The Business Environment and Enterprise Performance Survey (BEEPS) V Cyprus and Greece

A Report on methodology and observations
August 2017

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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 4,100 enterprises in 25 countries of Eastern Europe and Central Asia (including Turkey) to assess the environment for private enterprise and business development.

In the second round of BEEPS in 2002, the survey instrument was administered to almost 6,700 enterprises in 27 countries. In the third round of BEEPS, the survey included approximately 9,900 enterprises in 27 countries in 2005. In seven of the countries the survey included an additional sampling overlay of the manufacturing sector in addition to the main BEEPS sample. Furthermore, to set a benchmark for the transition countries, a survey of comparator countries was conducted in 2004-2005 in two rounds (Germany, Greece, Portugal, South Korea and Vietnam were covered in 2004 and Ireland and Spain in 2005).

In the fourth round of 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 other regions of the world since 2006. There were changes in the questionnaire and methodology.

The fifth round of BEEPS (BEEPS V) in 2011-2016 covered almost 16,600 enterprises in 32 countries, including 4,220 enterprises in 37 regions in Russia. It included an Innovation Module, covering product, process, organisational and marketing innovation, as well as management practices in manufacturing enterprises with at least 20 employees (50 employees in Russia). BEEPS V Russia was implemented in 2011-2012. BEEPS V Cyprus and Greece was implemented in 2016 and covered 683 enterprises were covered. This implementation report focuses on Cyprus and Greece, other countries are covered in separate reports (Russia, Non-Russia).

The objective of the survey is to obtain feedback from enterprises in EBRD countries of operation on their perception of the environment in which they operate 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.

Through interviews with firms in the manufacturing and services sectors, BEEPS captures business perceptions of the biggest obstacles to enterprise growth, the relative importance of various constraints to increasing employment and productivity, and the effects of a country's business environment on its international competitiveness. BEEPS is used to create statistically significant business environment indicators that are comparable across countries.

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

The fifth round of BEEPS V in Cyprus and Greece was implemented by Ipsos MORI in cooperation with local partners. For details, refer to Annex A.

BEEPS V has been supported by the EBRD Shareholder Special Fund.

2 BEEPS Methodology

2.1 Survey universe, sample population and sampling frames

The whole population, or universe of the study, are commercial, service or industrial business establishments with at least 5 full-time employees in 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. 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 V Cyprus and Greece. 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 sampling 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 Ipsos MORI in collaboration with the EBRD. One sampling frame was used for each country covered in BEEPS V Cyprus and Greece - an official frame of establishments supplied by the national statistical office of the country.

2.2 Specifications of the survey

2.2.1 Coverage of countries:

BEEPS V Cyprus and Greece was implemented in Cyprus and Greece.

2.2.2 Sampling structure

The sample was selected using stratified random sampling, following the methodology explained in the Sampling Manual. 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.

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 (5-19 employees), medium (20-99 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 and agriculture.

Details on the regional stratification can be found in country-specific information in Annex A.

2.3 Sampling implementation

Given the stratified design, sampling frames containing a complete and updated list of establishments as well as information on all stratification variables (number of employees, industry, and region) are required to draw the sample. Great efforts were made to obtain the best source for these listings. However, the quality of sampling 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.

The quality of the sampling frames was assessed at the onset of the project through calls. The sampling frames proved to be useful, though they all 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.

Table 1 depicts the targeted number of completed interviews for BEEPS V Cyprus and Greece, along with achieved total number of completed interviews.

Table 1: Targeted and achieved number of completed interviews – BEEPS V Cyprus and Greece

Country	Number of completed interviews						
	Target	***Completed***	*Panel*	*Manufacturing*	*Retail*	*Core*	*Innovation*
Cyprus	360	360	0	122	137	101	133
Greece	360	323	0	107	102	114	216
TOTAL	**720**	**683**	**0**	**229**	**239**	**215**	**349**

[1] The panel firms from BEEPS with less than 5 employees are included in the 5 to 19 strata.

3 Fieldwork

3.1 Questionnaires and translation

Three main questionnaires were used for the survey – core, services and manufacturing – depending on the respondent's industry. In addition, two innovation modules were used – core/retail and manufacturing. A screener questionnaire was also used during the recruitment phase.

The questionnaires were translated into local languages (Table 2).

Table 2: Questionnaire languages used in each country

Country	Languages
Cyprus	Greek, Turkish
Greece	Greek

The translation process progressed as follows:

1. The Word versions of the questionnaire were transferred into an Excel document, so that rather than have 6 separate documents, there was only one.
2. When the questionnaire in Excel was finalised, with updated routing instructions and logic checks, they were sent to the national agencies for translation.
3. The questionnaire was translated by a suitably qualified and experienced executive within each local agency into the national official languages.
4. The questionnaire was also translated by an independent translator from Ipsos' translation partner, Language Connect.
5. The two translations were reviewed by a third translator and combined into the "master" translation
6. The Ipsos MORI team checked the master translation to ensure consistency across repeated phrases etc.
7. The EBRD reviewed the master translation and recommended the final amendments
8. After the pilot, further changes were made to the questionnaire by the local agencies
9. Final national questionnaires were sent to the EBRD for their records.

