Palestinian National Authority
Palestinian Central Bureau of Statistics
Economic Statistics Directorate

The Services Survey – 2006
User's Guide Raw Data

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Concepts and Definitions

A. Statistical unit:
The SNA of 1993 defines two major statistical units:
- Institutional unit (enterprise): An economic entity that is capable, in its own right, of owning assets, incurring liabilities and engaging in economic activities and transactions with other entities.
- Establishment: An enterprise or part of an enterprise in which one group of goods and services is produced (with the possibility of having secondary activities).

B. Enterprises Sectors:
According to SNA1993, they are government, household, non-profitable enterprises, finance and non-finance companies. For services enterprises they are either household sector or non-finance companies.

C. Output:
Value of goods and services, including own-account goods, produced during a specific period.

D. Intermediate consumption:
Value of production inputs from both goods and services.

E. Gross value added:
Output minus intermediate consumption.

F. Compensation of employees:
Wages, salaries and other allowances and remuneration in cash or in kind.

G. Taxes on production less subsidies:
Taxes assessed on producers with respect to the production, sale, purchase or use of goods and services, less production subsidies.

H. Aids:
The current payments to the producers from the government according to output levels.

I. Depreciation:
They are the assets value, which reproduced, and depreciated during the year, depreciation is calculated on the current substitutive value.

J. Operating Surplus:
Value added-(compensation of employees + taxes on production less subsidies + Depreciation of fixed assets).

K. Gross Fixed Capital Formation:
It is measured by value of acquisitions less disposals of new or existing fixed assets.

L. Principal economic activity:
It is the main activity of the enterprise during the reference year, using (ISIC - 3) for classification and coding.

Survey Questionnaire

They are tow forms of the services survey questionnaire 2006, the first one is related to household and branches, and the second is related to non-finance companies sector. The questionnaire contains of the following main variables:

1. Number of employees in a company and their compensations.
2. The output of the main and second activities.
3. Goods production inputs.
4. Various payments and transfers.
5. Indirect taxes.
6. Enterprises assets.

Data Sets Linkage

There are 13 data file in this CD-ROM, with one key variable in each file to allow the linkage between these files. The following table describes the files names content and identification variables.

File Name	Content	Identification Variables
Identification data	Identification data	Est_no: establishment number
Fixed Assets	Data about establishment assets.	Est_no: establishment number
Good purchased for resale	Purchasing goods for selling purpose.	Est_no: establishment number
Employment and remuneration	Persons engaged and their compensations	Est_no: establishment number
Various payments and Transfers	Various payments and transfers	Est_no: establishment number
Other Production expenditures	Other output expenses	Est_no: establishment number
Commodity Product	Goods productions	Est_no: establishment number
Other Production Inputs	Goods Production Inputs	Est_no: establishment number
Revenues of services Rendered to Others	Revenues of Services Rendered to Others	Est_no: establishment number
Taxes on production and fees	Taxes on production and fees	Est_no: establishment number
Fuel and Oil	Production Inputs Fuel and oil	Est_no: establishment number
Various Transfers and Revenues	Various transfers and revenues	Est_no: establishment number
Electricity and water	Electricity and water	Est_no: establishment number

Target Population

PCBS depends on the International and Industrial Classification of all economic activities, version 3, (ISIC – 3) by the United Nation to classify the economic activities. All enterprises and establishments are classified according to the Establishments Census 2004, which works in agreement with (ISIC – 3).

The services survey covers the following activities:

1. Hotels and Restaurants
2. Real Estate, Renting and Business Activities
3. Education
4. Health and Social Work
5. Other Community, Social and Personal Service Activities

Sample and Frame

The sample of the Services Survey is a single-stage stratified random - systematic sample in which the enterprise constitutes the primary sampling unit (PSU). Three levels of strata were used to arrive at an efficient representative sample (i.e. economic activity, size of employment and geographical levels). The sample size amounted to (2141) enterprises out of the (18308) enterprises that comprise the survey frame in the Palestinian Territory.

Weighting and Estimation

Weighting Procedure:

The sampling weight of the enterprise is the mathematical turned of the possibility selection of that enterprise. It is necessary to use weights in the estimation of the survey society because of the differentiation in the possibility of enterprises' selection from another one.

