



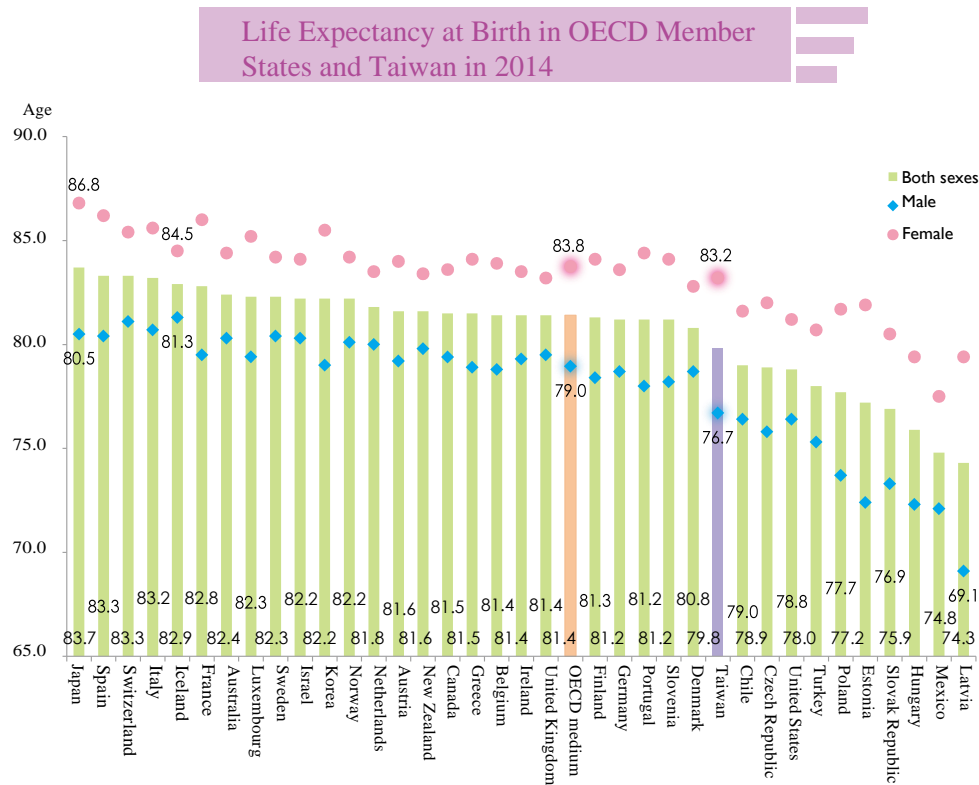
## VII. International Comparisons



# 1. Life Statistics

## (1) Life Expectancy at Birth

Taiwan ranked 26th among the OECD member states in life expectancy at birth.



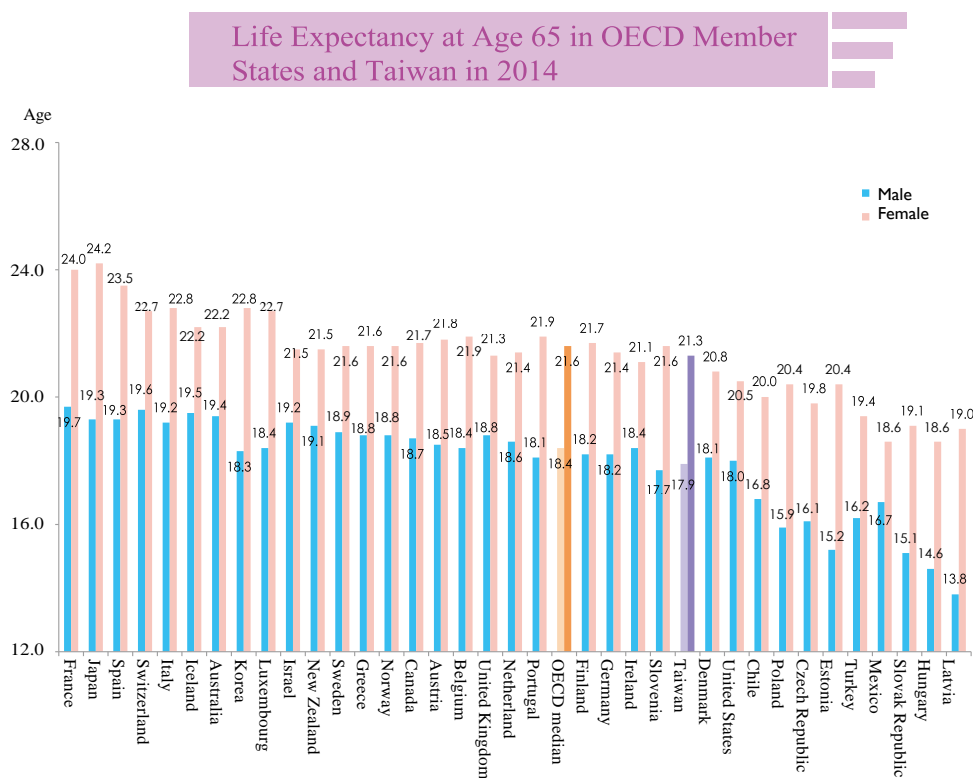
Sources: OECD Health Data. The most recent available data of the countries are used if there are no data for 2014.

In 2014, Japan ranked first with a life expectancy at birth of 83.7 years for both sexes. The life expectancy at birth for both sexes in Taiwan was 79.8 years, which was 3.9 years lower compared to Japan. Taiwan ranked 26th among the OECD member states, with 1.6 years less than the median of the OECD member states (81.4 years).

In terms of sexes, in 2014, Icelandic males had the highest life expectancy at birth at 81.3 years. Taiwanese males had a life expectancy at birth of 76.7 years, which was 4.6 years lower compared to Iceland and ranked 26th among the OECD member states, with 2.3 years less than the median of the OECD member states (79.0 years). Japanese females had the highest life expectancy at birth at 86.8 years. Taiwanese females had a life expectancy at birth of 83.2 years, which was 3.6 years lower compared to Japan and ranked 24th among the OECD member states, with 0.6 years less than the median of the OECD member states (83.8 years).

## (2) Life Expectancy at Age 65

Taiwan ranked 26th in life expectancy at age 65 for males and 23rd for females among the OECD member states.



