax line - data line | 3 |
|  | 12. Wrong address/ moved away and could not get the new references | 82 |
|  | 13. Refuses to answer the screener | 138 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 230 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 6 |
|  | 152. Out of target - firm moved abroad | 2 |
|  | Total | 1027 |

PANEL

|  | Complete interviews (Total) | 33 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 0 |
|  | Elegible in process | 3 |
|  | Refusals | 5 |
|  | Out of target | 1 |
|  | Impossible to contact | 23 |
|  | Ineligible - coop. | 0 |
|  | Refusal to the Screener | 16 |
|  | Total | 81 |
|  | ELIGIBLES |  |
| $\frac{0}{0}$ | 1.Elegible establishment (Correct name and address) | 30 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 1 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 0 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 10 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\frac{0}{0.0}$ | 5. The establishment has less than 5 permanent full time employees | 0 |
|  | 6. The firm discontinued businesses | 1 |
|  | 7. Not a business: private household | 0 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 0 |
| 00000000 | 91. No reply (after having called in different days of the week and in different business hours) | 16 |
|  | 92. Line out of order | 6 |
|  | 93. No tone | 0 |
|  | 10. Answering machine | 0 |
|  | 11. Fax line - data line | 0 |
|  | 12. Wrong address/ moved away and could not get the new references | 1 |
|  | 13. Refuses to answer the screener | 16 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 23 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 0 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 104 |

## FRESH

|  | Complete interviews (Total) | 242 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 5 |
|  | Elegible in process | 15 |
|  | Refusals | 12 |
|  | Out of target | 112 |
|  | Impossible to contact | 202 |
|  | Ineligible - coop. | 8 |
|  | Refusal to the Screener | 122 |
|  | Total | 718 |
|  | ELIGIBLES |  |
|  | 1.Elegible establishment (Correct name and address) | 264 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 0 |
| $0$ | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 1 |
| 工 | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 9 |
|  | 16. Panel firm - now less than five employees | 0 |
| 0 | 5. The establishment has less than 5 permanent full time employees | 18 |
| :00 | 6. The firm discontinued businesses | 40 |
| " | 7. Not a business: private household | 15 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 39 |
|  | 91. No reply (after having called in different days of the week and in different business hours) | 71 |
| त | 92. Line out of order | 25 |
| . | 93. No tone | 11 |
| $0$ | 10. Answering machine | 11 |
| $\stackrel{\square}{\square}$ | 11. Fax line - data line | 3 |
|  | 12. Wrong address/ moved away and could not get the new references | 81 |
|  | 13. Refuses to answer the screener | 122 |
|  | 14. In process (the establishment is being calledl is being contacted previous to ask the screener) | 207 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 6 |
|  | 152. Out of target - firm moved abroad | 2 |
|  | Total | 925 |

## A.25.3. Cell weights and universe estimates

## Individual cell weights (strict)

|  |  | Sector |  |  |
| :--- | ---: | :--- | ---: | ---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |
| Bratislava | $5-19$ | 207 | 28 | 208 |
|  | $20-99$ | 96 | 6 | 41 |
|  | $100+$ | 30 | 2 | 7 |
| Západné | $5-19$ | 202 | 24 | 178 |
| Slovensko | $20-99$ | 64 | 3 | 105 |
|  | $100+$ | 37 | 1 | 9 |
| Stredné | $5-19$ | 178 | 59 | 135 |
| Slovensko | $20-99$ | 38 | 2 | 40 |
|  | $100+$ | 15 | 2 | 7 |
| Východné | $5-19$ | 154 | 9 | 152 |
| Slovensko | $20-99$ | 43 | 2 | 39 |
|  | $100+$ | 17 | 1 | 3 |

## Individual cell weights (median)

|  |  | Sector |  |  |
| :--- | ---: | :--- | ---: | ---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |
| Bratislava | $5-19$ | 275 | 37 | 288 |
|  | $20-99$ | 119 | 8 | 52 |
|  | $100+$ | 37 | 2 | 9 |
| Západné | $5-19$ | 287 | 34 | 264 |
| Slovensko | $20-99$ | 84 | 4 | 144 |
|  | $100+$ | 49 | 1 | 12 |
| Stredné | $5-19$ | 345 | 116 | 272 |
| Slovensko | $20-99$ | 69 | 4 | 75 |
|  | $100+$ | 26 | 3 | 13 |
| Východné | $5-19$ | 231 | 14 | 239 |
| Slovensko | $20-99$ | 60 | 3 | 57 |
|  | $100+$ | 24 | 1 | 4 |

## Individual cell weights (weak)

|  |  | Sector |  |  |
| :--- | ---: | :--- | ---: | ---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |
| Bratislava | $5-19$ | 493 | 70 | 571 |
|  | $20-99$ | 188 | 13 | 92 |
|  | $100+$ | 57 | 4 | 15 |
| Západné | $5-19$ | 364 | 46 | 371 |
| Slovensko | $20-99$ | 94 | 5 | 179 |
|  | $100+$ | 53 | 2 | 15 |
| Stredné | $5-19$ | 519 | 184 | 454 |
| Slovensko | $20-99$ | 91 | 6 | 111 |
|  | $100+$ | 34 | 5 | 19 |
| Východné | $5-19$ | 373 | 25 | 427 |
| Slovensko | $20-99$ | 86 | 5 | 90 |
|  | $100+$ | 34 | 2 | 7 |

Slovak Republic universe estimates

| Strict individual cell weights | Median individual cell weights | Weak individual cell weights |
| :---: | :---: | :---: |
| 16938 | 25625 | 38723 |

## A.25.4. Survey and item non-response

The number of contacted establishments per realized interview was 3.73 . 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 relatively low ratio of contacted establishments per realized interview (3.73) suggests that the main source of error in estimates in the Slovak Republic may be selection bias and not frame inaccuracy.

## A.25.5. Local agency team involved in the study and its comments on the implementation of the BEEPS

## Local agency team involved in the survey

| Local agency | Name: ACRC s.r.o. <br> Country: Slovak Republic <br> Membership of international organisation: none <br> Activities since: various |
| :--- | :--- |
| Name of Project Manager |  |
| Name and position of other key <br> persons of the project |  |


| Enumerators involved | Enumerators: 74 (there were no enumerators doing recruitment) <br> Recruiters: 2 |
| :--- | :--- |
| Other staff involved | Fieldwork Coordinators: 3 |
|  | Editing: 2 |
|  | Data Entry: 5 |
|  | Data Processing: 2 |

## Sample Frame

| Characteristic of sample frame used | All requirements were met. |
| :--- | :--- |
| Source | Statistical Office of the Slovak Republic - Organization database (National <br> Register of Businesses) |
| Year of publication | 2007 |
| Comments on the quality of the <br> sample frame | None. |
| Year and organisation that <br> conducted the last economic census | Slovak Statistical Institute. |

## Sample

| Comments/problems on sectors and <br> regions selected in the sample | On sectors: None. <br> On regions: None. |
| :--- | :--- |
| Comments on the response rate | None. |
| Comments on the sample design | None. |

Fieldwork

| Date of fieldwork | August 2008 - February 2009 |
| :--- | :--- |
| Country | Slovak Republic |
| Number of interviews | Manufacturing: 86 <br> Services (sector 52): 97 <br> Core: 92 |
| Problems found during fieldwork | None. |
| Other observations | None. |

## Questionnaires

| Problems for the understanding of <br> questions (write question number) | None. |
| :--- | :--- |
| Problems found in the navigability <br> of questionnaires (for example, skip <br> patterns) | No problems here. |
| Comments on questionnaire length | Length was adequate. |
| Suggestions or other comments on <br> the questionnaires | None. |

## Database

| Data entry program chosen | CONFIRMIT |
| :--- | :--- |
| Comments on the data entry <br> program | Good feedback generally from team working with CONFIRMIT. |
| Comments on the data cleaning | None. |

## Country situation

| General aspects of economic, <br> political or social situation of the <br> country that could affect the results <br> of the survey | None. |
| :--- | :--- |
| Relevant country events that <br> occurred during fieldwork | None. |
| Other aspects | None. |

## A.26 Slovenia

## A.26.1. Sampling structure and implementation

The first sample frame was supplied by the World Bank and EBRD and consisted of enterprises interviewed in BEEPS 2005. The World Bank and EBRD required that attempts should be made to re-interview establishments responding to the BEEPS 2005 survey where they were within the selected geographical regions and met eligibility criteria. That sample is referred to as the Panel. The source of the second sample frame was IPIS - Business register of Republic Slovenia (maintained by the Agency of the Republic of Slovenia for Public Legal Records and Related Service).

The quality of the frame was assessed at the onset of the project. The frame proved to be useful though it showed positive rates of non-eligibility, repetition, non-existent units, etc. These problems are typical of establishment surveys, but given the impact these inaccuracies may have on the results, adjustments were needed when computing the appropriate weights for individual observations. The percentage of confirmed non-eligible units as a proportion of the total number of contacts to complete the survey was $23.37 \%$ ( 399 out of 1707 establishments).

Regional stratification was defined in 2 regions. These regions are Vzhodna Slovenija and Zahodna Slovenija (NUTS-2).

Sectors included in the sample:

| Original sectors | Manufacturing: $15,17,18,19,20,21,22,23,24,25,26$, |
| :--- | :--- |
|  | $27,28,29,30,31,32,33,34,35,36,37$ |
|  | Services: 52 |
|  | Residual: $45,50,51,55,60,61,62,63,64,72$ |
| Added (top up) sectors | None |

Fresh sample frame

|  |  | Sector |  |  |  |
| :--- | ---: | :--- | ---: | ---: | ---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual | Grand Total |
| Vzhodna | $5-19$ | 718 | 231 | 1283 | 2232 |
| Slovenija | $20-99$ | 483 | 73 | 396 | 952 |
|  | $100+$ | 271 | 17 | 81 | 369 |
| Vzhodna Slovenija Total |  | 1472 | 321 | 1760 | 3553 |
| Zahodna | $5-19$ | 829 | 294 | 2304 | 3427 |
| Slovenija | $20-99$ | 411 | 71 | 632 | 1114 |
|  |  |  |  |  |  |
| Zahodna Slovenija Total |  | 195 | 31 | 115 | 341 |
| Grand Total |  | 1435 | 396 | 3051 | 4882 |

Source: IPIS June 2007 - Business Register (Agency of the Republic of Slovenia for Public Legal Records and Related Services)

Panel sample frame

|  |  | Sector |  |  |  |
| :--- | ---: | :--- | ---: | ---: | ---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual | Grand Total |
| Vzhodna | $<5$ | 2 | 4 | 9 | 15 |
| Slovenija | $5-19$ | 3 | 2 | 13 | 18 |
|  | $20-99$ | 9 | 1 | 10 | 20 |
|  | $100+$ | 16 | 1 | 1 | 18 |
| Vzhodna Slovenija Total | 30 | 8 | 33 | 71 |  |
| Zahodna | $1-4$ | 5 | 2 | 17 | 24 |
| Slovenija | $5-19$ | 2 | 1 | 15 | 18 |
|  | $20-99$ | 3 | 1 | 10 | 14 |
|  | $100+$ | 9 | 1 | 1 | 11 |
| Zahodna Slovenija Total |  | 19 | 5 | 43 | 67 |
| Grand Total |  | 49 | 13 | 76 | 138 |

