

# TECHNICAL NOTES

## 2021 Labor Turnover Survey

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## I. Introduction

### I.1. Background of the Survey

The Labor Turnover Survey (LTS), one of the regular surveys of the Philippine Statistics Authority, is an offshoot of the Employment, Hours and Earnings Survey (EHES), which was conducted from 1987 to 2002 by the former Bureau of Labor and Employment Statistics (BLES). To come up with timely information on labor market trends in the formal sector of the economy, the items of inquiry have been limited to employment, labor turnover, and existing job vacancies.

### I.2. Objectives

The LTS aims to provide quarterly trend statistics on labor turnover and existing job vacancies as indicators of labor market activity and general business situation of the country. This provides the government and the private sector a complete picture of labor demand and job turnover as inputs to decision making and policy formulation.

### I.3. Historical Information on the Survey

Prior to 1989, statistics on labor turnover and layoffs were derived from two mandatory reports submitted by employers to the Department of Labor and Employment (DOLE). These reports

were the Monthly Employment Report and the Employer's Termination Report which were submitted in compliance with the implementing rules and regulations of the Labor Code of the Philippines. However, due to low compliance rates, coverage was limited, and the Department was unable to come up with an accurate picture of the dynamics of the labor market.

In 1988, a special study funded by the former National Statistical Coordination Board (NSCB) entitled "Improvement of Client-Based Statistics on Labor and Employment," was undertaken. Among others, the study recommended the conduct of a national survey of establishments to inquire on labor turnover, vacancies, and layoffs to adequately monitor the labor market performance of the business sector. This recommendation paved way for the conduct of the Employment, Hours and Earnings Survey (EHES).

From 1989 to 1997, the EHES was conducted as a rider to the then Quarterly Survey of Establishments (QSE) of the former National Statistics Office (NSO). The survey was designed to collect quarterly data on labor turnover, hours of work, layoffs, and job vacancies.

The EHES was revised in 1998 and this entailed the redesigning of the questionnaire and modification of the sampling design in conformance with the 1994 Philippine Standard Industrial Classification. Moreover, the field data collection was assumed by the former Bureau of Labor and Employment Statistics (BLES) in coordination with the DOLE Regional Offices. The revised EHES was conducted from 1998 to 2000 but temporarily discontinued in 2001 due to severe budget constraints. It was resumed in the first semester of 2002, but the coverage was limited only to the National Capital Region and was again discontinued for lack of budget.

In the 2nd semester of 2002, the DOLE Secretary instructed the former BLES to collect quarterly data on labor turnover to complement the data on establishment closures and layoffs. This became the forerunner of the current LTS and was in place from 2002 to 2007. The new survey was designed with "enterprise" as the sampling unit instead of the "establishment" in the EHES. To be manageable and to come up with the results the shortest time

possible, the survey was limited in Metro Manila where the bulk of the country's business enterprises were located. The sample size was fixed at 500 enterprises that were selected through stratified random sampling. Two strata were formed with the first 200 top firms (based on revenue) comprising the first stratum, all of them included as samples. The rest of the enterprises formed the second stratum from which the 300 samples were drawn randomly. The survey results were released based on sample data only.

The survey was redesigned in 2008 with sample enterprises selected from the Top 1,000 Corporations in the country which were sourced from the Credit Information Bureau, Inc. (CIBI). Further improvements were made with the introduction of Kish's allocation formula to reflect better industry representation. Also, released survey results were based on weighted data and the sample size was no longer fixed but was computed using the said formula.

Starting 4th quarter of 2013, the LTS was conducted by the Philippine Statistics Authority (PSA) due to the implementation of the Republic Act 10625 starting September 12, 2013, otherwise known as the Philippine Statistical Act of 2013.

From 2015 to 2017, the LTS covered a subsample of enterprises with 20 or more workers that are in the National Capital Region (NCR) only using the updated List of Establishments available at the Philippine Statistics Authority (PSA) as sampling frame. As a matter of procedure, the survey gathered consolidated information about the establishment and its branches, if any.