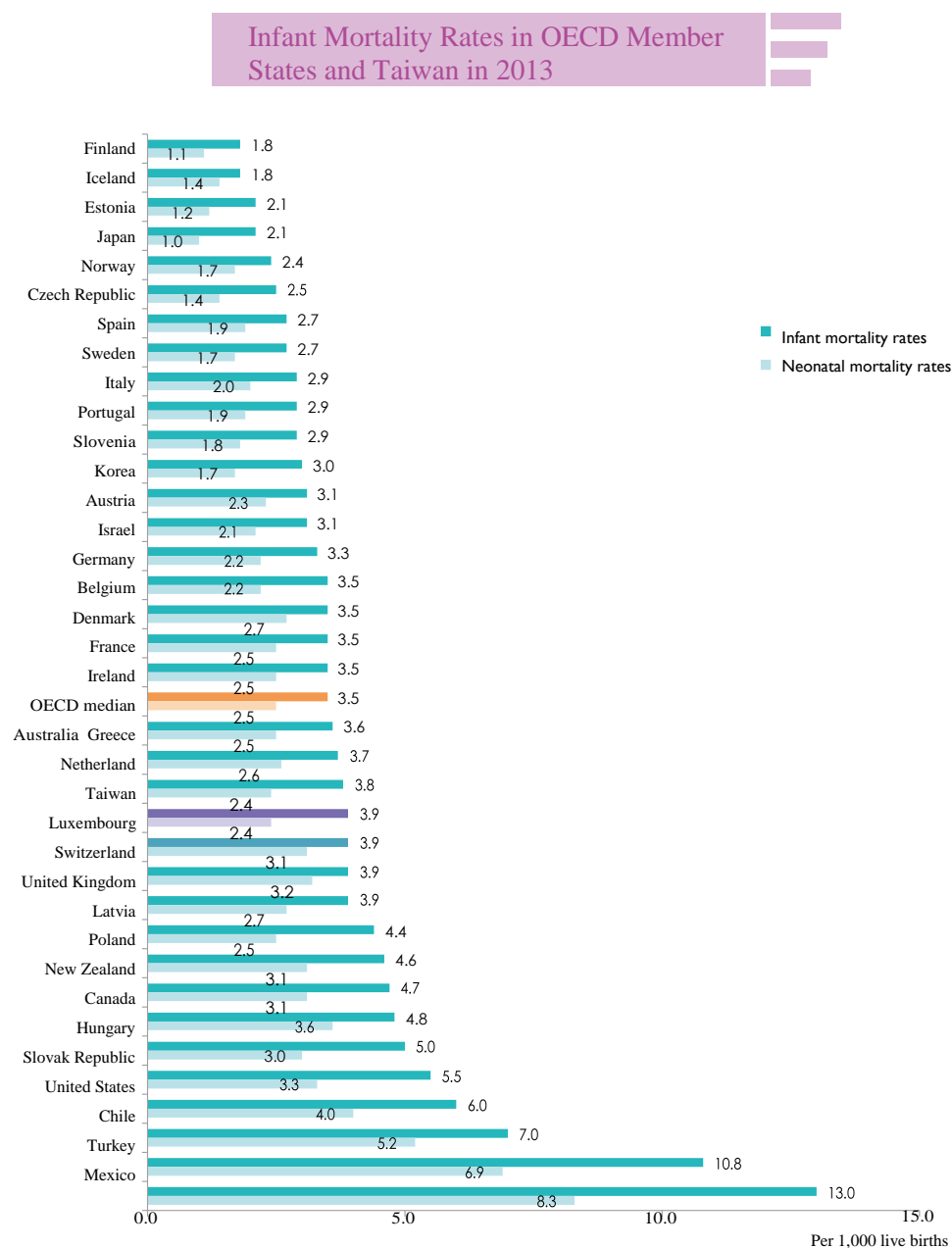
Sources: OECD Health Data. The most recent available data of the countries are used if there are no data for 2014.

In 2014, the country with the highest life expectancy at age 65 for males was France at 19.7 years. The life expectancy at age 65 for males in Taiwan was 17.9 years, which was 1.8 years lower compared to Iceland and ranked 26th among the OECD member states, with 0.5 years less than the median of the OECD member states (18.4 years).

In 2014, the highest life expectancy at age 65 for females was 24.2 years in Japan. The life expectancy at age 65 for females in Taiwan was 21.3 years, which was 2.9 years lower compared to Japan. It ranked 23rd among the OECD member states, with 0.3 years less than the median of the OECD member states (21.6 years).

## (3) Infant Mortality Rates

Taiwan ranked 23rd in infant mortality rates among the OECD member states.



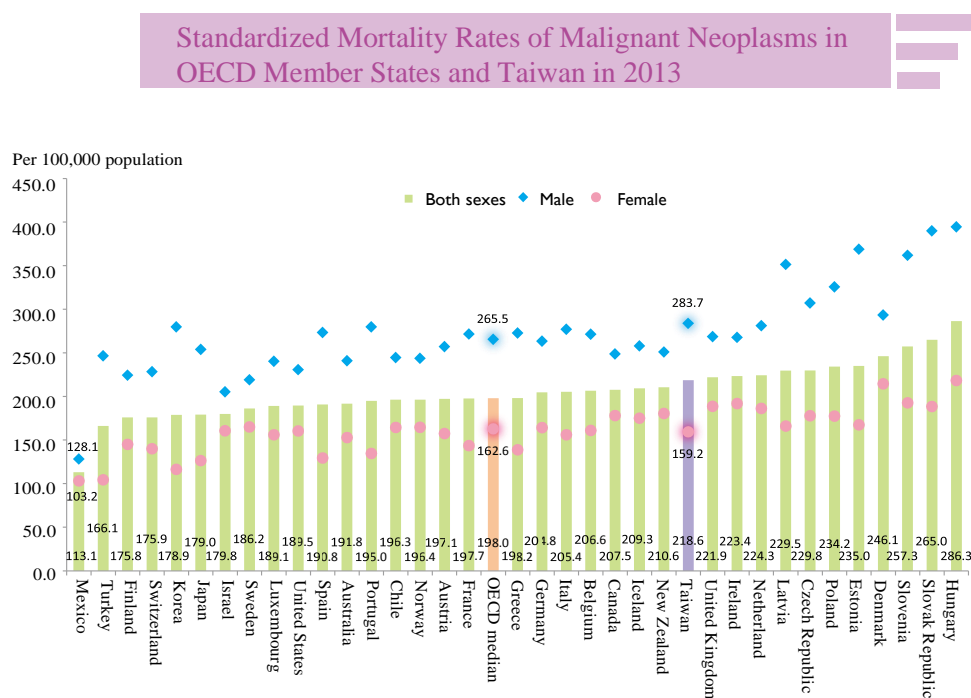
Sources: OECD Health Data. The most recent available data of the countries are used if there are no data for 2013.

