

Preface

The world is heading towards an aging population. The population and the growth rates of elderly people in developed countries are increasing rapidly. The population aging in Taiwan had already entered the aged society in 2018. According to the projections made by the National Development Council, Taiwan will become a “super-aged society (where the population of elderly people exceeds 20%)” in 2026, faster than many European countries, the United States and Japan.

The reasons for this aging population in Taiwan, are on one hand, due to the advancement in medical care, extending the average life expectancy of people here. Therefore, the baby boomers, born after World War II, will successively become the elderly population. On the other hand, the changes in Taiwan’s society and people’s values have led to the phenomenon of late-marriages and a single-by-choice life style, reducing the fertility rate of women. The crisis of fewer children and the aging of demographic structure in Taiwan are expected as a result.

The Ministry of the Interior has the most complete demographic database in Taiwan, which can be used to carry out real-time analysis on population structure changes in Taiwan. With regards to population aging, the aging index in February 2017 exceeded 100 for the first time, reaching 100.18; this was the first time in Taiwan that the elderly population surpassed the young population. In March 2018, the population of elderly people with an age over 65 in Taiwan reached 14.05%, officially entering Taiwan into the era of an aged society. As for the phenomenon of fewer children, the total fertility rate in 2010 dropped to 0.90 people per woman, reaching the lowest point in history. Since then, the government of Taiwan has been actively promoting various pronatalist policies. The fertility rate in 2018 was 1.06 people. Even though it was still lower than the fertility rate of 2.1 people, which is required for maintaining the population stability in Taiwan, it has gradually shown promising results due to the efforts to improve fertility. In addition, the National Development Commission

projected that after reaching its peak in 2021, Taiwan will enter an era of negative population growth.

The above-mentioned demographic changes will cause many problems, including the reduction of the labor force, which will affect the competitiveness, taxation, education, and finance of our nation. The Executive Yuan attaches great importance to the population issue. The Ministry of the Interior also, in accordance with the ROC (Republic of China) Population Policy Guidelines, actively cooperates with the Executive Yuan to plan and promote various population policies, including the activities to encourage marriage and childbirth, the housing improvement policies, the personal safety strengthening measures for women, children and elderly people, and the amendment of immigration regulations to attract international talents and increase manpower to reduce the impact of the imbalanced population structure.

The Ministry of the Interior publishes the “Population Policy Data Collection” every year to include chapters on population policy development & evolution, demographic structure change, future population estimates, demographic statistics and population policy-related regulations etc. The Year 2019 edition even compiles in detail the specific measures taken by the Ministry of the Interior in the past five years, serving as a reference for government agencies, academic institutions, and schools for the promoting of relevant businesses. We sincerely invite all of you to get involved and care about the population issues in Taiwan.

This publication collects information from many sources. If there are any mistakes, your kind correction is very much appreciated.

Sincerely,
Minister



November 2019

Table of Content

I. FORWARD.....	- 1 -
II. EVOLUTION OF POPULATION POLICY.....	- 5 -
1. Implications Of Population Policy	- 5 -
2. Reform Of Organizational Structure	- 5 -
3. Population policy reform and milestones in development	- 13 -
(I) Before the 90s, the emphasis is on reasonable population distribution and population quality improvement	- 13 -
(II) In the 2000s, the Population Policy White Paper was established in responding to the issues of fewer children and aged population.....	- 15 -
(III) In 2011, the emphasis is on new residents, immigration issues, amending the Guidelines and the White Paper	- 18 -
(IV) Since 2014, the level was upgraded to the Executive Yuan, and all Ministries and Departments will perform accordingly to the Guidelines	- 19 -
III. POPULATION CHANGE	- 24 -
1. Introduction To Change Of Population	- 25 -
2. Population Composition	- 31 -
(I) Age composition.....	- 31 -
(II) Sex Composition	- 40 -
(III) Marriage Composition	- 43 -
(IV) Ethnic Composition	- 52 -
(V) Educational Composition.....	- 56 -
(VI) Industrial Composition	- 62 -
(VII) Labor Force Composition.....	- 67 -
(VIII) Composition of Newborn Baby	- 74 -
3. Average life expectancy at birth (average life expectancy).....	- 81 -
4. Average Age of Death.....	- 88 -
5. Population Distribution	- 90 -
(I) Demographic Movements	- 90 -
(II) Population Density	- 95 -
IV. PRACTICAL IMPLEMENTATION OF POPULATION POLICY	- 97 -
1. Population Policy Content and Important Measures of the Past Five Years of Ministry of the Interior	- 97 -
(I) Basic Idea and Content of Population Policy	- 98 -

(II) Measures promoted by the Ministry of the Interior in line with the ROC Population Policy Guidelines in the past five years	99 -
(III) Countermeasures against the declining birthrate in Taiwan (2018 ~ 2022)	114 -
2. Implementaton Of Population Policy Advocacy	124 -
(I) Advocacy Implementation over the Years	124 -
(II) Explanation of the changes in the population policy of the Ministry of the Interior the and implementation status	139 -
3. Target Values for the Nation's Marriage and Childbirths.....	142 -
(I) Target Values for the Crude Marriage Rate	142 -
(II) Target Values for the Number of Children Born	143 -
V. FUTURE POPULATION GROWTH PROJECTIONS	145 -
1. Population Change Trends	145 -
2. Age of population and dependency rate in three stages	147 -
3. Changes in the preschool and school-age population composition	149 -
(I) Preschool Population (0-5 years-old)	149 -
(II) School-age population (6-21 years old)	149 -
4. Composition trends in the population of women of childbearing age.....	150 -
5. Composition trends in the working-age population	151 -
6. Composition Trends in the Elderly Population	152 -
7. Population Key Indicators	154 -
VI. CONCLUSION	156 -

List of Charts

Chart 3-1-1 Crude birth rate, crude death rate and natural increase rate of the population over the years.....	28 -
Chart 3-1-2 Population statistics over the years	28 -
Chart 3-1-3 Total fertility rate over the years.....	29 -
Chart 3-2-1-1 Year-end age rate percentages for three stages of the population	34 -
Chart 3-2-1-2 Elderly proportion in the total population over the years	34 -
Chart 3-2-1-3 Aging timescale - Medium projection	35 -
Chart 3-2-3-1 Marriage and divorce numbers and trends for males and females over the years...-	44 -
Chart 3-2-3-2 Average age of First Marriage for Males and Females over the Years	45 -
Chart 3-2-3-3 The marriage rate for males and females aged from 20 to 49 in Taiwan	46 -
Chart 3-2-4-1 Hakka population in different cities and counties estimated based on the definition stated in the Hakka Basic Act	54 -
Chart 3-2-4-2 Population Ratio of each indigenous ethnic group	55 -

Chart 3-2-6 Industrial change in the over 15 year-old employed population.....	63 -
Chart 3-2-7-1 2018 Overview of Manpower Resources.....	68 -
Chart 3-2-7-2 Labor force age compositions.....	69 -
Chart 3-2-7-3 Labor force participation rate of Both Sexes over the Past 20 Years	72 -
Chart 3-2-7-4 Labor force participation rates for the two sexes by age group.....	72 -
Chart 3-2-7-5 Labor force and labor force participation rates in major countries of both sexes in 2018.....	74 -
Chart 3-3-1 Development outline of citizen's average life expectancy	82 -
Chart 3-5-1 Population society increasing trend in the 4 major areas and the Kinmen/Matsu region.....	92 -
Chart 5-1 2018 and 2065 population pyramid - Medium projection.....	145 -
Chart 5-2 Birth rate, death rate and natural increase rate trends - Medium projection	147 -
Chart 5-3 Population change trends in three stages - Medium projection.....	149 -
Chart 5-4 Aging timescale - Medium projection.....	152 -

List of Tables

Table 3-1-1 Crude birth rate, crude death rate, natural increase rate, number of birth and total fertility rate of the population over the years.....	26 -
Table 3-1-2 Population and total increase rate, natural increase rate and community increase rate for each city and county of 2018	30 -
Table 3-1-3 Number of births, crude birth rate and total fertility rate for each city and county of 2018.....	31 -
Table 3-2-1-1 Year-end age structure, dependency ratio and aging index for three stages of the population	32 -
Table 3-2-1-2 Worldwide comparison for dependency ratio and aging index	37 -
Table 3-2-1-3 Age structure and dependency ratio at 3-stages for each city and county at the end of 2018	39 -
Table 3-2-2-1 Taiwan's population and sex ratio.....	40 -
Table 3-2-2-2 Sex ratio for elderly population with age over 65 years old.....	41 -
Table 3-2-2-3 Year-end of 2018 Sex ratio by county or city	42 -
Table 3-2-3-1 2018 Marriage and divorce numbers and marriage and divorce rates for the population of each city and county	47 -
Table 3-2-3-2 Marriage Status for Citizens in Taiwan over the Years.....	48 -
Table 3-2-3-3 No. of divorce couples over 10 Years	49 -
Table 3-2-3-4 2018 Number of Marriage Registration for Taiwan Citizen marries Non-Citizen (sorted according to various regions in Taiwan)	50 -
Table 3-2-3-5 Number of same-sex couples registered for marriage and marriage termination by the end of October 2019 in different cities and counties	50 -

Table 3-2-4 Indigenous population and ratio by County or City in 2018	56 -
Table 3-2-5-1 Educational composition of the over-15 year-old population of Taiwan	57 -
Table 3-2-5-2 The educational level of the nation's tertiary-educated population over the years	58 -
Table 3-2-5-3 Year-end of 2018 over 15-year-old population of each county and city by junior college level, university degree level and above and illiteracy	60 -
Table 3-2-5-4 Higher Education Rate of Population from ages 25 - 64 in major countries....	61 -
Table 3-2-6-1 Over 15 year-old employed population by occupation	63 -
Table 3-2-6-2 2018 Average Industry Ratios for Employed People	65 -
Table 3-2-7-1 Overview of Human Resources.....	67 -
Table 3-2-7-2 Labor force participation rate by sex and age.....	70 -
Table 3-2-7-3 2018 Labor force and labor force participation rates in each city and county..	73 -
Table 3-2-7-4 Labor force and labor force participation rates in major countries	73 -
Table 3-2-8-1 Sex ratio at birth according to mothers' age	75 -
Table 3-2-8-2 Sex ratio at birth by order of children born	76 -
Table 3-2-8-3 2018 Number of children born and Sex ratio by county or city	77 -
Table 3-2-8-4 The Composition of number of births by mothers' live-birth order.....	78 -
Table 3-2-8-5 The Composition of number of births by mothers' age.....	79 -
Table 3-2-8-6 The Composition of number of births of 1st birth by mothers' age	79 -
Table 3-2-8-7 Number of births by mothers' age and education	80 -
Table 3-2-8-8 Number of births by mothers' original nationality.....	81 -
Table 3-3-1 Citizens' average life expectancy over the years.....	82 -
Table 3-3-2 Comparison of average life expectancy of each county /city	83 -
Table 3-3-3 Average life expectancy at birth for major countries.....	85 -
Table 3-4-1 Citizens' average age of death.....	88 -
Table 3-4-2 2018 Average age of death in each city and county	89 -
Table 3-5-1-1 Overview of Community increase of population over the years	91 -
Table 3-5-1-2 Community increase of population figures for the four main regions, & Kinmen and Matsu regions	92 -
Table 3-5-1-3 Community increase of population circumstances over the past 7 years by county or city, and region	93 -
Table 3-5-2-1 Population density of the four main regions.....	95 -
Table 3-5-2-2 Population density of each county or city over the past 3 years.....	96 -
Table 4-1 Advocacy Slogans over the years	126 -
Table 4-2 Themes and key items of Population Policy Advocacy over the years.....	127 -
Table 4-3 Performance evaluation results of the implementation achievements in the promotion of population policy measures conducted by the Ministry of the Interior in 2018 -	141 -

Table 5-1 Overview of total population – Medium projection.....	146 -
Table 5-2 Birth rate and death rate – Medium projection	146 -
Table 5-3 Age of population and composition in three stages- Medium projection	148 -
Table 5-4 Preschool and school-age population figures in the future 10 and 20 years- Medium . projection.....	150 -
Table 5-5 Age composition in the population of women of childbearing age - Medium projection	151 -
Table 5-6 Age composition of the working-age population - Medium projection.....	152 -
Table 5-7 Aging index and middle-age - Medium projection	153 -
Table 5-8 Age composition of the elderly population—Medium projection	154 -

I. FORWARD

Population is one of the basic elements, which comprises a nation's constitution. Its composition, quality, structure, distribution and migration have ramifications on the development of the nation and the well-being of society. Therefore, many countries are committed to studying population issues, hoping to formulate a population policy that is in line with national goals and the interests of all citizens for promoting sustainable development of the country and enhancing national competitiveness.

Since Taiwan's land area and natural resources are very limited, however, in 1949, due to the government's move to Taiwan, and the effects of the post-war baby boom, coupled with the development of medical technology, the improvement of the health environment and population growth has been extremely rapid, heavy population pressure resulted, leading to overcrowding, intense academic competition, increased crime rates, energy shortages, environmental pollution, inadequate public facilities, transportation disorder and other related issues. These not only affected the country's economic development, but also hindered the improvement of citizens' living standards. Therefore, in order to alleviate the pressure on population growth, the government was to ardently work towards the population policy. The government worked in full cooperation with civic groups and citizens on the implementation of this population policy and family planning, the goal of alleviating population growth was effectively achieved. This performance earned the country first place out of over 120 developed and developing nations in the evaluation of the US Population Crisis Committee in 1987, and again in 1992. Population Action International in 1997 also gave Taiwan joint first place (with full marks), along with Hong Kong, Singapore, South Korea and Tunisia, out of a total of 88 countries assessed, leading to allied states dispatching observers to Taiwan in order to learn from our valuable experience in the implementation of population policy.

Although Taiwan effectively achieved the goal of alleviating population growth, the government re-adjusted the direction of population

policy implementation in response to the future needs of an aging society and sustainable national development in 1992, and also incorporated an immigration policy into its population policy in the hope of achieving such goals as maintaining a reasonable population growth, improving population quality and having a balanced population distribution.

The total fertility rate¹ of women in Taiwan in 1951 was 7.04 children. However, from 1984 onwards, it had fallen to below the maintaining a stable population's replacement rate of 2.1 children. And social changed and changed in the concept of citizens, Taiwan's fertility rate continued to decline. By 2010, the fertility rate fell to a historical low point of 0.90 children, climbing back up again to 1.06 children by 2018. At the same time, due to the improvement of medical care and the extending of average life expectancy, Taiwan has officially entered an aged society in March 2018. On the other hand, owing to the process of globalization, migration between countries has occurred frequently, resulting in immigration problems. Therefore, in order to alleviate the problem of Taiwan's aged population structure, fewer children and the rapid population changes caused by immigration among international countries and maintain Taiwan's competitiveness in globalization, the government of Taiwan must conduct in-depth investigation on current trends and issues and respond as early as possible.

The Executive Yuan on June 14, 2006 amended and approved the implementation of the "Republic of China Population Policy guidelines." Its focal points included population composition, quality, distribution, development, migrations, etc., as well as looking at today's population composition, sex roles, family structure, social resources, economic development, ethnic harmony and environmental protection, in keeping with the principles of human rights and the welfare of the people, the pursuit of the vision of sustainable development and environmental protection, harmonious coexistence with the world, and with the objectives of national development to improve the well-being of our citizens.

¹ The total fertility rate refers to the number of children that would be born to a woman over her lifetime in a hypothetical generation if she were to pass through the childbearing years bearing children according to a current schedule of age-specific fertility rates.

On March 10, 2008, the Executive Yuan issued the “Population Policy White Paper, proposing 21 policy measures covering 125 specific measures to tackle the issues of the trend towards fewer children, aging population, and increased immigration issues. In addition, to construct more diverse and comprehensive responding measures, the Executive Yuan approved twice amendments to the Population Policy White Paper on April 22, 2011 and July 12, 2013, separately. For the amendment on July 12, 2013, stipulated 18 policy measures, 107 specific measures, and 232 performance indicators, hoping to achieve the three great visions of "Creating a healthy environment for childbearing and child fostering, maintaining a moderate demographic structure", "Promoting family values, allowing the elderly to enjoy a healthy, dignified and energetic life" and "Respecting multiculturalism, creating a happy and harmonious life".

The “Republic of China Population Policy guidelines” was amended and approved by the Executive Yuan on December 7, 2011 to specify eight basic concepts, and 34 policy implications, covering aspects such as reaching a reasonable population composition, improving population quality, protecting labor rights, strengthening the social safety net, implementing sex equality rights, promoting ethnic equality, advancing a reasonable population distribution and protecting immigrant rights and interests, in order to create an environment in which citizens are happy to marry, willing to have children, and able to support them.

According to the announcement made by the Executive Yuan in July of 2013, the planning and preparation of the population policy is the responsibility of the National Development Council (hereinafter referred to as the NDC). In 2014, the NDC invited experts, scholars and relating governmental departments & agencies to jointly review the “ROC (Republic of China) Population Policy Guidelines”. The amendment was approved on December 27, 2014, which mainly incorporated the idea of “Expanding Labor Participation” and “Enhancing Immigration Policy”, to overcome the challenges of the current demographic transition. It is also hoped that under the trend towards fewer children and the aging population,

I.FORWARD

the amendment can help the government to propose policies that are more advanced and comprehensive.

II. EVOLUTION OF POPULATION POLICY

1. Implications Of Population Policy

Land, people, and sovereignty are the three basic elements constituting a country, and people in particular are the most important factor of the three. The composition, quality, distribution, development and migration of a country's population not only directly affect socio-economic development and the people's standard of living, but also have a direct bearing on the national development and well-being of its society. The so-called “population policy” refers to a kind of policy and strategy used by a state to solve population and socio-economic problems pertaining to fertility, parenting, education, quality, distribution as well as the maintenance of the ecological environment. Its purpose is to promote public health, advance economic development, and improve social welfare, to bring about a balanced distribution of population and industrial activities and to further ecologically sustainable development. Thus, the formulation of population policies should be in line with the principle of human rights and the welfare of the people, the pursuit of the vision of sustainable development and environmental protection, and in line with national development objectives of enhancing the well being of the citizens' lives.

2. Reform Of Organizational Structure

To steer the implementation of population policies, population research and analysis, the Social Affairs Department of the Executive Yuan established the Population Research Committee in 1941. The government moved to Taiwan in 1949, and the Ministry of the Interior (MOI) set up a Temporary Committee on Population Policy in 1966. In 1969, The “Ministry of the Interior Population Policy Committee” was set up according to Article 17 of the Population Policy guidelines published that year, and the “MOI Population Policy Committee Organizational Regulations” were submitted and approved by the Executive Yuan in 1970. In accordance with these regulations, this Ministry assigned the Deputy-minister for Home Affairs to serve concurrently as chairman, the Director

II. EVOLUTION OF POPULATION POLICY

of the Dept. of Household Registration, MOI to serve as vice chairman, and appointed 15-19 people as members, drawing on business people of relevant agencies as well as scholars and experts for the planning the implementation of population policy matters.

Subsequently, the very fast population growth led to the country facing problems of population pressure. To enhance the decision-making function of the Population Policy Committee, amendments to the “MOI Population Policy Committee Organizational Regulations” were submitted to the Executive Yuan for approval in April 1980 to improve the population policy administrative system as well as the coordination between relevant authorities. After the reorganization of the Population Policy Committee, the minister of this ministry served concurrently as chairman, while the three positions of vice-chairman were served by the heads and deputy heads of the Education Ministry, the Council for Economic Planning and Development, Executive Yuan, and the Department of Health, Executive Yuan, with 15-19 senior personnel of relevant authorities, scholars and experts also being invited to serve as members.

Article 28 of the Basic Code Governing Central Administrative Agencies Organizations provides that the Commission should have the focal points of its purpose determined as if it was classified as a case task force. Hence, the Executive Yuan abolished the organizational rules on August 27, 2004, issued a letter titled “MOI Population Policy Committee Focal Points” on August 30, 2004, and assigned 25 members in accordance with those focal points. The members include the chairman, served concurrently by the Minister of the Interior, 4 vice chairmen positions, filled by heads and deputy heads of the Ministry of Education, the Council for Economic Planning and Development, the Department of Health, Executive Yuan, and the MOI's General Affairs Deputy-minister, with the remaining members being 12 members consisting of scholars and experts, two representatives from the Executive Yuan, one from the Council of Labor Affairs, Executive Yuan, one from the Taipei City government, one from the Kaohsiung City government, and one each from the Ministry of the Interior, the Construction and Planning Agency, the Department of

Social Affairs and the Household Registration Affairs. An executive secretary was also appointed, served by the Director of the Dept. of Household Registration, MOI. The secretary and contracted researchers were appointed from MOI personnel, responsible as aides for committee affairs.

With respect to the three currently most pressing issues of the trend towards fewer children, the aging of the population, and increased immigration, we hope to construct a fair and universal child care system, build improved elderly economic security and care systems, plan the influx of economic and professional personnel, and implement policies providing care and counseling for the immigrant population as well as their employment rights. On January 17, 2007, the “MOI Population Policy Committee Focal Points” letter was issued and amended, increasing the 25 member positions appointed up to 27, with the addition of one person each from the MOI's Children's Bureau and the National Immigration Department.

In line with the recommendations of the CEPD's “Population Projections for R.O.C.: 2008-2056” report published in September 2008, the government must be able to properly cope with the future issues of fewer children and population aging, taking special precautions with respect to human assets and manpower use. Thus, it was necessary to enlist the additional help of scholars and experts from the fields of demography to provide professional advice with reference to the government's policies. On October 24, 2008, the “MOI Population Policy Committee Focal Points” letter was amended and issued which modified the number of focal point members from 27 to 29, and increased the number of scholars and experts from 11 to 13.

However, Taiwan has been facing the challenges of fewer children and more elderly people in recent years, and various sectors of society have repeatedly called on the Commission to improve the status of the population policy to enable integration of resources and effectively respond to these challenges, such as the recommendations made in the Control Yuan's 2010 “Evaluations and Measures the Government Should Have In

Tackling the Impact of the Trend Towards Fewer Children” project study report that suggested: “...the Executive Yuan should allow appropriate elevation of the status of the Population Policy Committee, lead inter-agency strategies, put forth appropriate contingency measures and multi-purposed supporting policies, fully consider long-term relevant variables as early as possible, and adopt effective strategies to address the social problems brought about by the trend towards fewer children, and maintain Taiwan's economic development and national competitiveness.” In the 21st Meeting of the Presidential Office Monthly Fiscal Report dated June 23, 2011, direction No. 4 given by the president regarding the progress report titled “Specific Countermeasures for the Fewer Childbirth” provides that: “For recommendations concerning population policy organization, a permanent task force can be set up under the Executive Yuan...”

In order to heighten the decision-making status of its population policy, the MOI Population Policy Committee was upgraded to the level of an Executive Yuan permanent task force to determine population planning and policy guidelines for the relevant ministries to develop programs and specific measures on the basis of it. With instructions from the Executive Yuan, the “Executive Yuan Population Policy Committee Focal Points” (draft) was submitted on September 16, 2011. The Executive Yuan then requested that the Population Policy Committee should make further clarifications on relevant matters, such as the establishment and starting points, and report them to the administration on September 29, 2011. For the sake of completeness, relevant agencies were invited for deliberation on November 28, 2011, and resolved to amend the “Executive Yuan Population Policy Committee Focal Points” to be the “Executive Yuan Population Policy Focal Points Report.” The MOI remained responsible as the unit of “Report’s” secretary of the Executive Yuan Population Policy Committee. In order to better link the population policy, it was recommended that the Executive Yuan Population Policy Committee Report be established on July 1, 2012. After hearing the “Changing Trends in Taiwan's Population and Response Measures” report at the Executive Yuan Meeting 3297 on May 3, 2012, the Executive Yuan instructed that: “This Administration's 'Population Policy Committee Report, scheduled

for July 1st, with Vice Premier Jiang Yi-hua as convener, Minister without Portfolio Hsueh, Cheng-tai as deputy convener, hereby considers the status of Taiwan's three main population challenges extremely severe, and requests establishment of immediate effective operations.”

On May 14, 2012, the Executive Yuan approved and promulgated the Executive Yuan Population Policy Committee Report Focal Points, which have been in effect since July 1, 2012. The committee report tasks are: (I) Population Policy Integration and Coordination; (II) Consultation and Supervision of Population Policy Plans and Measures; (III) Commissioning of Population Policy Study and Consultation; (IV) Other Major Issues Related to Population Policy. 21 to 25 committee members were chosen, including one convener to be served concurrently by the Vice Premier, one deputy convener to be served concurrently by a Minister without Portfolio, and the remainder appointed (or commissioned) by the Premier: namely, the Minister of the Interior, the Minister of Foreign Affairs, the Minister of Finance, the Minister of Education, the Minister of Transportation and Communications, the Minister of Health of the Executive Yuan, the personnel chief of the Executive Yuan's GDBAS, the director of the CEPD, the chairman of Council for Economic Planning and Development, Executive Yuan, the chairman of the Council of Labor Affairs, and 9 to 13 scholars and experts or representatives of civic groups and organizations.

To deal with the serious problem of the aging of the nation's population composition, the Executive Yuan upgraded the level of the Population Policy Committee on July 1, 2012, setting up the “Board of Population Policy, Executive Yuan” to guide inter-ministerial policies, propose appropriate response policies, specific programs, target data and other supporting measures, with early consideration of relevant variables, and adopting effective strategies in order to arrive at a comprehensive solution to the social problems brought about by the trend towards fewer children, and to maintain Taiwan's economic development and national competitiveness. Thenceforth, on January 22, 2014, the Executive Yuan instructed the National Development Council (NDC) to establish the

“Board of Population Policy, Executive Yuan” with responsibility for planning the formulation of population policy, including the revising of Population Policy Platform and the Population Policy White Paper, clerical operations of the Board of Population Policy, Executive Yuan, mapping out a more comprehensive and complete population policy. In this approach, the relevant ministries should not only continue to achieve implementation of the Population Policy White Paper's benchmarks, but at the same time also formulate innovative measures to improve government policies to encourage marriage and childbearing.