Estimation Procedure:

To calculate a variable as Y in a partial society as A on a study as D, we use the following:

$$\hat{Y} AD = \sum_{h}^{D} \sum_{J \in A} W_{hj} Y_{hj} \ldots \ldots (1)$$

$\hat{Y} AD$: it the estimated sum of the variable Y in a partial society A in a study D.

h: Strata code.

J: the register code in the data file of the partial society A.

A: a partial group from the registers related to a specific partial society.

D: a study scope as a specific governorate.

W_{hj} : the weight of the analytical unit No. "j" in a partial society A in a strata h in a study D.

Calculation of Variance

It is necessary to associate with an estimated statistical number by a sampling survey another one, which refers to the existing accuracy in the estimation.

The variance differ from one variable to another depending on:
1. Sample size.
2. The extent of the real variance for all society units unknown and could be estimated by comprehensive census for all society units, sample survey or pilot survey.
3. Sample design: Simple random sample or stratified random sample

CENVAR program is used for estimation. The following measures are used for the main economic indicators:
1. Standard Error: The error appeared as a result of sample survey not comprehensive survey.

2. $\text{Coefficient of Variation} = \dfrac{\text{Standard Error}}{\text{Estimation}}$

3. $\text{DEFF} = \dfrac{\text{The variance by a compound sample}}{\text{The variance by a simple random sample}}$

4. 95% Confidence Interval: Whether the survey is performed once or many times the confidence interval will remain the 95%

Reference Date

It is the period which data are gathered about, the period of this data is 2006.

Data Collecting

Questionnaire Test:
Doing a primitive pretest during two days to make a technical study of the questionnaire, study the rejection and the data quality.

Workers Selection and Training:
The interviewers in the fieldwork are selected from the experienced ones in the statistical work and they are also trained theoretically and practically.

Fieldwork operations:
They are initiated after the recruitment and training of qualified interviewers. The PCBS's Fieldwork Directorate administers fieldwork activities including interviewing activities.

Data Gathering Method:
Data are gathered by using an interview with the enterprise owner or general manager by applying the survey questionnaire.

Fieldwork Editing:

The interviewer and supervisor firstly edit technically the questionnaire according to editing rules.

Office Editing:
The office editor also edits the questionnaire in order to be ready to be sent to coding and data entry.

Coding:
After the editor finishes editing the questionnaire, a coding are used according to (ISIC – 3), then the questionnaire is transferred to data entry.

Response Rate

A: Non response:
1. Temporarily closed
2. Worked in 2006, and data not collected
3. Could not reach the address
4. Refusal
5. The Balance isn't ready
6. Israeli Ownership
7. Different Ownership
8. Converted from other surveys and not completed
9. Other

B: Over Coverage:
1. Completely Closed
2. Enterprises practice economic activities out of the survey.
3. Repeated
4. Central government
5. Agricultural Appropriation
6. Branch Keep No Records
7. Isn't an Establishment as Recognized
8. Branch Keeps Records & the Center Out of the Sample

C: Net Sample

$$= \text{Sample} - \text{Over Coverage}$$

D: Over coverage ratio mistakes

$$= \frac{\text{sum of over coverage stages}}{\text{Sample stages}} * 100\%$$

E: Non response

$$= \frac{\text{non response stages}}{\text{Net sample}} * 100\%$$

F: Response ratio

$$= 100\% - \text{non response ratio}$$

Values of Response Rates:

The original sample of Remaining West Bank and Gaza Strip is (2141) establishment and the number of completed questionnaires are (1687).

The over coverage ratio is (14.4%) distributed as:
1. Temporarily closed (9.3%)
2. Enterprises practice economic activities out of the survey. (1.5%)
3. Repeated. (0.1%)
4. Central government. (0.2%)
5. Branch Keep No Records. (3.1%)
6. Isn't an Establishment as Recognized. (0.1%)
7. Branch Keeps Records & the Center Out of the Sample (0.1%)

The non response ratio is (9.0%)distributed as:

1. Of Different Ownership (0.2%)
2. Worked in 2006, and data not collected (1.5%)
3. Could not reach the address (1.0%)
4. Permanently closed (0.6%)
5. Refusal (3.6%)
6. The budget isn't ready (0.3%)
7. Others (1.8%)

Data Quality

Accuracy of the Data:

Statistical Errors:

The findings of the survey are affected by statistical errors due to using sampling in conducting the survey for the units of the target population, which increases the chances of having variances from the actual values we expect to obtain from the data had we conducted the survey using comprehensive enumeration.. The variance of the key goods in the survey was computed and dissemination was carried out on the level of Remaining West Bank and Gaza Strip for reasons related to sample design and computation of the variance of the different indicators.