Source: BEEPS 2005

## Original sample design

|  |  | Sector |  |  |  |
| :--- | ---: | :--- | ---: | ---: | ---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual | Grand Total |
| Vzhodna | $5-19$ | 16 | 40 | 13 | 69 |
| Slovenija | $20-99$ | 15 | 8 | 11 | 34 |
|  | $100+$ | 15 |  | 14 | 29 |
| Vzhodna Slovenija Total |  | 46 | 48 | 38 | 132 |
| Zahodna | $5-19$ | 18 | 29 | 17 | 64 |
| Slovenija | $20-99$ | 14 | 6 | 16 | 36 |
|  | $100+$ | 12 | 7 | 19 | 38 |
| Zahodna Slovenija Total |  | 44 | 42 | 52 | 138 |
| Grand Total |  | 90 | 90 | 90 | 270 |

## A.26.2. Status codes

## TOTAL



PANEL


## FRESH

|  | Complete interviews (Total) | 219 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 0 |
|  | Elegible in process | 0 |
|  | Refusals | 43 |
|  | Out of target | 232 |
|  | Impossible to contact | 128 |
|  | Ineligible - coop. | 23 |
|  | Refusal to the Screener | 904 |
|  | Total | 1549 |
|  | ELIGIBLES |  |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{0}{00} \\ & \frac{1015}{2} \end{aligned}$ | 1.Elegible establishment (Correct name and address) | 262 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 0 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 0 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 0 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\begin{aligned} & 0 \\ & \frac{0}{0.0} \\ & \stackrel{0}{0} \\ & \frac{0}{6} \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 46 |
|  | 6. The firm discontinued businesses | 135 |
|  | 7. Not a business: private household | 3 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 48 |
| Unobtainable | 91. No reply (after having called in different days of the week and in different business hours) | 50 |
|  | 92. Line out of order | 27 |
|  | 93. No tone | 0 |
|  | 10. Answering machine | 2 |
|  | 11. Fax line - data line | 11 |
|  | 12. Wrong address/ moved away and could not get the new references | 38 |
|  | 13. Refuses to answer the screener | 904 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 19 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 23 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 1568 |

## A.26.3. Cell weights and universe estimates

## Individual cell weights (strict)

|  |  | Sector |  |  |  |  |
| :--- | ---: | :--- | ---: | ---: | :---: | :---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |  |  |
| Vzhodna | $5-19$ | 10 | 1 | 18 |  |  |
| Slovenija | $20-99$ | 6 | 1 | 8 |  |  |
|  | $100+$ | 5 |  | 2 |  |  |
| Zahodna | $5-19$ | 9 | 1 | 21 |  |  |
| Slovenija | $20-99$ | 6 | 1 | 9 |  |  |
|  | $100+$ | 4 | 1 | 2 |  |  |

## Individual cell weights (median)

|  |  |  | Sector |  |  |  |
| :--- | ---: | :--- | ---: | ---: | :---: | :---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |  |  |
| Vzhodna | $5-19$ | 35 | 6 | 58 |  |  |
| Slovenija | $20-99$ | 17 | 6 | 22 |  |  |
|  | $100+$ | 9 |  | 3 |  |  |
| Zahodna | $5-19$ | 48 | 12 | 104 |  |  |
| Slovenija | $20-99$ | 25 | 8 | 35 |  |  |
|  | $100+$ | 11 | 3 | 5 |  |  |

Individual cell weights (weak)

|  |  | Sector |  |  |  |
| :--- | :--- | :--- | ---: | ---: | :---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |  |
| Vzhodna | $5-19$ | 37 | 7 | 63 |  |
| Slovenija | $20-99$ | 18 | 7 | 24 |  |
|  | $100+$ | 10 |  | 3 |  |
| Zahodna | $5-19$ | 52 | 13 | 115 |  |
| Slovenija | $20-99$ | 26 | 8 | 38 |  |
|  | $100+$ | 12 | 4 | 5 |  |

## Slovenia universe estimates

| Strict individual cell weights | Median individual cell weights | Weak individual cell weights |
| :---: | :---: | :---: |
| 1745 | 6744 | 7332 |

## A.26.4. Survey and item non-response

The number of contacted establishments per realized interview was 6.18. 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 relatively low ratio of contacted establishments per realized interview (6.18) suggests that the main source of error in estimates in the Slovenia may be selection bias and not frame inaccuracy.

## A.26.5. Local agency team involved in the study and its comments on the implementation of the BEEPS

Local agency team involved in the survey

| Local agency | Name: RM PLUS d.o.o. <br> Country: Slovenia <br> Membership of international organisation: ESOMAR <br> Activities since: 1999 |
| :--- | :--- |
| Name of Project Manager | Branko Znuderl |
| Name and position of other key <br> persons of the project |  |
| Enumerators involved | Enumerators: 18 <br> Recruiters: 6 |
| Other staff involved | Fieldwork Coordinators: 1; Editing: 1 <br> Data Entry: (CAPI - done by enumerators) <br> Data Processing: 1 |

## Sample Frame

| Characteristic of sample frame used | Register of companies |
| :--- | :--- |
| Source | IPIS - Business register of Republic Slovenia |
| Year of publication | June 2007 |


| Comments on the quality of the <br> sample frame | Register is created on basis of data from Statistical Office of Republic of <br> Slovenia, Tax Administration of Republic of Slovenia. |
| :--- | :--- |
| Year and organisation that <br> conducted the last economic census | Above mentioned database includes all companies, therefore is also source of <br> economic census data. |

## Sample

| Comments/problems on sectors and <br> regions selected in the sample | On sectors: Difficulty completing sector 52 target. <br> On regions: Western Slovenia region was more challenging. |
| :--- | :--- |
| Comments on the response rate | None. |
| Comments on the sample design | None. |
| Other comments | Only approximately 7\% of companies in sample source have telephone <br> number information. |

## Fieldwork

| Date of fieldwork | September 2008 - March 2009 |
| :--- | :--- |
| Country | Slovenia |
| Number of interviews | Manufacturing: 102 <br> Services (sector 52): 101 <br> Core: 73 |
| Problems found during fieldwork | Main problem was companies' lack of interest in partaking in the study. |
| Other observations | None. |

## Questionnaires

| Problems for the understanding of <br> questions (write question number) | Main problems have been with questions which demanded concrete financial <br> figures. Otherwise questionnaire was well designed and most respondents <br> find it interesting. |
| :--- | :--- |
| Problems found in the navigability <br> of questionnaires (for example, skip <br> patterns) | No problems here. |
| Comments on questionnaire length | Questionnaire was in some cases considered to be intensive. |
| Suggestions or other comments on <br> the questionnaires | None. |

## Database

| Data entry program chosen | WEB CATI (CAPI) |
| :--- | :--- |
| Comments on the data entry <br> program | Data entry was done at time of interviewing (CAPI). |
| Comments on the data cleaning | None. |

## Country situation

| General aspects of economic, <br> political or social situation of the <br> country that could affect the results <br> of the survey | Low interest among companies to be included in project, even with clear <br> reference to World Bank and EBRD. |
| :--- | :--- |
| Relevant country events that <br> occurred during fieldwork | None. |
| Other aspects | None. |

## A. 27 Tajikistan

## A.27.1. Sampling structure and implementation

The first sample frame was supplied by the World Bank and EBRD and consisted of enterprises interviewed in BEEPS 2005. The World Bank and EBRD required that attempts should be made to re-interview establishments responding to the BEEPS 2005 survey where they were within the selected geographical regions and met eligibility criteria. That sample is referred to as the Panel.

The source of the second sample frame was the National Statistics Committee of Tajikistan (2008).

The quality of the frame was assessed at the onset of the project. The frame proved to be useful though it showed positive rates of non-eligibility, repetition, non-existent units, etc. These problems are typical of establishment surveys, but given the impact these inaccuracies may have on the results, adjustments were needed when computing the appropriate weights for individual observations. The percentage of confirmed non-eligible units as a proportion of the total number of contacts to complete the survey was $19 \%$ ( 126 out of 672 establishments).

Regional stratification was defined in 4 regions (oblasts). These regions are Capital (Dushanbe), Sogdiskaya oblast, Khatlonskaya oblast, and RRP (Region of Republican Subordination).

| Official provinces | Grouping used for stratification purposes in <br> BEEPS IV |
| :--- | :--- |
| Sughd | Sughd |
| RRP - Region of Republican <br> Subordination | RRP - Region of Republican Subordination |
| Khatlon | Dushanbe |
| Gorno-Badakhshan Autonomous <br> Province | Khatlon |

Sectors included in the sample:

| Original sectors | Manufacturing: $15,16,17,18,19,20,21,22,23,24,25$, <br>  <br>  <br>  <br>  <br>  <br>  <br>  <br> Addervices: 52 <br> Sesidual: $45,50,51,55,60,62,63,64$ |
| :--- | :--- |
| At the end of the fieldwork ISIC sector 51 was used for <br> the services sector to achieve the service target due to <br> the shortage of addresses for sector 52 |  |

## Fresh sample frame



Source: Register of establishment of Tajikistan, National Statistics Committee of Tajikistan, 2008

Panel sample frame


Source: BEEPS 2005

## Original sample design



## A.27.2. Status codes

## TOTAL

| Complete interviews (Total) | 360 |
| :--- | :---: |
| Incomplete interviews | 1 |
| Elegible in process | 0 |
| Refusals | 12 |
| Out of target | 126 |
| Impossible to contact | 148 |
| Ineligible - coop. | 3 |
| Refusal to the Screener | 22 |
| Total | 672 |


|  | ELIGIBLES |  |
| :---: | :---: | :---: |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{00}{30} \\ & \frac{10}{10} \end{aligned}$ | 1.Elegible establishment (Correct name and address) | 314 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 2 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 13 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 44 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\begin{aligned} & \frac{0}{0} \\ & \stackrel{00}{0} \\ & \stackrel{0}{0} \\ & \hline \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 3 |
|  | 6. The firm discontinued businesses | 104 |
|  | 7. Not a business: private household | 1 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 18 |
|  | 91. No reply (after having called in different days of the week and in different business hours) | 0 |
|  | 92. Line out of order | 0 |
|  | 93. No tone | 0 |
|  | 10. Answering machine | 0 |
|  | 11. Fax line - data line | 0 |
|  | 12. Wrong address/ moved away and could not get the new references | 148 |
|  | 13. Refuses to answer the screener | 22 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 0 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 3 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 672 |