3.2 CAPI scripting and testing

Once the translations had been approved, a CAPI script was set up and then the script was thoroughly tested by each country manager, the Ipsos team and the EBRD. To test the script, the country manager checked the question wording and the routing was correct and made sure that logic checks had been built into the script where appropriate.

The CAPI testing process was extensive due to the complexity of the script. A lot of "hard" and "soft" logic checks were built into the script to minimise the chance of respondents providing inconsistent or illogical answers, and to reduce the need for call-backs to verify responses after the completion of the interview.

3.3 Training

Centralised training briefing was organised with the country managers of all the three agencies, and was held in Athens in February 2016. The briefing was 2 days long, and the second day which focused on the questionnaire was also attended by the Greek pilot interviewers.

The training was delivered by representatives from the EBRD and Ipsos MORI. The training covered:

- BEEPS V management team introduction;

- Introduction of the BEEPS Survey by the EBRD representative;
- Universe and sample for BEEPS V
- Sampling frames and selected samples:
    - Listings and quality control
    - Sample management and fieldwork progress report
    - Response rate: Follow up – methods to ensure a good response rate
- The questionnaires implementation:
    - Key concepts
    - Questionnaire manual
    - Mock interviewing with the manufacturing questionnaire
    - Innovation module and eligibility
    - Multiple choice test
    - Questionnaire proofreading
- Supervisors and interviewer training
- BEEPS V pilot survey
- Data entry and quality control
- Detailed training on how to administer and probe on the open-ended questions
- An open question and answer session.

This training ensured that project managers were well-prepared to train their own field force. Importantly, it also ensured that the content of the training in each country was the same.

For the supervisors and interviewer training, Ipsos MORI provided the training materials to the survey and fieldwork managers, covering the different training components such as:

- Written training. Each supervisor and interviewer received a questionnaire manual that had to be read carefully before the training. In addition, supervisors and interviewers received detailed interviewer instructions, in order to fully understand the survey methodology and objectives.
- Theoretical training. Once the supervisors and interviewers had reviewed the questionnaire manual and interviewer instructions, the survey manager in each country thoroughly explained the study's metholodology and reviewed the whole instrument, question by question, to ensure its correct comprehension, explain key concepts, unification of criteria, and answer any questions.
- Comprehension test. After the training, supervisors and interviewers completed a multiple choice test to assess their understanding of the survey methodology and questionnaire.

Additional interviewer briefings –over the phone or in person – were also organised whenever needed and according to any particular requirements of the survey.

For further details on the training on a country by country basis, please refer to the appendices.

3.4 Piloting

Before the survey was launched, a pilot was conducted in Greece and Cyprus. Interviews were conducted by local interviewers who provided feedback to their country managers. The table below shows the number of interviews achieved in the pilot.

Table 5: Pilot fieldwork dates and interviews achieved

	Pilot fieldwork dates		Questionnaire type				
Country	Start	Finish	Manufacturing	Retail	Core	Innovation (added to the Main questionnaire)	Total
Cyprus	10/02/2016	24/02/2016	9	5	6	7	**20**
Greece	09/02/2016	16/02/2016	5	4	4	9	**13**

The main purpose of the pilot was to check that the translation was correct, the routing was correct, and that the questions were appropriate for the local environment. Also, these interviews were timed to ascertain the length of the questionnaire. All five questionnaires – core, manufacturing and services, and core/service and manufacturing innovation – were tested.

After the pilot was completed, a pilot report was sent to the EBRD outlining the key findings and recommended changes to the questionnaire. Any modification to the questionnaire and instructions were approved by the EBRD before the survey was implemented.

4 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) as a different option from don't know (-9).
- 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. From the start of fieldwork, up to 10 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. Further research is needed on survey non-response in BEEPS regarding potential introduction of bias.

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. Item non-response, selection bias and faulty sampling frames are not unique to BEEPS. All Enterprise Surveys suffer from these shortcomings, but in very few cases they have been made explicit.

5 BEEPS Database

5.1 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, *a0*.

All variables are named using, first, the letter of each section and, second, the number of the variable within the section (i.e., *a1* denotes section A, question 1). Variable names preceded by "*eca*" indicate questions specific to BEEPS (Table 6 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.

Table 6: Variable names preceeded by "eca" - BEEPS V

Main Questionnaire	Innovation Module
ecaq5	ecao1a
ecaq5x	ecao1bx
ecac31a1	ecao2a
ecac31a2	ecao2b
ecac31a3	ecao2c
ecaq15a	ecao3a
ecad31b1	ecao3b
ecad31b2	ecao3c
ecad31b3	ecao3d
ecaq53	ecao3e
ecah4	ecao3f
ecah8	ecao3fx
ecai31a1	ecao3g
ecai31a2	ecao4
ecai31a3	ecao5
ecak4a	ecao5x
ecak9a	ecao6
ecak9ax	ecao7a
ecaq46f	ecao7b
ecaq46fx	ecao7c
ecaq46d	ecao8x
ecaq46e	ecao9a
ecak15a1	ecao9b
ecak17	ecao9c
ecaq31e	ecao10a
ecaj1b	ecao10b
ecaj1c	ecao10c
ecaj31b1	ecao10d
ecaj31b2	ecao11
ecaj31b3	ecao11x
ecaj31c1	ecao12

