

# **New Estimates of Wage in Taiwan Using Administrative Data**

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## **Abstract**

The Ministry of Finance collects abundant data on income for taxation purpose. As public concern rises about wage issues, the analysis of the result of the employee earnings survey is no longer sufficient for the need of users. As a result, this paper aims to provide a new estimate of wages in Taiwan using administrative data, through combining wage data in filing personal income tax and other sources data from public sectors. The analysis shows the following results:

(1) During 2011 to 2015, the estimate of monthly wage in Taiwan is approximately NT\$ 45,000 to 48,000 on average, which is equivalent to the employee earnings survey; the median is around NT\$ 33,000 to 35,000, which is slightly different from the survey in wage distribution. Due to the differences in definition, coverage and source of data, the estimate of wage is lower at the bottom and higher at the top, compared with survey.

(2) The wages of employee is highly related to the size of the employer. In 2015, the median monthly wage in TPEX-listed companies is around NT\$ 51,000, which is NT\$ 18,000 higher than that of non-listed companies. The median monthly wage for companies with over 100 employees is over NT\$ 40,000, which is twice as much as that of companies with fewer than five employees.

(3) There are huge wage differences among different industries. In 2015, the median monthly wage in the “Electricity and Gas Supply” industry is around NT\$ 89,000. Meanwhile, that of the “Accommodation and Food Service Activities” industry is only around NT\$ 25,000. Seventy percent of employees who earned over a million dollars per month work among industries of “Manufacture of Semiconductors”, “Manufacture of Computers”, “Banks” and “Securities and Futures” etc.

(4) During 2011 to 2015, the growth rates of the median monthly wage for women and middle age employees are comparatively larger than other groups; the growth rate for women is 6.1%, 10% for employees who are over 40 years old, and less than 3% for employees who are under 40 years old, reflecting the wage stagnation in the younger generation.

(5) According to the Indicator of Wage Level from OECD (“Low Pay” refers to workers earning less than two-thirds of median earnings), about a quarter of employees in Taiwan belong to the “Low Pay” group, reflecting the phenomenon of increasing non-standard forms of employment in recent years. However, through raising the minimum wage and economic recovery, the share of “Low Pay” is declining.

Key words and phrases: wage, administrative data, tax data