In 2013, Finland and Iceland had the lowest infant mortality rate at 1.8 deaths per 1,000 live births. The mortality rate in Taiwan was 3.9 deaths, ranking 23rd among the OECD member states and 0.4% higher than the median of the OECD member states (3.5 deaths).

In 2013, Japan had the lowest neonatal mortality rate (deaths of neonates before reaching 28 days of age) at 1.0 deaths per 1,000 live births. The mortality rate in Taiwan was 2.4 deaths, ranking 17th among the OECD member states and 0.1% lower than the median of the OECD member states (2.5 deaths).

#### (4) Standardized Mortality Rates for Malignant Neoplasms

Taiwan ranked 25th among the OECD member states in standardized mortality rates for malignant neoplasms.



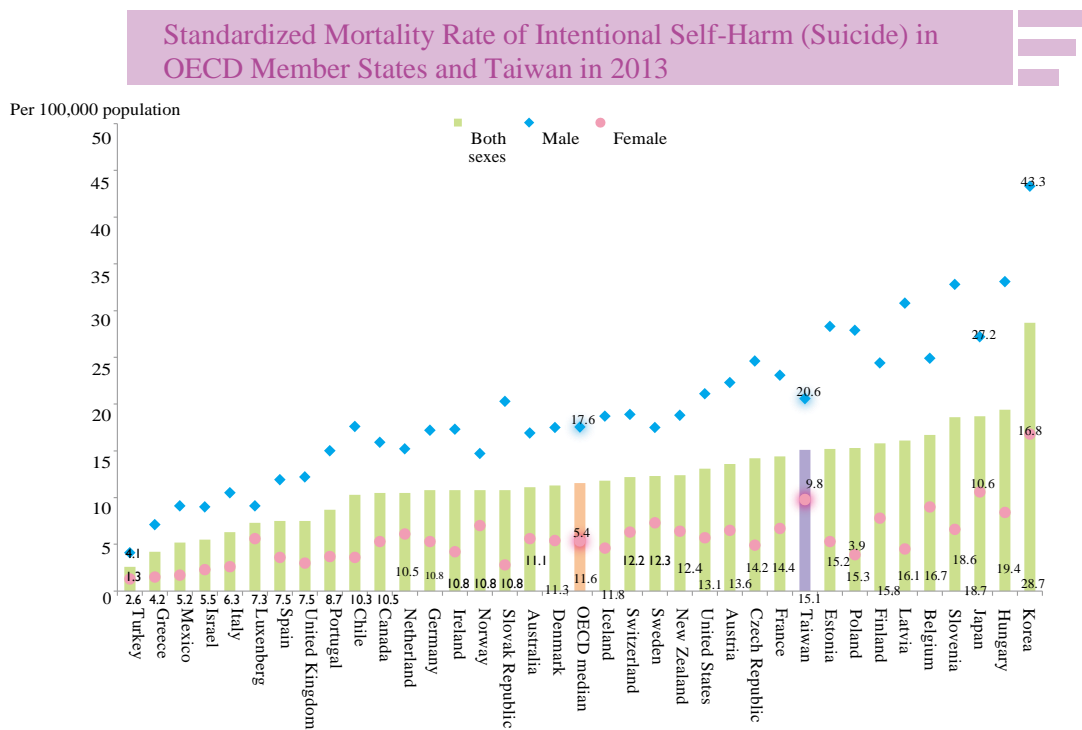
Sources: OECD Health Data. The most recent available data of the countries are used if there are no data for 2013.  
 Note: The standardized mortality rates are calculated based on the 2010 OECD standard population.

The standardized cancer mortality rate for both sexes was the lowest in Mexico at 113.1 deaths per 100,000 population in 2013. The standardized mortality rate in Taiwan was 218.6 deaths, which was higher than the median of the OECD member states (198.0 deaths) and ranked 25th among the OECD member states.

In terms of causes of death by sex, the standardized cancer mortality rate for males was still the lowest in Mexico at 128.1 deaths. The standardized mortality rate for males in Taiwan was 283.7 deaths, which was higher than the median of the OECD member states (265.5 deaths) and ranked 28th among the OECD member states. The standardized cancer mortality rate for females was the lowest in Mexico at 103.2 deaths. The standardized mortality rate for females in Taiwan was 159.2 deaths, which was lower than the median of the OECD member states (162.6 deaths) and ranked 15th among the OECD member states.

## (5) Standardized Mortality Rates for Intentional Self-Harm (Suicide)

Taiwan ranked 27th among the OECD member states in the standardized suicide mortality rate.



Sources: OECD Health Data. The most recent available data of the countries are used if there are no data for 2013.  
 Note: The standardized mortality rates are calculated based on the 2010 OECD standard population.

The standardized suicide mortality rate for both sexes was the lowest in Turkey at 2.6 deaths per 100,000 population in 2013. The standardized mortality rate in Taiwan was 15.1 deaths, which was higher than the median of the OECD member states (11.6 deaths) and ranked 27th among the OECD member states.

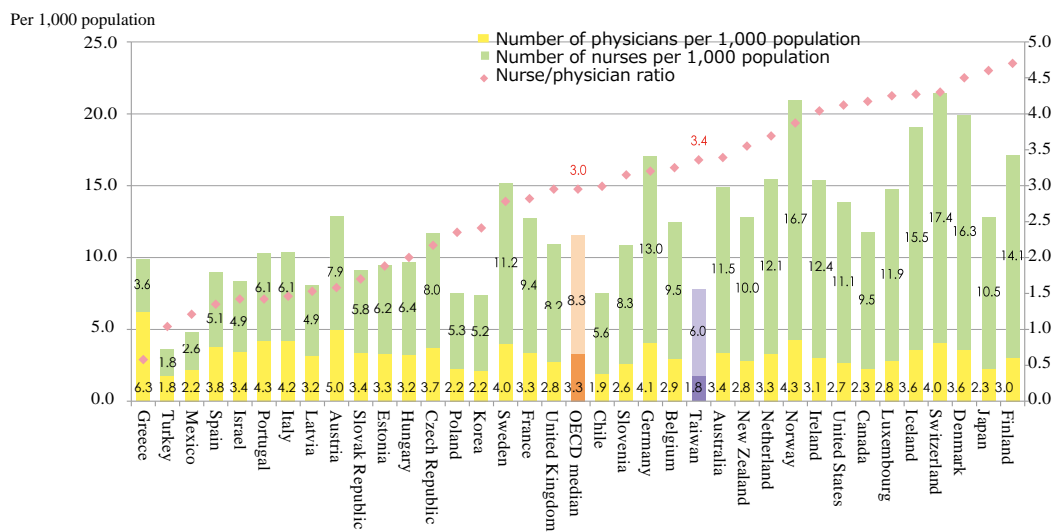
In terms of sex, the standardized suicide mortality rate for males was the lowest in Turkey at 4.1 deaths per 100,000 population. The standardized mortality rate for males in Taiwan was 20.6 deaths, which was higher than the median of the OECD member states (17.6 deaths) and ranked 23rd among the OECD member states. The standardized suicide mortality rate for females was the lowest in Turkey at 1.3 deaths per 100,000 population. Ranking 34th among the OECD member states, the standardized mortality rate for females in Taiwan was 9.8 deaths, which was higher than the median of the OECD member states (5.4 deaths) and only lower than the rates in Korea and Japan.