ecaj31c2	ecao13
ecaj31c3	ecao14a
ecaj31f1	ecao14b
ecaj31f2	ecao14c
ecaj31f3	ecao14d
ecah31a1	ecao14e
ecah31a2	ecao14f
ecah31a3	ecao15a
ecaq39	ecao15b
ecaq41a	ecao15c
ecaq41b	ecao15d
ecaq41c	ecao16
ecaq44a	ecao17
ecaq44b	ecao18
ecaq44c	ecao19
ecar16a	ecao20
ecar17a	ecao21
ecar17b	ecao22a
ecar17c	ecao22b
ecar18	ecao23a
ecar20	ecao23b
ecar20x	ecao23cx
ecaq69	ecao23d
ecal31a1	ecar1
ecal31a2	ecar2
ecal31a3	ecar6
ecal31b1	ecar7
ecal31b2	ecar8
ecal31b3	ecar11
ecas1a	ecar13
ecas1b	ecar15
ecas1c	ecaa15a4d
ecaa15a4a	
ecaa15a4b	
ecaa15a4c	

There is one establishment identifier in BEEPS V Cyprus and Greece, *id* - a country unique identifier. The variables *a2* (sampling region), *a6a* (sampling establishment's size) and *a4a* (sampling sector) contain the establishment's classification into the strata chosen for each country using information from the sampling 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 *a4a* (sampling sector) and *d1a2* (industry expressed as ISIC rev. 3.1 code). The former gives the establishment's classification into one of the chosen industry-strata, whereas the latter gives the actual establishment's industry classification (four digit code) in the sampling 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 sampling frames may contain inaccurate information. The variables containing the sampling frame information are included in the data set for researchers who may want to further investigate statistical features of the survey and the effect of the survey design on their results:

- *a2* is the variable describing sampling regions
- *a6a*: coded using the same standard for small, medium, and large establishments as defined above. The code -9 was used to indicate units for which size was missing in the sampling frame
- *a4a*: coded using ISIC codes for the chosen industries for stratification. These codes include most manufacturing industries (15 to 37), retail (52) and other services (45, 50, 51, 55, 60-64, 72)

The surveys were implemented following a two-stage procedure. In the first stage, a screener questionnaire was typically 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 *a4b* and *a6b* contain the industry and size of the establishment from the screener questionnaire. Variables *a8* to *a11* contain additional information and were also collected in the screening phase.

There are additional variables for location (*a3x*), industry (*d1a2*) and size (*l1*, *l6* and *l8*) that reflect more accurately the reality of each establishment:

- Variable *a3x* 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 *d1a2* 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 *l1*, *l6* and *l8* 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 *a17x* gives interviewer comments, including problems that occurred during an interview and extraordinary circumstances which could influence results. Please note that sometimes this variable is removed due to privacy issues.

Note that certain variables (including *a3x*, actual location of the establishment) have been removed from the public version of the dataset for confidentiality reasons.

The “last complete fiscal year” in BEEPS V Cyprus and Greece refers to 2014, while “three fiscal years ago” refers to 2012.

5.2 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 sampling 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

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

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 *a6a* and *a6b* (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 8 summarizes the eligibility criteria for each of the above three assumptions.

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. 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 8: 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 firm/establishment bought the original firm/establishment)	1	1	1
3. Eligible establishment (Different name but same address - the firm/establishment changed its name)	1	1	1
4. Eligible establishment (Wrong address - the firm/establishment has changed address and the address could be found)	1	1	1
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 different business hours)	0	1	0
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 – previous to ask the screener)*	0	0	0
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

5.2.1 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.

[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.

6 Bibliography

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Annex A Country-specific information on BEEPS survey

A.1 Cyprus

A.1.1. Sampling structure and implementation

The Business register 2013, provided by the Cyprus Statistical Department, was used as a sample frame in the Greek administered part of Cyprus, while the updated membership lists of establishments recorded by the Chamber of Commerce and Chamber of Industry in 2015 was used as a sample frame in the Turkish administered part of Cyprus. However, no valid information was available on the number of employees in the sample frames, so this was imputed using 'mi impute chained'. This fills in missing values in multiple variables iteratively by using chained equations, a sequence of univariate imputation methods with fully conditional specification (FCS) of prediction equations. It accommodates arbitrary missing-value patterns. The input variables used were legal status of establishment, region, and industrial sector of establishment. Once the sample design was approved, Ipsos selected the establishments for interview.

Regional stratification was defined in two regions. These regions are Area administered by Greek Cypriots and Area administered by Turkish Cypriots.

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 31% (644 out of 2103 establishments).