In response to the country's demographic trends, consolidating talent training supply and demand issues, organizing, planning and coordinating population and talent policies, and supervising various ministries in their gradual implementing of relevant plans, the Executive Yuan has combined the original "Board of Population Policy" and "Board of Talent Policy" to establish the "Board of Population and Talent Policy, Executive Yuan", and on February 17, 2015 approved and promulgated the “Key points of Setting Up the Board of Population and Talent Policy, Executive Yuan.” Its mandate is: (I) Planning, integration, coordination and consultation of population and talent policy and other major measures, (II) Supervision of population and talent policy planning and measures. (III) Coordinating and promoting other major policies relating to population and talent. A committee was set up according to those key points, consisting of 24 to 29 people, one of whom is the Board Convener, a position served concurrently by the Vice Premier; there is also one Deputy Convener, served concurrently by the Minister of the NDC, and the remaining members, appointed (or recruited) by the Premier, Executive Yuan include the following persons: one to two Executive Yuan Ministers without Portfolio, the Minister of the Interior, the Minister of Foreign Affairs, the Minister of Finance, the Minister of Education, the Minister of Economic Affairs, the Minister of Transportation and Communications, the Minister of Health and Welfare, the Minister of Labor, the Minister of Science and Technology, the Minister of the Overseas Community Affairs Council, the Minister of the Directorate-General of Budget, Accounting and Statistics, Executive Yuan, the Minister of the Directorate-General of Personnel

Administration, Executive Yuan or nine to thirteen experts and scholars or representatives of civic organizations. The first meeting was held on July 28, 2015, and the population and talent policies were discussed and planned together.

Since reviewing population and talent issues together in the same discussion meeting was difficult to demonstrate beneficial results, upon requesting by the Executive Yuan in November 2016, “population policies” and “talent policies” were discussed separately. Population policies were discussed in the "Board of Population Policy, Executive Yuan". In addition, “Immigration Policy Team” and “Fertility Rate Improvement Policy Team” were established under the "Board of Population Policy, Executive Yuan" to carry out: (1) planning, integration, coordination and consultation of population policies and key measures, (2) supervision of population policy related projects and measures, and (3) coordination and promotion of other major population policies. According to the amendment of the “Board of Population Policy Key Point, Executive Yuan” approved on November 15, 2016, there are 17~19 committee members; the Deputy Superintendent (Executive Yuan) is the convener and the Minister of the NDC is the vice convener. The rest of the committee members are assigned by the Premier as follows: one Minister without Portfolio, Minister of the Ministry of the Interior, Minister of the Ministry of Foreign Affairs, Minister of the Ministry of Finance, Minister of the Ministry of Education, Minister of the Ministry of Transportation and Communications, Minister of the Ministry of Health and Welfare, Minister of the Ministry of Labor, Minister of the DGBAS (Directorate-General of Budget, Accounting and Statistics, Executive Yuan), Minister of the DGPA (Directorate-General of Personnel Administration, Executive Yuan), and 5~7 experts, scholars or social group representatives.

The “Board of Talent Policy, Executive Yuan” was newly established on March 20, 2017 to stipulate the “Board of Talent Policy Establishment Guideline, Executive Yuan” Its missions include (1) planning, coordination and consultation of talent policies and key measures, (2) supervision of population policy related projects, measures and

implementation, and (3) coordination and promotion of other major population policies. The Board is made up of 1 convener and 24~27 committee members; the Minister without Portfolio, Executive Yuan serving concurrently as the Minister of the NDC (National Development Council) will serve as the convener concurrently. Besides the convener is the ex-officio committee member, the rest of the committee members are assigned by the Premier of the Executive Yuan as follows: the Minister of the Interior, the Minister of Foreign Affairs, the Minister of Finance, the Minister of Education, the Minister of Economic Affairs, the Minister of Transportation and Communications, the Minister of Labor, the Chairman of Council of Agriculture, the Executive Yuan, the Minister of Health and Welfare, the Minister of Culture, the Minister of Science and Technology, the Chairman of Financial Supervisory Commission, the Minister of Overseas Community Affairs, the Minister of Directorate-General of Personnel Administration, Executive Yuan, the Chairperson of National Communications Commission, and 8 to 11 experts and scholars or representatives of civic groups and organizations.

In response to the changes in population structure, the former Premier of the Executive Yuan, Mr. Ching-Te Lai, proposed the “Sustainable Population” policy in the Executive Yuan's press conference at the end of 2017; it was one of the main governmental policies to increase the total fertility rate of Taiwan to 1.4 people per woman by 2030, with the total population in the future not lower than 20 million people. On July 25, 2018, the Executive Yuan approved the "Countermeasures against the declining birthrate in Taiwan (from 2018 to 2022)," which was further amended and approved on June 4, 2019. The amended Plan includes expanding the supply of public preschools and adjusting the application criteria for public preschools, helping to solve the problem of fewer children in Taiwan. In addition, the "New Economy Immigration Act (Draft)" was proposed in October 2018; it aimed to recruit foreign qualified talents and manpower in order to strengthen industrial development, maintain a reasonable population structure, and improve national competitiveness. The Act was sent to the Legislative Yuan for review in December 2018.

3. Population policy reform and milestones in development

In recent years, there have been changes in the international economic environment and in the structure of domestic industry, lower total fertility rate, and insufficient talent arising from such problems as the aging of the population composition, which combined with the nation's trend toward a lower working population, and the rapid increase of its older population have led to the emergence of a “late in, early out” working population phenomenon. This is because an older labor force will tend to leave the labor market early. Moreover, due to the popularization of high-level education, most of the young labor force will tend to enter the labor market late owing to an over-adequate education. The following is a summary of the changes in each level of the population composition and the corresponding countermeasures.

(I) Before the 90s, the emphasis is on reasonable population distribution and population quality improvement

In 1941, the Executive Yuan Department of Social Affairs established the Population Policy Research Committee, employing scholars and experts to draw up the “Population Policy Guidelines Draft.” After being amended in the 6th National People’s Representative Assembly, the draft was passed and renamed the “National Conservation Policy Guidelines.” With a total of nine Sections and 21 Articles, the Guidelines provided general principles as well as the advocacy of marriage, complete family structure, promotion of proper reproduction, enhancement of public health, regulation of the sex ratio, adjustment of occupation distribution, counseling of population migration, and support of frontier populations. This document set out the general requirements for a reasonable increase in population, a rise in population quality, and appropriate adjustments in population distribution.

In 1949, the government moved to Taiwan, and in 1953, the then-president Chiang Kai-shek added two articles on the principles of people’s livelihood, indicating four specific instructions regarding population

II. EVOLUTION OF POPULATION POLICY

problems: (1) balanced quality and quantity; (2) a balanced distribution of the population; (3) the promotion of the population's balanced development and utilization according to the actual distribution of resources; and (4) balanced urban and rural development. In 1959, Mr. Chiang Meng-lin published "Facing Taiwan's Increasingly Urgent Population Issue," inspiring people to realize the importance of population issues. The government fully promoted family planning in 1964.

In 1966, the MOI set up a provisional population policy committee to draft the "Republic of China Population Policy Guidelines"; "Measures for the Implementation of Family Planning in Taiwan," and "Taiwan's Population Adjustment Programs" for submission to the Executive Yuan. In 1968 and 1969, the Executive Yuan announced "Implementation Measures for Taiwan's Family Planning" and the "Republic of China Population Policy Guidelines" announcing the policy objectives of improved population quality, reasonable population growth, and balanced population distribution.

In 1979, President Chiang Ching-kuo indicated "the natural Community increase of population rate after 10 years is expected to fall by 12.5 %, making it necessary to implement prenatal health care." In 1980, the Executive Yuan released the "Policy for Reviving Important Base Developments," further deciding on a policy enforcement that "strengthens the implementation of the population policy, reduces the population growth rate, improves population quality, and balances population distribution. Actively promote population policies and implement family planning, strive to decrease the natural population growth by 12.5% within 10 years. Through legislative enactment, implement prenatal health care and a sound childhood education system, improve people's nutrition, and with education and vocational training, continue to enhance the quality of the labor force. With a comprehensive plan for development, guide the population in the north to move eastward and to the central region." Following these policy guidelines, the Ministry of the Interior actively amended the "Republic of China Population Policy Guidelines" and drafted the "Strengthening the Implementation of Population Policy"

which was approved and implemented by the Executive Yuan in 1983. After years of undergoing promotional efforts, Taiwan's population growth gradually decreased.

In order to suit economic development prospects and adapt to the future growth and evolution of the population and its structure as well as social and economic development, the population policy guidelines and program content were amended and implemented in 1988 and 1992. In addition, the "Genetic Health Act" was developed in July of 1984 to implement eugenic care, improve population quality, protect the health of mothers and children, and promote family well-being. On July 30, 1994, the Social Welfare Policy Guidelines and its implementation program were announced. These would include the five key elements of employment security, social insurance, welfare services, public housing, and healthcare, aiming to promote balanced economic and social development and establish a social security system. In the same year on August 9, the "National Health Insurance Act" was promulgated to promote the health of citizens.

(II) In the 2000s, the Population Policy White Paper was established in responding to the issues of fewer children and aged population

Taiwan's total fertility rate dropped to 1.76 children per woman in 1993 and reached 1.235 children in 2003, passing the threshold to become a so-called "ultra-low children country." In contrast, the elderly Community increase of population d every year and accounted for 9.13% of the total population by 2003. This fewer children and aging population would give rise to labor shortages and issues pertaining to nursing care services for the elderly and the heavy burden carried by the younger population. At the same time, there was a substantial increase in marriage between Taiwanese nationals and people from Mainland China and other countries, resulting in problems regarding these spouses adapting to life in Taiwan and their children's education. In June 1994, the Executive Yuan announced: "To ease the rapid changes in the structure of Taiwan's population caused by an aging populace and fewer children . . . the MOI should forthwith consult relevant authorities and propose effective

countermeasures that would encourage people to give birth. In addition, related policy seminars should be held to enhance communication and form a consensus with civilians. It is hoped the MOI can put forward a population policy white paper for Taiwan before the end of March 2005.” Accordingly, in October and November of 2004, the MOI held six public hearings in the Northern, Central, Southern, and Eastern regions to encourage childbirth, during which it invited views of the community in order to reach a consensus which would serve as an important reference point for the government's planning to encourage fertility measures. Information offered by relevant departments was also compiled. In 2005, relevant agencies, experts, scholars, and civil groups deliberated together to draft the “Population Policy White Paper (Draft).”

As the times changed, it was difficult for the population policies of the past to keep up with the needs of the present, and there was an urgent need for updates geared towards the needs of the current population composition, sex roles, family structure, social resources, economic development, ethnic harmony, and ecological and environmental protection needs. In order to have the goals and visions of the population policy meet the requirements of the Taiwan’s future development, it was advised that interdepartmental opinions should be integrated. Thus in June 2005, the MOI submitted an application to the Executive Yuan asking for the postponement of the report on the Population Policy White Paper and the establishment of a task force to research the country’s population policy and draft the Population Policy White Paper. In September 2005, the Executive Yuan issued the letter “Key Points for the Installation of Population Policy Guidelines and White Paper Task Force,” with ministers without portfolio acting as conveners and the minister of the Ministry of the Interior as deputy convener, and began the research and study of the ROC Population Policy Guidelines and the subsequent development of “the Population Policy White Paper”.

During the period of The Ministry of the Interior and Council for Economic Planning and Development, Executive Yuan drafted the "Population Policy Guidelines (draft), the Social Security Group – Social

Security System Improvement of the Taiwan Economic Sustainable Development Conference had made a number of specific suggestions regarding the three major problems of fewer children, aging population, and immigration in 2006. The National Security Council also raised concerns about matters relating to demographic imbalance and coping strategies. Furthermore, all sectors of society repeatedly called on the government to respond to the abovementioned issues. In summary, both government and civil organizations recognized the urgency of the current fewer children, aging population, and immigration issues added to population and social issues. In order to maximize the effectiveness of government resources, the first draft of the "Population Policy Guidelines (draft)" was made by after several amendments at meetings. The Executive Yuan approved amendments on June 14, 2006, the goal of this amendment" was to report the nation's present and future demographic composition, population quality and distribution, population development, migration, and other policy directions given in five basic concepts and 22 policy implications. The Executive Yuan requested its application by all executive bureaus, departments, and provincial and municipal governments, directing relevant agencies such as the Ministry of the Interior, the Ministry of Education, the Department of Health, and the Council for Economic Planning and Development to research and set forth specific implementation plans for these issues and compose a draft of the country's Population Policy White Paper.

In order to have the Population Policy White Paper meet the needs of the government and all sectors of society in both theory and practice, the MOI commissioned National Chengchi University to conduct the "Population Policy White Paper and Plan Implementation Research" in September 2006. The research was divided into four sub-topics: "Countermeasures for Fewer Children Society in Taiwan," "Countermeasures for an Aging Society," "National Immigrant Population Policy Research and Countermeasures," and "Planning and Research of the National Population Policy White Paper." In the course of this research, and taking into account sex mainstreaming, the Council for the Promotion of Women's Rights of the Executive Yuan was invited to work with the

research team. In order to build a consensus, experts, scholars, and non-governmental organizations were invited to participate in three public hearings about the white paper in the Northern, Central, and Southern regions in June 2007, with dialogue between the government and the public to create better policy transparency. The research was successful with the development of 21 policy recommendations and 182 specific measures. Consequently, countermeasures were put forward that addressed the baby bust, aging population, immigration issues, and future demographic trends from a macroscopic viewpoint based on these measures. Several relevant agencies were then asked to discuss and formulate a population policy white paper for submission to the Executive Yuan on March 10, 2008; their draft proposed 21 countermeasures that covered 125 specific measures for the baby boom, aging population, and immigration issues.

(III) In 2011, the emphasis is on new residents, immigration issues, amending the Guidelines and the White Paper

Due to the constant change of the subjective and objective conditions of international politics and economics, the domestic socio-economic environment, and the population composition, the Executive Yuan approved amendments for specific measures and performance indicators of the “Population Policy White Paper” on April 22, 2011, stipulating 21 countermeasures, 114 specific measures, and 233 performance indicators addressing the fewer children, aging population, and immigration issues.

Since Taiwan is facing a changing population composition, population issues present themselves with economic development and demographic transitions, and change with the times. With the rapid aging of the population and a decline of the family as caregiver, the government needs to play a more active role in order to provide or assist more families with dignified and honest care and construct a rigorous system of economic security for the elderly. Secondly, fewer children will affect the educational, labor, and health care systems with a potentially long-lasting impact. Moreover, with a tendency towards globalization and internationalization, trends of demographic diversification are becoming increasingly evident, especially those of marriages of a non-economic nature. The population is

gradually increased by foreign spouses who enter society, a phenomenon, which has created issues such as the problems encountered by new residents and their children as they adapt to life and education in the country. Additionally, to enhance national competitiveness, the government should try to attract senior professionals to move to the country and to open to an immigrant investor's category, creating economic vitality and a harmonious new social force. As the times have changed, it has been difficult for the population policies of the past to keep up with the needs of the present, and there is an urgent need for updates geared towards the needs of today's population composition, sex roles, family structure, social resources, economic development, ethnic harmony, and ecological and environmental protection needs. Thus, on December 7, 2011, the Executive Yuan amended and approved the Republic of China Population Policy Guidelines to specify the following eight basic concepts and 34 policy implications.

To carry out rolling reviews and amendments of the Population Policy White Paper and construct more comprehensive and far-reaching population countermeasures, the Ministry of the Interior invited relevant authorities, scholars, experts, civic groups and organizations to solicit their views, and to study and discuss the issues together with the government on a number of occasions in 2011. On September 23, 2011, the Population Policy White Paper draft amendment was submitted to the Executive Yuan. After a number of review meetings, the administration approved this draft amendment on July 12, 2013, stipulating 18 policy measures, 107 specific measures, and 232 performance indicators.

(IV) Since 2014, the level was upgraded to the Executive Yuan, and all Ministries and Departments will perform accordingly to the Guidelines

To cope with today's complex Population Changes, in 2014, the NDC invited scholars and experts and relevant ministries to jointly research, amend and complete the "The ROC Population Policy Guidelines," primarily taking the concepts of "increase of labor force participation" and "refinement of immigration policies" and including them in the Guidelines.

II. EVOLUTION OF POPULATION POLICY

The main focal points of the amendments to the Guidelines are as follows: Firstly, including the “increase of labor force participation” and “refinement of immigration policies” concepts, in the hope that through improving education and employment diversification practices, actively developing and employing the Middle-aged and senior workforce, and thereby creating friendly workplaces, the willingness of citizens to participate in the labor force will be raised. Secondly, increasing diversification in the recruitment of professionals, creating a friendly environment for incoming populations and constructing a support system and domestic links for ROC nationals in foreign countries and overseas Chinese, utilizing overseas human resources in a global distribution, in order to expand the nation's network of professional expertise. Thirdly, the addition of six new policy implications such as timely promotion of education reform and active promotion of senior citizen-oriented industries, to serve as guidelines for the relevant ministries' follow-on promotion policies. Consequently, on December 27, 2014, the Executive Yuan approved amendments enshrining eight major basic concepts and 40 policy implications, enabling the government to adopt a more forward-looking policy planning in the face of the population's trend toward fewer children and the aging of society.

To implement the carrying through of relevant population policy-related measures, to enhance liaison, coordination and cooperation between the Executive Yuan's subordinate agencies and Special Municipalities, Counties (and Cities), and thus make the implementation of the population policy more effective, on May 20, 2015, the Executive Yuan enacted the “Executive Yuan Subordinate Agencies Population Policy Liaison, Coordination and Implementation Guidelines,” which took immediate effect. There are three main areas of focus: one, clearly stipulating the powers and responsibilities of the NDC and the Ministry of the Interior; two, each Special Municipality, County (and City) governments should designate a specific research agency (or unit) as a dedicated agency (or unit), to serve as an inter-bureau or inter-division coordination platform, responsible for coordination of population policy operations; three, the Executive Yuan subordinate agencies responsible for

promoting and implementing population policy, should establish a liaison and notification system with the corresponding operational agencies (or units) of local government to keep abreast of population policy promotion and execution circumstances.

In conjunction with the Implementation Guidelines announced previously, the Ministry of the Interior also reviewed “The MOI Population Policy Advocacy Implementation Plan” and “MOI's Key points of Population Policy Advocacy Assessment and Award” and revised them to “The MOI Population Policy Measures Advocacy Implementation Plan” and “The MOI Population Policy Measure Advocacy Performance Assessment Guidelines” on December 25, 2015. The revision highlighted local government assisted advocacy items on the related measures promoted by the Ministry of the Interior. In addition, the original quantification calculation standards for performance assessment were changed into assessment based on innovation and cross-department/unit collaboration. Hopefully, this will encourage local government to be more creative in promoting a more effective and resource-integrated population policy measure advocacy.

Considering that raising the willingness of our citizens to have children is an important part of our policy to deal with population change, the NDC, in conjunction with the Ministry of Health and Welfare, the Ministry of Education, the Ministry of Labor and other relevant ministries, evaluated the existing child birth and care measures and took into account the survey results of our citizens to present an “Improved Childbirth Environment Program,” which comprised a strategic framework with “children as the main body and family as the center.” By strengthening the collaboration system between family, community, employer, and government, three specific promotion strategies, including "Public Education & Care Popularization", "Balancing Career and Family" and "Supporting Family Birth & Parenting", are proposed to optimize the birth and parenting environment, enhance the willingness of people to give birth, and meet people's demand of creating a friendly birth and parenting environment, increasing people's willingness to give birth and the ability

to raise children. The Executive Yuan approved the "Birth and Parenting Environment Improving Program (2016-2018)" on January 14, 2016. Later on, the amendment was approved on July 27, 2017, which states that the organizing (supporting) institutes will promote and conduct specific measures according to the task division and implementation table listed in the Program.

The Population Policy White Paper was proposed by the Ministry of the Interior in 2008. Since 2014, the NDC was responsible for revising the White Paper. The aforementioned White Paper was expired in 2016. After careful review and assessment by the NDC, it was found that Ministries and Departments of the government continue to promote population-related policies, plans or programs, and the evaluation systems have been implemented to regularly review their effectiveness. In recent years, overlaps with the aforementioned White Paper in terms of contents and assessment system have been found. Considering the fact that the policy background when preparing the aforementioned White Paper, the economic & social environment, the population composition, and other subjective/objective conditions have been changed, the fact that the fundamental idea of the "The ROC Population Policy Guidelines" and the policy content are more rigorous, and the fact that the "Board of Population Policy, Executive Yuan" as well as the project team have been established to promote the coordination systems of related policies, the aforementioned White Paper has completed its short-term mission and will no longer require revision in the future. Starting from 2017, the "The ROC Population Policy Guidelines" has been serving as the highest guiding principle for Ministries and Departments of the government to prepare and promote population policies, ensuring they are well implemented.

In response to the changes in population structure, the former Premier of the Executive Yuan, Mr. Ching-Te Lai, proposed the "Sustainable Population" at the Executive Yuan's press conference in the end of 2017 as one of the main governmental policies to increase the total fertility rate of Taiwan to 1.4 people per woman by 2030, with the total population in the future not lower than 20 million people. On July 25, 2018, the Executive

Yuan approved the "Countermeasures against the declining birthrate in Taiwan (from 2018 to 2022)", which was further amended and approved on June 4, 2019. The amended plan includes expanding the supply of public preschools and adjusting the application criteria for public preschools, helping to solve the problem of fewer children in Taiwan. In addition, the "New Economy Immigration Act (Draft)" was proposed in October 2018, helping to recruit foreign qualified talents and manpower in order to strengthen industrial development, maintain a reasonable population structure, and improve national competitiveness. The Act was sent to the Legislative Yuan for review in December 2018.

III. POPULATION CHANGE

Taiwan's household registration system was established in the period of Japanese colonial rule. Since the implementation of the first population census (in year 1906), the static and dynamic population data have been well comprehended. Therefore, by examining the household registration system and the data of historical population censuses, the population status and change of Taiwan in the 20th century can be analyzed. Before the period of Japanese colonial rule, Taiwan and Mainland China had frequent population exchange. After the period of Japanese colonial rule, people from Mainland China moving to Taiwan were restricted, resulting in Japanese as the major immigration population. After Taiwan Restoration, particularly in the period around year 1949, a large number of people from Mainland China moved to Taiwan, leading to the rapid growth of Taiwan's population. After 1960s, not only the government actively promoted population policies and family plans, but also the changes in the values of people, Taiwan's population growth was gradually slowed down.

Today, almost all modern countries have experienced the process of “demographic transformation”, which is the transformation of population from high birth rate and high death rate to low birth rate and low death rate. Since the death rate always declines first, the decline of death rate then drives the decline of birth rate. There is a time difference between the two, and such time difference usually will bring about a rapid increase in population during the demographic transition. However, when the birth rate begins to decline, this phenomenon of rapid Community increase of population will gradually disappear. When the fertility rate drops to a very low level, the “trend towards fewer children” and the “aging population” will be created.

The transformation of population composition, including the trend towards fewer children and the aging population, the increasing trend of globalization in recent years, and the inevitable to form an immigrant society. All are an important population issue that our society has to face.

1. Introduction To Change Of Population

In 1946, the total population of Taiwan was 6,090,860 people. Due to the impact of the post-war baby boom, a rapid rise in fertility, and the 1949 ROC government retreat to Taiwan, which brought large numbers of people to Taiwan, as well as advances in health care, and improvement of citizens' nutrition, the death rate showed continued decline, leading to rapid population growth. From Table 3-1-1, Chart 3-1-1, and Chart 3-1-2, it can be seen that the 1951 number of births was 385,383 children, the population's natural increase rate reached 38.40‰, and the total fertility rate of women also reached 7.04 children, taking the total population to 7,869,247 people, compared with 1946, representing an increase of 1,778,387 people. By 1958, the total population exceeded 10 million, at 10,039,435 people. In 1964, to ease population growth, the government comprehensively promoted family planning², and in 1968 and 1969 it promulgated the “Taiwan Region Family Planning Implementation Measures” and the “Republic of China Population Policy guidelines.” Before 1969, people in the military service or in prison were not included in the calculation of the total population in Taiwan. After the announcement of the "Army, Navy, and Air Force In-Service Military Personnel Household Registration Regulation" in 1969, career soldiers, people who moved out due to military service and people who are in prison were all included in the household registration management, making the population statistics of household registration to be more complete by the end of 1969. In 1983, the Outline was amended and the “Improved Promotion of Population Policy Plan” was amended. In 1983, the Outline was amended and the 'Improved Promotion of Population Policy Plan' was amended.

² Family planning refers to each couple, or couple-to-be, deciding the number of people to be in their family, based on their own wishes, their mental and physical health, their economic foundation, ability to support others, and the needs of society and the nation, and it uses existing medical knowledge and principles, and methods of birth control, to achieve its purpose, so that each child born can be expected, and the parents are prepared for birth, in order to lay the foundation for the normal physical and mental development of the child in the future.