PANEL

|  | Complete interviews (Total) | 67 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 0 |
|  | Elegible in process | 0 |
|  | Refusals | 3 |
|  | Out of target | 19 |
|  | Impossible to contact | 12 |
|  | Ineligible - coop. | 2 |
|  | Refusal to the Screener | 2 |
|  | Total | 105 |
|  | ELIGIBLES |  |
| $\frac{0}{0}$ | 1.Elegible establishment (Correct name and address) | 54 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 1 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 5 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 10 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{0.0}{0} \\ & \frac{0}{E} \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 0 |
|  | 6. The firm discontinued businesses | 14 |
|  | 7. Not a business: private household | 0 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 5 |
| Unobtainable | 91. No reply (after having called in different days of the week and in different business hours) | 0 |
|  | 92. Line out of order | 0 |
|  | 93. No tone | 0 |
|  | 10. Answering machine | 0 |
|  | 11. Fax line - data line | 0 |
|  | 12. Wrong address/ moved away and could not get the new references | 12 |
|  | 13. Refuses to answer the screener | 2 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 0 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 2 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 105 |

## FRESH

|  | Complete interviews (Total) | 293 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 1 |
|  | Elegible in process | 0 |
|  | Refusals | 9 |
|  | Out of target | 107 |
|  | Impossible to contact | 136 |
|  | Ineligible - coop. | 1 |
|  | Refusal to the Screener | 20 |
|  | Total | 567 |
|  | ELIGIBLES |  |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{0}{30} \\ & \frac{10}{10} \end{aligned}$ | 1.Elegible establishment (Correct name and address) | 260 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 1 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 8 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 34 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\begin{aligned} & 0 \\ & 0.00 \\ & : 0 \\ & \stackrel{0}{0} \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 3 |
|  | 6. The firm discontinued businesses | 90 |
|  | 7. Not a business: private household | 1 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 13 |
| 0000000 | 91. No reply (after having called in different days of the week and in different business hours) | 0 |
|  | 92. Line out of order | 0 |
|  | 93. No tone | 0 |
|  | 10. Answering machine | 0 |
|  | 11. Fax line - data line | 0 |
|  | 12. Wrong address/ moved away and could not get the new references | 136 |
|  | 13. Refuses to answer the screener | 20 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 0 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 1 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 567 |

## A.27.3. Cell weights and universe estimates

## Collapsed cell weights (strict)

|  |  |  |  |  |  |  | Sector |  |  |  |
| :--- | ---: | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |  |  |  |  |  |  |
| Capital | $5-19$ | 10 | 1 | 9 |  |  |  |  |  |  |
| (Dushanbe) | $20-99$ | 3 | 1 | 5 |  |  |  |  |  |  |
|  | $100+$ | 2 | 1 | 7 |  |  |  |  |  |  |
| Sogdiskaya | $5-19$ | 4 | 1 | 5 |  |  |  |  |  |  |
| oblast | $20-99$ | 5 | 1 | 2 |  |  |  |  |  |  |
|  | $100+$ | 5 | 1 | 1 |  |  |  |  |  |  |
| Khatlonskaya | $5-19$ | 1 | 1 | 2 |  |  |  |  |  |  |
| oblast | $20-99$ | 1 | 1 | 1 |  |  |  |  |  |  |
|  | $100+$ | 1 |  | 1 |  |  |  |  |  |  |
| RRP | $5-19$ | 1 | 1 | 9 |  |  |  |  |  |  |
|  | $20-99$ | 1 | 2 | 2 |  |  |  |  |  |  |
|  | $100+$ | 1 |  | 1 |  |  |  |  |  |  |

## Collapsed cell weights (median)

|  |  | Sector |  |  |  |
| :--- | ---: | :--- | :--- | ---: | :---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |  |
| Capital | $5-19$ | 11 | 1 | 10 |  |
| (Dushanbe) | $20-99$ | 3 | 1 | 6 |  |
|  | $100+$ | 2 | 1 | 8 |  |
| Sogdiskaya | $5-19$ | 4 | 1 | 5 |  |
| oblast | $20-99$ | 5 | 1 | 3 |  |
|  | $100+$ | 5 | 1 | 2 |  |
| Khatlonskaya | $5-19$ | 1 | 1 | 2 |  |
| oblast | $20-99$ | 1 | 1 | 1 |  |
|  | $100+$ | 1 |  | 1 |  |
| RRP | $5-19$ | 1 | 1 | 10 |  |
|  | $20-99$ | 1 | 2 | 2 |  |
|  | $100+$ | 1 |  | 1 |  |

## Collapsed cell weights (weak)

|  |  |  | Sector |  |  |  |
| :--- | ---: | :--- | :--- | ---: | :---: | :---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |  |  |
| Capital | $5-19$ | 20 | 2 | 16 |  |  |
| (Dushanbe) | $20-99$ | 4 | 1 | 7 |  |  |
|  | $100+$ | 3 | 1 | 10 |  |  |
| Sogdiskaya | $5-19$ | 7 | 1 | 9 |  |  |
| oblast | $20-99$ | 6 | 1 | 3 |  |  |
|  | $100+$ | 6 | 1 | 2 |  |  |
| Khatlonskaya | $5-19$ | 1 | 2 | 3 |  |  |
| oblast | $20-99$ | 1 | 2 | 1 |  |  |
|  | $100+$ | 1 |  | 1 |  |  |
| RRP | $5-19$ | 2 | 1 | 16 |  |  |
|  | $20-99$ | 1 | 2 | 2 |  |  |
|  | $100+$ | 1 |  | 1 |  |  |

Tajikistan universe estimates

| Strict collapsed cell weights | Median collapsed cell weights | Weak collapsed cell weights |
| :---: | :---: | :---: |
| 916 | 976 | 1342 |

## A.27.4. Survey and item non-response

The number of contacted establishments per realized interview was 1.87 . 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 relatively low ratio of contacted establishments per realized interview (1.87) suggests that the main source of error in estimates in the Tajikistan may be selection bias and not frame inaccuracy.

## A.27.5. Local agency team involved in the study and its comments on the implementation of the BEEPS

## Local agency team involved in the survey

| Local agency | Name: The Center of Sociological Research "Zerkalo" <br> Country: Tajikistan <br> Membership of international organization: No <br> Activities since: 1999 |
| :--- | :--- |
| Name of Project Manager |  |
| Name and position of other key <br> persons of the project |  |


| Enumerators involved | Enumerators: 31 |
| :--- | :--- |
|  | Recruiters: 4 |
| Some of the interviewers were involved in recruitment activities. |  |
| Other staff involved | Fieldwork Coordinators: 5 <br> Editing: 2 people <br>  <br>  <br>  <br> Data Entry: 4 people <br> Data Processing: N/A |

## Sample Frame

| Characteristic of sample frame used | For the sample frame the Register of establishments of Tajikistan was used. <br> The data was obtained from the National Statistics Committee of Tajikistan. <br> The data base was issued in 2008, but the data is from 2007. |
| :--- | :--- |
| Source | Register of establishments of Tajikistan, National Statistical <br> Committee of Tajikistan |
| Year of publication | 2008 |
| Comments on the quality of the <br> sample frame | During the sample checking it turned out that only 11\% of the addresses were <br> valid. Whilst not ideal, this was still the only available frame and it was <br> therefore used. The level of ineligible firms is dealt with in the universe <br> estimation. <br> It transpired during the survey that the database provided is based on <br> information that was submitted by the businesses when they were established <br> and no further follow-up information is available by the National Statistical <br> Committee of Tajikistan. Due to this, several difficulties were encountered <br> while finding businesses from the data base. |
| Year and organisation that <br> conducted the last economic census | N/A |

Sample

| Comments/problems on sectors and <br> regions selected in the sample | On sectors: <br> From the very beginning it was clear that for the services sector there were <br> not enough addresses to achieve the required target. For example in the RRP <br> region, there were no establishments that had 100 or more employees in the <br> sample, but according to the requested target local institute was required to <br> interview 8 establishments in this cell. In addition, in the remaining regions <br> for the Services Sector there were establishments without enough preferences <br> because many of the addresses were not valid and we also experienced <br> several refusals. All of these factors prevented the timely completion of the <br> fieldwork. <br> On regions: <br> The sample distribution according to the number of interviews among the <br> regions was equal. However, not all of these regions are equally developed <br> economically. This fact was not taken into consideration while designing the <br> sample. This fact created problems for the fieldwork as interviewers lost <br> much time searching for establishments in operation. |
| :--- | :--- |
| Comments on the response rate | During the fieldwork, 678 establishments were contacted. |
| Comments on the sample design | N/A |

## Fieldwork

| Date of fieldwork | April - August 2008 |
| :--- | :--- |
| Country | Tajikistan |
| Number of interviews | Manufacturing: 116 <br> Services (sector 52): 151 <br> Core: 93 |
| Problems found during fieldwork | There were problems tracing the addresses from the sample. <br> Also, there were problems getting appointments as the top <br> managers were busy or had no desire to participate in the <br> survey. |
| Other observations | Due to the difficulties regarding the validity of the sample <br> (addresses), some interviewers were dropped from the <br> project. |

## Questionnaires

| Problems for the understanding of <br> questions (write question number) | Response rate for the questions n6 and n7 were low, because respondents <br> didn't want to answer these questions Services questionnaire TJTJ: the term <br> inventory in d17 was not always perceived correctly, because this word has <br> another meaning also. |
| :--- | :--- |
| Problems found in the navigability <br> of questionnaires (for example, skip <br> patterns) | No special problems encountered |
| Comments on questionnaire length | The questionnaire is too long; the average duration of the interview is 70 <br> minutes. Respondents were tired during the interview and became irritated. |
| Suggestions or other comments on <br> the questionnaires | N/A |

## Database

| Data entry program chosen | CONFIRMIT |
| :--- | :--- |
| Comments on the data entry <br> program | N/A |
| Comments on the data cleaning | N/A |

## Country situation

General aspects of economic, political or social situation of the country that could affect the results of the survey

The economic situation is characterized by high administrative regulation, state intervention in business affairs, high level of corruption and the 'shadow' economy. All these factors are causing negative attitudes towards survey research among the business community. Businessmen are negatively disposed to any questions from third parties and are not willing to share information and find it difficult to recognize the benefit of partaking in the survey. Thus, conducting B2B survey among Tajik businesses is considerably difficult.
In June, 2008 the president announced a moratorium for two years to inspect privately-owned businesses in Tajikistan by the tax authorities.
N/A

## A. 28 Turkey

## A.28.1. Sampling structure and implementation

Three sample frame sources were used. The first sample frame was supplied by the World Bank and consisted of enterprises interviewed in Investment Climate Survey in 2005. The World Bank and EBRD required that attempts should be made to re-interview establishments responding to the Investment Climate Survey 2005 where they were within the selected geographical regions and met eligibility criteria. That sample is referred to as the Panel. Universe estimates were taken from the TOBB database which contains a full list of establishments in manufacturing sectors. TOBB refers to the Union of Chambers and Commodity Exchanges of Turkey. Universe estimates for service sectors were taken from the Statistical Institute of Statistics (SIS) with additional information based on SIC code from the Turkish Studies Institute (TSI). Comparisons were made between estimates in TOBB and SIS to establish that the two sources are comparable and hence can be used side by side.