Fresh sampling frame

Region	Employees	Manufacturing	Retail	Other Services	Grand Total
Area administered by Greek Cypriots	5-19	892	1612	2076	4580
	20-99	930	579	1819	3328
	100+	461	167	870	1498
	Total	**2283**	**2358**	**4765**	**9406**
Area administered by Turkish Cypriots	5-19	326	716	608	1650
	20-99	214	309	198	721
	100+	28	29	43	100
	Total	**568**	**1054**	**849**	**2471**
Grand Total		**2851**	**3412**	**5614**	**11877**

Source: Business register 2013 and Chamber of Commerce and Chamber of Industry in 2015.

Original sample design

Region	Employees	Manufacturing	Retail	Other Services	Grand Total
Area administered by Greek Cypriots	5-19	33	53	37	123
	20-99	33	19	31	83
	100+	15	5	14	34
	Total	**81**	**77**	**82**	**240**
Area administered by Turkish Cypriots	5-19	20	26	27	73
	20-99	16	14	11	41
	100+	2	2	2	6
	Total	**38**	**42**	**40**	**120**
Grand Total		**119**	**119**	**122**	**360**

A.1.2. Status codes

	TOTAL
Complete interviews **(Total)**	360
Complete interviews (not eligible for innovation)	254
Complete interviews (with innovation)	105
Complete interviews (eligible, but refused to answer innovation)	1
Incomplete interviews	0
Elegible in process	0
Refusals	41
Out of target	644
Impossible to contact	424
Refusal to the Screener	634
Total	**2103**

Eligible	1.Elegible establishment (Correct name and address)	398
	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)	0
Ineligible	5. The establishment has less than 5 permanent full time employees	527
	616. The firm discontinued businesses - (Establishment went bankrupt)	12
	618. The firm discontinued businesses - (Original establishment disappeared and is now a different firm)	5
	619. The firm discontinued businesses - (Establishment was bought out by another firm)	0
	620. The firm discontinued businesses - (It was impossible to determine for what reason)	73
	621. The firm discontinued businesses - (Other: SPECIFY in COMMENTS)	1
	7. Not a business: private household	9
	8. Ineligible activity: education, agriculture, finances, governments…	16
Unobtainable	91. No reply *(after having called in different days of the week and in different business hours)*	145
	92. Line out of order	70
	93. No tone	26
	94. Phone number does not exist	17
	10. Answering machine	3
	11. Fax line - data line	41
	12. Wrong address/ moved away and could not get the new references	122
	13. Refuses to answer the screener	634
	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
	153. Out of target - Not registered with Federal Tax Service (does not have INN)	0
	Total	**2103**

A.1.3. Survey and item non-response

The number of completed interviews per contacted establishment was 0.17.[5] 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 sampling frame, as represented by the presence of ineligible units. The number of rejections per contact was 0.32.

A.1.4. Local agency team involved in the study and its comments on the implementation

Local agency team involved in the survey

Local agency	Area administered by the Greek Cypriots: CMRC Cypronetwork Ltd (year started operations: 1999) Area administered by the Turkish Cypriots: Lipa Consultancy (year started operations: 2012) Country: Cyprus
Name of Project Manager	Koulia Alexandrou / Eliz Tefik
Name and position of other key persons of the project	Georgia Michael / İzlem Verdi (field managers) Angela Pitiri (data specialist) Georgia Triggi / Fatma Yaman (administrative assistants to Project Managers)
Enumerators involved	Enumerators: 27 Recruiters: 12 Enumerators who also conducted screener (2)
Other staff involved	Fieldwork coordinators: 6 Data processing: 3

Sampling frame

Characteristic of sample frame used	Business Register 2013/Updated membership lists of establishments 2015
Source	Business Register 2013, Cyprus Statistical Department/ Updated membership lists of establishments 2015 recorded by the Chamber of Commerce and Chamber of Industry
Year of publication	2013/2015
Comments on the quality of the sample frame	Although there were cases of incorrect telephone / fax numbers or disconnected businesses in the area administered by Greek Cypriots, this did not affect the fieldwork significantly. The sample frame for the area administered by Turkish Cypriots had a lot of inaccurate contact data – the addresses and phone numbers were incorrect, and so the local agency spent additional time searching for this data. Sometimes it was not possible to find useful data and the selected company could not be reached. Additionally, the information on the number of employees in the sample frame for area administered by Greek Cypriots was not available in the categories required for the stratification. Moreover, the sample frame for the area administered by Turkish Cypriots did not have any information on the number of employees. Hence this data was imputed in the sample frame prior to the sample selection. However, as no exact data was available to exclude companies with 0-4 employees from the sample frame, a significant part of the contacted establishments (38%) in the area administered by Greek Cypriots proved to be ineligible due to having less than 5 employees.
Year and organisation that conducted the last economic census	2005, Cyprus Statistical Department (Area administered by Greek Cypriots)

[5] The estimate is based on the total number of firms contacted including ineligible establishments.