III. POPULATION CHANGE

Table 3-1-1 Crude birth rate, crude death rate, natural increase rate, number of birth and total fertility rate of the population over the years

Unit: People; ‰

Year	Total population	Number of births	Crude birth rate	Crude death rate	Natural increase rate	Total fertility rate
1951	7,869,247	385,383	49.97	11.57	38.40	7.04
1956	9,390,381	414,036	44.84	8.02	36.82	6.51
1961	11,210,084	422,740	38.33	6.74	31.58	5.59
1966	13,065,473	418,327	32.47	5.46	27.02	4.82
1971	15,073,216	382,797	25.67	4.79	20.88	3.71
1976	16,579,737	425,125	25.92	4.70	21.22	3.09
1981	18,193,955	414,069	22.97	4.84	18.13	2.46
1986	19,509,082	309,230	15.93	4.90	11.03	1.68
1991	20,605,831	321,932	15.70	5.18	10.52	1.72
1996	21,525,433	325,545	15.18	5.71	9.47	1.76
2001	22,405,568	260,354	11.65	5.71	5.94	1.40
2006	22,876,527	204,459	8.96	5.95	3.01	1.12
2010	23,162,123	166,886	7.21	6.30	0.91	0.90
2011	23,224,912	196,627	8.48	6.59	1.88	1.07
2012	23,315,822	229,481	9.86	6.63	3.23	1.27
2013	23,373,517	199,113	8.53	6.68	1.85	1.07
2014	23,433,753	210,383	8.99	7.00	1.98	1.17
2015	23,492,074	213,598	9.10	6.98	2.12	1.18
2016	23,539,816	208,440	8.86	7.33	1.53	1.17
2017	23,571,227	193,844	8.23	7.27	0.96	1.13
2018	23,588,932	181,601	7.70	7.33	0.37	1.06

Source: Population Statistics (registered number) over the Years, Dept. of Household Registration, MOI.

Explanation: The data for total fertility rate (number of occurrences) before 1971 (inclusive) and the rest of the data before 1956 were collected from all cities and counties of Taiwan except Kinmen County and Lienchiang County.

Due to the effective promotion of family planning, population education, population policy advocacy and other measures, and at the same time, the amendment of relevant laws and regulations that indirectly encouraged childbirth, the number of people having children was regulated, and the effective birth rate dropped, so that a rapid decline in the natural increase rate of the population began, which by 1986 saw it fall to 11.03‰, in advance of the original 1989 target for the natural increase rate to fall to 12.5‰; so that the original estimate of breaking the 20 million people mark by 1983, was delayed by six years, finally being reached in 1989, However,

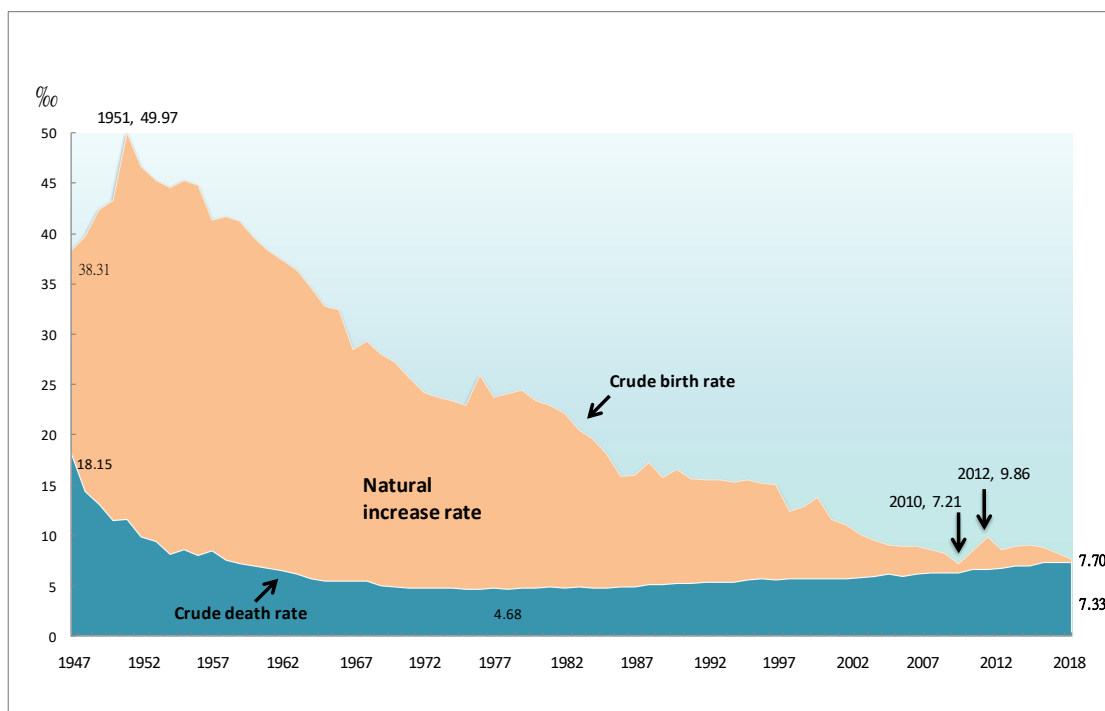
considering the rapid decline in the natural increase rate ³ of population in the future, it may lead to a negative population growth, which in turn would create social issues such as the aging of the population composition, labor shortages, and excessively heavy burdens of dependency; so in 1992, the “Republic of China Population Policy guidelines” and the “Improved Promotion of Population Policy Plan,” were again amended, changing the population growth target from “easing population growth” to “maintaining a reasonable population growth.” However, the population natural increase rate continued to drop to 0.91‰ by 2010. In recent years, due to the promotion of marriage and childbirth by the government, the population natural increase rate fluctuated from 2011 to 2018. The population natural increase rate reached 0.37‰ in 2018, with a total population of 23,588,932 people, which was an increase of 17,705 people compared with the total population of the last year (2017). This is the first time in Taiwan that the population growth rate has dropped to less than 1‰, with both a record-low population and population growth rate.

The total fertility rate of Taiwan has dropped year by year after reaching a historical peak of 7.04 people in 1951. In 1984, there were 371,008 births, and the total fertility rate had dropped to 2.06 children. It was the first time that the population replacement level was less 2.1 people. With only 166,886 births in 2010, the total fertility rate dropped further, to 0.9 children. The number of births was 181,601 and the total fertility rate to 1.06 children in 2018 (Chart 3-1-3), still far below the population replacement level, putting Taiwan among the world's ultra-fewer children countries. The rapid decline in Taiwan's birth rate, apart from being due to the effects of industrialization, urbanization and modernization, can also be attributed to the government's active promotion of family planning in the early years.

Compared with countries around the world, Taiwan's crude birth rate in 2018 reached 7.7‰, which is higher than that of South Korea (6.4‰), lower than that of the United States (11.58‰), the UK/France (11.1‰) and China (10.94‰), and the same as that of Japan (7.7‰).

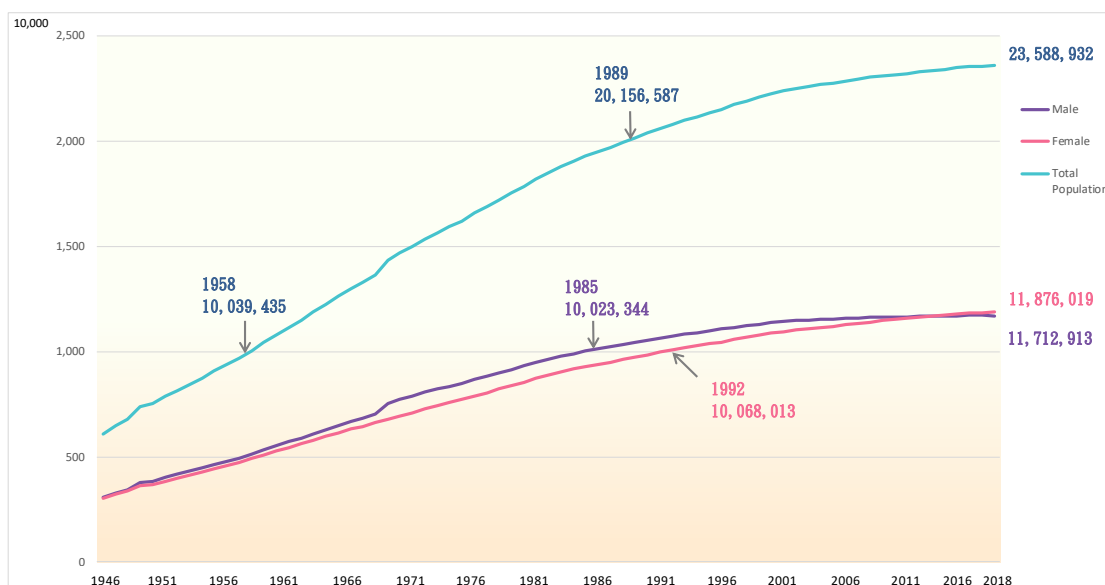
³ The natural increase rate is the difference between the crude birth rate and the crude death rate.

III. POPULATION CHANGE



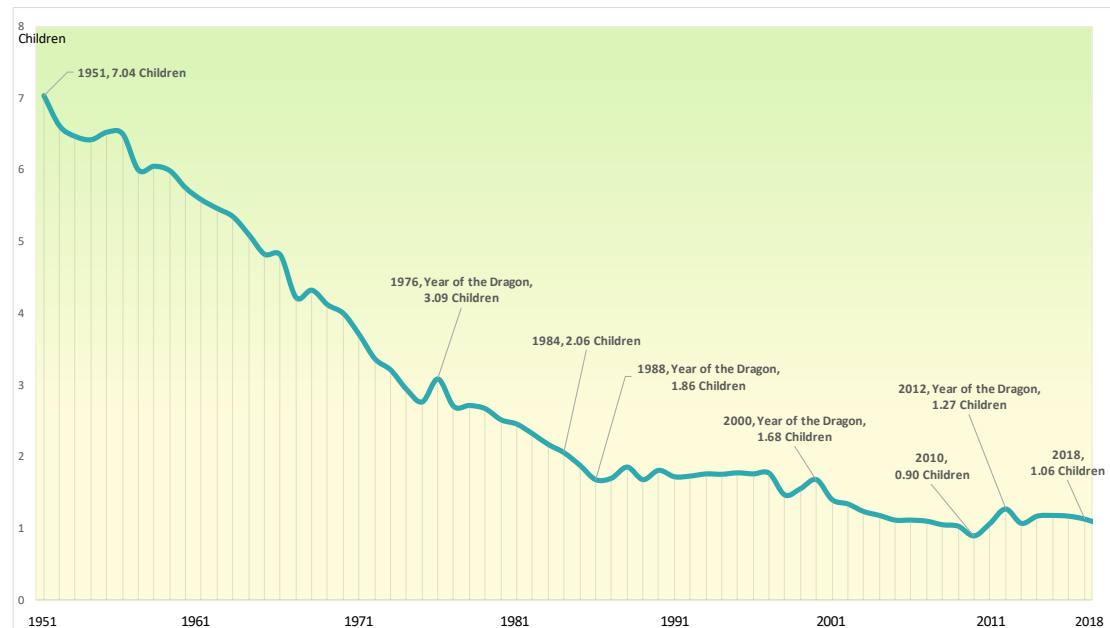
Source: Population Statistics over the Years, Dept. of Household Registration, MOI.

Chart 3-1-1 Crude birth rate, crude death rate and natural increase rate of the population over the years



Source: Population Statistics over the Years, Dept. of Household Registration, MOI.

Chart 3-1-2 Population statistics over the years



Source: Population Statistics over the Years, Dept. of Household Registration, MOI.

Chart 3-1-3 Total fertility rate over the years

Observing the population change of different regions and cities/counties in Taiwan in 2018, the population in the Kinmen/Matsu area showed the largest increase of 13.17%. The population in the northern Taiwan was increased by 3.16%, with Taoyuan City showing the largest population increase of 14.90% and social increase of 10.48%, ranking it the first among counties and cities in Taiwan. On the other hand, the population in eastern Taiwan, including Taitung County and Hualien County, showed a decline. Except for Taichung City, the population in the central region of Taiwan also declined. As for the counties and cities in southern Taiwan, except for Penghu County, the remaining 5 counties and cities showed a decrease in population (Table 3-1-2).

With regards to the number of babies born in the counties and cities of Taiwan, 128,810 births in Taiwan's six major cities ranked first, accounting for 71.30% of the total births. Among the six major cities, New Taipei City had the most births of 28,745 babies, followed by 22,663 babies in Taipei City and 22,568 babies in Taichung. Among different cities and counties, Lianjiang County had the highest fertility rate of 1.53 people, followed by 1.33 people in Taoyuan City/Changhua County, and 1.21 people in Hsinchu City, all of them are higher than the national average of

III. POPULATION CHANGE

1.06 people. Chiayi County showed the lowest fertility rate of 0.80 people, followed by 0.84 people in Pingtung County and 0.88 people in Miaoli County, all of them are lower than the national average (Table 3-1-3).

Table 3-1-2 Population and total increase rate, natural increase rate and community increase rate for each city and county of 2018

Unit: People; ‰

County / City & Region	Registered Population	Total Increase Rate	Natural Increase Rate	Community Increase Rate
Total	23,588,932	0.75	0.37	0.38
North Region	10,713,182	3.16	1.88	1.29
New Taipei City	3,995,717	2.26	1.25	1.01
Taipei City	2,668,572	-5.49	1.85	-7.34
Taoyuan City	2,220,872	14.90	4.42	10.48
Keelung City	370,155	-3.51	-2.29	-1.22
Hsinchu City	445,635	10.16	3.11	7.05
Yilan County	455,221	-3.04	-1.86	-1.18
Hsinchu County	557,010	8.73	1.30	7.43
Central Region	5,813,634	-0.19	0.20	-0.39
Taichung City	2,803,894	6.02	1.99	4.03
Miaoli County	548,863	-8.97	-2.99	-5.98
Changhua County	1,277,824	-3.62	1.57	-5.19
Nantou County	497,031	-8.06	-3.22	-4.84
Yunlin County	686,022	-6.32	-4.60	-1.72
South Region	6,362,900	-2.37	-1.74	-0.64
Tainan City	1,883,831	-1.43	-1.49	0.07
Kaohsiung City	2,773,533	-1.22	-0.50	-0.72
Chiayi City	268,622	-2.88	-0.80	-2.08
Chiayi County	507,068	-8.08	-5.85	-2.23
Pingtung County	825,406	-5.48	-4.41	-1.07
Penghu County	104,440	3.52	-0.27	3.79
East Region	546,887	-3.45	-3.52	0.07
Taitung County	218,919	-2.83	-3.77	0.94
Hualien County	327,968	-3.86	-3.36	-0.50
Kinmen and Matsu Regions	152,329	13.17	3.82	9.35
Kinmen County	139,273	13.13	3.68	9.45
Lienchiang County	13,056	13.57	5.32	8.25

Source: Statistics notification, Department of Statistics, MOI.

Table 3-1-3 Number of births, crude birth rate and total fertility rate for each city and county of 2018

Unit: People; ‰

County / City	Number of births	Crude Birth Rate	Total Fertility Rate
Total	180,656	7.7	1.06
New Taipei City	28,745	7.2	0.98
Taipei City	22,663	8.5	1.13
Taoyuan City	22,568	10.2	1.33
Taichung City	22,518	8.1	1.05
Tainan City	12,275	6.5	0.90
Kaohsiung City	20,041	7.2	1.01
Yilan County	3,067	6.7	0.99
Hsinchu County	4,436	8.0	1.14
Miaoli County	3,332	6.0	0.88
Changhua County	12,316	9.6	1.33
Nantou County	3,217	6.4	0.99
Yunlin County	4,086	5.9	0.92
Chiayi County	2,563	5.0	0.80
Pingtung County	4,637	5.6	0.84
Taitung County	1,497	6.8	1.07
Hualien County	2,407	7.3	1.11
Penghu County	875	8.4	1.16
Keelung City	2,193	5.9	0.89
Hsinchu City	3,964	8.9	1.21
Chiayi City	1,873	7.0	0.99
Kinmen County	1,246	9.0	1.17
Lienchiang County	137	10.6	1.53

Source: Dept. of Household Registration, MOI, annual counties/cities & national statistical data.

Explanation: The data in this Table are sorted according to the date of occurrence.

2. Population Composition ⁴

(I) Age composition

The age of a nation, whether young or old, can be illustrated from the proportion of its young able-bodied population, which directly affects the nation's economic mode and vitality. It is shown in Table 3-2-1-1 and Chart 3-2-1-1 that the children's population (from age 0 to 14) from 1986

⁴ Population composition refers to the group elements constituting a country or region's population & its distribution circumstances, including urban and rural residence, household, gender, age, marital status, race, language, religion, education, industry, occupation, national income and social class, etc.

III. POPULATION CHANGE

to 2018 decreased from 29.01% to 12.92% and this decreasing trend has been observed every year. During the same period of time, the proportion of the elderly population (over age of 65) increased from 5.28% to 14.56% due to the increase of the national average life expectancy. Similarly, the proportion of young able-bodied population (from age 15 to 64) during the same period of time rose from 65.71% to 72.52%, while the dependency ratio⁵ dropped significantly, from 52.18 to 37.89. It is evident that the current age structure is dominated by the young able-bodied population, which means the population composition is still young. The young able-bodied population imposes a less dependent burden on the dependent population⁶.

Table 3-2-1-1 Year-end age structure, dependency ratio and aging index for three stages of the population

Unit: %

End of year (month)	Age structure percentage			Dependency ratio	Child dependency ratio	Old age dependency ratio	Aging index
	0-14	15-64	65+				
1986	29.01	65.71	5.28	52.18	44.14	8.04	18.21
1991	26.34	67.13	6.53	48.96	39.23	9.73	24.79
1996	23.15	68.99	7.86	44.94	33.55	11.39	33.95
2001	20.81	70.39	8.81	42.07	29.56	12.51	42.33
2006	18.12	71.88	10.00	39.12	25.21	13.91	55.17
2011	15.08	74.04	10.89	35.07	20.37	14.70	72.20
2012	14.63	74.22	11.15	34.74	19.72	15.03	76.21
2013	14.32	74.15	11.53	34.85	19.31	15.55	80.51
2014	13.99	74.03	11.99	35.08	18.89	16.19	85.70
2015	13.57	73.92	12.51	35.28	18.36	16.92	92.18
2016	13.35	73.46	13.20	36.13	18.17	17.96	98.86
2017	13.12	73.02	13.86	36.95	17.96	18.99	105.70
2018	12.92	72.52	14.56	37.89	17.82	20.07	112.64

Source: Population Statistics over the Years, Dept. of Household Registration, MOI.

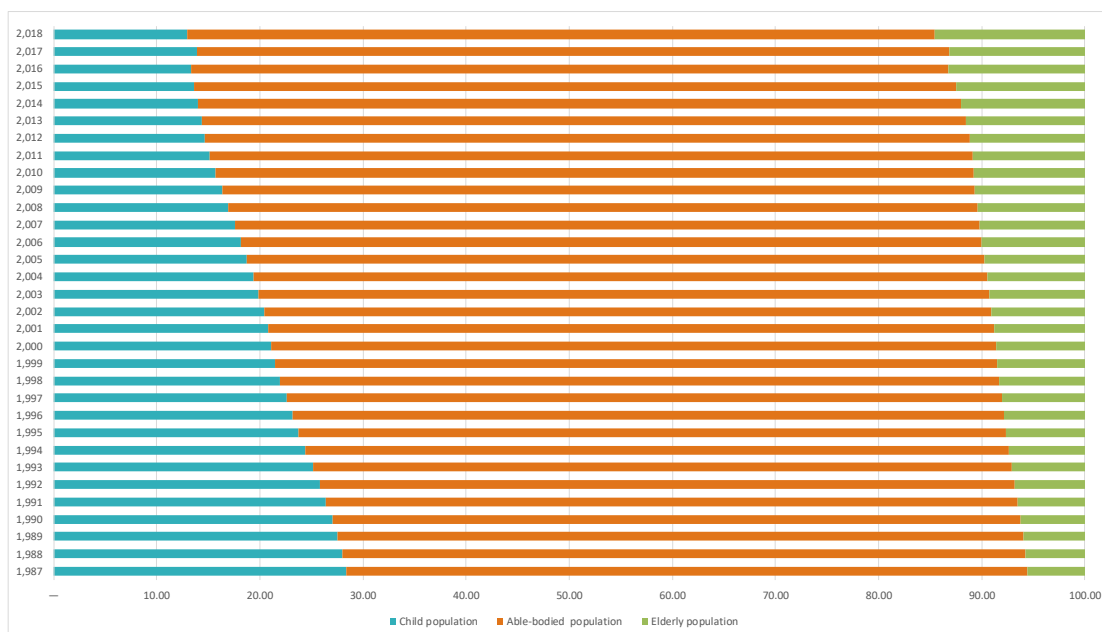
The continuous decline in fertility rate has led to a slowdown in Taiwan's population growth, resulting in dramatic changes for the age structure of Taiwan's population. The imbalanced population composition and aging population have already caused severe impact and effect on Taiwan at all levels. The advances in medical and health technology have pushed up the national average life expectancy, expanding the size of the

⁵ Dependency ratio refers to the ratio of the dependent population to the working-age population.

⁶ Dependent population refers to the child population and the elderly population.

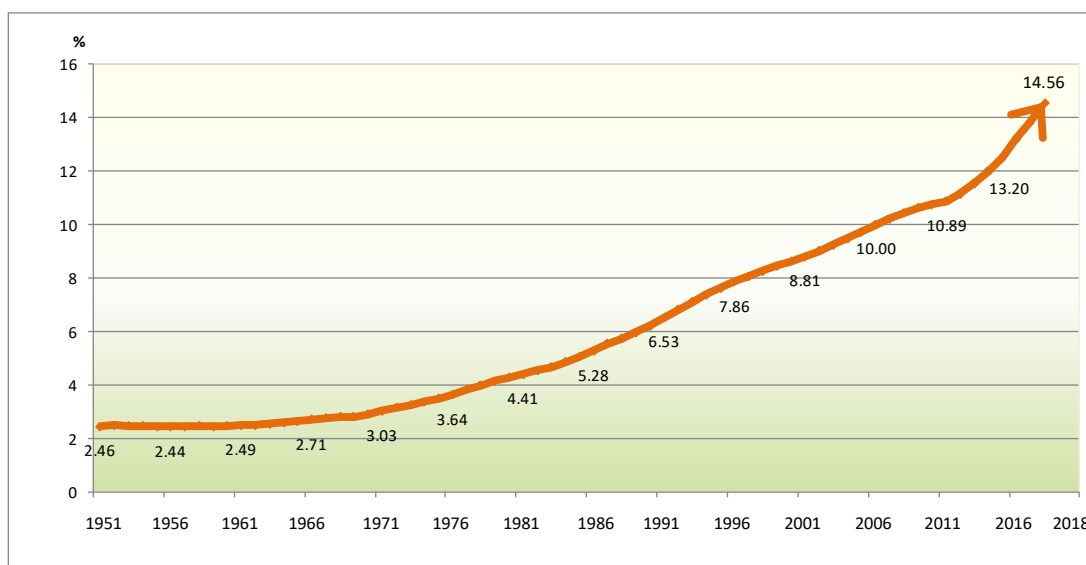
elderly population. According to the definition of the World Health Organization, when the proportion of elderly population with age over 65 years old reaches 7% of the total population, it is called "aging society". When the proportion of elderly population reaches 14% and 20%, it is called "aged society" and "super-aged society", respectively. By the end of 1949, the elderly population in Taiwan was only 184,622 people, accounting for 2.50% of the total population. In 1993, the proportion of elderly population with age over 65 years old in Taiwan reached more than 7% of the total population, entering the aging society. Due to the impact of post-war baby boom generation turning into elderly population with age over 65 years old, the elderly population in Taiwan has been increasing rapidly since 2011. By the end of February 2017, the elderly population exceeded the young population for the first time, reaching an aging index of 100.18 (number of elderly people per 100 young people). This was also the first time to have the aging index exceeding 100. At the end of 2018, the aging index reached 112.64. In March of 2018, the elderly population accounted for 14.05% of the total population, officially entering the aged society. By the end of 2018, the elderly population with an age over 65 reached 14.56% (Table 3-2-1-1 and Chart 3-2-1-2). With the prolonged natural aging process and the extended average life expectancy of people in Taiwan, not only the number of elderly people with an age over 65 has increased significantly, but also the number of the "aged elderly people" with an age in-between 75 to 84 and number of the "super aged elderly people" with an age of over 85 have increased as well.

III. POPULATION CHANGE



Source: Population Statistics over the Years, Dept. of Household Registration, MOI.

Chart 3-2-1-1 Year-end age rate percentages for three stages of the population

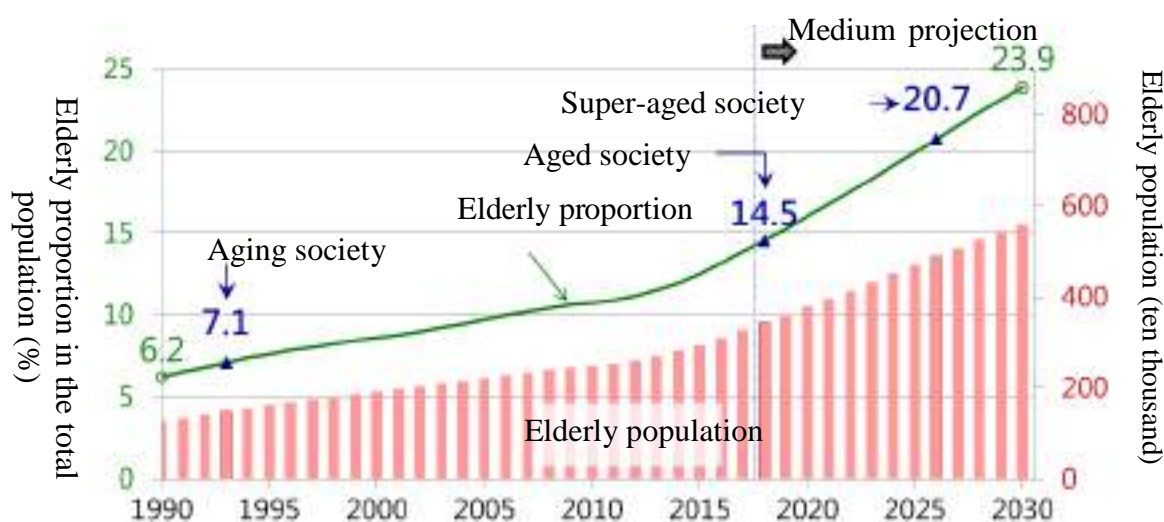


Source: Population Statistics over the Years, Dept. of Household Registration, MOI.

