

SURVEY COVERAGE AND METHODOLOGY

OCCUPATIONAL WAGE SURVEY, 2012

Introduction

The *Occupational Wage Survey, 2012* was conducted by the Central Provident Fund (CPF) Board, on behalf of the Ministry of Manpower, from July to December 2012. The survey was conducted under Section 76 (1) of the CPF Act (1999 Edition) which empowers the Board to collect and compile statistics relating to employers and employees.

Objective

The survey was conducted to obtain wage statistics of common occupations.

Coverage

The survey covered only establishments in the private sector. A representative sample of private sector establishments with at least 25 employees, stratified by industry, was surveyed. The effective sample consisted of 4,146 private sector establishments, covering some 271,000 full-time resident employees who have CPF contributions in June 2012. The survey response rate was 91%.

Methodology

The survey was conducted through mail questionnaires. Employers were required to provide information on their employees' wages and job titles. Only employees who contributed CPF were covered.

Reference Period

The survey reference period was the month of June 2012.

Data Collected

Data on monthly basic and gross wages were collected. Wages for the daily and hourly rated contributors were converted to their monthly equivalence using appropriate expansion factors.

The following types of contributors were excluded for the tabulation of monthly basic and gross wages :

- Apprentices/Trainees;
- Temporary workers;
- Part-time workers;
- Piece-rated workers; and
- Workers who worked part month in the month of June 2012

In addition, workers whose pay is based on commission were excluded for the tabulation of monthly basic wage.

Wage data by gender and age were obtained by matching the survey data with CPF Board's administrative records.

Classification

The occupations of the CPF contributors and the industries of the surveyed establishments were classified according to the Singapore Standard Occupational Classification 2010 and Singapore Standard Industrial Classification 2010 respectively.

Statistical Notes

The following should be noted when using wage data obtained from the survey:

- Changes in occupational wage levels over time should be interpreted with care. The changes not only reflect wage increases paid to the workers but also the changes in composition within the occupational group. For instance, a large increase in new entrants into a particular occupation may depress the average wage level for that occupation. Data may also fluctuate year to year due to sampling variability.
- The occupations of the CPF contributors surveyed were based on the job titles provided by their employers. This may result in lower wage data for certain occupations, especially those requiring professional qualifications, when a significant number of contributors without the necessary qualifications (and earning less than their suitably qualified counterparts) were given such professional titles by their employers.
- The wage data compiled exclude bonuses and profit sharing. The wages for certain occupations, especially those where performance-based bonuses constitute a significant portion of total wage, would be lower than expected. Examples of such occupations are brokers, dealers and senior management staff.
- The occupational wage data presented are those of full-time employees only. This provides a more meaningful basis for comparison of wages across occupations.
- Wages are determined by a host of factors, including the scope, responsibilities, requirements and working conditions of the job; as well as the productivity, qualifications, experience and innate ability of the worker. The state of the labour market in terms of demand and supply factors also influences the wages paid.
- The scope and job responsibilities of CPF contributors classified under the same occupation may vary widely across establishments, especially for occupations like managing directors and the various types of managers.

Concepts and Definitions

- Establishment** : An establishment refers to an economic unit that produces goods or services at a single physical location and engages in one, or predominantly one type of economic activity. Thus, each branch of a multi-branch organisation at a different location is conceptually a different establishment. However, if in practice the required statistics are centrally kept such that it is not possible to obtain separate data for each individual unit or branch, the organisation or enterprise is treated as a single reporting unit and allowed to submit a consolidated return covering all the units or branches.
- CPF Contributor** : This refers to an employee who has made CPF contributions for the month of June.
- Monthly Basic Wage** : This refers to the basic pay before deduction of employee CPF contributions and personal income tax. It excludes employer CPF contributions, bonuses, overtime payments, commissions, allowances (e.g. shift, food, housing and transport), other monetary payments and payments-in-kind.
- Monthly Gross Wage** : This refers to the sum of the basic wage, overtime payments, commissions, allowances, and other regular cash payments. It is before deduction of employee CPF contributions and personal income tax and excludes employer CPF contributions, bonuses, stock options, other lump sum payments and payments-in-kind.
- 25th Percentile Wage** : This refers to the wage level which divides the bottom 25% of wage earners from the rest.
- Median (50th Percentile) Wage** : This refers to the wage level at the middle of the wage distribution which divides the bottom half of wage earners from the upper half.
- 75th Percentile Wage** : This refers to the wage level which divides the top 25% of wage earners from the rest.

Reliability of Data

In a sample survey, inferences about the target population are drawn from the data collected from the sample. As such, differences between the published estimate and the value that would have been produced if the entire population had been surveyed can be expected. Factors influencing the magnitude of this difference include the sample size, the sample design, method of estimation, the variability of the population and the characteristics studied. As a general rule, the smaller the sample from which an estimate is derived, the larger we might expect the magnitude of this difference to be.

The number of employees covered by the survey for each published occupation has been made available under the column "Number Covered". Data users are advised to take this coverage into consideration when exercising judgment on whether the estimate is reliable for their intended purpose.