The quality of the frame was assessed at the onset of the project. The frame proved to be useful though it showed positive rates of non-eligibility, repetition, non-existent units, etc. These problems are typical of establishment surveys, but given the impact these inaccuracies may have on the results, adjustments were needed when computing the appropriate weights for individual observations. The percentage of confirmed non-eligible units as a proportion of the total number of contacts to complete the survey was $43 \%$ ( 2811 out of 6458 establishments).

Regional stratification was defined in 5 regions. These regions are Marmara, Aegean, South, Central Anatolia and Black Sea-Eastern.

| Grouping used for <br> stratification purposes <br> in BEEPS IV | Administrative <br> regions | Provinces |
| :--- | :--- | :--- |
| Aegean | Aegean | Afyonkarahisar, Aydin, Denizli, Izmir, <br> Kutahya, Manisa, Mugla, Usak |
| Black Sea - Eastern | Black Sea | Amasya, Artvin, Bayburt, Corum, Giresun, <br> Gumushane, Ordu, Rize, Samsun, Sinop, <br> Sivas (part), Tokat, Trabzon, Bartin, Bolu, <br> Duzce, Karabuk, Kastamonu, Zonguldak |
|  | Eastern Anatolia | Agri, Ardahan, Bingol, Bitlis, Elazig, <br> Erzincan, Erzurum, Hakkari, Igdir, Kars, <br> Malatya, Mus, Tunceli, Van |
|  | Central Anatolia | Aksaray, Ankara, Cankiri, Eskisehir, <br> Karaman, Kayseri, Kirikkale, Konya, <br> Nevsehir, Nigde, Sivas, Yozgat |
| Marmara | Marmara | Balikesir, Bilecik, Bursa, Canakkale, <br> Edirne, Istanbul, Kirklareli, Kocaeli, <br> Sakarya, Tekirdag, Yalova |
|  | Mediterranean | Adana, Antalya, Burdur, Hatay, Isparta, <br> Kahramanmaras, Mersin, Osmaniye |
|  | Southeastern Anatolia | Adiyaman, Batman, Diyarbakir, Gaziantep, <br> Kilis, Mardin, Sanliurfa, Siirt, Sirnak |

Sectors included in the sample:

| Original sectors | Manufacturing: 15, 17, 18, 24, 25, 26, 27, 28, 29, 31 <br> Services: 52 <br> Residual: 45, 50, 51, 55, 60, 61, 62, 63, 64, 72 |
| :--- | :--- |
| Added (top up) sectors | None. |

Fresh sample frame


Source: TOBB 2007 and SIS 2006

Panel sample frame

|  |  | Sector |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Region | Employees | 15 | 17 | 18 | 24 | 26 | 52 | Other <br> Manufacturing | Residual | Grand Total |
| Marmara | <5 | 2 | 1 | 5 | 2 | 0 | 0 | 3 | 0 | 13 |
|  | 5-19 | 21 | 16 | 13 | 7 | 3 | 0 | 29 | 0 | 89 |
|  | 20-99 | 39 | 33 | 58 | 18 | 14 | 0 | 68 | 0 | 230 |
|  | 100+ | 42 | 54 | 89 | 27 | 7 | 0 | 77 | 0 | 296 |
| Marmara Total |  | 104 | 104 | 165 | 54 | 24 | 0 | 177 | 0 | 628 |
| Aegean | <5 | 3 | 0 | 0 | 1 | 0 | 0 | 2 | 1 | 7 |
|  | 5-19 | 21 | 3 | 2 | 2 | 1 | 0 | 11 | 0 | 40 |
|  | 20-99 | 15 | 3 | 14 | 4 | 5 | 0 | 25 | 0 | 66 |
|  | 100+ | 26 | 16 | 10 | 5 | 4 | 0 | 34 | 0 | 95 |
| Aegean Total |  | 65 | 22 | 26 | 12 | 10 | 0 | 72 | 1 | 208 |
| South | <5 | 1 | 0 | 0 | 0 | 1 | 0 | 4 | 0 | 6 |
|  | 5-19 | 5 | 0 | 1 | 1 | 3 | 0 | 30 | 0 | 40 |
|  | 20-99 | 8 | 6 | 1 | 4 | 5 | 0 | 27 | 0 | 51 |
|  | 100+ | 8 | 14 | 2 | 4 | 3 | 0 | 12 | 0 | 43 |
| South Total |  | 22 | 20 | 4 | 9 | 12 | 0 | 73 | 0 | 140 |
| Central <br> Anatolia | <5 | 3 | 0 | 0 | 2 | 0 | 0 | 6 | 0 | 11 |
|  | 5-19 | 15 | 1 | 0 | 3 | 2 | 1 | 52 | 0 | 74 |
|  | 20-99 | 37 | 1 | 1 | 11 | 5 | 0 | 39 | 0 | 94 |
|  | 100+ | 23 | 5 | 3 | 4 | 4 | 0 | 34 | 1 | 74 |
| Central Anatolia Total |  | 78 | 7 | 4 | 20 | 11 | 1 | 131 | 1 | 253 |
| Black Sea Eastern | <5 | 2 | 0 | 0 | 2 | 0 | 0 | 4 | 0 | 8 |
|  | 5-19 | 2 | 0 | 2 | 5 | 2 | 0 | 20 | 0 | 31 |
|  | 20-99 | 9 | 4 | 1 | 1 | 7 | 0 | 16 | 1 | 39 |
|  | 100+ | 1 | 5 | 3 | 1 | 2 | 0 | 4 | 0 | 16 |
| Black Sea - Eastern Total |  | 14 | 9 | 6 | 9 | 11 | 0 | 44 | 1 | 94 |
| Grand Total |  | 283 | 162 | 205 | 104 | 68 | 1 | 497 | 3 | 1323 |

Source: World Bank Investment Climate Survey 2005

Original sample design

|  |  | Sector |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Region | Employees | 15 | 17 | 18 | 24 | 26 | 52 | Other <br> Manufacturing | Residual | Grand <br> Total |
| Marmara | 5-19 | 15 | 14 | 25 | 31 | 17 | 15 | 5 | 16 | 138 |
|  | 20-99 | 10 | 29 | 24 | 41 | 30 | 25 | 17 | 16 | 192 |
|  | 100+ | 16 | 31 | 35 | 19 | 8 | 25 | 12 | 17 | 163 |
| Marmara Total |  | 41 | 74 | 84 | 91 | 55 | 65 | 34 | 49 | 493 |
| Aegean | 5-19 | 7 | 8 | 5 | 10 | 17 | 8 | 5 | 6 | 66 |
|  | 20-99 | 10 | 10 | 12 | 13 | 26 | 5 | 6 | 5 | 87 |
|  | 100+ | 6 | 12 | 15 | 0 | 0 | 5 | 10 | 5 | 53 |
| Aegean Total |  | 23 | 30 | 32 | 23 | 43 | 18 | 21 | 16 | 206 |
| South | 5-19 | 12 | 5 | 10 | 17 | 10 | 3 | 15 | 11 | 83 |
|  | 20-99 | 11 | 17 | 8 | 0 | 5 | 2 | 5 | 9 | 57 |
|  | 100+ | 0 | 14 | 0 | 0 | 0 | 2 | 0 | 5 | 21 |
| South Total |  | 23 | 36 | 18 | 17 | 15 | 7 | 20 | 25 | 161 |
| Central | 5-19 | 23 | 5 | 7 | 17 | 19 | 11 | 15 | 7 | 104 |
| Anatolia | 20-99 | 15 | 5 | 14 | 7 | 18 | 6 | 0 | 6 | 71 |
|  | 100+ | 10 | 5 | 0 | 0 | 0 | 6 | 10 | 5 | 36 |
| Central Anatolia Total |  | 48 | 15 | 21 | 24 | 37 | 23 | 25 | 18 | 211 |
| Black | 5-19 | 15 | 5 | 0 | 5 | 10 | 3 | 5 | 5 | 48 |
| Sea- | 20-99 | 10 | 0 | 5 | 0 | 0 | 2 | 15 | 6 | 38 |
| Eastern | 100+ | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 3 |
| Black Sea-Eastern Total |  | 25 | 5 | 5 | 5 | 10 | 7 | 20 | 12 | 89 |
| Grand Total |  | 160 | 160 | 160 | 160 | 160 | 120 | 120 | 120 | 1160 |

## A.28.2. Cell weights and universe estimates

## Individual cell weights (strict)

|  |  | Sector |  |  |  |  |  |  |  |  |
| :--- | ---: | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Region | Employees | $\mathbf{1 5}$ |  | $\mathbf{1 7}$ | $\mathbf{1 8}$ | $\mathbf{2 4}$ | $\mathbf{2 6}$ | $\mathbf{5 2}$ | Other <br> Manufacturing | Residual |
| Marmara | $5-19$ | 77 | 83 | 101 | 24 | 13 | 235 | 229 | 67 |  |
|  | $20-99$ | 10 | 19 | 49 | 4 | 5 | 59 | 75 | 16 |  |
|  | $100+$ | 3 | 4 | 8 | 4 | 4 | 18 | 8 | 6 |  |
| Aegean | $5-19$ | 55 | 23 | 35 | 8 | 4 | 270 | 43 | 65 |  |
|  | $20-99$ | 20 | 17 | 22 | 3 | 3 | 128 | 29 | 15 |  |
|  | $100+$ | 4 | 2 | 4 | 3 | 3 |  | 18 | 12 |  |
| South | $5-19$ | 57 | 22 | 8 | 16 | 8 | 201 | 68 | 29 |  |
|  | $20-99$ | 10 | 3 | 9 | 3 | 9 | 61 | 25 | 7 |  |
|  | $100+$ | 3 | 1 | 23 | 7 | 17 | 33 | 11 | 12 |  |
| Central | $5-19$ | 18 | 55 | 6 | 5 | 4 | 63 | 29 | 22 |  |
| Anatolia | $20-99$ | 3 | 44 | 6 | 1 | 2 | 28 | 6 | 5 |  |
|  | $100+$ | 1 | 12 |  | 1 |  | 4 | 1 | 2 |  |
| Black | $5-19$ | 57 | 22 | 8 | 16 | 8 | 201 | 6 | 29 |  |
| Sea- | $20-99$ | 10 | 3 | 9 | 3 | 9 | 61 | 25 | 7 |  |
| Eastern | $100+$ | 3 | 1 | 23 |  | 17 | 33 |  | 11 | 12 |