Chart 3-2-1-2 Elderly proportion in the total population over the years

According to the “ROC Population Projection (from 2018 to 2065)” reported by the NDC, Taiwan is expected to become a super-aged society (over 20% of the total population) in 2026. The transition from aged society (2018) to super-aged society is only 8 years, which is shorter than in Japan

(11 years), the United States (15 years), France (29 years), and the UK (51 years) and similar to Korea (7 years), and Singapore (7 years) (Chart 3-2-1-3).



Source: National Development Council, ROC Population Projection (from 2018 to 2065)

Chart 3-2-1-3 Aging timescale - Medium projection

Population aging will have an impact on political, economic and social levels; for example, reduction in population size will involve reduction in the number of local government councilors; as the burden of caring and upbringing on young adults are increasing, the fertility rate will be less likely to improve; labor shortage will bring impact on national competitiveness and taxation; early childhood education, senior people as well as other industries will face the challenges of recession or transformation; senior-friendly environment and economic security crisis of the elderly people will be put to the test.

Therefore, there are several issues worthy of government attention, such as facing the sharp decline in the labor force, how to best use senior citizen and expatriate manpower to fill the labor gap; creating a favorable environment for marriage and childbearing, in order to improve peoples' desire to get married and have children, and thus increase the fertility rate; coping with the aging of the working population, improving office environments, improving working conditions and welfare; paying more

consideration to various aspects of support for the elderly, to ensure vitality and dignity in aging; paying concern to the digital divide caused by the urban-rural gap, making sure that the policies and information pertaining to the rights of the elderly can be effectively conveyed to them; various government services should be made more convenient, to ensure the rights and interests of the elderly.

Compared with countries around the world, Taiwan's elderly population by the end of 2018 accounted for 14.56% of the total population in Taiwan, which is higher than the world average of 9% and the average of 7% for developing countries, but lower than the average of 18% for developed countries. When compared with major countries in the world, this value is lower than that in Japan (28%) and France (20%), since both of these countries have become a "super-aged society." The percentage of elderly population in Taiwan is also lower than that in the UK (18%) and the United States (15%), since both of these countries are regarded as an "aged society." However, it is higher than that in Singapore (13%) and China (11%), and close to that in South Korea (14%).

To benchmark with other countries in the world, the dependency ratio of Taiwan in 2018 was 37.89, which is lower than that of the developed countries, which is 51.52, and that of the developing countries, which is 53.85. Compared with other major countries, the dependency ratio of Taiwan is lower than that of Japan (66.67), France (61.29), United Kingdom (56.25) and the United States (51.52); and is similar to that of South Korea and Singapore (36.99), and China (38.89). The dependency ratio of Taiwan is currently at a relatively lower level among the major countries in the world. However, due to the increase of elderly population, the dependency ratio will increase rapidly in the future.

The aging index of Taiwan in 2018 was 112.64, which is higher than that of the world (34.62) as well as that of the developing countries (25.00), but lower than that of the developed countries (112.50). To benchmark with major countries around the world, the aging index is lower than that of Japan (233.33), Germany (161.54), South Korea (107.69), but is higher than that of the United Kingdom (100.00), United States (78.95) and China

(64.71). Taiwan's aging index is affected by both the trend towards fewer children and the increase of elderly population, which will increase rapidly in the future. (Table 3-2-1-2)

The old-age-dependency ratio⁷ in Taiwan in 2018 was 20.07, which is lower than that of 45.2 in Japan, 32.4 in Germany, 28.0 in the UK, and 23.1 in the United States, but higher than 18.5 in South Korea, 17.1 in Singapore, and 15.0 in China. Taiwan's old-age-dependency ratio is affected by the increase of the elderly population, and is expected to rise rapidly in the future.

Table 3-2-1-2 Worldwide comparison for dependency ratio and aging index

Country	Dependency ratio	Aging index
Worldwide	53.85	34.62
Developed countries	51.52	112.50
Developing countries	53.85	25.00
R.O.C.	37.89	112.64
Canada	49.25	106.25
United States	51.52	78.95
United Kingdom	56.25	100.00
France	61.29	111.11
Germany	51.52	161.54
Mainland China	38.89	64.71
Japan	66.67	233.33
South Korea	36.99	107.69
Malaysia	42.86	25.00
The Philippines	58.73	15.63
Singapore	38.89	86.67
Australia	53.85	84.21
New Zealand	51.52	78.95

Resource: According to the 2018 World Population Data Sheet published by the US Population Reference Bureau in 2019, Dept. of Household Registration, M.O.I.

With regards to the child population by city or county, the highest ratio was in Hsinchu City at 17.29%, followed by Hsinchu County at 16.30%, with Taoyuan City third at 15.06%, all three are higher than the

⁷ The old-age-dependency ratio refers to the ratio of the old-age population (over 65 years) to the working-age population (15 to 64 years) multiplied by 100.

national average of 12.92%. The high child populations of these three suggests a connection with more job opportunities, providing high maternity incentives and childcare subsidies that attract the young and able-bodied population to settle in these areas to give birth to and raise children; Kinmen County's 9.39% was the lowest, with Chiayi County next at 9.42%, and Keelung City was third-lowest, at 10.50%, all were lower than the national average. With regards to the young, able-bodied population, Kinmen County's 77.83% was the highest, with Lienchiang County next at 77.07% and New Taipei City was third at 74.23%, all were higher than the national average of 72.52%; while Taipei City's 69.19% was the lowest, Yunlin County's 70.53% was next lowest, with Hsinchu City third-lowest at 70.72%; all were lower than the national average. As for the elderly population, Chiayi County's 19.06% was the highest, followed by Yunlin County at 18.01%, with Taipei City third at 17.19%, all higher than the national average of 14.56%; they appear related to the outward migration of the young, able-bodied population; Lienchiang County was the lowest at 11.24%, followed by Taoyuan City at 11.40%, with Hsinchu City's 11.99% the third-lowest; all were lower than the national average.

By analyzing the aging index of various counties and cities, the counties and cities with aging index below 100 are listed as follows in the order of increasing aging index in 5 counties (cities): 69.34 for Hsinchu City, 75.47 for Hsinchu County, 75.72 for Taoyuan City, 84.06 for Taichung City and 96.07 for Lienchiang County. The counties and cities with an aging index higher than 150 are listed as follows in the order of decreasing aging index in 5 counties (cities): 202.38 for Chiayi County, 158.46 for Nantou County, 157.20 for Yunlin County, 154.67 for Pingtung County, 152.05 for Penghu County (Table 3-2-1-3).

By analyzing the dependency ratio of various counties and cities, Taipei City 44.54% was the highest, followed by Yunlin County at 41.79%, with Hsinchu City third at 41.40%, all three higher than the average of 37.89%. Kinmen County's 28.49% was the lowest, Lienchiang County

next at 29.76%, with New Taipei City's 34.71% the third lowest, all lower than the average. (Table 3-2-1-3).

Taipei City's children and elderly population is higher than the national average, and the country's lowest proportion of able-bodied population, and dependency burden is the heaviest in Taiwan. The proportion of the young able-bodied population in Yunlin County is the nation's second-lowest, and the proportion of the elderly population in the county is the second-highest, its dependency burden is second to Taipei City. The proportion of Hsinchu City's children population is the country's highest, and the proportion of able-bodied population is the country's third-lowest, its dependency burden is next-highest after Yunlin County.

As the able-bodied populations of Kinmen and Lienchiang counties account for the country's first and second-highest, and the proportions of children and elderly population are low, the dependency burdens are the country's first and second-lightest. As New Taipei City's young, able-bodied population accounted for the third-highest proportion in the country, and young and elderly proportions of population were below average, so the dependency burden for New Taipei City was third-lightest among other counties and cities in the country.

Table 3-2-1-3 Age structure and dependency ratio at 3-stages for each city and county at the end of 2018

Unit: %

County / City	Percentages of age structure			Dependency ratio	Aging index
	0-14	15-64	65+		
Total	12.92	72.52	14.56	37.89	112.64
New Taipei City	12.26	74.23	13.51	34.71	110.16
Taipei City	13.63	69.19	17.19	44.54	126.12
Taoyuan City	15.06	73.54	11.40	35.98	75.72
Taichung City	14.46	73.38	12.16	36.27	84.06
Tainan City	12.24	72.73	15.04	37.50	122.88
Kaohsiung City	11.97	73.02	15.01	36.96	125.44
Yilan County	11.94	72.10	15.96	38.70	133.63
Hsinchu County	16.30	71.40	12.30	40.06	75.47
Miaoli County	12.54	71.48	15.98	39.90	127.37
Changhua County	13.02	71.63	15.35	39.61	117.83
Nantou County	10.84	71.99	17.17	38.92	158.46
Yunlin County	11.46	70.53	18.01	41.79	157.20
Chiayi County	9.42	71.52	19.06	39.83	202.38

III. POPULATION CHANGE

Pingtung County	10.67	72.82	16.51	37.33	154.67
Taitung County	11.76	72.14	16.11	38.62	136.99
Hualien County	11.98	72.12	15.91	38.66	132.81
Penghu County	10.54	73.44	16.02	36.17	152.05
Keelung City	10.50	73.83	15.67	35.44	149.24
Hsinchu City	17.29	70.72	11.99	41.40	69.34
Chiayi City	13.75	71.46	14.79	39.94	107.62
Kinmen County	9.39	77.83	12.78	28.49	136.18
Lienchiang County	11.70	77.07	11.24	29.76	96.07

Source: 2018 Population Statistics, Dept. of Household Registration, MOI

(II) Sex Composition

At the end of 2018, the household registration population of Taiwan was 23,588,932 people, with male population of 11,712,913 people, accounting for 49.65%, and female population of 11,876,019 people, accounting for 50.35%. Before 2013, Taiwan showed more males than females. The sex ratio⁸ has been decreasing from 105.53 in 1997 to less than 100 in 2013 for the first time, reaching a sex ratio of 99.96, meaning that there were slightly more female than male. In 2018, the sex ratio reached 98.63, which was due to the fact that male death rate was relatively higher, and the increasing immigration of female from China or other countries as foreign spouse in recent years, resulting in a rapid decrease in sex ratio. In the past few years, the sex ratio continued to decline year by year, maintaining the trend of more female than male. (Table 3-2-2-1)

Table 3-2-2-1 Taiwan's population and sex ratio

Unit: people; Female=100

Year	Population			Sex ratio
	Total	Male	Female	
1986	19,509,082	10,114,710	9,394,372	107.67
1991	20,605,831	10,640,276	9,965,555	106.77
1997	21,742,815	11,163,764	10,579,051	105.53
2001	22,405,568	11,441,651	10,963,917	104.36
2006	22,876,527	11,591,707	11,284,820	102.72
2007	22,958,360	11,608,767	11,349,593	102.28
2008	23,037,031	11,626,351	11,410,680	101.89
2009	23,119,772	11,636,734	11,483,038	101.34
2010	23,162,123	11,635,225	11,526,898	100.94
2011	23,224,912	11,645,674	11,579,238	100.57
2012	23,315,822	11,673,319	11,642,503	100.26
2013	23,373,517	11,684,674	11,688,843	99.96

⁸ This is the number of males to every 100 females.

Year	Population			Sex ratio
	Total	Male	Female	
2014	23,433,753	11,697,971	11,735,782	99.68
2015	23,492,074	11,712,047	11,780,027	99.42
2016	23,539,816	11,719,270	11,820,546	99.14
2017	23,571,227	11,719,580	11,851,647	98.89
2018	23,588,932	11,712,913	11,876,019	98.63

Source: Population Statistics over the Years, Dept. of Household Registration, MOI.

By observing the sex ratio for elderly population with age over 65 years old, it is found that sex ratio appears less than 100 as early as 2005 and continues to decline year by year. It reached 84.52 in 2018, which suggests that the male population was about 84.5% of the female population (Table 3-2-2-2).

Table 3-2-2-2 Sex ratio for elderly population with age over 65 years old

Unit: people; Female=100

Year-end	Population			Sex ratio
	Total	Male	Female	
2001	1,973,357	1,026,591	946,766	108.43
2002	2,031,300	1,045,154	986,146	105.98
2003	2,087,734	1,063,368	1,024,366	103.81
2004	2,150,475	1,083,496	1,066,979	101.55
2005	2,216,804	1,105,422	1,111,382	99.46
2006	2,287,029	1,129,910	1,157,119	97.65
2007	2,343,092	1,146,064	1,197,028	95.74
2008	2,402,220	1,165,347	1,236,873	94.22
2009	2,457,648	1,183,124	1,274,524	92.83
2010	2,487,893	1,188,511	1,299,382	91.47
2011	2,528,249	1,198,548	1,329,701	90.14
2012	2,600,152	1,224,369	1,375,783	88.99
2013	2,694,406	1,261,259	1,433,147	88.01
2014	2,808,690	1,307,173	1,501,517	87.06
2015	2,938,579	1,361,140	1,577,439	86.29
2016	3,106,105	1,432,398	1,673,707	85.58
2017	3,268,013	1,501,711	1,766,302	85.02
2018	3,433,517	1,572,719	1,860,798	84.52

Source: 2018 Population Statistics, Dept. of Household Registration, MOI

In addition, by observing the sex ratios for the different regions and counties/cities, the north region and south region of Taiwan only had 99.14

III. POPULATION CHANGE

and 99.98, which was less than 100, suggesting that there are more females than males. As for the rest of the regions in Taiwan, the sex ratios were over 100. If we view the sex ratios for different cities and counties, the highest was Lienchiang County at 132.81, followed by Chiayi County at 108.14, with Yunlin County the third-highest at 107.61. Moreover, the sex ratio was 91.27 for Taipei City, 94.36 for Chiayi City, 95.80 for New Taipei City, 96.93 for Taichung City, 97.37 for Hsinchu City, 97.89 for Kaohsiung City, 98.86 for Taoyuan City, 99.59 for Tainan City and Kinmen County, and 99.89 for Keelung City. All of them were less than 100, indicating that there were more females than males. (Table 3-2-2-3)

Table 3-2-2-3 Year-end of 2018 Sex ratio by county or city

Unit: people; Female=100

Region and County / City	Population			Sex ratio
	Total	Male	Female	
Total	23,588,932	11,712,913	11,876,019	98.63
North Region	17,803,366	8,863,177	8,940,189	99.14
New Taipei City	3,995,717	1,954,968	2,040,749	95.80
Taipei City	2,668,572	1,273,375	1,395,197	91.27
Taoyuan City	2,220,872	1,104,073	1,116,799	98.86
Keelung City	370,155	184,978	185,177	99.89
Hsinchu City	445,635	219,846	225,789	97.37
Yilan County	455,221	230,027	225,194	102.15
Hsinchu County	557,010	284,385	272,625	104.31
Central Region	5,813,634	2,924,084	2,889,550	101.20
Taichung City	2,803,894	1,380,106	1,423,788	96.93
Miaoli County	548,863	283,174	265,689	106.58
Changhua County	1,277,824	650,677	627,147	103.75
Nantou County	497,031	254,549	242,482	104.98
Yunlin County	686,022	355,578	330,444	107.61
South Region	6,362,900	3,181,132	3,181,768	99.98
Tainan City	1,883,831	939,967	943,864	99.59
Kaohsiung City	2,773,533	1,371,957	1,401,576	97.89
Chiayi City	268,622	130,416	138,206	94.36
Chiayi County	507,068	263,451	243,617	108.14
Pingtung County	825,406	421,534	403,872	104.37
Penghu County	104,440	53,807	50,633	106.27
East Region	546,887	279,103	267,784	104.23
Taitung County	218,919	112,845	106,074	106.38
Hualien County	327,968	166,258	161,710	102.81

Kinmen and Matsu Regions	152,329	76,942	75,387	102.06
Kinmen County	139,273	69,494	69,779	99.59
Lienchiang County	13,056	7,448	5,608	132.81

Source: 2018 Population Statistics, Dept. of Household Registration, MOI

(III) Marriage Composition

In Taiwan's social structure, marriage and childbearing are still highly correlated. The people of Taiwan typically consider the concept of giving birth to a child in a marriage "legitimate" and "appropriate". Therefore, in the course of life, most people in Taiwan have the idea of "getting married first, and then having children", and the probability of non-marriage birth is less. For this reason, the relationship between marriage, maternity and family is still inseparable. Family is the most basic unit of society. All personal survival, personality development, future generation reproduction, cultural teaching and social system are created based on the foundation of family. According to Taiwan's current status, marriage is the key to family system. Therefore, stable marriage and family are the basis of social stability.

According to Chart 3-2-3-1, the number of marriage couples and marriage rate⁹ in 1996 were 169,424 pairs and 7.90 ‰, respectively, which fell to 142,669 pairs and 6.25‰ in 2006, and which in 2018 were 135,403 couples and 5.74‰. The number of divorced couples and divorce rate¹⁰ in 1996 were 35,875 pairs and 1.67 ‰, respectively, which increased to 64,540 pairs and 2.83‰ in 2006, and which in 2018 were 54,443 pairs and 2.31‰.

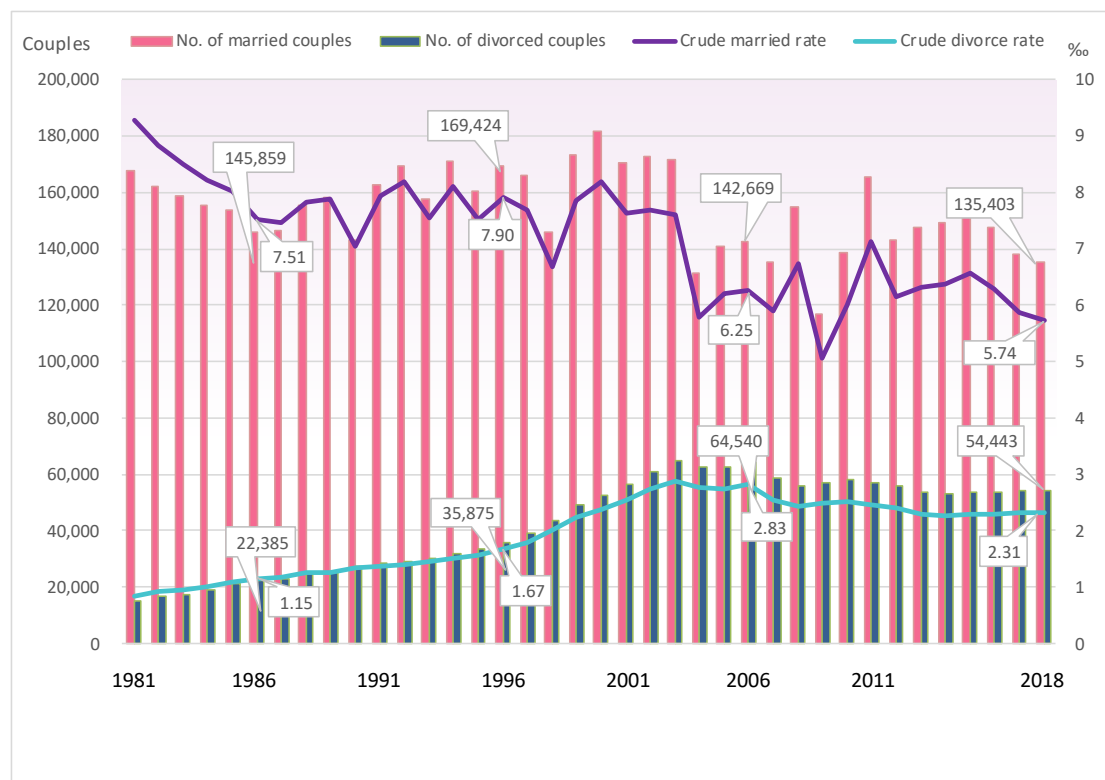
Looking at divorcees in 2018 in terms of their years of marriage, those married for less than five years accounted the greatest part, at 34.29%, while those married for 5 to 9 years were second, accounting for 21.73%.

⁹ The crude marriage rate refers to the annual number of couples marrying as a percentage of the total population of a country or region.

¹⁰ The crude divorce rate refers to the annual number of couples divorcing as a percentage of the total population of a country or region.

III. POPULATION CHANGE

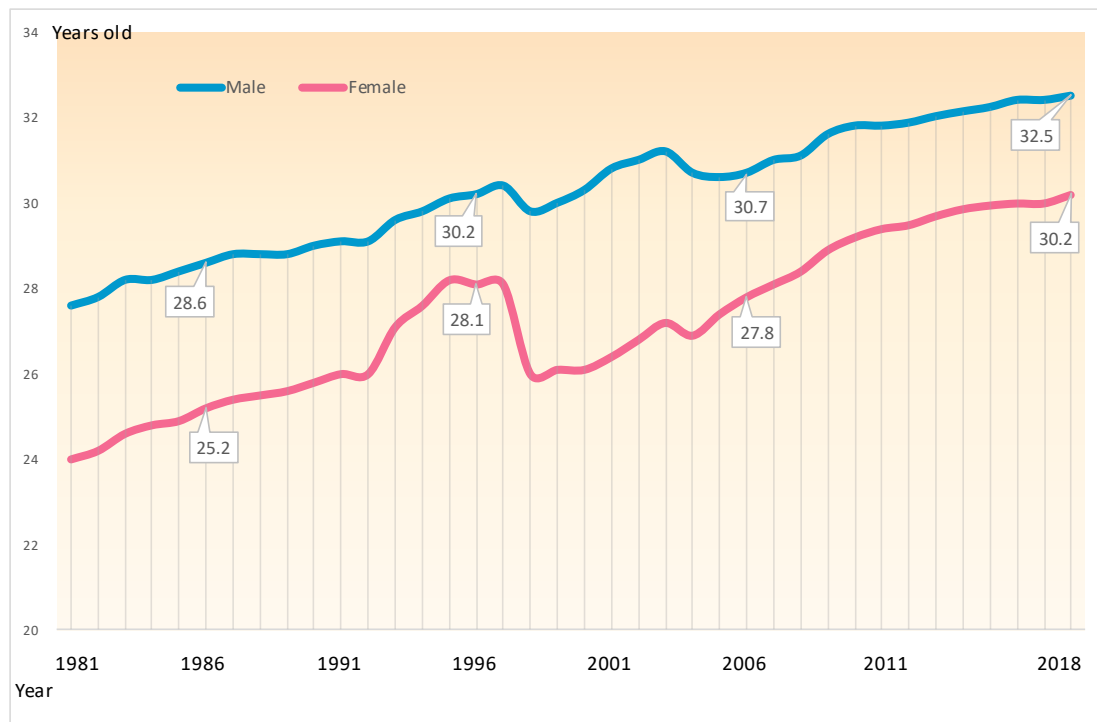
For those married for more than 10 years, the number of divorces decreases as the number of years of marriage increases.



Source: Population Statistics (registered number) over the Years, Dept. of Household Registration, MOI.

Chart 3-2-3-1 Marriage and divorce numbers and trends for males and females over the years

Due to the rapid development of Taiwan's industry and commerce and improvement of female education level, its society and population composition has changed rapidly. Personal outlooks and values have been subject to more influence from Western culture, which has led to significant changes in the peoples' attitudes and behavior towards marriage, birth and the family. These changes also have had a huge impact on the country's socio-economic development. According to Chart 3-2-3-2, the average age of first marriage for males in 2006 was 30.7 years, which was increased to 32.5 years in 2018. For the same period, the average age of first marriage for females increased from 27.8 years to 30.2 years, showing that people in Taiwan are getting married late. Late marriage inevitably will lead to late childbearing, and shorten the fertility period for females, which in turn affecting the number and quality of births.



Source: Population Statistics over the Years, Dept. of Household Registration, MOI.
(occurred number)

Chart 3-2-3-2 Average age of First Marriage for Males and Females over the Years

According to Chart 3-2-3-3, in 1998, the marriage rate for males and females aged from 20 to 49 in Taiwan was 56.10% and 64.50% respectively, which then dropped to 46.63% and 52.79%, respectively in 2008. In 2018, the marriage rate further declined 39.66% and 46.78% for males and females respectively. The marriage rate for males and females in Taiwan has decreased to less than 50%, which is worth our attention.

III. POPULATION CHANGE



Source: Population Statistics over the Years, Dept. of Household Registration, MOI.

Chart 3-2-3-3 The marriage rate for males and females aged from 20 to 49 in Taiwan

Since the idea of "giving birth after marriage" is deeply affecting our society, and the course of life for people in Taiwan is still based mostly on the idea of "getting married first, and then having children", as a result, the rate of marriage was declined significantly, leading to decrease in fertility rate. In addition, the divorce rate in Taiwan still remains high; therefore, we should strengthen the promotion of population & family education, consolidate the consensus of our citizens, and re-establish marriage & family values to build a harmonious and stable family.