Sample

Comments/problems on sectors and regions selected in the sample	Coding in ISIC 3.1. was not available for the area administered by Turkish Cypriots. As only two-digit NACE 2 codes were available, it was not possible to unambiguously recode these to two-digit ISIC 3.1. codes. Hence, only the information on sector was available in this sample frame.
Comments on the response rate	The overall response rate achieved was similar as in the other surveys of the same type. It can be noted that the area administered by Greek Cypriots achieved significantly higher response rate than the area administered by Turkish Cypriots. The local team in the area administered by Turkish Cypriots put additional efforts on back-checking the refusals, using different recruiters, and going back to the soft refusals and trying to persuade them to take a part. In many cases the latter proved to be successful. Nevertheless, the difficult economical situation in the country and the long interview still caused many refusals by the managers, who claimed that they were very busy and that did not have time to participate.
Comments on the sample design	Apart from the above mentioned issues with the sample frame, there were no major problems with the sample design. The order of preferences was introduced to maximise the response rate and to improve the quality of the sample, but it did cause certain delays in moving on to the next preference – if a company was postponing the screening/interviewing for several times and eventually refused to participate, it meant that important days/weeks were lost and that the whole process needed to start again, with a new company.

Fieldwork

Date of fieldwork	March 2016 - July 2016
Country	Cyprus
Number of completed interviews	360
Problems found during fieldwork	The majority of refusals took place before asking any recruitment questions. These were caused mainly by a general lack of interest or a lack of time for such a long interview. Negative business environment in both parts of Cyprus also contributed to the non-response. The enterprises could not see the benefit in taking part in the survey, even though the recruiters were persistent in explaining the value of their participation. Additionally, a part of the establishments that responded to the recruitment questions, and were eligible to participate, kept postponing the scheduled appointment for the main interview several times. This happened more frequently in the area administered by Greek Cypriots, where a maximum of re-scheduled appointments had to be set after which it was considered that the establishment refused to participate. In the area administered by Turkish Cypriots, the contact information in the sample frame was not always up-to-date, so the local agency spent additional time on searching for the correct telephone numbers. During the interviewing phase, the interviewers reported that although there were respondents who were very positive and willing to answer all the questions, there were also some respondents who were reluctant to answer all the questions since they felt some of them are very private. However, most of them kept answering the questions patiently.
Actions taken to improve response rate/deal with problems during fieldwork	

Questionnaires

Problems for the understanding of questions (write question number)	There were no problems with understanding the questions. Many respondents were concerned about the financial questions and considered them sensitive, and so they refused to answer these questions claiming this information was confidential.
Problems found in the navigability	There were no issues with navigability, as the CAPI script was thoroughly

of questionnaires (for example, skip patterns)	checked before the fieldwork start.
Comments on questionnaire length	Many respondents found the questionnaire too long in length. It was hard for them to find time for the questionnaire in their busy days.
Suggestions or other comments on the questionnaires	The questionnaire is structured very well and properly serves its purpose.

Quality control

Fieldwork monitoring	Fieldwork efficiency was monitored in conjunction with the progress reporting. Number of contacted companies, appointments and conducted interviews were monitored per coordination region on weekly bases. It was also checked that the recruiters used the correct preference order when contacting the companies. It was also monitored whether the contact attempts were systematically repeated until at least 10 contact attempts at different times of the day were made. Special attention was paid to refusals at the screening phase. The supervisors made the follow up call for soft refusals, to make sure if something could be done to convince the company to take part in the survey. As part of the monitoring process different recruiters were used interchangeably for the different regions or sampling units. This was useful to check the recruiters' performance, as well as if they are accepting the refusals too easily. Companies with unobtainable outcome codes (fax line, line out of order, no tone etc.) during recruitment were also checked in order to verify that the firm is indeed unobtainable. The work of each face-to-face interviewer was also checked. The call backs were made for more than 20% of the completed interviews. No interviewer had to be removed from the project. Regular meetings were held with the interviewers in order to discuss any potential issues they had on the field, as well as to discuss their performances.
Data checking procedures	The script was thoroughly checked and confirmed before the interviewing phase. Following that, the data checks were performed on the first 10% of the data, and then the first 50% and 100% of the data. SPSS syntax for identifying potential data errors was run on each batch of the data. The output was then analysed and every flagged error was checked and corrected if necessary. Upon the initial checks, further analyses were run, and call backs were performed to check the unusual data. At each stage, the database of completed interviews was also checked against the progress reports to make sure that fieldwork was progressing as planned and reported, and that the interviews were conducted with the right enterprises, from the right sampling point and preference.
Number of respondents selected for back-checking	114
Selection procedures	The work of each interviewer was back-checked. The interviews were selected randomly. For the interviewers who conducted only a few interviews, back checks were made for all their interviews
Who carried out back-checks?	Call backs were conducted by Fieldwork Supervisors and the assistants who were not involved neither in the screening nor main interviewing phase, but who were especially trained for conducting back-checks
Mode of contact	Telephone
Number of completed interviews back-checked	91
Number of non-responses back-checked	23
Results of alternative method of contacting non-respondents	N/A
Description of what was covered inthe back-checks	Questions asked in back checks: Company name

	Length of interview Number of employees Year when the company started operations and the year it was registered Main product description The position and the name of the respondent
Number of completed interviews that were rejected and why	No interviews were rejected.