In 2018, the LTS was expanded from its NCR to nationwide coverage to get a more complete picture of the labor market situation in the whole country. Also started from this period, data encoding and machine processing are decentralized at the Regional Statistical Services Offices (RSSOs) except for NCR where the distribution and collection of questionnaires, field editing, data encoding and machine processing were all done at the Central Office until 4th quarter 2018 survey round.

However, due to limited budget, the conduct of nationwide LTS for 2019 was deferred. At the very least, the survey was conducted in a semi-annual frequency covering NCR only and was handled by the RSSO and PSOs. Data encoding and machine processing was likewise devolved to the NCR provincial offices.

The 2020 LTS rounds were likewise conducted semi-annually covering two (2) quarters information with samples further reduced due to budgetary constraints. Moreover, changes were effected to introduce/cope with the “new normal” brought about by the COVID-19 pandemic. Specifically, ways of engagement were affected or minimized in the conduct of trainings and interviews during questionnaire distribution and collection.

The same strategies are employed for LTS 2021. Field operations are done semi-annually to generate data for two quarters for each survey period. Further, health protocols are still observed, especially during distribution and collection of questionnaires.

#### **I.4. Scope and Coverage**

The LTS 2021 covers establishments with 20 or more workers located in NCR as listed by the Philippine Statistics Authority. The survey covers 18 major industries classified according to the amended 2009 Philippine Standard Industrial Classification (PSIC).

## **II. Data Collection**

### **II.1. Data Collection Procedure**

This survey employed a face-to-face interview using a structured questionnaire. In some instances, respondents are contacted through phone and or email to ascertain their location, establish initial contact, and/or to verify submitted figures. The distribution and collection of questionnaires to and from the sample establishments are done by hired Statistical Researchers (SRs).

Under the “new normal” condition, various schemes that will limit face-to-face engagement of the SRs and the respondents are

employed during the distribution, follow-up, and collection/transmittal of questionnaires. These strategies include mail or email, phone calls/facsimile.

## **II.2. The Instrument**

The instrument used is a four-page questionnaire that captures the necessary data to obtain the objectives of the survey. It is composed of the cover page, general information, items of inquiry, certification, and information on the survey personnel.

The results of the latest LTS conducted as a means of disseminating the information gathered from the survey are provided in a loose sheet and may be retained by the respondent to make them appreciate and may encourage them to participate in PSA statistical activities.

## **II.3. Data Items**

This survey collects data on the establishment's total employment, accession and separation, reasons for separation, total accession and separation of agency-hired workers, and the existing job vacancies at the end of the quarter.

# **III. Methodology**

## **III.1. Sampling Frame**

The establishment sampling frame for the 2021 Labor Turnover Survey was extracted from the preliminary 2020 List of Establishments (LE) as of 31 December 2020.

This list was a product of the 2020 Updating of List of Establishments (ULE). The updating involved complete enumeration of establishments in the barangays where “no matched” establishments (establishments listed in other sources but not in the LE) from prioritized secondary sources are located, barangays with new malls, barangays having establishments

with total employment of 100 and over, and barangays with the highest number of establishments for some provinces. Also covered using mail inquiry, were other “no matched” establishments including those located in distant barangays.

Other sources of updates are the feedbacks from different establishment-based surveys such as Annual Survey of Philippine Business and Industry (ASPBI) and Labor Turnover Survey (LTS).

A total of **15,094** establishments in NCR with employment size of at least 20 workers extracted from the 2020 List of Establishments in the country comprised the LTS 2021 sampling frame.

### III.2. Sample Selection Procedure

The 15,094 establishments in NCR included in the frame were stratified based on the eighteen (18) sections as domains.

The initial sample size per stratum was obtained by taking into account the computed highest Coefficient of Variation ( $CV_h$ ) between the estimates on Accession and Separation rates from the result of the 4<sup>th</sup> Quarter 2020 LTS and a target Coefficient of Variation. For manageability and budget considerations, target CV of 9% was used.