Looking the marriage rate by city or county, Lienchiang County was highest at 6.79‰, followed by Taoyuan City at 6.60‰, with Taichung City third at 6.17‰, the above cities all were higher than the average of 5.74‰; while Kinmen County was lowest at 4.57‰, followed by Chiayi County at 4.73‰, with Yunlin County third-lowest at 4.80‰, these counties (cities) were all lower than the average. (Table 3-2-3-1)

Looking at the divorce rate by cities and counties, the highest was Hualien County, at 2.89‰, followed by Taitung County at 2.85‰, with Taoyuan City third-highest at 2.71‰; the above counties and city were all higher than the national average of 2.31‰; while the lowest divorce rates were in Kinmen County, at 1.55‰, with Changhua County next at 1.84‰,

and Chiayi County third-lowest, at 2.03‰; these counties (cities) were all lower than average. (Table 3-2-3-1)

Table 3-2-3-1 2018 Marriage and divorce numbers and marriage and divorce rates for the population of each city and county

Unit: couple; ‰

County /City	Marriages		Divorces	
	No. of marriage couples	Crude marriage rate	No. of divorced couples	Crude divorce rate
Total	135,322	5.74	54,402	2.31
New Taipei City	23,925	5.99	9,763	2.45
Taipei City	15,152	5.66	5,554	2.08
Taoyuan City	14,544	6.60	5,976	2.71
Taichung City	17,240	6.17	6,648	2.38
Tainan City	10,231	5.43	3,976	2.11
Kaohsiung City	15,703	5.66	6,421	2.31
Yilan County	2,477	5.43	1,059	2.32
Hsinchu County	3,144	5.67	1,312	2.37
Miaoli County	3,054	5.54	1,311	2.38
Changhua County	6,836	5.34	2,356	1.84
Nantou County	2,554	5.12	1,095	2.19
Yunlin County	3,303	4.80	1,410	2.05
Chiayi County	2,408	4.73	1,033	2.03
Pingtung County	4,339	5.24	1,857	2.24
Taitung County	1,125	5.13	624	2.85
Hualien County	1,897	5.77	949	2.89
Penghu County	572	5.49	252	2.42
Keelung City	1,992	5.37	941	2.54
Hsinchu City	2,683	6.05	1,027	2.32
Chiayi City	1,422	5.29	596	2.22
Kinmen County	633	4.57	214	1.55
Lienchiang County	88	6.79	28	2.16

Source: 2018 Population Statistics, Dept. of Household Registration, MOI. (Occurred number)

In recent years, with changes in the social composition of our country, economic boom and development, development trends of globalization, and the cross-border population movements in the Asian region, the marriage structure has also moved in the direction of “transnational marriages,” and which have become a common yet special social phenomenon. For the registered marriages in 2018, there were 114,795 couples in which both males and females are citizens of Taiwan, accounting for 84.78%. There were 20,608 couples in which their spouses are foreigners or are from Mainland China, Hong Kong and Macao,

III. POPULATION CHANGE

accounting for 15.22%. Among them, there were 15,223 females, accounting for 73.87%, which was higher than that of males, which was 5,385, accounting for 26.13%. This suggests that foreign spouses in Taiwan are mainly females. However, the gap has been reducing year by year.

From long-term observation, the proportion of foreign marriage couples, that is Taiwan citizen with spouse from foreign countries, Mainland China, Hong Kong or Macao, to total marriage couples reached a peak of 31.86% in 2003, which suggests that on average, there will be one foreign marriage couple in every 3 marriage couples. Moreover, since the Ministry of the Interior started to implement the Mainland China spouse interview system in 2003 and the Ministry of Foreign Affairs began to strengthen the measures of foreign spouse interview in 2005, a declining trend for foreign spouses or spouses from Mainland China, Hong Kong or Macao was resulted since 2004 despite some fluctuations. The proportion of foreign marriage couples reached 15.22% in 2018 (Table 3-2-3-2).

Table 3-2-3-2 Marriage Status for Citizens in Taiwan over the Years

Unit: No. of Couples; people; %

Year	Total No. of couples	ROC citizens		By nationality (region)						Non-ROC nationals spouse	
		No. of couples	Percent age points	Total		Mainland Chinese, HK & Macao		Foreign nationals		Male	Female
				No. of couples	Percent age points	No. of couples	Percent age points	No. of couples	Percent age points		
2003	171,483	116,849	68.14	54,634	31.86	34,991	20.40	19,643	11.45	6,001	48,633
2004	131,453	100,143	76.18	31,310	23.82	10,972	8.35	20,338	15.47	3,176	28,134
2005	141,140	112,713	79.86	28,427	20.14	14,619	10.36	13,808	9.78	3,139	25,288
2006	142,669	118,739	83.23	23,930	16.77	14,406	10.10	9,524	6.68	3,214	20,716
2007	135,041	110,341	81.71	24,700	18.29	15,146	11.22	9,554	7.07	3,141	21,599
2008	154,866	133,137	85.97	21,729	14.03	12,772	8.25	8,957	5.78	3,516	18,213
2009	117,099	95,185	81.29	21,914	18.71	13,294	11.35	8,620	7.36	3,673	18,241
2010	138,819	117,318	84.51	21,501	15.49	13,332	9.60	8,169	5.88	3,792	17,709
2011	165,327	143,811	86.99	21,516	13.01	13,463	8.14	8,053	4.87	4,090	17,426
2012	143,384	122,784	85.63	20,600	14.37	12,713	8.87	7,887	5.50	4,337	16,263
2013	147,636	128,144	86.80	19,492	13.20	11,542	7.82	7,950	5.38	4,190	15,302
2014	149,287	129,586	86.80	19,701	13.20	10,986	7.36	8,715	5.84	4,521	15,180
2015	154,346	134,358	87.05	19,988	12.95	10,455	6.77	9,533	6.18	4,686	15,302
2016	147,861	127,502	86.23	20,359	13.77	9,813	6.64	10,546	7.13	4,917	15,442
2017	138,034	116,937	84.72	21,097	15.28	8,950	6.48	12,147	8.80	5,304	15,793
2018	135,403	114,795	84.78	20,608	15.22	8,216	6.07	12,392	9.15	5,385	15,223

Source: Dept. of Household Registration, MOI.

Explanation: Data on this table is calculated according to date of registration.

For the divorces in 2018, there were 44,027 couples in which both husband and wife are citizens of R.O.C. The husband or wife was originally from foreign nationals, the mainland China, Hong Kong and Macao were 10,375 couples, among them, the husband or wife was originally from the mainland China, Hong Kong and Macao were 5,802 couples, while 3,905 couples of husband or wife was from Southeast Asia countries. (Table 3-2-3-3)

Table 3-2-3-3 No. of divorce couples over 10 Years

Unit: No. of Couples

Year	Total No. of divorce couples	Both husbands and wives were originally R.O.C. nationality	The husband or wife was originally from foreign nationals, the mainland Chinese, Hong Kong and Macao	The husband or wife was originally from the mainland Chinese, Hong Kong and Macao	The husband or wife was originally from Southeast Asia countries
2008	56,103	44,581	11,522	6,647	4,198
2009	57,223	44,097	13,126	7,746	4,654
2010	58,037	42,827	15,210	9,729	4,711
2011	57,077	42,865	14,212	8,749	4,732
2012	55,835	42,512	13,323	8,195	4,401
2013	53,599	41,482	12,117	7,270	4,141
2014	53,144	41,567	11,577	6,966	3,867
2015	53,448	42,367	11,081	6,517	3,914
2016	53,850	43,070	10,780	6,295	3,810
2017	54,439	43,655	10,784	6,068	4,037
2018	54,402	44,027	10,375	5,802	3,905

Source: Statistics notification, Department of Statistics, MOI.

Explanation: Data on this table is calculated according to date of registration.

Looking at the number ratio of foreign spouses in each county or city, the highest was Lienchiang County, at 24.42%, followed by Kinmen County at 23.05%, with Yunlin County third-highest at 17.37%; the above counties and city were all higher than the national average of 15.22%; while the lowest number of foreign spouses were in Penghu County, at 11.11%, with Hualien County next at 11.13%, and Tainan City third-lowest, at 12.76%. (Table 3-2-3-4)

On May 24, 2019, the “Act for Implementation of J.Y. Interpretation No. 748” was officially implemented, allowing the household administration authorities in Taiwan to accept the application of “marriage registration” as the corresponding cancellation and abolition processes for same-sex couples. Since the implementation of this Law up to the end of

III. POPULATION CHANGE

October 2019, there have been 2,390 couples registered for marriage; among which 771 couples are males and 1,619 couples are females, while 71 couples registered for marriage termination; among which 39 couples are males and 32 couples are females.

As for the number of same-sex couples registered for marriage in different cities and counties, New Taipei City has the most couples, accounting for 20.92%, followed by Taipei City, accounting for 16.57% and Kaohsiung City, accounting for 13.26%. Penghu County and Jinmen County have the least couples, accounting for 0.29%, followed by Chiayi City (Table 3-2-3-5), accounting for 0.59%, and Chiayi/Taitung County, accounting for 0.79%.

**Table 3-2-3-4 2018 Number of Marriage Registration for Taiwan
Citizen marries Non-Citizen (sorted according to
various regions in Taiwan)**

Unit: No. of Couples; people; %

Region	Total No. of marriage couples	Foreign nationals and Mainland Chinese, HK & Macao		By nationality (region)					
				Mainland Chinese, HK & Macao			Foreign nationals		
		Number of people	Ratio	Total	Mainlan d Chinese	HK & Macao	Total	Southeas t Asia	Other
Total	135,403	20,608	15.22	8,216	6,944	1,272	12,392	8,749	3,643
North Region	63,935	10,506	16.43	4,406	3,705	701	6,100	3,997	2,103
New Taipei City	23,882	3,928	16.45	1,668	1,388	280	2,260	1,530	730
Taipei City	15,193	2,574	16.94	1,193	998	195	1,381	550	831
Taoyuan City	14,544	2,395	16.47	908	768	140	1,487	1,193	294
Keelung City	2,004	339	16.92	162	136	26	177	125	52
Hsinchu City	2,682	372	13.87	151	135	16	221	154	67
Yilan County	2,483	398	16.03	157	136	21	241	189	52
Hsinchu County	3,147	500	15.89	167	144	23	333	256	77
Central Region	33,039	4,811	14.56	1,748	1,480	268	3,063	2,396	667
Taichung City	17,260	2,386	13.82	966	812	154	1,420	988	432

Miaoli County	3,055	490	16.04	167	143	24	323	280	43
Changhua County	6,826	943	13.81	291	247	44	652	558	94
Nantou County	2,564	413	16.11	134	107	27	279	227	52
Yunlin County	3,334	579	17.37	190	171	19	389	343	46
South Region	34,678	4,761	13.73	1,773	1,508	265	2,988	2,175	813
Tainan City	10,209	1,303	12.76	439	363	76	864	631	233
Kaohsiung City	15,746	2,183	13.86	874	743	131	1,309	888	421
Chiayi City	1,434	203	14.16	96	81	15	107	73	34
Chiayi County	2,404	398	16.56	133	121	12	265	231	34
Pingtung County	4,318	611	14.15	209	182	27	402	317	85
Penghu County	567	63	11.11	22	18	4	41	35	6
East Region	3,023	361	11.94	158	131	27	203	153	50
Taitung County	1,128	150	13.30	67	58	9	83	57	26
Hualien County	1,895	211	11.13	91	73	18	120	96	24
Kinmen and Matsu Regions	728	169	23.21	131	120	11	38	28	10
Kinmen County	642	148	23.05	116	106	10	32	23	9
Lienchiang County	86	21	24.42	15	14	1	6	5	1

Source: Dept. of Household Registration, MOI

Explanation: Data on this table is calculated according to date of registration.

Table 3-2-3-5 Number of same-sex couples registered for marriage and marriage termination by the end of October 2019 in different cities and counties

Unit : couple ; %

City/County	Same-sex marriage		Same-sex marriage termination	
	Number of couples	Percentage	Number of couples	Percentage
Total	2,390	100.00	71	100.00
New Taipei City	500	20.92	10	14.08
Taipei City	396	16.57	6	8.45
Taoyuan City	240	10.04	8	11.27
Taichung City	288	12.05	3	4.23
Tainan City	154	6.44	5	7.04

III. POPULATION CHANGE

Kaohsiung City	317	13.26	12	16.90
Yilan County	41	1.72	0	0.00
Hsinchu County	51	2.13	0	0.00
Miaoli County	38	1.59	5	7.04
Changhua County	45	1.88	2	2.82
Nantou County	22	0.92	0	0.00
Yunlin County	21	0.88	3	4.23
Chiayi County	19	0.79	1	1.41
Pingtung County	69	2.89	8	11.27
Taitung County	19	0.79	0	0.00
Hualien County	56	2.34	1	1.41
Penghu County	7	0.29	1	1.41
Keelung City	33	1.38	3	4.23
Hsinchu City	53	2.22	2	2.82
Chiayi City	14	0.59	1	1.41
Kinmen County	7	0.29	0	0.00
Lianjiang County	0	0.00	0	0.00

(IV) Ethnic Composition

“Ethnicity” is a term used in political science and sociology. What is meant by “ethnic group” according to the definition of social scientists is a group who consider themselves, or are considered by others to constitute a unique community on account of their common origin, or common ancestry, culture or language. This definition includes both objective and subjective criteria: the objective criteria is that these people are thought to have a common culture or a common ancestral source; and the subjective criteria is that a group consider themselves to constitute a distinct ethnic group, and their community has also received such recognition by other people. This involves a social process of subjective mutual recognition of whether or not the other party constitutes an ethnic group, which is ethnic identity¹¹. Taiwan's concept of ethnicity involves many factors, which are extremely sensitive and complex.

Fu-chang Wang (2004), on the basis of ethnic identity theory, analyzed the imagined ethnic origins and differences of groups within Taiwan, and through a historical perspective and observation of social structure, divided Taiwan's ethnic groups into the four groups namely,

¹¹ Fu-chang Wang, 'Ethnic Imagination in Contemporary Taiwan' (Socio Publishing Co., Taipei, 2003), Page 10.

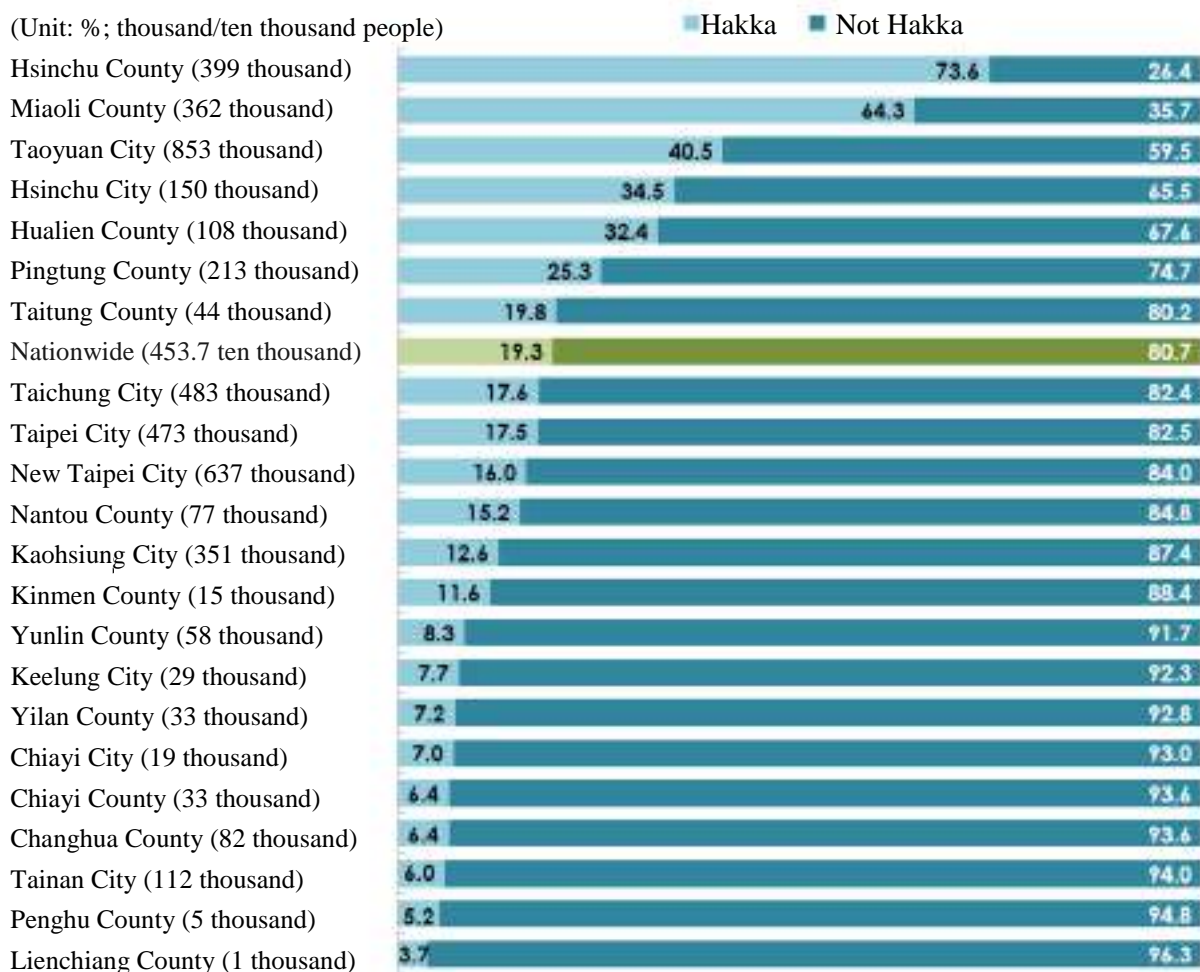
Taiwan aborigines, Hakka, Hokkien Taiwanese, and mainland Chinese, considering Taiwan's four classifications to be composed of three large ethnic groups in relative mutual antagonism. The nation's ethnicity can be roughly divided into the Han Chinese ethnic group, Indigenous ethnic groups, and overseas expatriates living in the country, and the Han Chinese can be further roughly divided into Hokkien, Hakka, Mainland Chinese and others.

Referring to the "2016 Taiwan Hakka Population and Language Basic Information Survey" conducted by the Hakka Affairs Council and from the distribution of the "single self-identity" group, most of the people are "Hoklo Taiwanese", which accounted for 69.0% of the total population, approximately 16,201,000 people; followed by "Hakka People", which accounted for 16.2% of the total population, approximately 3,815,000 people; "People from Mainland China", which accounted for 5.5% of the total population, approximately 1,296,000 people; and "Indigenous People", which accounted for 2.7% of the total population, approximately 635,000 people (The estimation values and statistics may subject to discrepancies. According to the statistics of the Ministry of the Interior, the registered indigenous population in 2016 is 553,228 people).

According to the definition of Hakka in the Hakka Basic Act, "people who have Hakka blood or Hakka origin, and those who identify themselves as Hakka," the total Hakka population estimated is 4.537 million people, accounting for 19.3% of the total population in Taiwan. With regard to the proportion of Hakka population in different counties and cities, Hsinchu County has 73.6%, Miaoli County has 64.3%, Taoyuan City has 40.5%, Hsinchu City has 34.5% and Hualien County has 32.4%. Among them, nearly two-thirds of the population in Hsinchu County and Miaoli County are Hakka people, and the proportion of Hakka population in the rest of the three counties and cities is more than 30%. The remaining counties and cities with reasonably high Hakka population are as follows in the order of decreasing Hakka population: 25.3% for Pingtung County, 19.8% for Taitung County, 17.6% for Taichung City, 17.5% for Taipei City, 16.0%

III. POPULATION CHANGE

for New Taipei City, 15.2% for Nantou County, and 12.6% for Kaohsiung City (Chart 3-2-4-1).



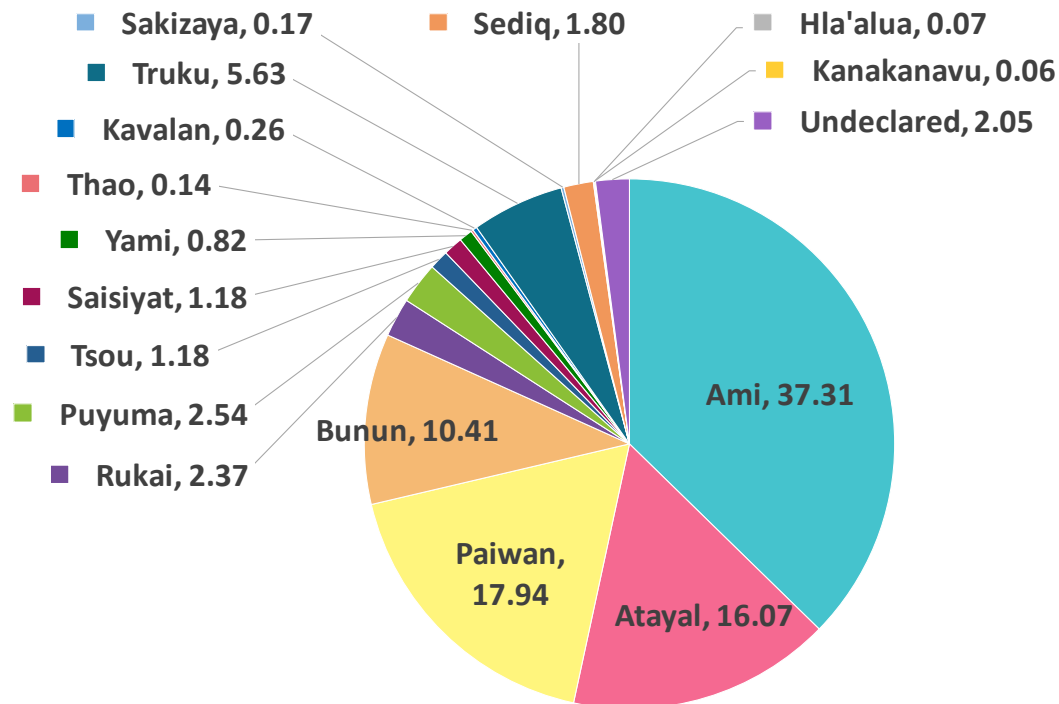
Source: Hakka Affairs Council “2016 Taiwan Hakka Population and Language Basic Information Survey”

Chart 3-2-4-1 Hakka population in different cities and counties estimated based on the definition stated in the Hakka Basic Act

Currently, there are 16 indigenous groups (tribes) recognized by the government. Each indigenous group has its own culture, language, customs and social structure. In 2018, the total population of the indigenous people was 565,561, accounting for 2.4% of the total population.

The Ami's total population, at 211,031 people, accounted for 37.31% of the total indigenous population, and was the largest indigenous ethnic group; The ratio of other ethnic groups to the total population of the indigenous people were Atayal (16.07%), Paiwan (17.94%), Bunun

(10.41%), Rukai (2.37%), Puyuma (2.54%), Tsou (1.18%), Saisiyat (1.18%), Yami (0.82%), Thao (0.14%), Kavalan (0.26%), Truku (5.63%), Sakizaya (0.17%), Sediq (1.80%), Hla'alua (0.07%) and Kanakanavu (0.06%), for which the undeclared accounted for 2.05% (Chart 3-2-4-2).



Source: Population Statistics over the Months, Dept. of Household Registration, MOI.

Chart 3-2-4-2 Population Ratio of each indigenous ethnic group

With regard to the distribution of indigenous people in various counties and cities, Hualien County has the highest indigenous population of 93,178 people, accounting for 16.48% of the total indigenous population followed by Taitung County with indigenous population of 79,235 people, accounting for 14.01%, and Taoyuan City with indigenous population of 73,874 people, accounting for 13.06%. The above three county and city together accounted for 40% of the total indigenous population. On the other hand, the proportions of indigenous population in Lienchiang County, Penghu County, Chiayi City and Kinmen County were all less than 0.20%; among all the cities and counties, Taitung County has the highest proportion of indigenous population, reaching 36.19%, followed Hualien County with 28.41% and Pingtung County with 7.25% (Table 3-2-4).

Table 3-2-4 Indigenous population and ratio by County or City in 2018

Unit: People; %

County/city	Indigenous population	Population ratio of county or city	Ratio of indigenous population
Total	565,561	2.40	100.00
New Taipei City	55,607	1.39	9.83
Taipei City	16,713	0.63	2.96
Taoyuan City	73,874	3.33	13.06
Taichung City	34,514	1.23	6.10
Tainan City	7,938	0.42	1.40
Kaohsiung City	34,670	1.25	6.13
Yilan County	17,192	3.78	3.04
Hsinchu County	21,622	3.88	3.82
Miaoli County	11,397	2.08	2.02
Changhua County	5,786	0.45	1.02
Nantou County	29,187	5.87	5.16
Yunlin County	2,458	0.36	0.43
Chiayi County	5,868	1.16	1.04
Pingtung County	59,832	7.25	10.58
Taitung County	79,235	36.19	14.01
Hualien County	93,178	28.41	16.48
Penghu County	569	0.54	0.10
Keelung City	9,359	2.53	1.65
Hsinchu City	4,167	0.94	0.74
Chiayi City	1,078	0.40	0.19
Kinmen County	1,092	0.78	0.19
Lienchiang County	225	1.72	0.04

Source: Statistics notification, Department of Statistics, MOI.

(V) Educational Composition

By the year-end of 2018, Taiwan's registered population of people aged 15 years or more numbered about 20.54 million people, 87.08% of the total population. Those with tertiary education of junior college level, university degree level or above accounted for 45.52%; the biggest proportion, while senior high school and vocational school graduates accounted for 30.30%, followed by junior high school graduates, ranking third at 11.85%. Of these groups, tertiary education has seen the biggest increases over the past 10 years, at 10.61 %, among them, the increase of 8.79 percentage points in university enrollments, the ratios of junior college and senior high school and vocational school graduates have been decreasing every year. (Table 3-2-5-1)

Due to the implementation of twelve-year compulsory education and the promotion of higher education, the standard of our citizens' education has increased over the years. The population of the over 15 year-old illiterates rate fell from 2.22% in the end of 2008 to 1.13% in the end of 2018. At the elementary school education level, this fell from 15.23% in the end of 2008 to 10.98% by the end of 2018; while the proportion of the population educated at junior college and above has been increasing year by year; over the same period, it rose from 34.91% to 45.52%, demonstrating that in recent years the nations' standard of education has risen (Table 3-2-5-1).