Individual cell weights (median)

|  |  | Sector |  |  |  |  |  |  |  |
| :--- | ---: | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Region | Employees | $\mathbf{1 5}$ | $\mathbf{1 7}$ | $\mathbf{1 8}$ | $\mathbf{2 4}$ | $\mathbf{2 6}$ | $\mathbf{5 2}$ | Other <br> Manufacturing | Residual |
| Marmara | $5-19$ | 101 | 122 | 164 | 28 | 15 | 350 | 377 | 89 |
|  | $20-99$ | 14 | 32 | 90 | 5 | 6 | 99 | 138 | 25 |
|  | $100+$ | 5 | 7 | 16 | 5 | 5 | 34 | 16 | 11 |
| Aegean | $5-19$ | 61 | 29 | 49 | 8 | 3 | 346 | 61 | 75 |
|  | $20-99$ | 25 | 23 | 34 | 3 | 4 | 184 | 46 | 19 |
|  | $100+$ | 6 | 4 | 7 | 3 | 4 |  | 31 | 17 |
| South | $5-19$ | 71 | 30 | 13 | 18 | 9 | 283 | 107 | 37 |
|  | $20-99$ | 14 | 5 | 15 | 4 | 11 | 85 | 44 | 10 |
|  | $100+$ | 5 | 2 | 43 | 10 | 22 | 47 | 21 | 19 |
| Central | $5-19$ | 22 | 77 | 10 | 5 | 4 | 89 | 46 | 29 |
| Anatolia | $20-99$ | 4 | 69 | 10 | 2 | 2 | 44 | 11 | 7 |
|  | $100+$ | 1 | 21 |  | 1 |  | 7 | 1 | 4 |
| Black | $5-19$ | 71 | 30 | 13 | 18 | 9 | 283 | 107 | 37 |
| Sea- | $20-99$ | 14 | 5 | 15 | 4 | 11 | 85 | 44 | 10 |
| Eastern | $100+$ | 5 | 2 | 43 |  | 22 | 47 | 21 | 19 |

## Individual cell weights (weak)

|  |  | Sector |  |  |  |  |  |  |  |
| :--- | ---: | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Region | Employees | $\mathbf{1 5}$ | $\mathbf{1 7}$ | $\mathbf{1 8}$ | $\mathbf{2 4}$ | $\mathbf{2 6}$ | $\mathbf{5 2}$ | Other <br> Manufacturing | Residual |
| Marmara | $5-19$ | 112 | 132 | 207 | 29 | 16 | 382 | 404 | 95 |
|  | $20-99$ | 16 | 35 | 116 | 5 | 7 | 110 | 151 | 27 |
|  | $100+$ | 5 | 8 | 20 | 5 | 5 | 36 | 17 | 11 |
| Aegean | $5-19$ | 67 | 31 | 62 | 8 | 4 | 374 | 65 | 80 |
|  | $20-99$ | 28 | 25 | 44 | 3 | 4 | 202 | 49 | 20 |
|  | $100+$ | 7 | 4 | 9 | 4 | 4 |  | 33 | 18 |
| South | $5-19$ | 78 | 32 | 16 | 19 | 9 | 283 | 113 | 39 |
|  | $20-99$ | 16 | 6 | 19 | 4 | 12 | 85 | 47 | 10 |
|  | $100+$ | 6 | 2 | 54 | 10 | 23 | 47 | 22 | 19 |
| Central | $5-19$ | 25 | 84 | 12 | 6 | 4 | 98 | 49 | 31 |
| Anatolia | $20-99$ | 5 | 76 | 13 | 2 | 2 | 49 | 12 | 7 |
|  | $100+$ | 1 | 22 |  | 1 |  | 7 | 1 | 4 |
| Black | $5-19$ | 78 | 32 | 16 | 19 | 9 | 283 | 113 | 39 |
| Sea- | $20-99$ | 16 | 6 | 19 | 4 | 12 | 85 | 47 | 10 |
| Eastern | $100+$ | 6 | 2 | 54 |  | 23 | 47 | 23 | 19 |

## Turkey universe estimates

| Strict individual cell weights | Median individual cell weights | Weak individual cell weights |
| :---: | :---: | :---: |
| 35347 | 53009 | 57976 |

## A.28.3. Survey and item non-response

The number of contacted establishments per realized interview was 5.60 . Details on rejections rates, eligibility rates, 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 the Republic of Turkey. All enterprise surveys suffer from these shortcomings but in very few cases they have been made explicit.

## A.28.4. Local agency team involved in the study and its comments on the implementation of the BEEPS

Local agency team involved in the survey

| Local agency 1 | Name: TNS Piar <br> Country: Turkey <br> Member of the Gallup International Association <br> Alliance with TNS Worldwide <br> Activities since: 1975 |
| :--- | :--- |
| Name of Project Manager |  |
| Name and position of other key <br> persons of the project |  |
| Enumerators involved | Enumerators: 40 <br> Recruiters: 17 |
| Other staff involved | Fieldwork Coordinators: 17 people <br> Editing: 3 people <br> Data Entry: 5 people <br> Data Processing: 2 people |


| Local agency 2 | Name: Ipsos KMG <br> Country: Turkey <br> Member of the ESOMAR <br> Activities since: 2001 |
| :--- | :--- |
| Name of Project Manager |  |
| Name and position of other key <br> persons of the project | Enumerators: 40 <br> Recruiters: 20 |
| Enumerators involved | Fieldwork Coordinators: 3 people <br> Editing: 3 people <br> Data Entry: 5 people <br> Data Processing: 2 people |
| Other staff involved |  |

## Sample Frame

| Characteristic of sample frame used | Sample frame is based on official data from Union of Chambers and <br> Commodity Exchanges of Turkey and Statistical Institute of Statistics (SIS) <br> of Turkey with additional information based on SIC code from the Turkish <br> Studies Institute. |
| :--- | :--- |
| Source |  |
| Year of publication | Data from TOBB database is from 2007. Data from the Statistical Institute of <br> Statistics (SIS) is from 2006. |
| Comments on the quality of the <br> sample frame | N/A |
| Year and organisation that <br> conducted the last economic census | N/A |

## Sample

| Comments/problems on sectors and <br> regions selected in the sample | On sectors: - <br> On regions: - |
| :--- | :--- |
| Comments on the response rate | The response rate in this survey it was good. Usually, according to the <br> implementing contractors' experience, the target group for ES, top-managers, <br> is very difficult to reach and convince to participate in the survey. <br> The timing of the fieldwork, i.e. during the holiday season in Turkey made it <br> extremely difficult to reach the target. <br> The panel list did not have any contact information for the firms. The contact <br> information was retrieved through the Internet by the field teams. |
| Comments on the sample design | N/A |

Fieldwork

| Date of fieldwork | April 2008 - January 2009 |
| :--- | :--- |
| Country | Turkey |
| Number of interviews | Manufacturing: 860 <br> Services (sector 52): 165 <br> Core: 127 |
| Problems found during fieldwork | • It was hard to convince the top-managers to partake in the survey; <br> - Most of the respondents hesitated to give the financial information of <br> their establishments; |
| - The field team had a difficult time convincing especially the small-scale |  |
| establishments to participate in the survey; |  |$|$| Nther observations | N/A |
| :--- | :--- |

## Questionnaires

| Problems for the understanding of <br> questions (write question number) | No special problems encountered. |
| :--- | :--- |
| Problems found in the navigability <br> of questionnaires (for example, skip <br> patterns) | No special problems encountered. |
| Comments on questionnaire length | Most of the respondents have found the questionnaire very long and they got <br> tired during the interview. Some of them interrupted the interview because of <br> the length. |
| Suggestions or other comments on <br> the questionnaires | N/A |

## Database

| Data entry program chosen | N/A |
| :--- | :--- |
| Comments on the data entry <br> program | N/A |
| Comments on the data cleaning | N/A |

## Country situation

General aspects of economic, political or social situation of the country that could affect the results of the survey
Relevant country events that occurred during fieldwork
Other aspects

Because of the declining economy in Turkey in the last 7 years (since 2001 economic crises), a lot of establishments were bankrupt or closed. This is a factor that could be noted during the analysis of the survey results.

None.
None.

## A. 29 Ukraine

## A.29.1. Sampling structure and implementation

The first sample frame was supplied by the World Bank and EBRD and consisted of enterprises interviewed in BEEPS 2005. The World Bank and EBRD required that attempts should be made to re-interview establishments responding to the BEEPS 2005 survey where they were within the selected geographical regions and met eligibility criteria. That sample is referred to as the Panel. The source of the second sample frame was the State Statistics Committee of Ukraine.

The quality of the frame was assessed at the onset of the project. The frame proved to be useful though it showed positive rates of non-eligibility, repetition, non-existent units, etc. These problems are typical of establishment surveys, but given the impact these inaccuracies may have on the results, adjustments were needed when computing the appropriate weights for individual observations. The percentage of confirmed non-eligible units as a proportion of the total number of contacts to complete the survey was $11 \%$ ( 260 out of 2,393 establishments).

Regional stratification was defined in 5 regions. These regions are North, South, East, West and Kiev.

| Oblast | Grouping used for stratification purposes in BEEPS IV |
| :---: | :---: |
| Kyiv | Kyiv |
| Kyivska |  |
| Dnipropetrovska | East |
| Donetska |  |
| Kharkivska |  |
| Luhanska |  |
| Sumska |  |
| Zaporizka |  |
| Chernivetska | West |
| Ivano-Frankivska |  |
| Khmelnytska |  |
| Lvivska |  |
| Rivnenska |  |
| Ternopilska |  |
| Volynska |  |
| Zakarpatska |  |
| Autonomous Republic of Crimea | South |
| Khersonska |  |
| Mykolayivska |  |
| Odeska |  |
| Sevastopol |  |
| Cherkaska | North |
| Chernihivska |  |
| Kirovohradska |  |
| Poltavska |  |
| Vinnytska |  |
| Zhytomyrska |  |

Sectors included in the sample:

| Original sectors | Manufacturing: $15,17,18,24,25,26,27,28,29,31$ <br> Services: 52 <br> Residual: $45,50,51,55,60,61,62,63,64, ~ 72 ~$ |
| :--- | :--- |
| Added (top up) sectors | None. |

Fresh sample frame

|  |  | Sector |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Region | Employees | 15 | 18 | 29 | 52 | Other manufacturing | Residual | Grand Total |
| North | 5-19 | 234 | 80 | 139 | 1026 | 1148 | 3823 | 6450 |
|  | 20-99 | 306 | 143 | 150 | 504 | 740 | 1772 | 3615 |
|  | 100+ | 301 | 42 | 66 | 72 | 289 | 319 | 1089 |
| North T |  | 841 | 265 | 355 | 1602 | 2177 | 5914 | 11154 |
| West | 5-19 | 405 | 195 | 140 | 1705 | 1864 | 5817 | 10126 |
|  | 20-99 | 404 | 165 | 115 | 689 | 1222 | 2542 | 5137 |
|  | 100+ | 245 | 81 | 62 | 97 | 454 | 500 | 1439 |
| West Total |  | 1054 | 441 | 317 | 2491 | 3540 | 8859 | 16702 |
| East | 5-19 | 434 | 213 | 519 | 2031 | 2271 | 10338 | 15806 |
|  | 20-99 | 364 | 120 | 391 | 745 | 1469 | 3921 | 7010 |
|  | 100+ | 319 | 33 | 223 | 145 | 761 | 799 | 2280 |
| East Total |  | 1117 | 366 | 1133 | 2921 | 4501 | 15058 | 25096 |
| South | 5-19 | 301 | 65 | 159 | 1102 | 999 | 5001 | 7627 |
|  | 20-99 | 218 | 73 | 97 | 354 | 512 | 1998 | 3252 |
|  | 100+ | 152 | 14 | 55 | 83 | 182 | 421 | 907 |
| South Total |  | 671 | 152 | 311 | 1539 | 1693 | 7420 | 11786 |
| Kiev | 5-19 | 180 | 119 | 236 | 1191 | 2114 | 9562 | 13402 |
|  | 20-99 | 190 | 25 | 161 | 442 | 1177 | 3423 | 5418 |
|  | 100+ | 131 | 21 | 44 | 111 | 372 | 735 | 1414 |
| Kiev Total |  | 501 | 165 | 441 | 1744 | 3663 | 13720 | 20234 |
|  |  | 4184 | 1389 | 2557 | 10297 | 15574 | 50971 | 84972 |