Variance Account of Services Survey at Remaining West Bank and Gaza Strip Level

Variable	Estimate		Standard Error	CV%	95% Confidence interval	
	Unit	Value			Lower	Upper
Number of Persons Engaged	Number	53754	930.3	0.017	51930	55580
Output	US$ 1000	486678.0	17516.7	0.036	452319.3	521036.8
Gross Value Added	US$ 1000	331884.5	14347.7	0.043	303741.7	360027.3
Intermediate Consumption	US$ 1000	154793.5	5964.2	0.039	143094.8	166492.3

The preceding table shows the variation of the most distinct variables, where it indicates to institutions with activities that have been withdrawn sample for the rest of the West Bank and Gaza Strip.

Non-Statistical Errors

These types of errors could appear on one or all the survey stages that include data collection and data entry:

Response rate values:

- Sample size was 2,141 institution in Remaining West Bank and Gaza Strip.
- Non-response cases was 166.
- Over coverage cases was 313.
- Net sample= 2,141-313= 1,828.
- Non-response rate = 9%.

Response errors: these types of errors are related to, responders, fieldworkers, and data entry personnel's. And to avoid mistakes and reduce the impact has been a series of actions that would enhance the accuracy of the data through a process of data collection from the field and the data processing.

Fieldwork

- Selection of specialized fieldwork team of economic back ground, the team was trained theoretically and practically on the survey questionnaire.
- The main fieldwork team was selected according to the training course.
- Field work visits by both fieldwork and project management staff for monitoring and following up data collection process and progress of work, An average of two visits for each governorate, a bout 90% of completed questionnaires was reviewed and corrected if needed, comments and notes were directed to the team accordingly.
- Different levels of supervision and monitoring toke place a according to the following division:
  o Fieldworkers
  o Fieldworkers supervisors
  o Fieldwork coordinator. (Each of them has responsibilities in monitoring)
- Project management receive a daily progress report about completeness and response.
- Conducting a refreshment training course during the stage of data collection for emphasizing the main issues of training and answering questions of fieldworkers about issues faced them in the field.
- We made another visit to some institutions which were visited by the researchers to confirm the accuracy of the data that have been given to researchers and that called the interview, these institutions has been selected randomly by withdrawing a random sample of 10% of the original sample of the survey, and then the data were compared with data from series surveys.

Data processing:

For insuring quality and consistency of data a set of measures were taken into account for strengthening accuracy of data as follows:

- Preparing data entry program before data collection for checking readiness of the program for data entry.

- A set of validation rules were applied on the program for checking consistency of data.
- Efficiency of the program was checked through pre-testing in entering few questionnaires, including incorrect information for checking its efficiency, in capturing these information.
- Well trained data keyers were selected and trained for the main data entry.
- Weekly or biweekly data files were received by project management for checking accuracy and consistency, notes of correction are provided for data entry management for correction.

Notes on Data:
1. Differences of results of certain indicators that can be noticed are due to approximation.
2. Note that there are some economic activities to reduce second ISIC has been collecting data with the previous activity, due to maintain the confidentiality of data provided by the law of statistics for 2000.
3. Financial data was collected by NIS, US $ and JD, but it was converted and published in US $.

   Exchange rates:
   US $ / NIS = 4.4545
   US $ / JD = 0.7078

Derived Variables

Annual consumption per paid employee   = Compensation of Employees

No. of paid employees

Output per person engaged $= \dfrac{\text{Output}}{\text{Persons engaged}}$

Output per paid employee $= \dfrac{\text{Output}}{\text{No. of paid employees}}$

Value added per person engaged $= \dfrac{\text{Value added}}{\text{No. of persons engaged}}$

Value added per paid employee $= \dfrac{\text{Value added}}{\text{No. of paid employees}}$

Value added to output $= \dfrac{\text{Value added}}{\text{Output}} \times 100$

Compensation of employees to value added $= \dfrac{\text{Compensation of employees}}{\text{Value added}} \times 100$

Depreciation to output $= \dfrac{\text{Annual depreciation}}{\text{Output}} \times 100$