Table 3-2-5-1 Educational composition of the over-15 year-old population of Taiwan

Unit: %

Year's end	Sum-total	Literate									Illiterate
		Total	Tertiary educated				Senior High school (vocational school) (Incl. 3 year pre-tertiary)	Junior high school	Elementary school	Self-taught	
			Sub-total	Graduate Institute	University or College	Junior college					
Year end of 2008	100.00	97.78	34.91	4.13	18.35	12.43	32.92	14.31	15.23	0.41	2.22
Year end of 2009	100.00	97.91	35.87	4.42	19.29	12.15	32.84	14.04	14.78	0.39	2.09
Year end of 2010	100.00	98.04	37.05	4.73	20.38	11.94	32.56	13.74	14.33	0.37	1.96
Year end of 2011	100.00	98.17	38.18	5.14	21.27	11.77	32.32	13.44	13.87	0.35	1.83
Year end of 2012	100.00	98.29	39.45	5.52	22.27	11.66	31.86	13.24	13.41	0.33	1.71
Year end of 2013	100.00	98.39	40.70	5.84	23.32	11.54	31.43	12.95	12.99	0.31	1.61
Year end of 2014	100.00	98.50	41.75	6.14	24.16	11.45	31.15	12.73	12.58	0.30	1.50
Year end of 2015	100.00	98.60	42.68	6.40	24.92	11.36	30.92	12.53	12.18	0.28	1.40
Year end of 2016	100.00	98.70	43.64	6.68	25.67	11.30	30.79	12.24	11.77	0.26	1.30
Year end of 2017	100.00	98.79	44.55	6.94	26.38	11.23	30.56	12.08	11.36	0.24	1.21
Year end of 2018	100.00	98.87	45.52	7.21	27.14	11.17	30.30	11.85	10.98	0.23	1.13
Increase or decrease percentage points compared with the year-end of 2008	-	1.09	10.61	3.09	8.79	-1.27	-2.62	-2.47	-4.25	-0.18	-1.09

Source: Statistics notification, Department of Statistics, MOI.

Explanation: This refers to two and three year and two years in addition to five-year junior colleges.

III. POPULATION CHANGE

By the end of 2018, for the population of the over 15 year-old, there were 20,300,000 literate people in Taiwan, a literacy rate of 98.87%, demonstrating a continuing increase year on year. If further examination is made of the higher education (junior college level, university degree level and above) population composition, at the end of 2018, Taiwan's tertiary graduate population numbered 9,350,000 people, an average annual growth rate of 3.42% over the past 10 years. Looking at sex, the average annual rate of increase of the population in higher education has been greater for women than for men over the past 10 years, at 3.7%, compared to 3.16% for men. As for the level of education, university graduates accounted for the majority, at 59.62%, or 5.57 million people, and junior college graduates accounted for 24.53%, or 2.29 million people, with graduate institute graduates ranking third at 1.48 million, accounting for 15.84%. (Table 3-2-5-2)

Table 3-2-5-2 The educational level of the nation's tertiary-educated population over the years

Unit: 1,000 People

Year's end	Total			Graduate Institute		University or College				Junior College (note)		
	Total	Male	Female	Male	Female	Male	Female	Male	Female	Total	Male	Female
Year end of 2008	6,679	3,510	3,169	789	506	284	3,511	1,774	1,737	2,379	1,231	1,148
Year end of 2009	6,938	3,634	3,304	855	544	311	3,732	1,874	1,858	2,351	1,216	1,135
Year end of 2010	7,239	3,781	3,458	925	584	341	3,981	1,991	1,990	2,333	1,206	1,127
Year end of 2011	7,531	3,926	3,605	1,014	636	379	4,195	2,090	2,104	2,322	1,200	1,122
Year end of 2012	7,852	4,082	3,770	1,099	685	414	4,433	2,200	2,233	2,320	1,197	1,123
Year end of 2013	8,151	4,226	3,925	1,169	725	445	4,670	2,311	2,359	2,312	1,191	1,120
Year end of 2014	8,415	4,352	4,063	1,237	762	475	4,870	2,402	2,468	2,308	1,187	1,120
Year end of 2015	8,666	4,471	4,195	1,300	797	503	5,059	2,490	2,569	2,307	1,184	1,123
Year end of 2016	8,902	4,583	4,319	1,362	831	531	5,236	2,571	2,665	2,304	1,181	1,123
Year end of 2017	9,124	4,687	4,436	1,422	864	558	5,403	2,647	2,756	2,299	1,177	1,122
Year end of 2018	9,350	4,794	4,556	1,481	896	585	5,575	2,726	2,849	2,294	1,172	1,122
Increase or decrease from the year-end of 2008 (%)	39.98	36.55	43.77	87.64	77.13	106.40	58.77	53.66	63.99	-3.58	-4.78	-2.29
Average increase over the	3.42	3.16	3.70	6.50	5.88	7.52	4.73	4.39	5.07	-0.36	-0.49	-0.23

past 10
years (%)

Source: Statistics notification, Department of Statistics, MOI.

Explanation: This refers to two and three year and two years in addition to five-year junior colleges.

Looking at higher educational levels (junior college level, university degree or above) in each city or county, Taipei City was highest, at 61.84%, followed by Hsinchu City at 54.72%, with Chiayi City third at 49.07%; all were higher than the average value of 45.52%. Taitung County was lowest, at 30.87%, followed by Chiayi County at 31.46%, Yunlin County was third at 33.02%; and all were lower than the average value. Looking at the illiteracy rates of each city and county, Taipei City was lowest, at 0.45%, followed by Kinmen County at 0.49%, Hsinchu County was third at 0.58%; all were lower than the average value of 1.13%; also, Yunlin County's 2.81% was the highest, followed by Changhua County at 2.61%, with Chiayi County the third highest at 2.52%; all were higher than the average value (Table 3-2-5-3).

Table 3-2-5-3 Year-end of 2018 over 15-year-old population of each county and city by junior college level, university degree level and above and illiteracy

Unit: People; %

Region	Total	Junior college level, university degree level and above		Number of people of illiteracy	Rate of illiteracy
		Number of people	Rate		
Total	20,540,705	9,349,824	45.52	231,226	1.13
New Taipei City	3,505,795	1,632,906	46.58	25,227	0.72
Taipei City	2,304,915	1,425,290	61.84	10,421	0.45
Taoyuan City	1,886,448	874,195	46.34	16,431	0.87
Taichung City	2,398,398	1,135,275	47.33	21,523	0.90
Tainan City	1,653,327	725,633	43.89	21,299	1.29
Kaohsiung City	2,441,541	1,088,735	44.59	33,975	1.39
Yilan County	400,858	152,022	37.92	5,993	1.50
Hsinchu County	466,222	225,573	48.38	2,703	0.58
Miaoli County	480,017	186,245	38.80	3,013	0.63
Changhua County	1,111,395	424,372	38.18	29,030	2.61
Nantou County	443,158	156,222	35.25	4,543	1.03
Yunlin County	607,412	200,584	33.02	17,067	2.81
Chiayi County	459,304	144,496	31.46	11,564	2.52
Pingtung County	737,305	255,641	34.67	13,427	1.82
Taitung County	193,181	59,637	30.87	2,463	1.27
Hualien County	288,691	108,303	37.52	1,873	0.65
Penghu County	93,434	35,227	37.70	957	1.02
Keelung City	331,292	136,851	41.31	3,558	1.07
Hsinchu City	368,587	201,691	54.72	2,663	0.72
Chiayi City	231,698	113,687	49.07	2,591	1.12
Kinmen County	126,198	61,781	48.96	620	0.49
Lienchiang County	11,529	5,458	47.34	285	2.47

Source: 2018 Population Statistics, Dept. of Household Registration, MOI.

To benchmark with countries around the world, Taiwan's higher education rate for a population in the age of 25-64 reached 51% by the year-end of 2018, which is higher than the average value of 37% for OECD countries. Compared to other major countries, lower than that of Canada (57%), and similar to Japan (51%), the rest of the countries show value, which is lower than that of Taiwan. (Table 3-2-5-4)

Table 3-2-5-4 Higher Education Rate of Population from ages 25 - 64 in major countries

Unit: %

Country	Year-end of year	Higher education rate of population from ages 25 - 64
R.O.C.	2018	51
	2017	49
Average of OECD	2017	37
Canada	2017	57
Japan	2017	51
Israel	2017	50
Korea	2017	47
United Kingdom	2017	46
United States	2017	47
Australia	2017	46
Ireland	2017	46
Norway	2017	43
Finland	2017	45
Sweden	2017	43
Switzerland	2017	43
Iceland	2017	42
Denmark	2017	40
Belgium	2017	40
The Netherlands	2017	37
Spain	2017	37
New Zealand	2017	38
France	2017	35
Austria	2017	32
Poland	2017	31
Germany	2017	29
Portugal	2017	24
Czech Republic	2017	24
Chile	2015	22

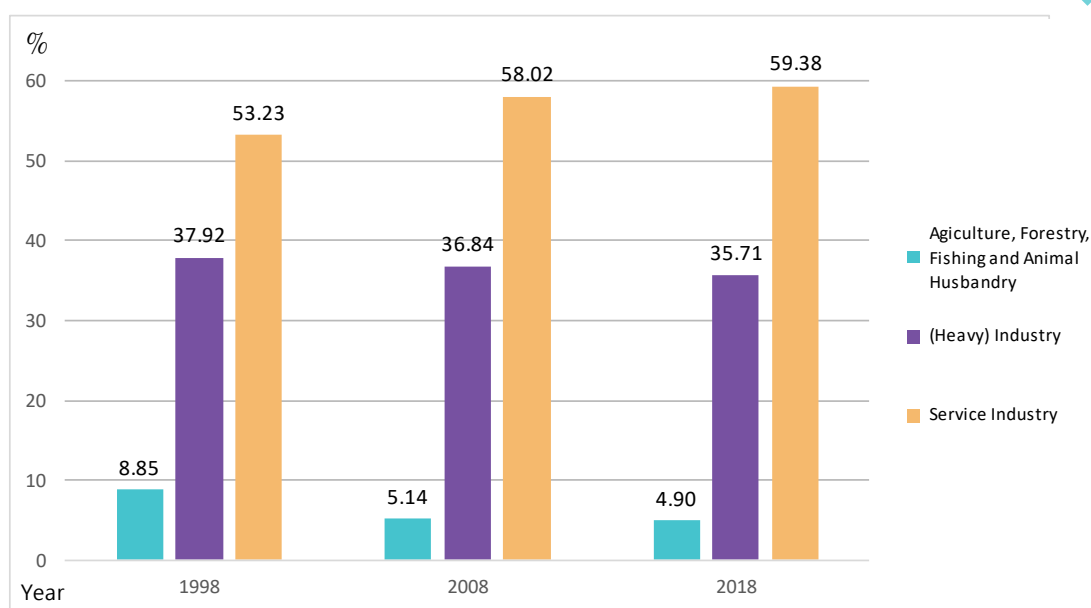
Source: Statistics notification, Department of Statistics, MOI.

(VI) Industrial¹² Composition

Due to industrial and commercial development, the nation's economic model has evolved from a predominantly agricultural lifestyle to a commercial and industrial-based production model, and in recent years also because of computer, electronics, telecommunications, biochemical and financial services industries accounted for the vast majority of the job market, most economic models have been converted to service-based production models. In agriculture, forestry, fishing and animal husbandry there has been a rapid decrease in the proportion of the population from 1998's 8.85% to 4.90% by 2018, while the proportion of the population employed in the service sector rose from 53.23 % in 1998 to 59.38% by 2018; and the industrial proportion of the population rose to 42.47% in 1988, after which it dropped to 35.71% by 2018 (Table 3-2-6-1 and Chart 3-2-6).

Industrial categories can be subdivided into the five categories of mining and quarrying, manufacturing, electricity and fuel supply industry, water supply and pollution treatment, and the construction engineering industry and other industries; service industries can be further subdivided into 13 categories, such as the wholesale and retail industries; transportation and storage industries; accommodation & catering industries (food and beverage service industry); publishing, audiovisual production, communication, IT and communication and broadcasting industries; finance and insurance industries; real estate industry; professional, scientific and technical industries; support services industry, public administration and national defense, compulsory social security ; educational industry; medical health and social services work; arts, entertainment and recreation services and other services and so on.

¹² According the ROC standard definition of industry, 'the word trade' refers to a category of economic activity; also according the MOI Dept. of Household Registration 100-year Review, trade refers a category of individual economic activity engaged in, including the production of various tangible goods and the provision of services. The Population Census Methods published by the United Nations defines trade as an economic activity sector, which a worker belongs to.



Source: Human Resources Annual Survey Report, Directorate General of Budget, Accounting and Statistics (DGBAS), Executive Yuan.

Explanation: Statistics of 1998, 2008 and 2018, adopt the Republic of China's sixth, eighth and tenth revision of industry standard classifications.

Chart 3-2-6 Industrial change in the over 15 year-old employed population

Table 3-2-6-1 Over 15 year-old employed population by occupation

Unit: 1,000 People; %

Industry Year	Agriculture, Forestry, Fishing and Animal Husbandry		(Heavy) Industry		Service Industry	
	No. of People	Percentage	No. of People	Percentage	No. of People	Percentage
1988	1,113	13.73	3,443	42.47	3,551	43.80
1993	1,005	11.49	3,418	39.08	4,323	49.43
1998	822	8.85	3,523	37.92	4,944	53.23
2003	696	7.27	3,398	35.49	5,480	57.24
2008	535	5.14	3,832	36.84	6,036	58.02
2011	542	5.06	3,892	36.34	6,275	58.60
2012	544	5.01	3,935	36.23	6,381	58.75
2013	544	4.96	3,965	36.16	6,458	58.89
2014	548	4.95	4,004	36.14	6,526	58.91
2015	555	4.95	4,035	36.03	6,609	59.02
2016	557	4.95	4,043	35.88	6,667	59.17
2017	557	4.90	4,063	35.79	6,732	59.31

III. POPULATION CHANGE

2018	561	4.90	4,083	35.71	6,790	59.38
------	-----	------	-------	-------	-------	-------

Source: Human Resources Annual Survey Report, Directorate General of Budget, Accounting and Statistics (DGBAS), Executive Yuan.

Explanation: Statistics of prior to 1998, 2001 ~ 2011, 2012 ~ 2016 and 2017, adopt the Republic of China's sixth, eighth, ninth and tenth revision of industry standard classifications.

Looking at each city and county from the point of view of industry in 2018, the proportion of the population engaged in agriculture, forestry, fishing and animal husbandry was highest in Chiayi County at 22.57%, followed by Yunlin County at 20.06%, and Nantou County was third at 18.53%; all were significantly higher than the national overall average value of 4.90%. Taipei City was the lowest, at 0.17%, Hsinchu City was second-lowest at 0.30%, New Taipei City and Keelung City was third-lowest at 0.61%; all were significantly lower than that average value. And with respect to the size of the population engaged in industrial work, Hsinchu County's 51.18% was the highest, followed by Miaoli County at 48.43%, with Changhua County third at 47.71%; all these were significantly higher than the national average value of 35.71%. Also, Taipei City's 18.81% was lowest, Taitung County's 19.16% was second lowest, and Hualien County was third lowest at 22.37%; all were much lower than the average value. And with respect to the proportion of the population engaged in the service industry, Taipei City's 81.02% was highest, followed by Chiayi City at 72.00%, with Keelung City third at 71.62%; all were much higher than the national average value of 59.38%. Also, Changhua County was lowest, at 43.85%, followed by Chiayi County at 45.61%, with Hsinchu County third lowest at 46.36%; all here were much lower than the national average (Table 3-2-6-2).

Table 3-2-6-2 2018 Average Industry Ratios for Employed People

Unit: %

County / City	Total	Agriculture, Forestry, Fishing and Animal Husbandry	Industry						Service Industry													
			Total	Mining and quarrying industries	Manufacturing industry	Electricity and fuel supply industries	Water supply and pollution treatment industries	Construction engineering industry	Total	Wholesale and retail industries	Storage and transportation industries	Accommodation and catering industries	Publishing, audiovisual production, communication, IT and communication and broadcasting industries	Finance and Insurance industries	Real estate industry	Professional, scientific and technical services	Support service industry	Public administration and national defense, compulsory social security	Educational services	Medical health and social services work	Arts, entertainment and recreation industries	Other service industries
Total	100.00	4.90	35.71	0.03	26.80	0.26	0.71	7.91	59.38	16.62	3.90	7.33	2.26	3.78	0.93	3.27	2.59	3.21	5.71	3.99	0.96	4.84
New Taipei City	100.00	0.61	34.89	0.00	25.57	0.19	0.78	8.34	64.50	19.59	4.44	7.64	3.30	4.63	1.01	3.96	3.47	2.85	4.82	3.24	0.90	4.66
Taipei City	100.00	0.17	18.81	0.01	13.03	0.93	0.54	4.30	81.02	20.89	3.86	5.87	6.70	9.19	1.42	7.61	2.91	4.18	8.72	4.79	0.98	3.89
Taoyuan City	100.00	1.05	45.23	0.01	37.21	0.06	0.76	7.19	53.72	14.53	6.64	6.60	1.31	2.74	1.10	2.65	2.92	2.06	4.73	2.98	0.97	4.48
Keelung City	100.00	0.61	27.77	-	16.62	0.28	0.61	10.25	71.62	17.29	10.67	7.27	3.40	4.18	1.13	3.33	3.81	4.44	5.47	4.24	1.10	5.31
Hsinchu City	100.00	0.30	44.78	0.01	36.02	0.04	0.91	7.81	54.92	14.27	2.18	6.81	1.42	2.56	0.75	4.88	2.90	2.79	7.66	3.34	0.98	4.38
Yilan County	100.00	6.22	31.52	0.04	19.64	0.13	0.47	11.24	62.25	16.29	3.87	10.55	1.54	2.85	1.21	2.39	1.99	3.95	5.87	4.53	1.31	5.91
Hsinchu County	100.00	2.46	51.18	0.02	42.21	0.05	0.96	7.94	46.36	10.70	3.15	6.94	0.79	1.71	1.35	4.21	2.29	1.76	4.82	2.85	1.02	4.77
Taichung City	100.00	3.24	39.48	0.03	30.90	0.20	0.88	7.47	57.28	16.42	3.43	6.97	1.57	3.32	1.23	3.05	2.80	2.81	5.72	3.88	0.82	5.27
Miaoli County	100.00	4.99	48.43	0.29	37.65	0.04	1.03	9.42	46.58	13.58	2.74	6.84	0.86	1.84	0.57	2.08	1.97	3.11	4.25	3.16	1.12	4.46
Changhua County	100.00	8.44	47.71	0.01	39.91	0.01	0.42	7.35	43.85	13.64	2.55	5.20	0.81	2.19	0.51	1.49	1.34	2.53	4.87	3.81	0.64	4.30
Nantou County	100.00	18.53	29.14	0.12	19.77	0.16	0.63	8.45	52.33	13.47	2.33	8.21	1.15	2.12	0.76	1.82	1.29	4.64	5.59	3.51	1.35	6.07
Yunlin County	100.00	20.06	32.30	0.02	21.87	0.06	0.78	9.57	47.64	14.77	2.19	6.04	0.81	1.82	0.46	1.42	0.91	3.75	6.06	4.01	0.79	4.60
Tainan City	100.00	7.23	41.17	0.02	32.83	0.09	0.59	7.65	51.60	14.89	2.47	7.60	1.06	2.66	0.43	2.18	2.13	2.97	5.16	3.98	0.80	5.25
Kaohsiung City	100.00	3.63	35.80	0.03	26.38	0.40	0.75	8.24	60.57	16.74	4.31	8.43	1.66	3.38	0.84	2.37	2.86	3.29	5.65	4.74	0.99	5.31

Chiayi City	100.00	1.55	26.46	0.05	19.38	0.70	0.59	5.74	72.00	18.25	3.21	8.15	2.05	3.93	0.97	4.12	1.75	4.68	10.62	7.39	1.38	5.51
Chiayi County	100.00	22.57	31.81	0.06	21.53	0.05	0.71	9.46	45.61	14.45	2.49	6.47	0.86	1.89	0.27	1.13	1.07	3.10	4.79	3.56	0.85	4.68
Pingtung County	100.00	16.47	31.27	0.16	18.95	0.19	0.50	11.47	52.26	14.18	3.12	9.37	1.02	1.98	0.56	1.52	1.68	3.51	4.37	4.72	1.33	4.91
Penghu County	100.00	5.61	23.30	-	6.66	1.30	1.43	13.91	71.09	16.90	3.67	10.05	1.05	2.62	0.44	1.37	2.94	12.89	7.54	5.41	1.75	4.46
Taitung County	100.00	18.46	19.16	0.16	5.08	0.08	0.53	13.29	62.39	18.85	2.99	11.47	0.55	1.48	0.56	1.09	1.82	5.70	5.81	5.27	1.45	5.36
Hualien County	100.00	8.32	22.37	0.19	9.91	0.26	1.06	10.95	69.31	15.98	4.19	10.94	1.41	2.63	0.85	2.02	2.89	5.55	7.45	7.60	1.62	6.19

Source: 2018 Human Resources Annual Survey Report, Directorate General of Budget, Accounting and Statistics (DGBAS), Executive Yuan. The scope of statistics only covers the Taiwan region.

(VII) Labor Force ¹³Composition

With regard to labor force, the average labor force in Taiwan in 2018 was 11,874,000 people, an increase of 79,000 people or 0.67% compared with 2017. As for the labor market, the average number of employment in 2018 was 11,434,000 people, an increase of 82,000 or 0.73% compared with 2017, while the unemployment rate was 3.71%, a decreased by 0.05% compared with 2017. Observing the data in the past 10 years, as the population increases, the labor force in 2018 was increased by 1,021,000 people as compared with 10,853,000 people in 2008 (Table 3-2-7-1, Chart 3-2-7-1).

Table 3-2-7-1 Overview of Human Resources

Unit: 1,000 People

Average	Over-15 year-old civilian population	Labor force	Employed	Unemployed	Non- labor force	Labor force participation rate (%)	Unemployment rate (%)
2008	18,623	10,853	10,403	450	7,770	58.28	4.14
2009	18,855	10,917	10,279	639	7,937	57.90	5.85
2010	19,062	11,070	10,493	577	7,992	58.07	5.21
2011	19,253	11,200	10,709	491	8,053	58.17	4.39
2012	19,436	11,341	10,860	481	8,096	58.35	4.24
2013	19,587	11,445	10,967	478	8,142	58.43	4.18
2014	19,705	11,535	11,079	457	8,170	58.54	3.96
2015	19,842	11,638	11,198	440	8,204	58.65	3.78
2016	19,962	11,727	11,267	460	8,235	58.75	3.92
2017	20,049	11,795	11,352	443	8,254	58.83	3.76
2018	20,129	11,874	11,434	440	8,254	58.99	3.71

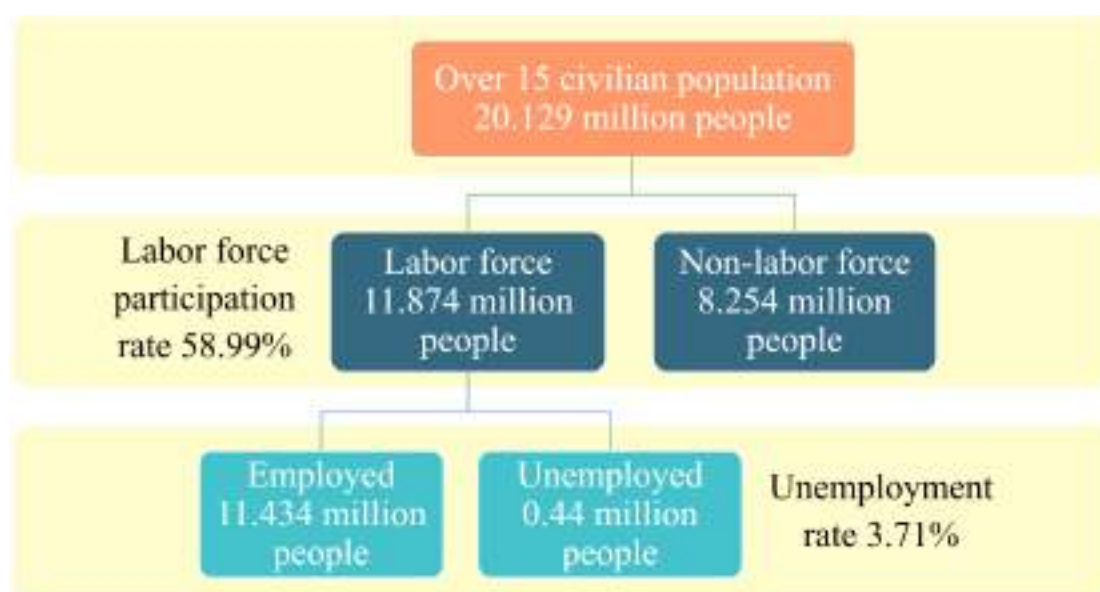
Source: Labor Statistic Annual Report, Ministry of Labor

¹³(1) The labor force refers to the civilian population over 15 years of age who are able to work during the standard periods of the data, and it includes both employed and unemployed.

(2) Employed refers to workers who engaged in remunerated work during the standard periods of the data-including those over 15 years of age who are engaged in remunerated work, and those who are their dependents and engaged in unpaid work for more than 15 hours per week.

(3) Unemployed refers to those unemployed people over 15 years of age during the standard periods of the data who meet the following conditions: ① they have no work; ② they are able to work at any time; ③ they are presently looking for work, or have found work but not yet seen the results of it. Additionally, it includes those who are expecting to resume work, those who have been appointed a position but have not begun work or not received remuneration yet.

(4) Non-labor force refers to the civilian population over 15 years of age during the standard periods of the data, who do not belong to the labor force, including those in pursuit of education, engaged in domestic work, the elderly, the mentally or physically handicapped, those who would like to work but have yet to find work and can at any time begin work and those who for other reasons are waiting to begin work or have not yet found work.