Source: State Committee of Statistics of Ukraine (2007)

Panel sample frame

|  |  | Sector |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Region | Employees | 15 | 18 | 29 | 52 | Other manufacturing | Residual | Grand Total |
| North | 5-19 |  |  |  |  |  | 10 | 10 |
|  | 20-99 | 3 | 2 | 1 |  | 10 |  | 16 |
|  | 100+ |  |  |  | 6 |  | 10 | 16 |
| North T |  | 3 | 2 | 1 | 6 | 10 | 20 | 42 |
| West | 5-19 |  |  |  |  |  | 10 | 10 |
|  | 20-99 | 3 | 1 |  |  | 19 |  | 23 |
|  | 100+ |  |  |  | 16 |  | 17 | 33 |
| West To |  | 3 | 1 |  | 16 | 19 | 27 | 66 |
| East | 5-19 |  |  |  |  |  | 33 | 33 |
|  | 20-99 | 6 | 9 | 2 |  | 52 |  | 69 |
|  | 100+ |  |  |  | 34 |  | 50 | 84 |
| East Tot |  | 6 | 9 | 2 | 34 | 52 | 83 | 186 |
| South | 5-19 |  |  |  |  |  | 7 | 7 |
|  | 20-99 | 8 |  |  |  | 9 |  | 17 |
|  | 100+ |  |  |  | 3 |  | 21 | 24 |
| South T |  | 8 |  |  | 3 | 9 | 28 | 48 |
| Kiev | 5-19 |  |  |  |  |  | 3 | 3 |
|  | 20-99 | 5 | 5 |  |  | 19 |  | 29 |
|  | 100+ |  |  |  | 10 |  | 35 | 45 |
| Kiev Total |  | 5 | 5 |  | 10 | 19 | 38 | 77 |
| Grand Total |  | 25 | 17 | 3 | 69 | 109 | 196 | 419 |

Source: BEEPS 2005
Original sample design


## A.29.2. Status codes

## TOTAL

|  | Complete interviews (Total) | 851 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 15 |
|  | Elegible in process | 0 |
|  | Refusals | 333 |
|  | Out of target | 260 |
|  | Impossible to contact | 614 |
|  | Ineligible - coop. | 34 |
|  | Refusal to the Screener | 1 |
|  | Total | 2108 |
|  | ELIGIBLES |  |
| $\frac{0}{0} \frac{0}{\sqrt[0]{\mid 1}}$ | 1.Elegible establishment (Correct name and address) | 1165 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 6 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 9 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 16 |
|  | 16. Panel firm - now less than five employees | 3 |
| $\frac{0}{00}$ | 5. The establishment has less than 5 permanent full time employees | 5 |
|  | 6. The firm discontinued businesses | 121 |
|  | 7. Not a business: private household | 97 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 37 |
|  | 91. No reply (after having called in different days of the week and in different business hours) | 320 |
|  | 92. Line out of order | 66 |
|  | 93. No tone | 113 |
|  | 10. Answering machine | 17 |
|  | 11. Fax line - data line | 1 |
|  | 12. Wrong address/ moved away and could not get the new references | 97 |
|  | 13. Refuses to answer the screener | 1 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 285 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 33 |
|  | 152. Out of target - firm moved abroad | 1 |
|  | Total | 2393 |

PANEL

|  | Complete interviews (Total) | 120 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 0 |
|  | Elegible in process | 0 |
|  | Refusals | 73 |
|  | Out of target | 32 |
|  | Impossible to contact | 67 |
|  | Ineligible - coop. | 1 |
|  | Refusal to the Screener | 0 |
|  | Total | 293 |
|  |  | 120 |
|  | ELIGIBLES |  |
|  | 1.Elegible establishment (Correct name and address) | 175 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 1 |
| $\begin{aligned} & 0 \\ & 000 \\ & 0.0 \end{aligned}$ | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 5 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 9 |
|  | 16. Panel firm - now less than five employees | 3 |
| $\bigcirc$ | 5. The establishment has less than 5 permanent full time employees | 1 |
| - 0 | 6. The firm discontinued businesses | 12 |
| - | 7. Not a business: private household | 14 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 5 |
| $\bigcirc$ | 91. No reply (after having called in different days of the week and in different business hours) | 40 |
| \% | 92. Line out of order | 2 |
| . | 93. No tone | 7 |
| $\bigcirc$ | 10. Answering machine | 1 |
|  | 11. Fax line - data line | 0 |
|  | 12. Wrong address/ moved away and could not get the new references | 17 |
|  | 13. Refuses to answer the screener | 0 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 37 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 0 |
|  | 152. Out of target - firm moved abroad | 1 |
|  | Total | 330 |

## FRESH

|  | Complete interviews (Total) | 731 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 15 |
|  | Elegible in process | 0 |
|  | Refusals | 260 |
|  | Out of target | 228 |
|  | Impossible to contact | 547 |
|  | Ineligible - coop. | 33 |
|  | Refusal to the Screener | 1 |
|  | Total | 1815 |
|  | ELIGIBLES |  |
| $\frac{0}{0}$ | 1.Elegible establishment (Correct name and address) | 990 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 5 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 4 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 7 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{0}{0} \\ & =0 \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 4 |
|  | 6. The firm discontinued businesses | 109 |
|  | 7. Not a business: private household | 83 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 32 |
| Unobtainable | 91. No reply (after having called in different days of the week and in different business hours) | 280 |
|  | 92. Line out of order | 64 |
|  | 93. No tone | 106 |
|  | 10. Answering machine | 16 |
|  | 11. Fax line - data line | 1 |
|  | 12. Wrong address/ moved away and could not get the new references | 80 |
|  | 13. Refuses to answer the screener | 1 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 248 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 33 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 2063 |

## A.29.3. Cell weights and universe estimates

## Collapsed cell weights (strict)

|  |  | Sector |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  | Other <br> manufacturin |  |  |
| Region | Employees | $\mathbf{1 5}$ | $\mathbf{1 8}$ | $\mathbf{2 9}$ | $\mathbf{5 2}$ | $\mathbf{g}$ | Residual |
| North | $5-19$ | 10 | 3 | 7 | 33 | 62 | 266 |
|  | $20-99$ | 18 | 6 | 6 | 79 | 36 | 174 |
|  | $100+$ | 23 | 3 | 3 | 10 | 36 | 31 |
| West | $5-19$ | 15 | 7 | 5 | 59 | 61 | 315 |
|  | $20-99$ | 13 | 6 | 4 | 29 | 60 | 245 |
|  | $100+$ | 12 | 5 | 3 | 9 | 38 | 55 |
| East | $5-19$ | 17 | 9 | 41 | 125 | 138 | 485 |
|  | $20-99$ | 19 | 6 | 28 | 46 | 94 | 216 |
|  | $100+$ | 28 | 2 | 18 | 21 | 154 | 177 |
| South | $5-19$ | 14 | 2 | 8 | 68 | 138 | 485 |
|  | $20-99$ | 10 | 5 | 5 | 44 | 45 | 172 |
|  | $100+$ | 13 | 2 | 5 | 7 | 25 | 63 |
| Kiev | $5-19$ | 6 | 4 | 13 | 63 | 165 | 266 |
|  | $20-99$ | 11 | 2 | 9 | 26 | 65 | 325 |
|  | $100+$ | 9 | 2 | 3 | 14 | 37 | 94 |

Collapsed cell weights (median)

|  |  | Sector |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Region | Employees |  |  | Other manufacturin |  |  |  |
|  |  | 15 | 18 | 29 | 52 | g | Residual |
| North | 5-19 | 10 | 3 | 8 | 34 | 63 | 270 |
|  | 20-99 | 18 | 6 | 6 | 80 | 36 | 173 |
|  | 100+ | 24 | 3 | 3 | 10 | 36 | 31 |
| West | 5-19 | 16 | 7 | 5 | 61 | 63 | 322 |
|  | 20-99 | 13 | 6 | 4 | 30 | 60 | 246 |
|  | 100+ | 12 | 5 | 4 | 9 | 39 | 57 |
| East | 5-19 | 18 | 9 | 42 | 129 | 141 | 493 |
|  | 20-99 | 19 | 6 | 27 | 46 | 94 | 215 |
|  | 100+ | 29 | 2 | 18 | 21 | 156 | 179 |
| South | 5-19 | 14 | 2 | 8 | 71 | 141 | 493 |
|  | 20-99 | 11 | 5 | 5 | 45 | 46 | 173 |
|  | 100+ | 14 | 2 | 5 | 8 | 25 | 64 |
| Kiev | 5-19 | 6 | 4 | 13 | 65 | 167 | 270 |
|  | 20-99 | 11 | 2 | 9 | 26 | 65 | 323 |
|  | 100+ | 9 | 2 | 3 | 14 | 38 | 95 |

Collapsed cell weights (weak)


## Ukraine universe estimates

| Strict collapsed cell weights | Median collapsed cell weights | Weak collapsed cell weights |
| :---: | :---: | :---: |
| 50467 | 51162 | 73545 |

## A.29.4. Survey and item non-response

The number of contacted establishments per realized interview was 2.48 . 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 relatively low ratio of contacted establishments per realized interview (2.48) suggests that the main source of error in estimates in the Ukraine may be selection bias and not frame inaccuracy.