## 2. Medical Resources and Their Utilization

### (1) Nurse-Physician Ratios

In 2013, there were 3.4 nurses per physician in Taiwan, which was more than the median of the OECD member states (3.0 nurses).

Number of Nurses Per physician in OECD Member States and Taiwan in 2013



Source: OECD Factbook 2015-2016, Health at a Glance 2015.

The most recent available data of the countries are used if there are no data for 2013.

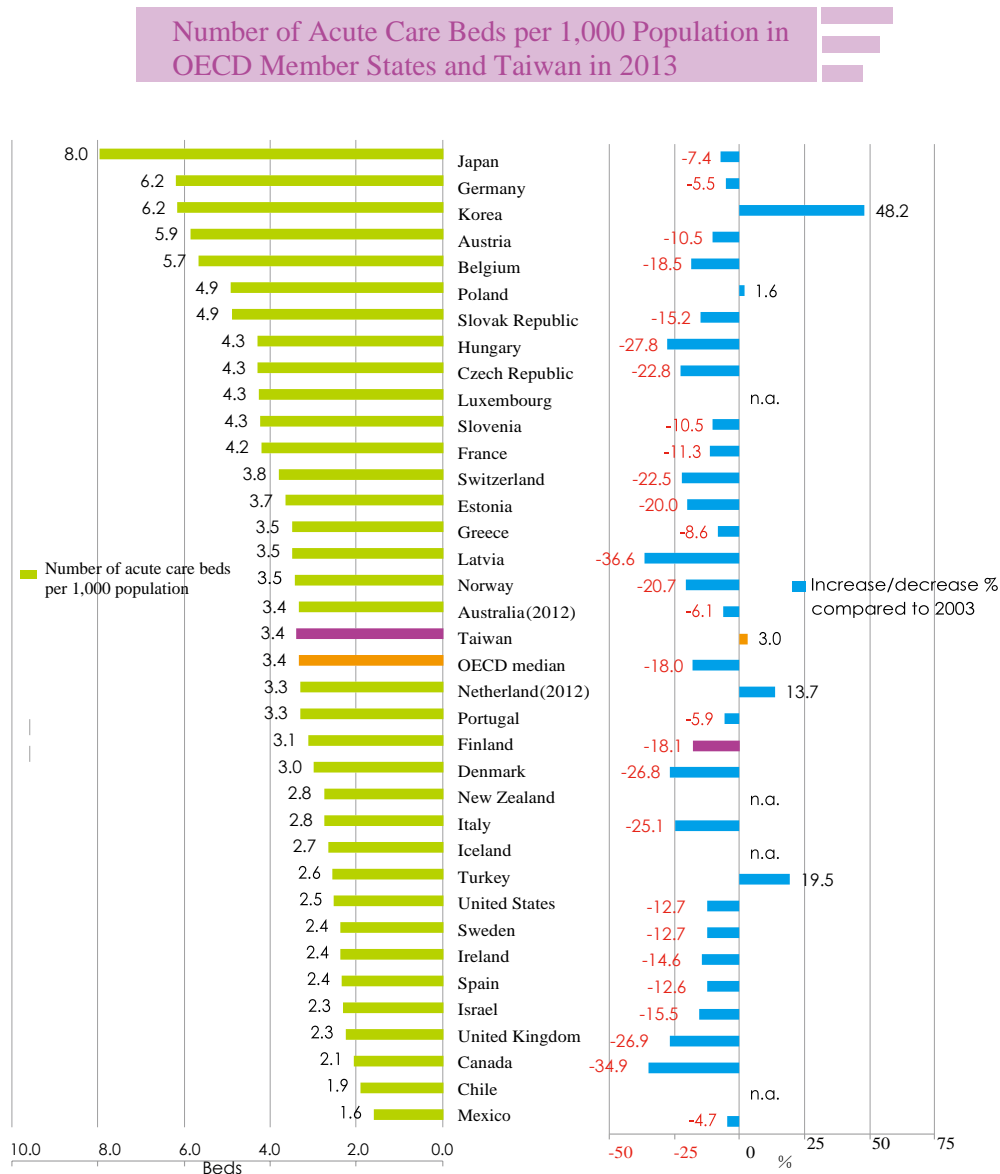
Note: The number of physicians in Taiwan refers to the number of Western medicine practitioners in medical institutions, and the number of nurses refers to the number of professional registered nurses and registered nurses.

In 2013, Greece had the highest number of physicians per 1,000 population at 6.3 physicians. Taiwan had 1.8 physicians per 1,000 population, which was less than the median of the OECD member states (3.3 physicians) and ranked 35th among the OECD member states, only higher than Turkey. Switzerland had the highest number of nurses per 1,000 population at 17.4 nurses. Taiwan had 6.0 nurses per 1,000 population, which was less than the median of the OECD member states (8.3 nurses) and ranked 26th among the OECD member states.

In 2013, the highest nurse-physician ratio (the number of nurses per physician) was 4.7 in Finland. The nurse-physician ratio in Taiwan was 3.4, which was higher than the median of the OECD member states (3.0) and ranked 14th among the OECD member states.

## (2) Number of Acute Care Beds per 1,000 Population

In 2013, Taiwan had an average of 3.4 acute care beds per 1,000 population, which was the same as the median of the OECD member states.



Source: 1. OECD Health Statistics 2016.

2. Department of Statistics, Ministry of Health and Welfare

Notes: 1. The acute care beds refer to general acute care beds, excluding acute psychiatric care beds.