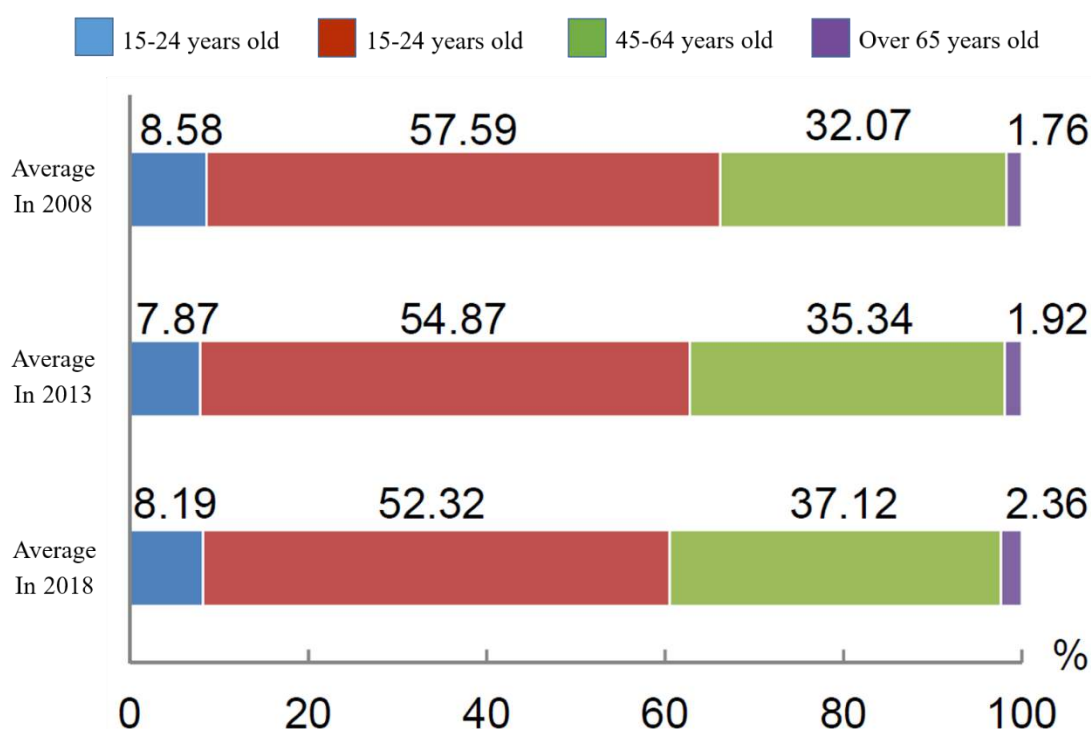


Source: Human Resources Survey, DGBAS, Executive Yuan, drawn by the Dept. of Household Registration.

Chart 3-2-7-1 2018 Overview of Manpower Resources

By sorting the data according to the age structure, although the main labor force is the same as that 10 years ago which is young adults (25 to 44 years old), the proportion of middle-to-high aged labor force (45-64 years old) is increased from 32.07% to 37.12% due to the overall demographic transformation, an increase of 5.05 percent (Chart 3-2-7-2).

Source: Human Resources Survey, DGBAS, Executive Yuan, drawn by the Dept. of Household Registration.



Source: General Overview of Labor Trends, Ministry of Labor

Chart 3-2-7-2 Labor force age compositions

In 2018, the average Labor force participation rate¹⁴ was 58.99%, a rise of 0.16 percentage point comparing with that of previous year. The rising tendency has been lasted for consecutive 9 years. The female average Labor force participation rate was 51.14%, while that for males was 67.24%, representing an increase of 0.22 and 0.11 percentage point respectively for female and male as compared with that of previous year. Looking at the data for the past 20 years, the females' Labor force participation rate rose due to the rise in the education level, the increase of job opportunities in the services industry, and the relevant maternal protection measures implemented by the government. The Labor force participation rate rose from 45.60% in 1998 to 51.14% in 2018, up by a total of 5.54 percentage points, demonstrating a gradually rising trend. Ever since the Labor force participation rate was increased to 50.19%, exceeding 50% for the first time after 2012, the Labor force participation rate in 2018 was increased by 51.14%. Owing to the impact of the extension of males' pursuit of further studies and the earlier retirement age, the Labor force

¹⁴ This refers to the proportion of the civilian population over 15 years of age, which is part of the labor force.

III. POPULATION CHANGE

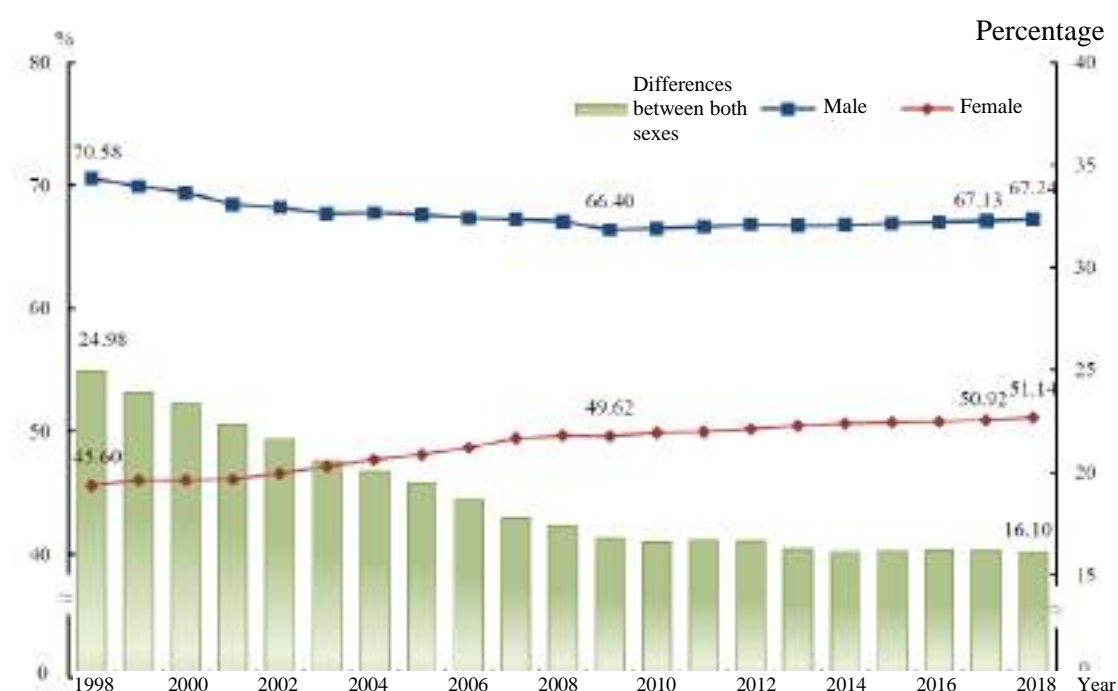
participation rate was dropped from 70.58% in 1998 to 66.40% in 2009. In recent years, the number was remained in the range of 66%~67%. In the long run, the sex gap in terms Labor force participation rate has become smaller. (Table 3-2-7-2) (Chart 3-2-7-3)

Table 3-2-7-2 Labor force participation rate by sex and age

Unit: %

year	Total	Sex		Age Group			
		Male	Female	15-24 years old	25-44 years old	45-64 years old	Over 65-year-old
2008	58.28	67.09	49.67	30.17	83.81	60.83	8.10
2009	57.90	66.40	49.62	28.62	84.19	60.25	8.05
2010	58.07	66.51	49.89	28.78	84.72	60.31	8.09
2011	58.17	66.67	49.97	28.56	85.56	60.36	7.93
2012	58.35	66.83	50.19	29.08	86.33	60.48	8.10
2013	58.43	66.74	50.46	29.58	86.64	60.73	8.34
2014	58.54	66.78	50.64	29.36	86.85	61.65	8.68
2015	58.65	66.91	50.74	30.24	87.40	61.89	8.78
2016	58.75	67.05	50.80	31.37	87.82	62.42	8.61
2017	58.83	67.13	50.92	32.68	88.26	62.82	8.58
2018	58.99	67.24	51.14	34.34	88.85	63.21	8.43

Source: Human Resources Survey, DGBAS, Executive Yuan



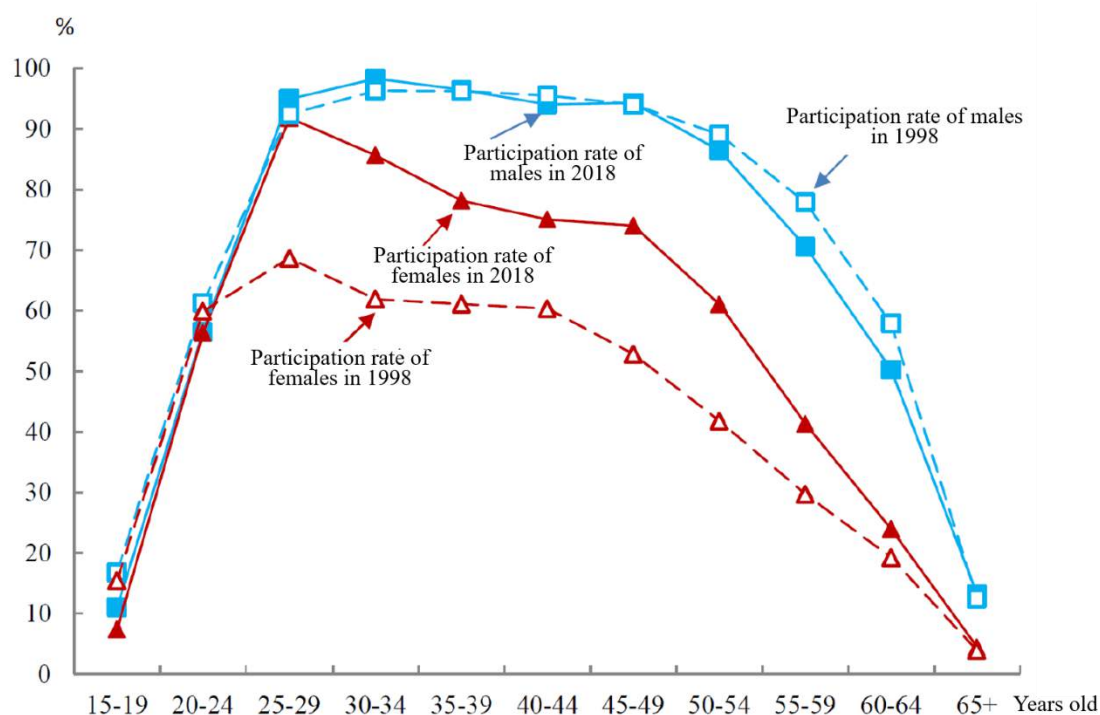
Source: Human resources survey ad hoc sex analysis, Directorate General of Budget, Accounting and Statistics (DGBAS), Executive Yuan.

Chart 3-2-7-3 Labor force participation rate of Both Sexes over the Past 20 Years

Looking at age groups, the male and female labor force participation rate for 15 to 24 year olds in 2018 was 34.76% and 33.92%, respectively, both of which were rather low, mainly due to the higher schooling rate in the age group. Beginning at 30 years of age, the sex differences in the labor force participation rate demonstrate a progressive discrepancy, gradually widening with age. In this, the female labor force participation rate for 30 to 34 year olds was 85.64%, lower than the 98.34% for males by 12.70%; the female labor force participation rate for 55 to 59 year-olds was 41.35%, also lower than the male participation rate of 70.62%, with the difference having widened to 29.27 percentage points, evidence that there is still space for development of female human resources.

Observing the female labor force data in the past 20 years, besides the age group in-between 15 and 24, which showed a decline in the female labor force, the rest of the age groups showed an increasing trend in the labor force; particularly for the age group in-between 30 to 34 and 25 to 29, which showed an increase of 23.73% and 23.17%, respectively. For the age group in-between 45 to 49, the increase in the female labor force reached 21.21%. Over the same period, male labor force participation rates fell for all age groups except for the 25 to 29 year-old group, which saw an increase of 2.52 percentage points, which is the highest, 30 to 34 year-old group increased 2.02%, which is the second-high. The fall in labor force participation for the 15 to 24 year-old and 55 to 64 year-old age groups were more pronounced, mainly due to the impact of the extension of the years spent in school life and to early retirement. (Chart 3-2-7-4)

III. POPULATION CHANGE



Source: Human resources survey ad hoc sex analysis, Directorate General of Budget, Accounting and Statistics (DGBAS), Executive Yuan.

Chart 3-2-7-4 Labor force participation rates for the two sexes by age group

Looking at labor force and labor force participation rates from the point of view of each city and county, Tainan City's 62.4% was the highest, followed by Nantou County at 61.7%, with Yilan County third at 61.3%, all higher than the average value of 58.99%; while Penghu County's 51.3% was lowest, with Hualien County next at 55.8%, and Keelung City third at 56.5%, all lower than the average. (Table 3-2-7-3)

To benchmark with major countries around the world, Taiwan's labor force participation rate is lower than that of Singapore (67.7%), Korea (63.1%), Hong Kong (61.2%), Japan (61.5%), and the United States (62.9%). The deviation is within 2.2~8.7 percentage points. (Table 3-2-7-4)

Table 3-2-7-3 2018 Labor force and labor force participation rates in each city and county

Unit: 1,000 People, %

County / City	Labor Force		Male		Female	
	No. of People	Participation rate	No. of People	Participation rate	No. of People	Participation rate
Total	11,874	58.99	6,602	67.24	5,272	51.14
New Taipei City	2,052	59.1	1,126	67.4	926	51.5
Taipei City	1,334	57.9	702	64.8	632	51.7
Taoyuan City	1,063	57.6	590	65.5	473	50.0
Keelung City	185	56.5	105	65.1	80	48.2
Hsinchu City	214	59.0	118	67.2	96	51.3
Yilan County	242	61.3	140	71.4	102	51.3
Hsinchu County	276	60.0	160	69.0	116	50.8
Taichung City	1,375	58.3	754	66.2	622	50.9
Miaoli County	279	58.9	161	66.9	118	50.5
Changhua County	647	58.9	375	67.9	272	49.7
Nantou County	270	61.7	157	71.4	112	51.9
Yunlin County	362	60.3	216	70.3	146	49.8
Tainan City	1,018	62.4	562	70.2	456	54.9
Kaohsiung City	1,398	58.2	772	66.3	625	50.5
Chiayi City	135	58.9	71	66.0	63	52.5
Chiayi County	275	60.5	162	69.4	113	51.1
Pingtung County	439	60.9	255	70.7	185	51.2
Penghu County	45	51.3	26	60.1	19	42.8
Taitung County	111	59.3	63	66.9	48	51.6
Hualien County	155	55.8	87	63.9	68	48.0

Source: 2018 Human Resources Annual Survey Report, Directorate General of Budget, Accounting and Statistics (DGBAS), Executive Yuan. The scope of statistics only covers the Taiwan region.

Table 3-2-7-4 Labor force and labor force participation rates in major countries

Unit: %

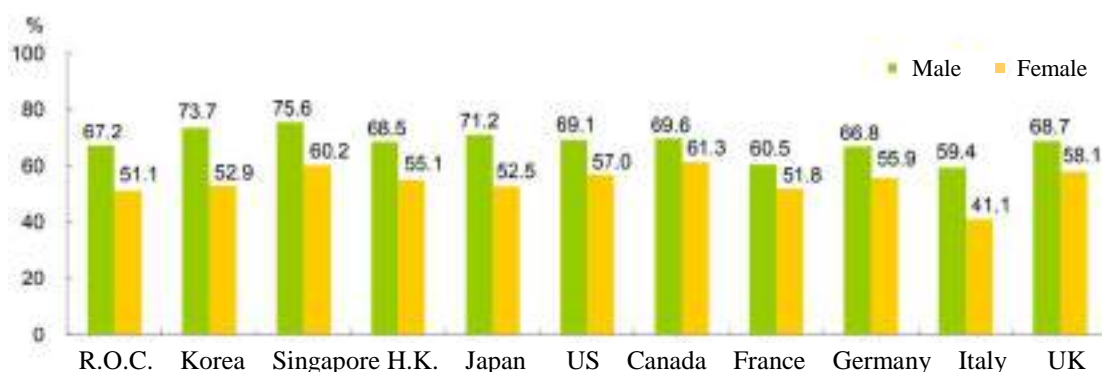
Year	R.O.C.	Korea	Singapore ¹	H.K.	Japan	US ²	Canada	France	Germany	Italy	UK ²
2008	58.3	61.7	65.6	60.9	60.2	66.0	67.5	56.4	59.3	49.1	63.4
2009	57.9	61.0	65.4	60.8	59.9	65.4	67.1	56.6	59.5	48.5	63.2
2010	58.1	61.1	66.2	59.6	59.6	64.7	68.9	56.5	59.5	48.2	62.9
2011	58.2	61.3	66.1	60.1	59.3	64.1	68.7	56.3	60.1	48.1	63.0
2012	58.4	61.6	66.6	60.5	59.1	63.7	66.5	56.5	60.1	49.1	62.8
2013	58.4	61.7	66.7	61.2	59.3	63.2	66.5	56.4	60.3	48.8	63.0
2014	58.5	62.7	67.0	61.1	59.4	62.9	66.0	56.3	60.4	49.1	62.9
2015	58.7	62.8	68.3	61.1	59.6	62.7	65.8	56.1	60.2	49.0	63.2
2016	58.8	62.9	68.0	61.1	60.0	62.8	65.7	56.0	61.0	49.5	63.1
2017	58.8	63.2	67.7	61.1	60.5	62.9	65.8	55.9	61.2	49.8	63.3
2018	59.0	63.1	67.7	61.2	61.5	62.9	65.4	55.9	61.3	49.9	63.3

Source: Statistics of International Labor, Ministry of Labor

Note: 1. The labor force participation rate of Singapore for residents is made in June of each year.

2. The labor force participation rate of the United States and the UK is over 16 years old.

Observed by gender, the male labor force participation rates in different countries are very similar, ranging from 60% to 70%. Among them, Singapore has the highest male labor force participation rate of 75.6%, followed by South Korea (73.7%), while Italy has the lowest male labor force participation rate of 59.4%, followed by France (60.5%). As for the female labor force participation rate in various countries, except for Italy which had a participation rate of 41.1%, the rest of the countries had the participation rate in-between 50% and 60%. The female labor force participation rate in Taiwan was 51.1%. Compared with other countries in Asia, the value is lower than that in Japan (52.5%), South Korea (52.9%), and Singapore (60.2%). (Chart 3-2-7-5)



Source: General Overview of Labor Trends, Ministry of Labor

Chart 3-2-7-5 Labor force and labor force participation rates in major countries of both sexes in 2018

(VIII) Composition of Newborn Baby

In general, the sex ratio at birth has been maintained in between 104 and 106. Due to the influence of traditional Chinese “patriarchal” values towards “having a son to carry on the family line”, the sex ratio at birth in Taiwan is slightly higher, ranging in between 105 and 107. Owing to the advances in medical technology, parents are able to determine the sex of the fetus from chorionic villus sampling and amniocentesis and selectively cause an abortion in order to get their desired number of children as well as the desired sex of children, resulting in a gradual rise in the sex ratio at birth. In 1991, the sex ratio at birth reached 110.4. After then, it declined slightly, but rose again in 2004, reaching 110.7. In 2018, the sex fell to a minimum at 106.9.

Comparing the sex ratios at birth for mothers with different ages, it is found that the higher the age of the mother, the higher the sex ratio at birth. The sex ratios at birth for mothers with ages under 30 years old are mostly in between 105 and 109. In early years, the sex ratios at birth for mothers with ages above 30 years old are greater than 110, while in the past 10 years, the sex ratios at birth for mothers with ages above 30 years old are less than 110 (except for the age group of 45~49). (Table 3-2-8-1)

Table 3-2-8-1 Sex ratio at birth according to mothers' age

Unit: Female =100

Year	Mother's Age at Childbirth							
	Total	15~19	20~24	25~29	30~34	35~39	40~44	45~49
1987	108.4	109.0	107.7	107.5	111.4	112.6	113.1	118.9
1991	110.4	106.5	108.4	109.6	113.3	124.1	115.4	105.4
1996	108.8	106.8	107.9	108.5	110.0	110.1	112.2	117.6
1991	108.7	104.9	107.8	107.5	110.0	114.9	110.5	98.8
2004	110.7	108.7	110.0	109.5	112.2	113.1	112.5	113.7
2006	109.6	112.8	106.8	108.8	110.3	113.8	118.1	109.8
2007	109.7	106.1	109.3	109.2	110.3	110.7	109.9	129.5
2008	109.7	107.0	109.4	110.1	109.2	109.5	115.4	124.5
2009	108.4	106.8	106.3	108.6	108.9	107.9	111.7	125.5
2010	109.0	108.9	104.5	108.4	109.1	112.8	110.2	119.4
2011	107.9	111.4	106.1	108.5	107.9	108.2	102.8	85.9
2012	107.4	109.1	107.7	107.6	107.1	107.7	106.6	89.3
2013	107.8	113.1	107.7	108.0	106.8	109.1	110.9	94.6
2014	107.0	111.2	103.9	108.1	107.2	105.8	108.2	134.6
2015	108.3	109.2	106.3	107.9	108.2	109.5	109.6	139.4
2016	107.6	112.1	108.7	107.0	107.6	107.7	106.7	124.8
2017	107.6	105.5	107.6	108.7	107.2	107.1	108.0	123.1
2018	106.9	118.0	106.6	106.1	106.8	107.2	107.7	113.4

Source: Population Statistics over the Years, Dept. of Household Registration, MOI.

Explanation: Figures prior to 1990 do not include Kinmen and Matsu regions. The data on this table is calculated according to date of occurrence.

Comparing the sex ratios at birth for different numbers of birth, it is found that the higher the number of birth, the higher the sex ratio at birth. In the past 10 years, the sex ratios at birth for first born children are mostly in between 106 and 108, the sex ratios at birth for second born children are in between 107 and 109, and the sex ratios at birth for third born children are mostly over 110. In 2018, the third-child sex ratio increased slightly to

III. POPULATION CHANGE

109.5 compared with that in the previous year. However, it still deviated from the gender structure balance. The fourth-child sex ratio, on the other hand, reached 108.9, showing a decrease from last year and a significant decline from 2010, which still deviated from the gender structure balance. (Table 3-2-8-2)

In responding to the imbalanced sex structure of babies, which may lead to the possibility of some people unable to find spouses in the future, causing social problems, the Ministry of Health and Welfare will continue to implement quarterly census for the maternity examination clinics through the health bureau of municipalities, counties (cities), monitor and regulate the sex ratios at birth for hospitals, and audit local medical clinics which perform abortion operations. In addition, it is hoped that through positive initiatives of innovative activities, the message of “Girls and boys are as good, they are all treasures of parents” can be delivered to the grandparents of the “old generation”, parents of the “current generation”, and children the “new generation”, improving sex discrimination, strengthening sex equality, and making every effort to improve the sex imbalanced problem. However, some measures still need further examination.

Table 3-2-8-2 Sex ratio at birth by order of children born

Unit: Female =100

Year	Number of Children Born					
	Total	1	2	3	4	5+
1987	108.4	107.2	108.2	110.2	113.7	109.8
1991	110.4	107.4	108.5	118.2	129.5	124.4
1996	108.8	107.9	107.0	112.4	120.5	122.3
2001	108.7	106.9	105.8	120.8	135.0	121.2
2006	109.6	107.2	108.2	126.4	136.6	113.3
2007	109.7	107.9	108.9	123.4	120.0	112.2
2008	109.7	108.6	108.4	120.3	121.9	112.0
2009	108.4	106.7	107.6	122.9	125.6	101.8
2010	109.0	106.4	109.6	119.3	129.1	112.8
2011	107.9	106.8	108.1	112.2	115.0	118.8
2012	107.4	106.8	107.1	112.4	113.0	101.0
2013	107.8	107.6	106.8	114.4	107.8	94.9
2014	107.0	106.6	106.6	111.2	109.6	102.9
2015	108.3	107.2	108.4	114.1	107.3	116.9

2016	107.6	106.5	107.8	113.0	113.7	103.2
2017	107.6	106.8	108.2	108.8	112.0	104.9
2018	106.9	105.4	108.3	109.5	108.9	111.8

Source: Population Statistics over the Years, Dept. of Household Registration, MOI.

Explanation: Figures prior to 1990 do not include Kinmen and Matsu regions. The data on this table is calculated according to date of occurrence.

Looking at the sex ratio by cities and counties, the highest was Lienchiang County at 121.67, followed by Chiayi City at 116.78, with Penghu County third-highest at 114.36; the above counties and cities were all higher than the national average of 107.01; while Miaoli County's 101.20 was the lowest, followed by Hsinchu City's 101.45, with Chiayi County's 103.42 the third-lowest; these counties or cities were all lower than average. (Table 3-2-8-3)

By observing the number of babies born in 2018 for mothers with different numbers of birth, the first born children were the most, accounting for 51.02%, followed by the second born children, accounting for 37.01%. Both first born children and second born children summed up to 88.03%. In the past 10 years, the proportion of first and second born children to the total number of babies born was approximately 90%, leaving about 20% for the third born children or above. (Table 3-2-8-4)

Table 3-2-8-3 2018 Number of children born and Sex ratio by county or city

Unit: people; female=100		
County /City	Number of children born	Baby's sex ratio
Total/Total average	181,601	107.01
New Taipei City	28,927	106.96
Taipei City	22,849	106.44
Taoyuan City	22,583	108.14
Taichung City	22,646	105.95
Tainan City	12,379	106.18
Kaohsiung City	20,107	108.67
Yilan County	3,055	106.84
Hsinchu County	4,449	110.06
Miaoli County	3,346	101.20
Changhua County	12,527	104.52
Nantou County	3,232	111.10

III. POPULATION CHANGE

Yunlin County	4,100	111.01
Chiayi County	2,559	103.42
Pingtung County	4,599	105.04
Taitung County	1,479	110.98
Hualien County	2,411	109.29
Penghu County	881	114.36
Keelung City	2,180	109.21
Hsinchu City	4,019	101.45
Chiayi City	1,886	116.78
Kinmen County	1,254	107.27
Lienchiang County	133	121.67

Source: Statistical Yearbook of Interior, Department of Statistics, MOI

Explanation: Data on this table is calculated according to date of registration.