Database

CAPI platform	NIPO
Data output	SPSS, Web ADC
Comments on the script	The CAPI script was thoroughly checked before the fieldwork start, so there were no issues during the fieldwork.
Comments on the data cleaning	There were no major issues during the data cleaning since the CAPI script was strictly defined. There were a few recoding errors in the data processing stage, which were resolved upon 10% data upload. When the data obtained in the main interview seemed odd, the respondents were called back in order to confirm whether the recorded values were correct.

Country situation

General aspects of economic, political or social situation of the country that could affect the results of the survey	The economic crisis that began in 2012 was the biggest crisis experienced in the Republic of Cyprus. In 2013 Cyprus was bound by a Eurogroup decision to set the Eurozone precedent of imposing losses on large depositors in two of its major banks, Bank of Cyprus and Laiki Bank. This was immediately followed by a closure of the entire banking sector for nearly two weeks with the imposition of capital controls in a bid to prevent a bank run. Cypriots and the local banking sector were severely hit by the closing of Laiki Bank and the restructuring of the Bank of Cyprus. Deposits exceeding €100,000 were turned into equity to recapitalise the Bank of Cyprus, which was also given most of Laiki's assets and debts. This situation caused a great blow to businesses and their liquidity for the next three years (2013-2015). Companies in both parts of Cyprus are still affected by this situation.
Relevant country events that occurred during fieldwork	Due to Easter holidays the offices in the Area administered by Greek Cypriots were closed between 28/04-03/05 and so recruitment was paused during that period. For the period between 25/04-06/05 it was very difficult to schedule any appointment in this part of Cyprus. Area administered by Turkish Cypriots had only a one-day holiday during the fieldwork period, which did not affect the fieldwork progress
Other aspects	On 18th April, CMRC Cypronetwork's offices were affected by a fire. The recruitment stopped for the week 18-22th April, but the interviewers continued to conduct the interviews with the scheduled appointments.

A.2 Greece

A.2.1. Sampling structure and implementation

ICAP dataset was used as a sample frame. It is considered to be the most reliable business database in Greece, and it is exclusive collaborator of Dun & Bradstreet. The source of the data stored in this dataset are the official state authorities, where companies have to register in order to start the operations. The database is constantly updated. Once the sample design was approved, the local agency selected the establishments for interview.

Regional stratification was defined in four regions. These regions are Athens, Northern Greece, Central Greece, and Aegean Islands, Crete (NUTS-1). Table below shows the grouping of official administrative regions into these four regions.

Regions (NUTS2)	**Regions to be used for sample stratification (NUTS1)**
Attica	Athens (Attiki)
North Aegean	Aegean Islands, Crete (Nisia Aigaiou, Kriti)
South Aegean	
Crete	
Eastern Macedonia and Thrace	Northern Greece (Voreia Ellada)
Central Macedonia	
Western Macedonia	
Epirus	
Thessaly	Central Greece (Kentriki Ellada)
Ionian Islands	
Western Greece	
Central Greece	
Peloponnese	

The quality of the frame was assessed at the onset of the project. The frame proved to be useful and it showed only slight 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 2% (49 out of 2334 establishments).

Total sampling frame

Region	**Employees**	**Manufacturing**	**Retail**	**Other Services**	**Grand Total**
Athens	5-19	2457	993	6511	9961
	20-99	772	234	2081	3087
	100+	187	70	318	575
	Total	**3416**	**1297**	**8910**	**13623**
Northern Greece	5-19	1776	517	2532	4825
	20-99	603	69	573	1245
	100+	98	19	31	148
	Total	**2477**	**605**	**3136**	**6218**
Central Greece	5-19	1058	404	1685	3147
	20-99	371	67	351	789
	100+	47	8	15	70
	Total	**1476**	**479**	**2051**	**4006**
Aegean Islands	5-19	441	276	1245	1962
	20-99	113	58	239	410
	100+	9	6	8	23
	Total	**563**	**340**	**1492**	**2395**
Grand Total		**7932**	**2721**	**15589**	**26242**

Source: ICAP dataset.

Original sample design

Region	Employees	Manufacturing	Retail	Other Services	Grand Total
Athens	5-19	33	43	45	121
	20-99	12	10	16	38
	100+	3	3	3	9
	Total	**48**	**56**	**64**	**168**
Northern Greece	5-19	27	22	20	69
	20-99	10	3	5	18
	100+	2	1	1	4
	Total	**39**	**26**	**26**	**91**
Central Greece	5-19	16	18	13	47
	20-99	6	3	3	12
	100+	1	1	1	3
	Total	**23**	**22**	**17**	**62**
Aegean Islands	5-19	7	12	10	29
	20-99	2	3	2	7
	100+	1	1	1	3
	Total	**10**	**16**	**13**	**39**
Grand Total		**120**	**120**	**120**	**360**

A.2.2. Status codes

	TOTAL
Complete interviews **(Total)**	**323**
Complete interviews (not eligible for innovation)	110
Complete interviews (with innovation)	209
Complete interviews (eligible, but refused to answer innovation)	4
Incomplete interviews	0
Elegible in process	23
Refusals	142
Out of target	49
Impossible to contact	572
Refusal to the Screener	1216
In process *(the establishment is being called/ is being contacted - previous to ask the screener)*	9
Total	**2334**