2. There are no available data for Luxembourg, New Zealand, Iceland, and Chile for 2003; thus, there is no increase/decrease % data.

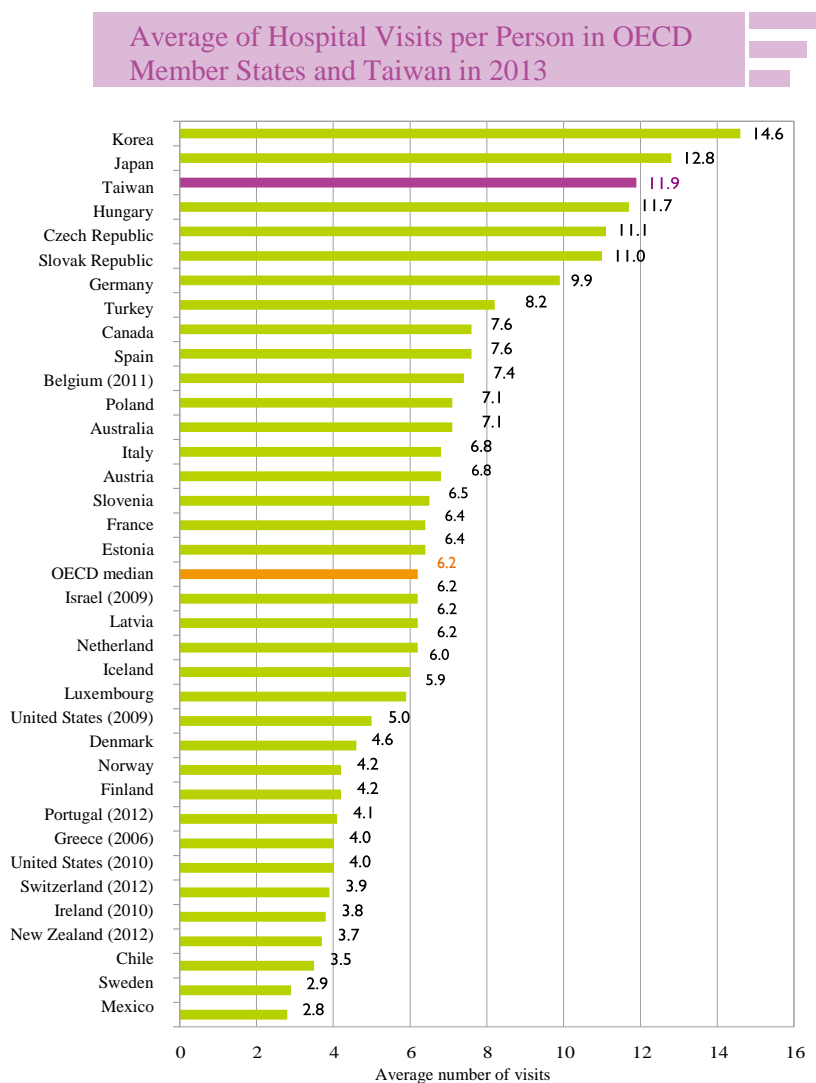
In 2013, Japan had the highest average of acute care beds per 1,000 population at 8.0 beds. Taiwan had 3.4 beds, which was the same as the median of the OECD member states and ranked 19th among the OECD member states.

In comparison to 10 years ago, the number of acute care beds per 1,000 people in the majority of OECD member states has declined. The largest decrease was 36.6% in Latvia. Acute care beds dropped by 7.4% in Japan and 12.7% in the United States. Besides Taiwan, acute care beds increased in only four countries, South Korea, Poland, the Netherlands, and Turkey.



### (3) Number of Hospital Visits

In 2013, the average number of visits to Western medicine outpatient clinics for each person in Taiwan was 11.9, which was the third highest following 14.6 in Korea and 12.8 in Japan.



Source: 1. OECD Health Statistics 2016.

2. Department of Statistics, Ministry of Health and Welfare

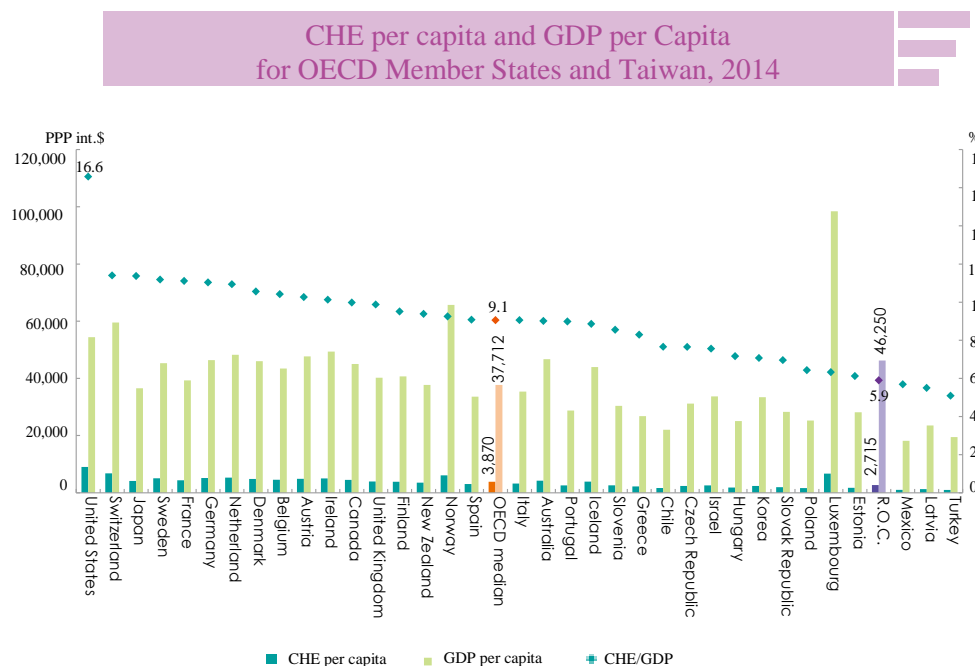
Notes: 1. The data does not include the number of visits to dental medicine clinics.

2. The data for Taiwan show the average number of visits to Western medicine outpatient clinics for each person. The formula: number of declared Western medicine outpatient visits covered by the National Health Insurance / number of beneficiaries at the end of each year; the number of visits by others on behalf of patients are excluded from the declared visits.