The formula used is as follows:

$$n_i = \sum_{j=1}^{18} \frac{CV_{hj} \times r_j}{CV_t}$$

where:

- $n_i$  = initial sample size
- $CV_{hj}$  = highest coefficient of variation in the  $j$ th section
- $r_j$  = number of responding in NCR from the 4Q LTS 2020 data in the  $j$ th section
- $CV_t$  = target coefficient of variation

The distribution of computed samples over domains was done using Kish's allocation procedure. The formula is defined as:

where:

$$n_j = n_k \left( \frac{\sqrt{\frac{1}{L^2} + IW_h^2}}{\sum_{j=1}^L \sqrt{\frac{1}{L^2} + IW_h^2}} \right)$$

$n_j$  = sample size in the  $j$ th section

$n_k$  = initial sample size

$L$  = total number of strata (Section)

$I$  = set at 0.5 to allow approximately equal allocation for each stratum

$W_h$  = population weight which is equal to  $(N_h/N)$ ,

where:

$N_h$  = population size for  $h$ th stratum

$N$  = total population size

The result further adjusted the initially computed sample size in each domain for availability of population units per stratum to arrive at the final sample size of **2,842** establishments in NCR.

The sample establishments for each domain were drawn through systematic sampling. This procedure was used so that the representation of establishments with respect to the Total Employment (TE) values are spread out, thus avoiding all sample establishments with low TE values or high TE values.

No replacement of sample establishments is made as the final sample has already been adjusted.

### III.3. Estimation Procedure

Estimates are obtained by simple expansion, i.e., by multiplying the sample values at the industry level by the corresponding blowing-up factor (BUF) which is the ratio of the estimated population of establishments to the number of responding establishments. These estimates are then aggregated to the desired totals. This weighing procedure takes non-response into account.

#### Accession:

$$A = \sum_i \sum_j \sum_k \sum_l A_{ijkl}$$

$$= \sum_i \sum_j \sum_k \sum_l AE_{ijkl} + \sum_i \sum_j \sum_k \sum_l AP_{ijkl}$$

where:

- A = total accession  
 AE<sub>ijkl</sub> = total number of accession due to expansion of the *l*<sup>th</sup> establishment during the *k*<sup>th</sup> month covered by the survey with employment size *j* in major industry *i*  
 AP<sub>ijkl</sub> = total number of accession due to replacement of the *l*<sup>th</sup> establishment during the *k*<sup>th</sup> month covered by the survey with employment size *j* in major industry *i*

#### Separation:

$$S = \sum_i \sum_j \sum_k \sum_l S_{ijkl}$$

$$= \sum_i \sum_j \sum_k \sum_l SE_{ijkl} + \sum_i \sum_j \sum_k \sum_l SR_{ijkl}$$

where:

- S = total separation  
 SE<sub>ijkl</sub> = total number of employee-initiated separation of the *l*<sup>th</sup> establishment during the *k*<sup>th</sup> month covered by the survey with employment size *j* in major industry *i*



$SR_{ijk}$  = total number of employer-initiated separation of the  $i^{th}$  establishment during the  $k^{th}$  month covered by the survey with employment size  $j$  in major industry  $i$

**Accession Rate:**

$$AR = \frac{A}{E} \times 100$$

where:

AR = accession rate  
A = total accession  
E = average total employment

**Separation Rate:**

$$SR = \frac{S}{E} \times 100$$

where:

SR = separation rate  
A = total separation  
E = average total employment

**Labor Turnover Rate**

$$LTR = AR - SR$$

where:

LTR = Labor Turnover Rate  
AR = accession rate  
SR = separation rate

### III.4. Other Related Topics

#### III.4.1. Adjustments

- **Non-response:** Non-response is taken into account in the weighing procedure.
- **Other bias:** No adjustments are made.
- **Use of benchmark data:** No benchmark data is used.
- **Use of other surveys:** No other survey data are used.