Eligible	1.Elegible establishment (Correct name and address)	459
	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)	4
	4. Elegible establishment (Wrong address - the firm/establishmen has changed address and the address could be found)	24
Ineligible	5. The establishment has less than 5 permanent full time employees	18
	51. The establishment started its operations in 2015	2
	616. The firm discontinued businesses - (Establishment went bankrupt)	10
	618. The firm discontinued businesses - (Original establishment disappeared and is now a different firm)	5
	619. The firm discontinued businesses - (Establishment was bought out by another firm)	5
	620. The firm discontinued businesses - (It was impossible to determine for what reason)	1
	621. The firm discontinued businesses - (Other: SPECIFY in COMMENTS)	2
	7. Not a business: private household	4
	8. Ineligible activity: education, agriculture, finances, governments…	1
Unobtainable	91. No reply *(after having called in different days of the week and in different business hours)*	524
	92. Line out of order	3
	93. No tone	0
	94. Phone number does not exist	41
	10. Answering machine	0
	11. Fax line - data line	0
	12. Wrong address/ moved away and could not get the new references	4
	13. Refuses to answer the screener	1216
	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	0
	153. Out of target - Not registered with Federal Tax Service (does not have INN)	0
	Total	**2334**

A.2.3. Survey and item non-response

The number of completed interviews per contacted establishment was 0.14. 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 sampling frame, as represented by the presence of ineligible units. The number of rejections per contact was 0.58.

A.2.4. Local agency team involved in the study and its comments on the implementation

Local agency team involved in the survey

Local agency	Ipsos-Opinion S.A. Country: Greece Year started operations: 2013 as such. It is a joint venture, Ipsos S.A (once known as Synovate SA) and Opinion S.A have been present on Greek market for more than 25 years
Name of Project Manager	Giorgos Corcodilos
Name and position of other key persons of the project	Voula Liarou (field manager) Chryssa Michelaki (data specialist)
Enumerators involved	Enumerators: 22 Recruiters: 8 Enumerators who also conducted screener (0)
Other staff involved	Fieldwork coordinators: 8 Data processing: 4

Sample Frame

Characteristic of sample frame used	It is the most reliable business database in Greece, and exclusive collaborator of Dun & Bradstreet. The database is constantly updated
Source	ICAP
Year of publication	2015
Comments on the quality of the sample frame	ICAP database, which is constantly updated, is representative for the companies with 5 and more employees, but less representative for very small companies (like sole proprietorships), with less than 5 employees, due to data protection reasons. According to Greek law and Hellenic Data Protection Authority the companies need to give their permission to be included in ICAP database. The most of non-covered companies have less than 5 employees, so would not be eligible for this survey. ICAP use the official state authorities as a source for the database.
Year and organisation that conducted the last economic census	2010, ELSTAT
Other sources for companies statistics	None

Sample

Comments/problems on sectors and regions selected in the sample	Coding in ISIC 3.1. was not available. However, 4-digit NACE 2 codes were available, hence re-coding was performed for the sampled companies
Comments on the response rate	Response rate was significantly lower than initially anticipated due to the general issues of Greek economy and overall business climate in the country (described in Country situation table below). 52% of contacted enterprises refused to answer the screening questions. Two main reasons for refusals were the questionnaire length, i.e. lack of time to participate, and general unwillingness to participate. Further on, 29% of the successfully screened eligible companies that initially agreed to participate, eventually refused when the interviewer went on the scheduled appointment. The reasons were sudden urgent business issues they needed

	to deal with, unplanned busy schedules, etc. Even though the interviewers were willing to re-schedule the appointment for more convenient day/time, the most of the respondents did not show interest to participate.
Comments on the sample design	In several stratification cells it was not possible to complete the required number of interviews. It was either due to smaller number of available contacts in these cells, or due to high non-response rate in these cells. In these cases, the neighbouring cells (within the same sector and region) were merged and then treated as one stratification cell. Unused preferences in these cells (originally assigned to the sampling units where the interview was completed) were used as new preferences for the 'problematic' sampling units.

Fieldwork

Date of fieldwork	March 2016 – August 2016
Country	Greece
Number of completed interviews	323
Problems found during fieldwork	The main reason for the extremely high refusal rate was the uncertainty and instability that still exists in Greek economy after 6 consecutive years of recession. Businesses and their leaders who were interviewed in this survey are very disappointed and dissatisfied about it. The well-promising new government has followed the previous path and have increased taxes one more time. On the other hand, pensions and wages have been also reduced once again having a significant impact on the demand for goods/ services. All above have created a really bad climate in the whole Greek economy and everyday life, which eventually lead to very high refusal rate. Additionally, the core holiday period in Greece started at the end of July (and lasted until the end of August) which made progress even more difficult. Eventually, the fieldwork became completely unproductive, and it was decided to conclude it before reaching the full sample size. Instead of completing 360 interviews, the fieldwork was finished with 323 interviews.
Other observations	