In 2013, the highest average number of visits to Western medicine outpatient clinics for each person was seen in Korea at 14.6. Taiwan had an average of 11.9, which was the third highest among the OECD member states, only behind Korea and Japan, and 1.9 times that of the median of the OECD member states (6.2)

### 3. Health Expenditure

(1) In 2014, Taiwan's CHE by purchasing power parity was 5.9% of GDP, 3.2% lower than the median of OECD member states.



Source: OECD Health Data 2016.

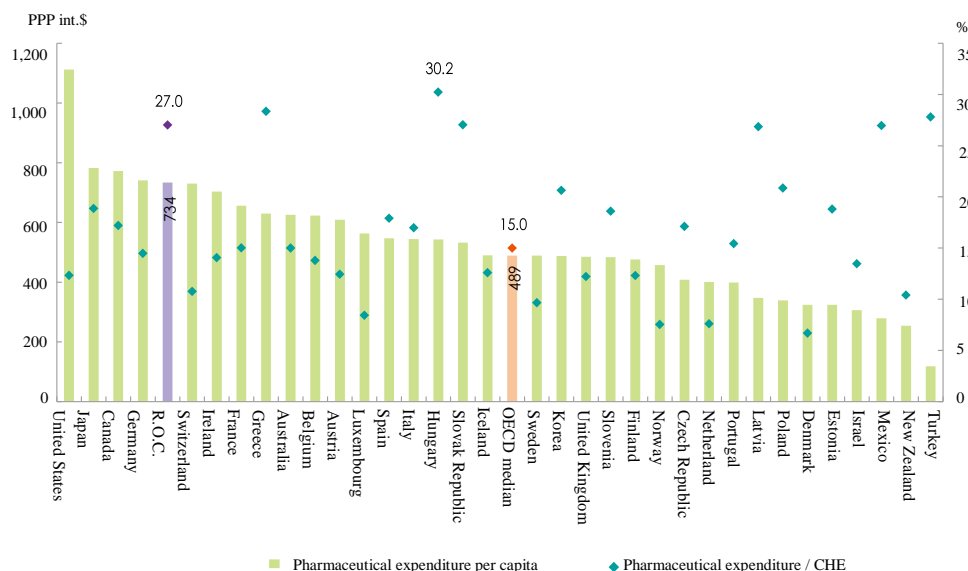
After adjusted using purchasing power parity (PPP), the 2014 current health expenditure (CHE) per capita and GDP per capita in Taiwan were 2,715 PPP int. \$ and 46,250 PPP int. \$, ranking 22nd and 10th, respectively, among the OECD member states.

Among the OECD member states, the United States had the highest CHE/GDP ratio (16.6%) in 2014. Taiwan had a ratio of 5.9%, which is 3.2% lower than the median of the OECD member states (9.1%). Taiwan is not an OECD member, but her rank is equivalent to 33rd among the OECD member states, only higher than Mexico, Latvia, and Turkey.

## (2) Pharmaceutical Expenditure as a share of Current Health Expenditure

**In comparison to OECD member states, the ratio of Taiwan's pharmaceutical expenditure by purchasing power parity in CHE was relatively high in 2014.**

Pharmaceuticals expenditure as % of CHE and Pharmaceutical Expenditure per Capita for OECD Member States and Taiwan, 2014



Sources: 1. OECD Health Data 2016. The most recent available data of the OECD member states are used if there are no data for 2014.  
2. No data are available for Chile.

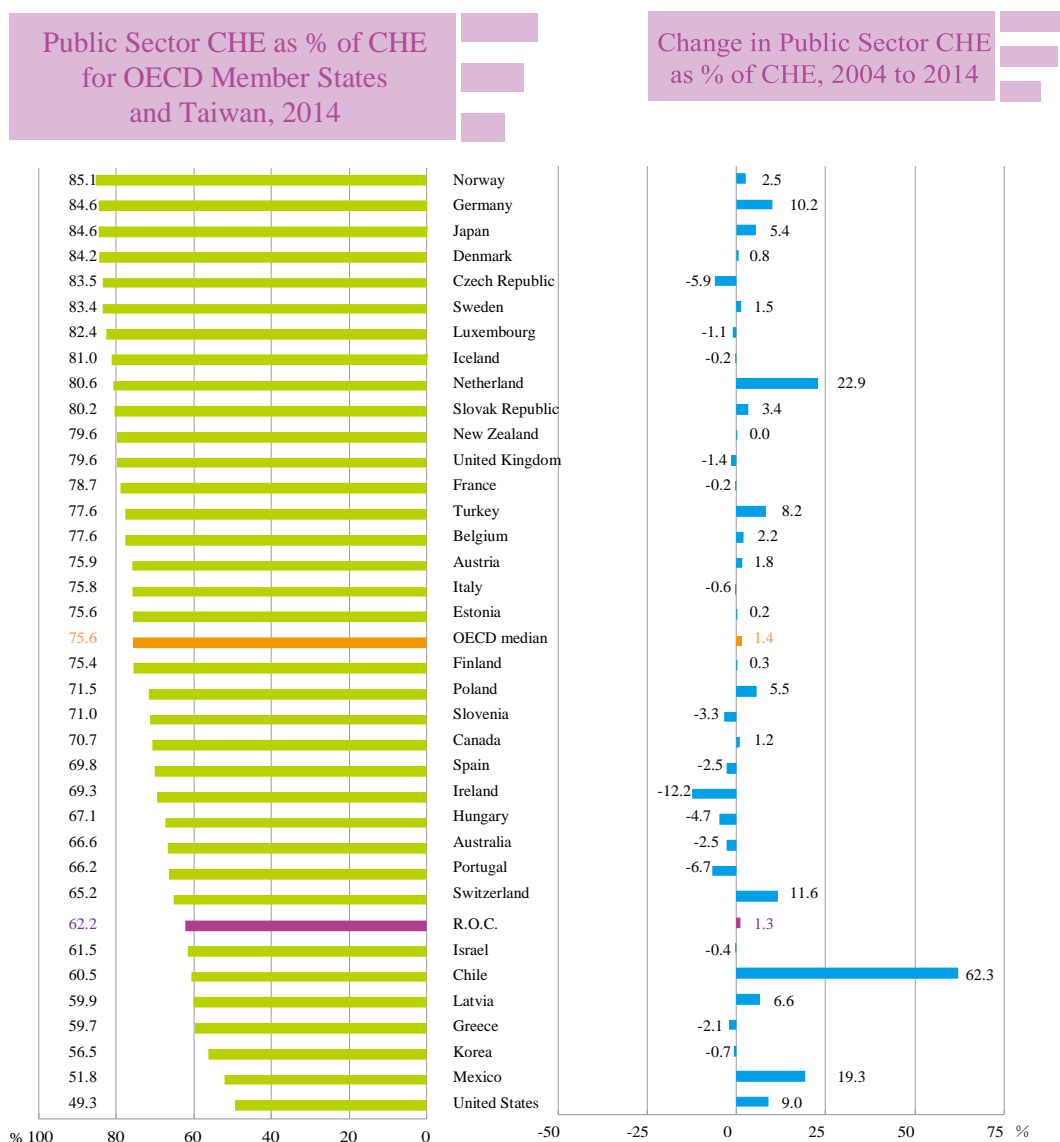
When calculating using purchasing power parity (PPP), the pharmaceutical expenditure per capita in Taiwan in 2014 was 734 PPP int. \$, which was higher than the median of the OECD member states (489 PPP int. \$) and ranked 5th among the OECD member states.