## A.29.5. Local agency team involved in the study and its comments on the implementation of the BEEPS

Local agency team involved in the survey

| Local agency | Name: Ukrainian Marketing Project <br> Country: Ukraine <br> Membership of international organization: ESOMAR <br> Activities since: November 1996 |
| :--- | :--- |
| Name of Project Manager |  |
| Name and position of other key <br> persons of the project | Enumerators: 152 <br> Recruiters: 1 |
| Enumerators involved | Fieldwork Coordinators: 3 <br> Editing: 2 <br> Data Entry: 3 people <br> Data Processing: 0 |
| Other staff involved |  |

## Sample Frame

| Characteristic of sample frame used | Sample frame is based on official data from State Statistics <br> Committee of Ukraine published in 2007. |
| :--- | :--- |
| Source | State Statistics Committee of Ukraine |
| Year of publication | The data base was issued in 2007, but the data refers to 2006. |


| Comments on the quality of the <br> sample frame | In panel sample there are almost 8\% of government enterprises. <br> A large number of establishments changed activity as indicated below in <br> comments on sample selected. <br> Incorrect telephone numbers (private household numbers, changed numbers, <br> not replying ...), reorganization and businesses discontinued. |
| :--- | :--- |
| Year and organisation that <br> conducted the last economic census | All-Ukrainian Population Census took place on December 5, 2001 and was <br> conducted by State Statistics Committee of Ukraine. |

## Sample

| Comments/problems on sectors and <br> regions selected in the sample | For sectors: a lot of enterprises changed their activity, particularly small (5 - <br> 19) and middle-sized (20-99) manufacturing enterprises. |
| :--- | :--- |
| Comments on the response rate | Response rate level hampered by vacation period. There was a high refusal <br> level in Western region. |
| Comments on the sample design | It was easy to implement. |

Fieldwork

| Date of fieldwork | May - August 2008 |
| :--- | :--- |
| Country | Ukraine |
| Number of interviews | Manufacturing: 487 <br> Services (sector 52): 182 <br> Core: 182 |
| Problems found during fieldwork | Many respondents refused after having agreed to being interviewed. <br> Questions about financial indicators put respondents on their guard, and some <br> refused to answer these questions. |
| Other observations | N/A |

## Questionnaires

| Problems for the understanding of <br> questions (write question number) | All questions were easy to understand. |
| :--- | :--- |
| Problems found in the navigability <br> of questionnaires (for example, skip <br> patterns) | No special problems encountered. |
| Comments on questionnaire length | Questionnaires are very long and in some cases it was difficult to keep <br> respondent's attention. |
| Suggestions or other comments on <br> the questionnaires | N/A |

## Database

| Data entry program chosen | CONFIRMIT |
| :--- | :--- |
| Comments on the data entry <br> program | N/A |
| Comments on the data cleaning | N/A |

## Country situation

| General aspects of economic, <br> political or social situation of the <br> country that could affect the results <br> of the survey | None. |
| :--- | :--- |
| Relevant country events that <br> occurred during fieldwork | Ukrainian Constitution Day |
| Other aspects | None. |

## A. 30 Uzbekistan

## A.30.1. Sampling structure and implementation

The first sample frame was supplied by the World Bank and EBRD and consisted of enterprises interviewed in BEEPS 2005. The World Bank and EBRD required that attempts should be made to re-interview establishments responding to the BEEPS 2005 survey where they were within the selected geographical regions and met eligibility criteria. That sample is referred to as the Panel. The source of the second sample frame was the Uniform State Register of Enterprises and Organizations, published by the State Department of Statistics of the Republic of Uzbekistan.

The quality of the frame was assessed at the onset of the project. The frame proved to be useful though it showed positive rates of non-eligibility, repetition, non-existent units, etc. These problems are typical of establishment surveys, but given the impact these inaccuracies may have on the results, adjustments were needed when computing the appropriate weights for individual observations. The percentage of confirmed non-eligible units as a proportion of the total number of contacts to complete the survey was $13 \%$ ( 89 out of 703 establishments).

Regional stratification was defined in 3 regions. These regions are Tashkent, Samarkandskaya, and Tashkentskaya.

| Province (viloyat) | Grouping used for stratification <br> purposes in BEEPS IV |
| :--- | :--- |
| Toshkent Shahri | Tashkent |
| Toshkent | Tashkentskaya |
| Samarqand | Samarkandskaya |
| Andijon | Not covered |
| Buxoro | Not covered |
| Fargona | Not covered |
| Jizzax | Not covered |
| Xorazm | Not covered |
| Namangan | Not covered |
| Navoiy | Not covered |
| Qashkadaryo (8) | Not covered |
| Qaraqalpaqstan Republikasi | Not covered |
| Sidaryo | Not covered |
| Surxondaryo | Not covered |

Sectors included in the sample:

| Original sectors | Manufacturing: $15,16,17,18,19,20,21,22,23,24,25$, <br> $26,27,28,29,30,31,32,33,34,35,36,37$ <br>  <br>  <br> Services: 52 <br> Residual: $45,50,51,55,60,61,62,63,64,72$ |
| :--- | :--- |
| Added (top up) sectors | None. |

Fresh sample frame

|  |  | Sector |  |  | Grand Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Region | Employees | Manufacturing | 52 | Residual |  |
| Tashkent | 5-19 | 2927 | 2753 | 4718 | 10398 |
|  | 20-99 | 538 | 1183 | 1294 | 3015 |
|  | 100+ | 165 | 142 | 478 | 785 |
| Tashkent Total |  | 4078 | 3630 | 6490 | 14198 |
| Samarkandskaya | 5-19 | 1253 | 1748 | 2049 | 5050 |
|  | 20-99 | 174 | 373 | 330 | 877 |
|  | 100+ | 50 | 61 | 137 | 248 |
| Samarkandskaya Total |  | 2182 | 1477 | 2516 | 6175 |
| Tashkentskaya | 5-19 | 1046 | 2116 | 2038 | 5200 |
|  | 20-99 | 255 | 461 | 378 | 1094 |
|  | 100+ | 91 | 64 | 156 | 311 |
| Tashkentskaya Total |  | 2641 | 1392 | 2572 | 6605 |
| Grand Total |  | 6499 | 8901 | 11578 | 26978 |

Source: Uniform State Register of Enterprises and Organisations

## Panel sample frame

|  |  | Sector |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Region | Employees | Manufacturing | 52 | Residual | Grand Total |
| Tashkent | 2-49 |  |  | 10 | 10 |
|  | 50-99 | 15 |  |  | 15 |
|  | 100+ |  | 24 | 12 | 36 |
| Tashkent Total |  | 15 | 24 | 22 | 61 |
| Samarkandskaya | 2-49 |  |  | 7 | 7 |
|  | 50-99 | 27 |  |  | 27 |
|  | 100+ |  | 22 | 15 | 37 |
| Samarkandskaya Total |  | 27 | 22 | 22 | 71 |
| Tashkentskaya | 2-49 |  |  | 10 | 10 |
|  | 50-99 | 15 |  |  | 15 |
|  | 100+ |  | 29 | 17 | 46 |
| Tashkentskaya Total |  | 15 | 29 | 27 | 71 |
| Grand Total |  | 57 | 75 | 71 | 203 |

Source: BEEPS 2005

Original sample design

|  |  | Sector |  |  |  |
| :--- | ---: | :--- | ---: | ---: | ---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual | Grand Total |
| Tashkent | $2-49$ | 15 | 15 | 15 | 45 |
|  | $50-99$ | 15 | 15 | 15 | 45 |
|  | $100+$ | 10 | 10 | 10 | 30 |
| Tashkent Total |  |  | 40 | 40 | 40 |
| Samarkandskaya |  | $2-49$ | 15 | 15 | 15 |
|  |  |  |  |  |  |
|  | $50-99$ | 15 | 15 | 15 | 45 |
| Samarkandskaya Total |  | $100+$ | 10 | 10 | 10 |

## A.30.2. Status codes

TOTAL

| Complete interviews (Total) | 367 |
| :--- | :---: |
| Incomplete interviews | 0 |
| Elegible in process | 1 |
| Refusals | 0 |
| Out of target | 89 |
| Impossible to contact | 62 |
| Ineligible - coop. | 0 |
| Refusal to the Screener | 72 |
| Total | 591 |


|  | ELIGIBLES |  |
| :---: | :---: | :---: |
| $\frac{0}{0} \frac{0}{60}$ | 1.Elegible establishment (Correct name and address) | 357 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 0 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 8 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 3 |
|  | 16. Panel firm - now less than five employees | 2 |
| $\begin{aligned} & \frac{0}{0} \\ & \frac{00}{00} \\ & \frac{0}{0} \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 16 |
|  | 6. The firm discontinued businesses | 61 |
|  | 7. Not a business: private household | 0 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 12 |
| $\begin{aligned} & 0 \\ & 0 \\ & \text { O } \\ & \text {. } \\ & \text { I } \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ | 91. No reply (after having called in different days of the week and in different business hours) | 3 |
|  | 92. Line out of order | 8 |
|  | 93. No tone | 0 |
|  | 10. Answering machine | 0 |
|  | 11. Fax line - data line | 0 |
|  | 12. Wrong address/ moved away and could not get the new references | 51 |
|  | 13. Refuses to answer the screener | 72 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 110 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 0 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 703 |

PANEL


## FRESH

|  | Complete interviews (Total) | 255 |
| :---: | :---: | :---: |
|  | Incomplete interviews | 0 |
|  | Elegible in process | 0 |
|  | Refusals | 0 |
|  | Out of target | 60 |
|  | Impossible to contact | 51 |
|  | Ineligible - coop. | 0 |
|  | Refusal to the Screener | 57 |
|  | Total | 423 |
|  | ELIGIBLES |  |
| $\frac{0}{0}$ | 1.Elegible establishment (Correct name and address) | 247 |
|  | 2. Elegible establishment (Different name but same address - the new firm/establishment bought the original firm/establishment) | 0 |
|  | 3. Elegible establishment (Different name but same address - the firm/establishment changed its name) | 5 |
|  | 4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found) | 3 |
|  | 16. Panel firm - now less than five employees | 0 |
| $\begin{aligned} & \frac{0}{0} \\ & \stackrel{0}{00} \\ & \stackrel{0}{0} \\ & 0 \end{aligned}$ | 5. The establishment has less than 5 permanent full time employees | 16 |
|  | 6. The firm discontinued businesses | 36 |
|  | 7. Not a business: private household | 0 |
|  | 8. Ineligible activity: education, agriculture, finances, governments... | 8 |
| Unobtainable | 91. No reply (after having called in different days of the week and in different business hours) | 3 |
|  | 92. Line out of order | 8 |
|  | 93. No tone | 0 |
|  | 10. Answering machine | 0 |
|  | 11. Fax line - data line | 0 |
|  | 12. Wrong address/ moved away and could not get the new references | 40 |
|  | 13. Refuses to answer the screener | 57 |
|  | 14. In process (the establishment is being called/ is being contacted previous to ask the screener) | 101 |
|  | 151. Out of target - outside the covered regions, firm moved abroad | 0 |
|  | 152. Out of target - firm moved abroad | 0 |
|  | Total | 524 |

## A.30.3. Cell weights and universe estimates

## Collapsed cell weights (strict)

|  |  | Sector |  |  |  |  |
| :--- | ---: | :--- | ---: | ---: | :---: | :---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |  |  |
| Tashkent | $5-19$ | 110 | 108 | 153 |  |  |
|  | $20-99$ | 31 | 43 | 35 |  |  |
|  | $100+$ | 10 | 5 | 18 |  |  |
| Samarkandskaya | $5-19$ | 110 | 108 | 153 |  |  |
|  | $20-99$ | 5 | 43 | 35 |  |  |
|  | $100+$ | 3 | 2 | 4 |  |  |
| Tashkentskaya | $5-19$ | 110 | 108 | 153 |  |  |
|  | $20-99$ | 9 | 43 | 35 |  |  |
|  | $100+$ | 4 | 3 | 5 |  |  |