#### III.4.2. Indicators of the Reliability of the Estimates

- **Coverage of the sampling frame:** Partially updated.
- **Sampling error/Sampling variance:** Standard errors (SE) and Coefficient of variations (CV) are computed.
- **Response rate:** For the 3<sup>rd</sup> and 4<sup>th</sup> quarter 2021 LTS, the response rates in terms of eligible units are **85.4%** and **83.6%**, respectively.
- **Non-sampling errors:** These may occur due to inaccuracies in reporting by establishments and enumerators, mistakes in coding, editing and data entry. However, efforts are made to reduce non-sampling errors by careful design of the questionnaire, intensive training of survey personnel, linkages with key informants (employers' and workers' groups, government agencies and the academe) and through adoption and documentation of efficient operating procedures.

## IV. Concepts and Definitions of Terms

**Total employment** - refers to the number of persons who worked or received pay from the establishment during the reference period. This includes the following:

- a. Working Owners – owners who are actively engaged in the management of the establishment but do not receive regular pay.
  - b. Unpaid Workers – refer to persons working without pay and work for at least 1/3 of the working time normal to the establishment; and
  - c. Paid Employees - include full-time/part-time workers; employees on paid leaves (e.g., sick/vacation/maternity/holiday/study leave); and employees working away from the establishment but paid by and under the control of the firm.
- It excludes workers that are hired through agencies/contractors, workers on indefinite leave, workers paid purely on commission without employer control.

**Labor Turnover** – refers to the changes in the employment of an establishment resulting from accessions and separations.

**Accessions (New Hires)** – refer to permanent or temporary additions to employment in the establishment due to 1) expansion of business activity and 2) replacement of separated workers and employment resulting from changes in methods/technology of production or service.

**Separations** - refer to terminations of employment due to (a) layoffs or terminations initiated by the employers due to economic reasons (e.g., lack of market, financial losses, reorganization, end of contract) and non-economic reasons (e.g., gross negligence, AWOL, failure rating on performance, health reasons) and (b) quits or termination initiated by the employees (e.g., resignations due to being hired by another company, to work abroad).

**Agency-Hired Workers** – workers employed by the contractors to perform or complete a job, work, or service pursuant to a service agreement within or outside the premises of the establishment. They are excluded from the total employment of the establishment.

**Existing Job Vacancies** – defined as a paid post that is newly created, unoccupied, or unfilled job openings at the end of the quarter which are immediately available for employment and for which active recruitment steps are being undertaken.

## V. Dissemination of Results and Revisions

### V.1. Schedule of Release

The LTS 2021 is implemented in the NCR only with semi-annual frequency of conduct. Below is the timetable of field operations:

Reference Period	Field Operation	Target Release of the Results
1 <sup>st</sup> Qtr. and 2 <sup>nd</sup> Qtr. 2021	August to November 2021	December 2021
3 <sup>rd</sup> Qtr. and 4 <sup>th</sup> Qtr. 2021	February to May 2022	June 2022

### V.2. Forms of Dissemination

Preliminary results of the survey will be disseminated through a Press Release simultaneous with the statistical tables five months after the start of field operations. Final results will be made available and posted in the PSA website through a monograph (LABSTAT Updates) and Infographics one month later.

## VI. Citation

Philippine Statistics Authority, (June 2022). Technical Notes on 2021 Labor Turnover Survey.

Link: <https://psa.gov.ph/statistics/technical-notes>.

## VII. Contact Information

### **Alegria A. Mota**

Chief Statistical Specialist, EDSD

Tel No.: 8281-7998

Email Address: [edsd.staff@gmail.com](mailto:edsd.staff@gmail.com)/[edsd.staff@psa.gov.ph](mailto:edsd.staff@psa.gov.ph)

### **For data request, you may contact:**

Knowledge Management and Communications Division

Tel No.: (632) 8462-6600 loc. 839

Email Address: [info@psa.gov.ph](mailto:info@psa.gov.ph)