Questionnaires

Problems for the understanding of questions	Overall there were no such cases; the understanding of questions was fully correlated to the degree of attention that respondent was paying during the interview. In many occasions the respondent had to deal with several other business issues during the interview. As this is something rather common for business surveys in Greece, the interviewers were well trained to deal with these situations (they waited for the respondent to complete the other tasks and then repeated the question).
Problems found in the navigability of questionnaires (for example, skip patterns)	There were no issues with navigability, as the CAPI script was thoroughly checked before the fieldwork start.
Comments on questionnaire length	Another reason for the high refusal rate was the questionnaire length. Given the difficult economical situation in the country, many enterprises could not see the benefit in taking an hour from their busy days to respond to the questionnaire. However, it is important to note that the efforts made during the recruitment to be perfectly clear on the questionnaire length, in order to avoid serious issues during the main interview, was very successful and no cancellations or interruptions happened due to this reason. But, it was noted by several respondents that the questionnaire was extremely long.
Suggestions or other comments on the questionnaires	The major concerns raised from almost a third of respondents is the reason for asking all the financial data (i.e. turnover, fixed assets, loans, amount of investments, etc.) as they considered these as establishment's private data, which needed to be protected.

Quality control

Fieldwork monitoring	Fieldwork was closely monitored at both the recruiting and the main interviewing phase - on daily basis by fieldwork supervisors and twice a week by the Project Manager. The Project Manager was reviewing the progress updates and had bi-weekly meetings with the recruitment and fieldwork supervisors to discuss the progress. Reports with long-pending appointments for both the screening or the main fieldwork were sent to the central or local teams for further actions. Especially, a system for monitoring preference order was created (split in 12 separate sub-folders), that enabled feeding in only the available (allowed) preferences. This was updated daily, based on the feedback from the recruitment and fieldwork teams. Finally, considering all the challenges that have arisen during the fieldwork (very high refusal rate and unfavourable business climate in the country) it was concluded to work with the most capable interviewers only, and speed up the process in that way. Total of 15 interviewers was originally trained for the telephone recruitment and 35 for the main fieldwork, but at the end only the most experienced team of 8 recruiters and 22 face-to-face interviewers was working on the survey.
Data checking procedures	Based on the experience gained from the previous BEEPS rounds, significant effort was made to build all the hard and soft checks into the script during the set up phase. The local team also put additional notes for the interviewer into the script (i.e. remark about the number of employees or turnover that the respondent had mentioned in the previous question) which was very useful, especially in cases when the interview was paused so that the respondent could respond to urgent business issues. The interviewers from all regions uploaded the completed interviews on daily bases which was checked by the fieldwork supervisors for consistency and validity. Additional call-backs were made in cases where further information or clarifications were required. Moreover, all interviewers were asked to keep notes if some situation seemed strange to them or if they were not quite sure how to record the data in the questionnaire. All this data was passed to the supervisors and it proved to be very useful during the data and verbatim back-checks.
Number of respondents selected for back-checking	85
Selection procedures	The work of each interviewer was back-checked. The interviews for each interviewer were selected randomly.
Who carried out back-checks?	Fieldwork supervisors conducted the call-back supported by Quality Controls Specialists (persons who were not involved neither in the screening nor main interviewing process and who are trained specifically for conducting back-checks).
Mode of contact	Telephone
Number of completed interviews back-checked	68
Number of non-responses back-checked	17
Results of alternative method of contacting non-respondents	N/A
Description of what was covered inthe back-checks	Questions asked in back checks - Company's name Verification of information gained through the screening/ recruitment process (including number of employees, date of registration) Details of main activity / main product Address where interview took place Respondent (s) name(s) Interview length
Number of completed interviews that were rejected and why	No interviews were rejected.

Database

CAPI platform	Converso
Data output	SPSS, Web ADC
Comments on the script	The CAPI script was thoroughly checked before the fieldwork start, so there were no issues during the fieldwork. Due to technical limitations a minor obstacle occurred before the fieldwork start – concerning the real time collaboration between CATI (recruitment) and CAPI (main interviewing) script. It was solved by updating the database in each CAPI device three times a week.
Comments on the data cleaning	There were no major issues during the data cleaning since the CAPI script was strictly defined. When the data obtained in the main interview seemed odd, the respondents were called back in order to confirm whether the recorded values are correct.

Country situation

General aspects of economic, political or social situation of the country that could affect the results of the survey	Living and doing business in Greece is quite hard at the moment, as there is a certain fear of what is going to happen next. Total population, including the top managers, are not particularly optimistic as they have to deal with new challenges every day. These challenges are mostly related to amount of money required from them and that they most probably do not have. It is worth of mentioning that the companies that have survived this very difficult period in Greece have the prerequisites to go further, hoping to see some small improvement in the following years.
Relevant country events that occurred during fieldwork	As aforementioned it was the unfavourable business environment due to continuous recession, policy & tax changes (increase on business tax/ tax payment in advance for the next year) and holiday period in summer that affected significantly response rate and eventually the fieldwork progress.
Other aspects	None