Collapsed cell weights (median)

|  |  | Sector |  |  |  |  |
| :--- | ---: | :--- | ---: | ---: | :---: | :---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |  |  |
| Tashkent | $5-19$ | 133 | 135 | 180 |  |  |
|  | $20-99$ | 38 | 58 | 44 |  |  |
|  | $100+$ | 10 | 5 | 18 |  |  |
| Samarkandskaya | $5-19$ | 133 | 135 | 180 |  |  |
|  | $20-99$ | 7 | 58 | 44 |  |  |
|  | $100+$ | 3 | 2 | 4 |  |  |
| Tashkentskaya | $5-19$ | 133 | 135 | 180 |  |  |
|  | $20-99$ | 11 | 58 | 44 |  |  |
|  | $100+$ | 4 | 4 | 6 |  |  |

## Collapsed cell weights (weak)

|  |  | Sector |  |  |
| :--- | ---: | :--- | ---: | ---: |
| Region | Employees | Manufacturing | $\mathbf{5 2}$ | Residual |
| Tashkent | $5-19$ | 157 | 161 | 231 |
|  | $20-99$ | 40 | 68 | 56 |
|  | $100+$ | 10 | 5 | 18 |
| Samarkandskaya | $5-19$ | 157 | 161 | 231 |
|  | $20-99$ | 8 | 68 | 56 |
|  | $100+$ | 3 | 2 | 5 |
| Tashkentskaya | $5-19$ | 157 | 161 | 231 |
|  | $20-99$ | 15 | 68 | 56 |
|  | $100+$ | 5 | 4 | 7 |

Uzbekistan universe estimates

| Strict collapsed cell weights | Median collapsed cell weights | Weak collapsed cell weights |
| :---: | :---: | :---: |
| 15192 | 18416 | 22305 |

## A.30.4. Survey and item non-response

The number of contacted establishments per realized interview was 1.61 . 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 relatively low ratio of contacted establishments per realized interview (1.61) suggests that the main source of error in estimates in the Uzbekistan may be selection bias and not frame inaccuracy.

## A.30.5. Local agency team involved in the study and its comments on the implementation of the BEEPS

Local agency team involved in the survey

| Local agency | Name: "Ekspert fikri" Center for Social and Marketing Research in Central <br> Asia in collaboration with "BRIF Research Group" LLP, Kazakhstan <br> Country: Uzbekistan <br> Membership of international organization: None <br> Activities since: 1991 |
| :--- | :--- |
| Name of Project Manager |  |
| Name and position of other key <br> persons of the project |  |
| Enumerators involved | Interviewers: 28 <br> Recruiters: 28 <br> All interviewers functioned as both recruiters and interviewers. Interviewer <br> contacted respondents directly and could schedule their work independently. |


| Other staff involved | Fieldwork Coordinators: 2 |
| :--- | :--- |
|  | Editing: 0 |
|  | Data Entry: 4 people |
|  | Data Processing: 1 people |

## Sample Frame

| Characteristic of sample frame used | All enterprises in Uzbekistan are officially registered in The <br> "Uniform State Register of Enterprises and Organizations" starting from <br> 1993. In Uzbekistan they have different classification system. However, in <br> the sample frame they classified them according to the ISIC Rev. 3.1 <br> classification. |
| :--- | :--- |
| Source | Uniform State Register of Enterprises and Organizations, <br> published by the State Department of Statistics of the <br> Republic of Uzbekistan. Official register. |
| Year of publication | 2006 |
| Comments on the quality of the <br> sample frame | The quality of sampling had shortcomings caused by the <br> following problems: <br> There were many enterprises not fitting their forms of ownership and number <br> of employees due to the fact that from 2006 until now, there were changes in <br> statistical criteria of enterprises groupings into large, middle and small-sized <br> enterprises depending on the forms of activities and number of employees. <br> For example, the middle-sized category has disappeared. Changes took place <br> at enterprises for the last 2 years since 2006. |
| Year and organisation that <br> conducted the last economic census | 2006. State Department of Statistics of the Republic of <br> Uzbekistan. |

## Sample

| Comments/problems on sectors and <br> regions selected in the sample | By sectors: <br> In all sectors there were problems with large-scale enterprises, mainly in <br> services sector. Many large-scale enterprises decreased the official number of <br> employees in order to qualify under small-scale category, where the taxing <br> system is simpler and the number of revisions is less. From January 1, 2004, <br> the number of small-scale enterprises increased in some industrial branches, <br> where enterprises with 100 employees are considered as small-scale <br> enterprise. For this reason, many enterprises have decreased the number of its <br> employees to less than 100. This caused problems for the research team in <br> finding and conducting interviews with large-scale enterprises. There were <br> problems with finding large-scale trade enterprises (code 52), since many <br> large-scale enterprises in this sector have decreased in number or closed <br> because micro-enterprises have less problems with surviving in the trade <br> sector. <br> By regions: <br> Tashkent region. There were problems with finding small-scale enterprises <br> with 5-19 employees. Majority of enterprises selected in the sampling were <br> liquidated, or in the process of liquidation or expansion. |
| :--- | :--- |
| It was difficult to get permission for interviewing at enterprises with foreign |  |
| investments and in many cases refusals resulted. |  |
| Samarkand region. |  |

Fieldwork

| Date of fieldwork | April - August 2008 |
| :--- | :--- |
| Country | Uzbekistan |
| Number of interviews | Manufacturing: 121 <br> Services (sector 52): 160 <br> Core: 85 |
| Problems found during fieldwork | Questions related to financial situation of an enterprise were sometimes <br> completed by phone as accountants did not have time to meet with <br> interviewers. <br> The mentality of respondents and their attitude towards interviews can be <br> expressed by a proverb cited by respondents, "Once you are on paper, you are <br> on fire", meaning that such surveys are extremely rare in Uzbekistan and <br> interviews are perceived as inspectors. This attitude is also caused by the fact <br> that the essential part of manufacturing and financial activities of enterprises <br> is unofficial and under the table with the aim of evading official and <br> unofficial taxes. Unofficial taxes are caused by pressure from local authorities <br> over enterprises with requests to bear costs for municipal improvements, <br> charities, sports events, etc. Thanks to personal acquaintance interviewers had <br> with managers and their expertise in surveying enterprises, some respondents <br> agreed to participate in interviews without having agreed on the answers <br> beforehand with owners. For this reason they asked not to mention their <br> phone numbers and not to visit them again. For this reason together with the <br> fact that in some enterprises telephone communication was not available or <br> working improperly, specialists and managers gave their home phone <br> numbers. |
| Other observations | N/A |

## Questionnaires

| Problems for the understanding of <br> questions (write question number) | In most cases, in "Performance" section, accountants did not always <br> understand the question n2 and were tempted to give the cost of <br> manufacturing figures instead of giving the procurement of raw materials <br> figures. |
| :--- | :--- |
| Problems found in the navigability <br> of questionnaires (for example, skip <br> patterns) | No special problems encountered |
| Comments on questionnaire length | Interview lasted less than one hour. According to respondents, questions were <br> long. It was hard for them to concentrate. Sometimes respondents gave an <br> impression of "automated" answering, without reflecting on the question. |
| Suggestions or other comments on <br> the questionnaires | N/A |

## Database

| Data entry program chosen | PERTS |
| :--- | :--- |
| Comments on the data entry <br> program | N/A |
| Comments on the data cleaning | N/A |

Country situation

General aspects of economic, political or social situation of the country that could affect the results of the survey

- The basic country's politics is mainly focused on autarchy (aspiration for maximum economic independence and food security) and monetarism postulates.
- Shadow (informal, evading taxes) sector of economy is extremely developed in the country. According to our estimations, about 56\% of able-bodied population is occupied outside the official sector of employment. High taxes for low-wage labour force entice employers to recruit majority of workers for constant but not official work and hide their employment. Restrictions on cash turnover and limits on banks to function as controlling bodies including their supplementary role of tax inspectorate force entrepreneurs to take the means of production, volumes of products and services away to the shadow sector of economy. According to experts' estimations about $60 \%$ of turnover in private service sector and about $30 \%$ of turnover in manufacturing sector remain in the 'shadow' and are hidden by entrepreneurs.
- High labor supply caused low wages in the labour market. This, in turn, caused 1.5 million able-bodied people to emigrate for work; these bring a significant amount of money to the country annually making it possible to sustain the living level and demand for products and services in the local consumer market.
- According to official data, $63 \%$ of the population lives in rural inhabited areas. Taking into consideration the fact that small cities lose their urban roles and functions and their transformation into large villages - a share of the population, whose income depends on the level of agricultural products produced can represent $75 \%$ out of the total population.

| Relevant country events that <br> occurred during fieldwork | Revenues in the rural sector of the economy have decreased in comparison to <br> previous years, influencing the decrease in products and services turnover and <br> increase in prices for those in the country in general. This was caused by the <br> following events: <br> $\bullet \quad$ A drastic decrease in provision of irrigation water in 2008 (about $70 \%$ <br> out of the normal volumes of water) led to a decrease in yield generated <br> by farmers and rural households; <br> Prohibition and restrictions on export of agricultural products outside the <br> country in 2007 and 2008 caused the growth of prices for food products <br> and aspiration of the government to withhold the prices for food <br> products. |
| :--- | :--- |
| Other aspects | N/A |


[^0]:    ${ }^{1}$ The panel firms from BEEPS with less than 5 employees are included in the 5 to 19 strata.

[^1]:    ${ }^{2}$ This is equivalent to the weighted average of the estimates for each stratum, with weights equal to the population shares of each stratum.

[^2]:    ${ }^{3}$ 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.
    ${ }^{4}$ The use of weights in most model-assisted estimations using survey data is strongly recommended by the statisticians specialised on survey methodology of the JPSM of the University of Michigan and the University of Maryland.

[^3]:    - Company name
    - Activity description
    - ISIC 2-digit code
    - Number of employees
    - Region
    - Phone number
    - Company address (Oblast, city, street name and number)
    - Name of the company boss

[^4]:    Grouping used for stratification purposes in BEEPS IV (municipalities in brackets)
    North (municipality Balti, raionuls Briceni, Donduseni, Drochia, Edinet, Falesti, Floresti, Glodeni, Rezina, Riscani, Singerei, Ocnita, Soroca, Soldanesti)
    Center (municipality Chisinau, raionuls Anenii Noi, Causeni, Calarasi, Criuleni, Hincesti, Ialoveni, Leova, Nisporeni, Orhei, Straseni, Ungheni, Telenesti)

    South (republica Gaugazia, municipality Comrat, raionuls Cahul, Cantemir, Cimislia, Taraclia)
    South East - Transdnistria (municipality Bender, Tiraspol, raionuls Basarabeasca, Dubasari, Stefan Voda)