In 2014, Hungary had the highest pharmaceutical expenditure to CHE ratio (30.2%). The ratio was 27.0% in Taiwan, 12.0% more than the median of the OECD member states (15.0%). Taiwan ranked 5<sup>th</sup> for this ratio, which was lower than Hungary, Greece, Turkey, and Slovak Republic.

## VII International Comparisons

### (3) Public Sector Current Health Expenditure as a share of Current Health Expenditure

In 2014, the ratio of Taiwan's public sector CHE to overall CHE was lower than the median of OECD member states.



Source: OECD Health Data 2016.

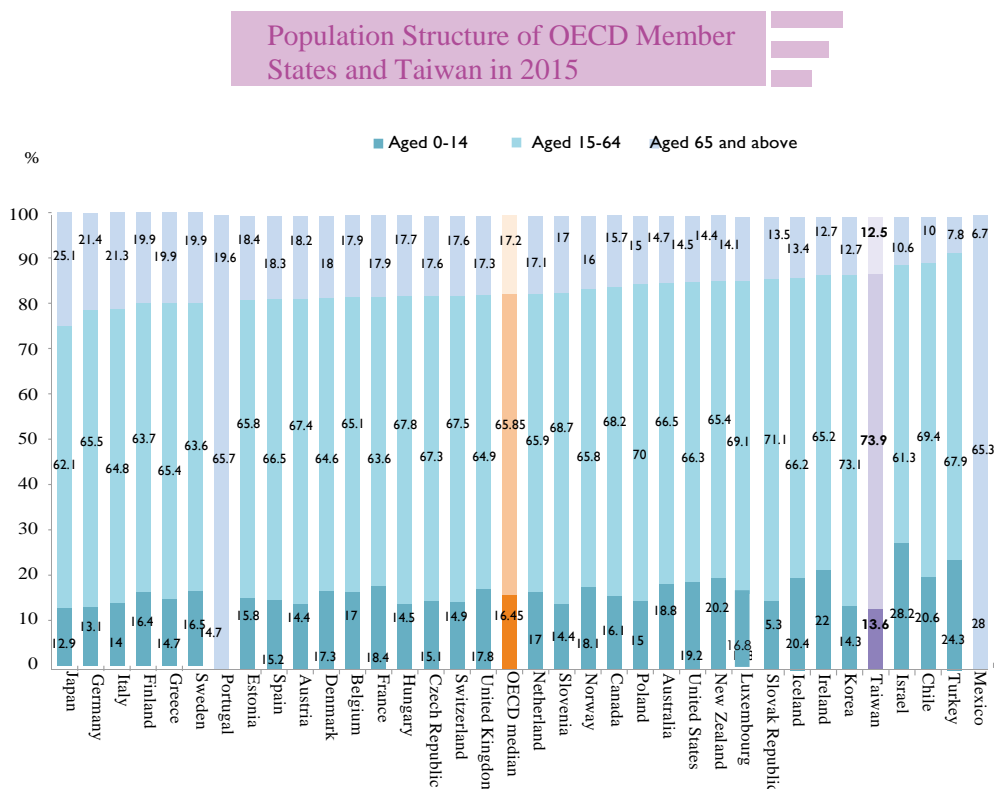
In 2014, Norway had the highest ratio of public sector CHE to overall CHE (85.1%). Taiwan was 62.2%, lower than the median of 75.6% among OECD member states and ranked 29th among OECD member states.

The majority of OECD member states showed an upward trend in the public sector share of CHE, with Chile having the highest increase (62.3%). Netherlands increased by 22.9%, Mexico by 19.3%, and Taiwan by 1.3%. Only 15 member states, including Ireland, Portugal, Czech Republic, and Hungary, showed a decreasing trend.

# 4. Demographic Statistics

## (1) Population Structure

In 2015, the population aging in Taiwan was relatively slow when compared to the OECD member states.



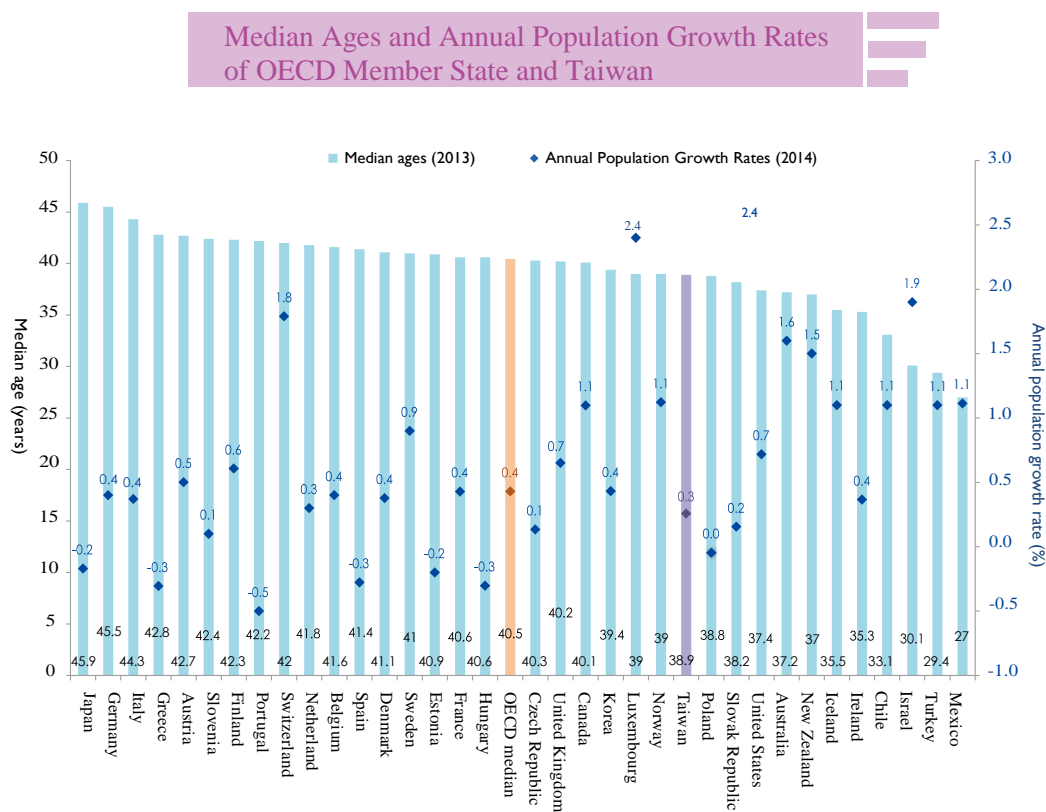
Source: 1. OECD Health Data. ALFS Summary tables, Population under 15, Population 15-64 and Population over 65 as % of population (2015). The most recent available data of the countries are used if there are no data for 2015.  
2. Ministry of the Interior

In 2015, Taiwan's population aged 0-14 accounted for 13.6% of the total population, which was lower than the median of the OECD member states and ranked 33rd among the OECD member states. The population aged 65 and above accounted for 12.5%, which was lower than the median of the OECD member states and put Taiwan in the 31st place among the OECD member states, only above Israel, Chile, Turkey, and Mexico.

From the analysis of population aging in each country based on the old-age dependency ratio (dependency ratio = population aged 65 and above/population aged 15-64\*100), it is found that the dependency ratio for Taiwan was 16.9 in 2015, ranking 32nd among the OECD member states, only above Chile, Turkey, and Mexico. Compared with the OECD member States, the population aging in Taiwan was lower.

## (2) Annual Population Growth Rates and Median Ages

The median age in Taiwan was 38.9 years in 2013, indicating that Taiwan is a country with a relatively young population compared to the OECD member states.



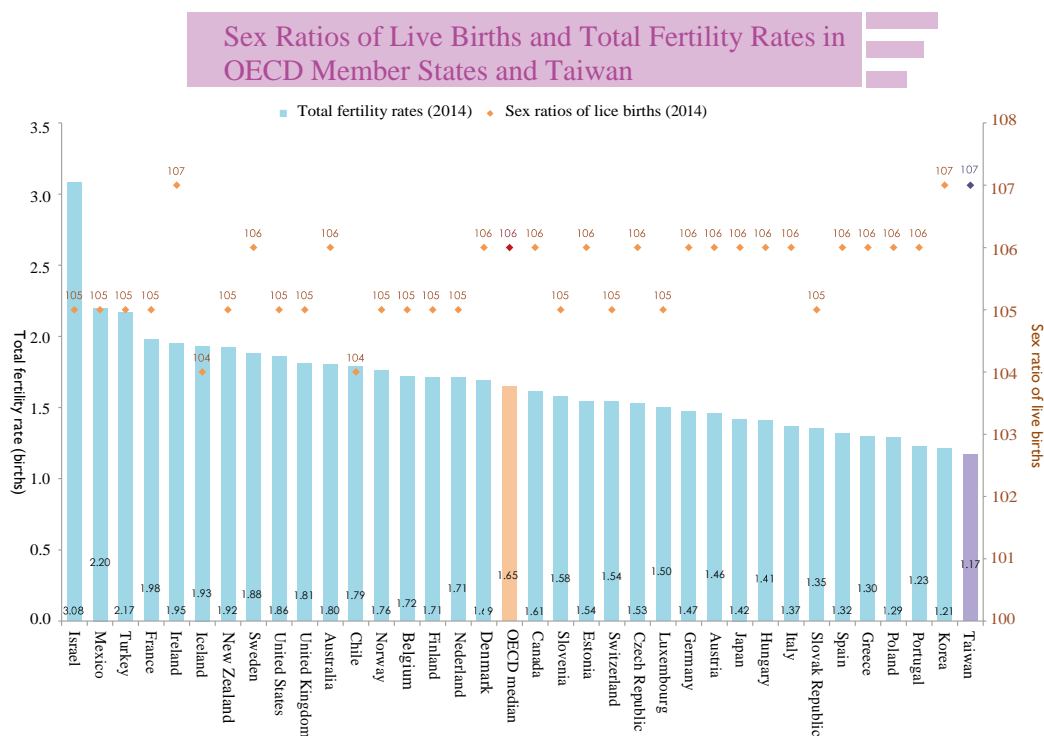
Sources: 1. OECD Health Data, Population growth rate (%).  
 The most recent available data of the countries are used if there are no data for 2014.  
 2. WHO World Health Statistics, Population median age (years).  
 The most recent available data of the countries are used if there are no data for 2013.  
 3. Ministry of the Interior

The annual population growth rate in Taiwan in 2014 was 0.3%, ranking 24th among the OECD member states and lower than the median of the OECD member states. A decline was seen in the population growth rate in Taiwan.

The median age of Taiwan's population in 2013 was 38.9 years, ranking 24th among the OECD member states and lower than the median of the OECD member states (40.5). Taiwan is a country with a relatively young population.

### (3) Sex Ratios of Live Births and Total Fertility Rates

The sex ratio imbalance and low birth rate are issues that require attention in Taiwan.



Source: 1. World Bank, Health Nutrition and Population Statistics, Sex Ratio at Birth (male births per one female birth). The most recent available data of the countries are used if there are no data for 2014.  
 2. OECD Health Data, Total fertility (children per woman). The most recent available data of the countries are used if there are no data for 2014.  
 3. Ministry of the Interior

In 2014, the sex ratio of live births (male births/female births\*100) in Taiwan was 107, which was higher than that of most of the OECD member states and higher than the normal range of the sex ratio of live births (102 to 106) as deemed by demographic experts. There has been a gradual decline in the traditional preference for sons over daughters in Taiwan in recent years, and the sex ratio in Taiwan decreased by 3 percent compared to 2004. A comparison with the OECD member states shows that the sex imbalance at birth remains an issue that requires attention in Taiwan.

In 2014, the total fertility rate in Taiwan was 1.17 for each woman of child-bearing age, which was low compared to the OECD member states and lower than the population replacement level of 2.1. Due to such influences as getting married and giving birth at later ages in recent years, the total fertility rate for each woman of child-bearing age decreased by 0.15 when compared to 2004.