Table 3-2-8-4 The Composition of number of births by mothers' live-birth order

Unit: %

Year	Total	1 - 2 births			3 births and above			
		Total	1 birth	2 births	Total	3 births	4 births	5 births and above
2009	100.00	90.18	53.66	36.52	9.82	7.86	1.42	0.54
2010	100.00	89.22	53.08	36.14	10.78	8.55	1.61	0.62
2011	100.00	90.24	52.40	37.83	9.76	7.87	1.40	0.49
2012	100.00	89.97	53.11	36.86	10.03	8.15	1.38	0.49
2013	100.00	89.60	53.48	36.11	10.40	8.38	1.51	0.51
2014	100.00	89.75	51.67	38.08	10.25	8.25	1.49	0.50
2015	100.00	89.33	51.29	38.04	10.67	8.55	1.57	0.55
2016	100.00	88.72	50.89	37.83	11.28	8.94	1.70	0.66
2017	100.00	88.34	50.52	37.82	11.66	9.15	1.81	0.69
2018	100.00	88.02	51.02	37.01	11.98	9.39	1.89	0.70

Source: Population Statistics over the Years, Dept. of Household Registration, MOI.

Explanation: The data on this table is calculated according to the date of occurrence.

By observing the age of mothers for babies born in 2018 is mostly 30-34 years old, accounting for 36.52%, followed by 35-39 years old, accounting for 25.41%, with 25-29 years old the third highest, accounting for 23.40%. The average age of mothers giving birth to babies in 2018 was 32.03 years old, an increase of 0.06 years compared with that in 2017, an increase of 1.82 years compared with the age of mothers (30.21 years old) in 2009, showing an increasing trend year by year. (Table 3-2-8-5)

Table 3-2-8-5 The Composition of number of births by mothers' age

Unit: %; age

Year	Total	Less than 20	20-24	25-29	30-34	35-39	40-44	45 and above	Average
2009	192,133	1.64	11.07	35.06	37.82	12.60	1.74	0.06	30.21
2010	166,473	1.69	10.40	31.33	39.34	14.97	2.18	0.08	30.62
2011	198,348	1.44	8.93	30.35	41.54	15.50	2.18	0.07	30.88
2012	234,599	1.33	8.47	28.86	42.30	16.66	2.30	0.07	31.08
2013	194,939	1.53	8.62	26.01	41.89	19.05	2.78	0.11	31.36
2014	211,399	1.44	7.96	25.14	42.43	20.08	2.84	0.12	31.54
2015	213,093	1.49	8.13	24.09	41.39	21.64	3.16	0.11	31.67
2016	207,600	1.43	8.12	23.51	39.85	23.25	3.65	0.17	31.85
2017	194,616	1.40	8.32	23.39	37.85	24.64	4.20	0.19	31.97
2018	180,656	1.34	8.62	23.40	36.52	25.14	4.74	0.24	32.03

Source: Population Statistics over the Years, Dept. of Household Registration, MOI.

Explanation: The data on this table is calculated according to the date of occurrence.

By observing the age of mothers for first born children in 2018 is mostly 30-34 years old, accounting for 35.89%, followed by 25-29 years old, accounting for 28.14%, with 35-39 years old the third highest, accounting for 18.86%. In the past 10 years, for the top 3 age groups, except the age group of 25-29 had a drop of 12.83 percentage points, the age group of 30-34 and 35-39 had an increase of 4.69 and 11.06 percentage points, respectively. The mothers for first born children had an average age of 30.90 years old in 2018, an increase of 0.07 years compared with that in 2017, and an increase of 2.03 years compared with the age of mothers (28.87 years old) in 2008. (Table 3-2-8-6)

Table 3-2-8-6 The Composition of number of births of 1st birth by mothers' age

Unit: %; age

Year	Total	Less than 20	20-24	25-29	30-34	35-39	40-44	45 and above	1st birth by mothers' average age	Average age of 1st marriage for females
2008	100.00	3.08	16.05	40.96	31.20	7.80	0.87	0.04	28.87	28.41
2009	100.00	2.62	13.68	39.64	34.68	8.28	1.06	0.04	29.28	28.86
2010	100.00	2.70	13.36	35.98	36.37	10.25	1.28	0.06	29.61	29.20
2011	100.00	2.34	11.63	35.00	38.82	10.81	1.33	0.06	29.92	29.40
2012	100.00	2.16	11.02	33.86	39.79	11.71	1.41	0.05	30.11	29.49
2013	100.00	2.47	11.20	30.53	40.40	13.46	1.84	0.10	30.35	29.70
2014	100.00	2.42	10.60	29.64	40.94	14.53	1.77	0.10	30.51	29.86

III. POPULATION CHANGE

2015	100.00	2.51	10.84	29.15	39.71	15.67	2.02	0.10	30.58	29.95
2016	100.00	2.39	10.87	28.44	38.76	17.08	2.31	0.15	30.74	30.04
2017	100.00	2.35	11.10	28.54	36.73	18.33	2.78	0.16	30.83	30.03
2018	100.00	2.25	11.47	28.14	35.89	18.86	3.18	0.22	30.90	30.17
Increase of decrease from the year of 2008 (%)	-	-0.83	-4.58	-12.83	4.69	11.06	2.30	0.18	2.03	1.76

Source: Population Statistics over the Years, Dept. of Household Registration, MOI.

Explanation: The data on this table is calculated according to the date of occurrence.

Due to the improvement of the educational level for people in Taiwan, nearly 56% of the mothers in 2018 were university graduates or above, 24% of the mothers were graduated from high school, and 10% of the mothers were graduated from junior college. By comparing education level and age, most mothers were graduated from university or above and in the age of 30-34, accounting for 24.63%, followed by those with age of 35-39, accounting for 14.42%, and those with age of 25-29, accounting for 13.38%. (Table 3-2-8-7)

Table 3-2-8-7 Number of births by mothers' age and education

						Unit: %
Education level		University, college or above	Junior college	Senior high school	Junior high school	Elementary school or less
Age	Total					
Total	100.00	56.12	9.35	24.23	8.96	1.34
Less than 20	1.34	-	-	0.32	0.97	0.05
20-24	8.62	1.33	0.51	4.61	2.03	0.14
25-29	23.40	13.38	1.38	6.44	1.95	0.25
30-34	36.52	24.63	2.76	6.46	2.23	0.44
35-39	25.14	14.42	3.69	5.22	1.45	0.36
40-44	4.74	2.25	0.98	1.10	0.31	0.09
45 and above	0.24	0.11	0.04	0.06	0.02	0.00

Source: Statistics notification, Department of Statistics, MOI.

Explanation: The data on this table is calculated according to the date of occurrence.

By observing the among the babies born in 2018, 170,433 babies were born by mothers with Taiwan citizenship, accounting for 93.85%, 4,827 were born by mothers from Mainland China, Hong Kong and Macao, accounting for 2.66%, and 6,341 babies were born by mothers with foreign nationality, accounting for 3.49%. (Table 3-2-8-8)

Table 3-2-8-8 Number of births by mothers' original nationality

Unit: People; %

Year	Number of births			Mother's nationality (region)							
				R.O.C. mothers		Total		Mainland China, H. K. and Macao regions		Foreign nationals	
	Total	Male	Female	No. of People	Percentage	No. of People	Percentage	No. of People	Percentage	No. of People	Percentage
1998	271,450	141,462	129,988	257,546	94.88	13,904	5.12	—	—	—	—
1999	283,661	148,042	135,619	266,505	93.95	17,156	6.05	—	—	—	—
2000	305,312	159,727	145,585	282,073	92.39	23,239	7.61	—	—	—	—
2001	260,354	135,596	124,758	232,608	89.34	27,746	10.66	—	—	—	—
2002	247,530	129,537	117,993	216,697	87.54	30,833	12.46	—	—	—	—
2003	227,070	118,984	108,086	196,722	86.63	30,348	13.37	—	—	—	—
2004	216,419	113,639	102,780	187,753	86.75	28,666	13.25	11,260	5.18	17,460	8.07
2005	205,854	107,378	98,476	179,345	87.12	26,509	12.88	10,022	4.87	16,487	8.01
2006	204,459	106,936	97,523	180,556	88.31	23,903	11.69	10,423	5.10	13,480	6.59
2007	204,414	106,898	97,516	183,509	89.77	20,905	10.23	10,117	4.95	10,788	5.28
2008	198,733	103,937	94,796	179,647	90.40	19,086	9.60	9,834	4.95	9,252	4.66
2009	191,310	99,492	91,818	174,698	91.32	16,612	8.68	8,871	4.64	7,741	4.05
2010	166,886	87,213	79,673	152,363	91.30	14,523	8.70	8,185	4.90	6,338	3.80
2011	196,627	101,943	94,684	181,230	92.17	15,397	7.83	8,937	4.55	6,460	3.29
2012	229,481	118,848	110,633	212,186	92.46	17,295	7.54	10,056	4.38	7,239	3.15
2013	199,113	103,120	95,993	185,194	93.01	13,919	6.99	8,035	4.04	5,884	2.96
2014	210,383	108,817	101,566	196,545	93.42	13,838	6.58	8,151	3.87	5,687	2.70
2015	213,598	111,041	102,557	200,345	93.80	13,253	6.20	7,340	3.44	5,913	2.77
2016	208,440	108,133	100,307	195,557	93.82	12,883	6.18	6,940	3.33	5,943	2.85
2017	193,844	100,477	93,367	182,066	93.92	11,778	6.08	5,753	2.97	6,025	3.11
2018	181,601	93,876	87,725	170,433	93.85	11,168	6.15	4,827	2.66	6,341	3.49

Source: Population Statistics over the Years, Dept. of Household Registration, MOI.

Explanation: Data on this table is calculated according to date of registration, no statistics exist prior to 1997. Prior to 2004, those whose mothers originated from Mainland China, Hong Kong or Macao, and those foreign nationals who had registered domicile here, were included in ROC statistics.

3. Average life expectancy at birth¹⁵ (average life expectancy)

In 2018, the national average life expectancy at birth (average life expectancy) was 80.69 years (77.55 years for male, and 84.05 years for female); an increase of 0.30 years compared with that in 2017 (an increase of 0.26 years for male and 0.35 years for female), reaching a record high. Looking at the long-term trend of the citizen's average life expectancy, that for the entire population and for males has decreased in 2011, 2014 and 2016, comparing with that in the previous year. As for the average life

¹⁵ Average life expectancy refers to the assumed age a newly born child can be expected to live to, subject to risk of death experienced applicable to a given period for each year of an age group, that is, after reaching a given age, the average number of years remaining which the person can be expected to survive, and is called "average life expectancy at a given age," or a "given age's expected life." Average life expectancy at birth is called "average life expectancy." This document's data uses average life expectancy at birth. Average life expectancy at birth is arrived at through converting a given year's death rate to probability of death rate, then dividing the probability of surviving with average life expectancy.

III. POPULATION CHANGE

expectancy at birth for females, the number also decreased in 2014 and 2016, comparing with that in the previous year, there had ups and downs in certain years, and an overall increasing trend was observed. (See Table 3-3-1, Chart 3-3-1 for detail)

Table 3-3-1 Citizens' average life expectancy over the years

Unit: age

Year	Average	Male	Female
1976	-	68.70	73.60
1981	72.01	69.74	74.64
1986	73.28	70.97	75.88
1991	74.26	71.83	77.14
1996	74.95	72.38	78.05
2001	76.75	74.07	79.92
2006	77.90	74.86	81.41
2011	79.15	75.96	82.63
2012	79.51	76.43	82.82
2013	80.02	76.91	83.36
2014	79.84	76.72	83.19
2015	80.20	77.01	83.62
2016	80.00	76.81	83.42
2017	80.39	77.28	83.70
2018	80.69	77.55	84.05

Source: Simplified Life Expectancy Table over the Years, Department of Statistics, MOI.

Explanation: Figures prior to 1991 do not include Kinmen and Matsu regions.

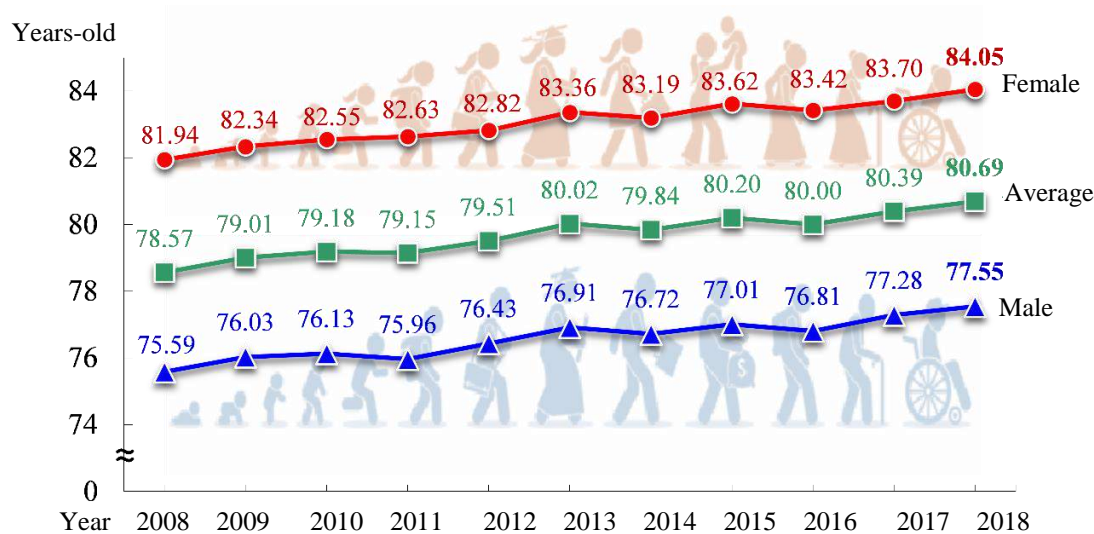


Chart 3-3-1 Development outline of citizen's average life expectancy

Looking specifically at special municipalities, Taipei City's 83.63 years was highest of average life expectancy, the rest are New Taipei City, Taoyuan City, Taichung City, Tainan City and Kaohsiung City. Men are the highest in Taipei City at 80.93 years old, and Kaohsiung City is the lowest at 76.13 years old; women are also the highest in Taipei City at 86.29 years old and Kaohsiung City at 82.62 years old. In the six special municipalities, the average life expectancy for all, male and female shows a decreasing trend from north to south of Taiwan.

Looking at the various counties and cities, Hsinchu City's 81.10 years was the highest of average life expectancy (78.20 years for males, 84.10 for females), while Taitung County's 75.79 years was the lowest (72.05 years for males, 80.38 years for females). It is found from the analysis that the average life expectancy of the eastern counties and cities is lower than that of the western counties and cities. Especially, Taitung County's average life expectancy differed by 5 years from that of the national average life expectancy, the reasons may be related to the inconvenience of transportation in east Taiwan compared to the west, as well as the relative insufficiency of medical resources, cultural lifestyle factors and so on, all contribute to a comparatively higher standardized mortality ratio in eastern counties and cities. However, the difference in life expectancy between Taitung County and the entire population has been shortened by 0.24 years compared with that of 10 years ago. Compared with the data in the year 2017, the average life expectancies of all counties and cities increased except for Hualien County. Among them, Penghu County showed the biggest increase of 0.46 years, while Hualien County showed a decrease of 0.18 years. (See Table 3-3-2 for detail.)

Table 3-3-2 Comparison of average life expectancy of each county /city

Unit: year-old

Region	2018			2017			Increase or decrease value		
	Average (1)	Male (2)	Female (3)	Average (4)	Male (5)	Female (6)	Average (7) = (1) - (4)	Male (8) = (2) - (5)	Female (9) = (3) - (6)
Total Special municipalities	80.69	77.55	84.05	80.39	77.28	83.70	0.30	0.26	0.35

III. POPULATION CHANGE

Region	2018			2017			Increase or decrease value		
	Average (1)	Male (2)	Female (3)	Average (4)	Male (5)	Female (6)	Average (7) = (1) - (4)	Male (8) = (2) - (5)	Female (9) = (3) - (6)
New Taipei City	81.37	78.33	84.47	81.17	78.14	84.27	0.20	0.19	0.20
Taipei City	83.63	80.93	86.29	83.57	80.82	86.29	0.05	0.11	0.00
Taoyuan City	80.82	77.86	83.98	80.75	77.73	83.97	0.07	0.13	0.01
Taichung City	80.57	77.61	83.60	80.34	77.37	83.39	0.23	0.24	0.21
Tainan City	79.85	76.79	83.15	79.73	76.67	83.00	0.13	0.12	0.15
Kaohsiung City	79.28	76.13	82.62	79.08	75.93	82.41	0.20	0.20	0.21
Counties/Cities									
Yilan County	79.77	76.57	83.39	79.65	76.20	83.59	0.11	0.37	-0.20
Hsinchu County	80.45	77.41	84.00	80.28	77.08	84.06	0.17	0.33	-0.05
Miaoli County	79.22	76.09	82.94	79.10	76.01	82.75	0.12	0.08	0.19
Changhua County	80.03	76.63	83.91	79.89	76.47	83.82	0.14	0.17	0.09
Nantou County	78.73	75.47	82.53	78.41	75.01	82.41	0.32	0.47	0.12
Yunlin County	78.46	74.80	82.93	78.30	74.76	82.63	0.16	0.05	0.31
Chiayi County	78.85	75.35	83.12	78.71	75.17	83.06	0.14	0.18	0.07
Pingtung County	77.11	73.70	81.11	76.96	73.54	80.97	0.15	0.16	0.13
Taitung County	75.79	72.05	80.38	75.49	71.50	80.40	0.31	0.55	-0.02
Hualien County	76.59	72.62	81.37	76.77	72.88	81.46	-0.18	-0.25	-0.09
Penghu County	80.49	77.24	84.26	80.04	76.63	84.05	0.46	0.61	0.21
Keelung City	79.97	76.89	83.29	79.89	76.98	82.92	0.08	-0.09	0.38
Hsinchu City	81.10	78.20	84.10	80.92	77.94	84.08	0.18	0.26	0.02
Chiayi City	80.20	76.90	83.49	79.91	76.69	83.11	0.29	0.21	0.38

Source: 2018 Simplified Life Expectancy Table Key Point Analysis, Department of Statistics, MOI

- Explanation:
1. National average life expectancy: Adopting the relevant year's numerical value to calculate by compilation of basic population.
 2. Average life expectancy for Special Municipalities and Counties or Cities: calculated by adopting a three year population merging method; 2018's average life expectancy is compiled using the combined three years population data from 2016-2018; 2017's average life expectancy is compiled using the combined three years population data from 2015 -2017.
 3. Some counties or cities have lower populations but greater death rate fluctuations, which cause greater changes in the range of average life expectancy; users are advised to quote with discretion.

4. As to the effect of population migration on fluctuations in life expectancy, in Kinmen County this is relatively large, while the number of people in Lienchiang County is too small, hence they have not been compiled separately.
5. After actual calculations, the figures of this table were rounded up or down to the second point, thus there is increase of decrease decimal point discrepancy for some statistics.

Compared with the data worldwide, since the average life expectancy of countries varies depending on the year of data, the release period and the calculation method, the basis for comparison may encounter certain deviation. This report refers to the United Nations Demographic Yearbook and the latest statistics from various countries. The average life expectancy of major countries is shown in Table 3-3-3. In general, countries with high average life expectancy for men include Japan, Singapore, Switzerland, Spain, Sweden, and Australia, while countries with high average life expectancy for women include Japan, Spain, South Korea, Singapore, France, and Italy. This suggests that Japan is the country with the longest life expectancy in the world.

Compared with the latest global average life expectancy published by the United Nations in 2015, the average life expectancy in Taiwan was 8.4 years and 10.5 years longer for males and females respectively, suggesting that the average life expectancy in Taiwan is higher than the global average. (see Table 3-3-3 for detail).

Table 3-3-3 Average life expectancy at birth for major countries

Unit: year-old

Country		Data year	Male	Female	Country		Data year	Male	Female
Global [#]		2015	68.6	73.1	Europe	Spain*	2018	80.5	85.9
Asia	R.O.C.*	2015	77.0	83.6		Switzerland*	2018	81.7	85.4
		2018	77.5	84.0					
						Austria*	2018	79.3	84.0
	Japan*	2018	81.3	87.3		Germany*	2015-2017	78.4	83.2
	Singapore*	2018	81.0	85.4		Greece*	2017	78.4	83.5
	South Korea*	2017	79.7	85.7		United Kingdom*	2015-2017	79.2	82.9
	Malaysia	2017	72.7	77.4					

III. POPULATION CHANGE

America	China*	2015	73.6	79.4		Italy*	2016	80.6	85.0
	Indonesia*	2018	69.3	73.2		France*	2017	79.5	85.3
	USA*	2017	76.1	81.1		Norway*	2018	81.0	84.5
	Brazil*	2017	72.5	79.6		Swedish*	2018	80.8	84.3
	Canada*	2015 - 2017	79.9	84.0		The Netherlands*	2018	80.2	83.3
Africa	Egypt	2016	70.5	73.3	Oceania	Australia*	2015-2017	80.5	84.6
	South Africa*	2018	61.1	67.3		New Zealand*	2016~2018	80.2	83.6

Source: 2017 United Nations Demographic Yearbook

Obtained from the updated website of the United Nations (website: <http://data.un.org/en/reg/g1.html>)

* By referring to the most updated data of each country (updated on July 30, 2019)

Explanation: According to the 2017 United Nations Demographic Yearbook, the life expectancy for male and female in Hong Kong is 81.9 and 87.6 years old, respectively, which is the region with the highest life expectancy in the world; moreover, the life expectancy for male and female in San Marino is 82.7 and 86.8 years old, respectively, which is also the country with high life expectancy. However, the total population of San Marino is less than 50,000 people; both the data of Hong Kong and San Marino are not considered for comparison.

The data on citizens' average life expectancy can be summed up in three principle conclusions:

- (I) The average life expectancy for Taiwan citizens in 2018 was 80.69 years old, reaching a record high. The standardized death rate on the other hand reached a record low.

With the increase in national health care expenditure and the improvement of the medical care environment, the standardized death rate issued by the Ministry of Health and Welfare (calculated according to the WHO's 2000 world standard population age structure adjustment) is decreased from 484.3 people per 100,000 population in 2008 to 415.0 people in 2018. The citizen's average life expectancy was increased from 78.57 years in 2008 to 80.69 years in 2018. The average life expectancy for male and female is 77.55 and 84.05 years old, respectively, both of which reaching a record high.

- (II) The average life expectancy for each region varies depending on the degree of urban development

The average life expectancy for counties and cities in Taiwan shows regional differences. In general, the average life expectancy for

counties and cities in the northern region is higher than that in the central region, which is higher than that in the southern region. Moreover, the average life expectancy for counties and cities in the western region is higher than that in the eastern region. Due to the fact that the western region of Taiwan has a good public transportation network, sufficient medical resources, and different living lifestyles, the standardized mortality rate is relatively low while the average life expectancy is relatively high. However, the gap between the two has narrowed compared to the gap of 10 years ago.

(III) The average life expectancy in Taiwan is higher than the global average life expectancy

The average life expectancy in 2018 was 80.69 years. Comparing with other Asian countries, no matter for male or female, this number is lower than that in Japan, Singapore and South Korea, but higher than that in China, Malaysia, and the Indonesia. The latest global average life expectancy published by the United Nations in 2015, for male and female is 68.6 and 73.1 years old, the average life expectancy in Taiwan is higher than the global average life expectancy.

(IV) The average life expectancy of people in Taiwan has been improving, leading to the issue of aging society which requires special attention

According to the statistics of the Ministry of the Interior, by the end of March 2018, the elderly population accounted for 14.05% of the total population, officially entering into the aged society. This suggests that Taiwan officially enters the so-called "aged society" as defined by the United Nations. With the increase of the average life expectancy of people in Taiwan, the continuous rising of the population aging index has created problems in elderly care as well as related issues such as economic security, long-term home services, medical institutions, friendly living environment, and transportation convenience. Therefore, related measures should be planned and implemented continuously for the possible needs of the elderly people, including rental and managing services, building of accessibility

environment, fire safety, home safety, heating, food delivery, pick-up and escort services, reverse mortgage, etc., helping the elderly people not only to live longer, but also to live comfortably, conveniently and safely, and improving the quality of life of the elderly people.

4. Average Age of Death

The average age of death refers to the chronological age of death of those who died during a given year. The method of calculation used is an average age of the time, which is calculated by a weighted average added to the relevant age group. Currently, internationally, the average age of life expectancy is used as a measure of a country's socio-economic environment, and an important indicator of the country's degree of development, while the average age of death represents the particular characteristics of those who died that year of age. In 2018, the average age of death was 73.49 for both sexes, while the average age of death for men was 71.41 years, and 76.49 years for women.

The average age of death for the citizens in 2008 was 69.71 years, which had increased to 73.49 by 2018, while the average age of death for men in 2008 was 67.78, which had increased to 71.41 by 2018, the average age of death for women in 2008 was 72.80 years, which had increased to 76.49 years by 2018, which sufficiently demonstrates that the age of death is extending upwards. (Table 3-4-1)

Table 3-4-1 Citizens' average age of death

Unit: year-old

Year	Citizens	Male	Female
2008	69.71	67.78	72.80
2009	69.97	68.09	72.97
2010	70.70	68.75	73.77
2011	71.01	69.04	74.14
2012	71.39	69.50	74.32
2013	71.84	69.93	74.76
2014	72.27	70.32	75.21
2015	72.50	70.50	75.52
2016	72.92	70.84	76.03
2017	73.34	71.21	76.43

2018	73.49	71.41	76.49
------	-------	-------	-------

Source: Statistical Yearbook of Interior, Department of Statistics, MOI

By observing the counties and cities, Taipei City's 76.73 years was highest, followed by Penghu County at 76.20 years, with Chiayi County third at 74.81 years; all were higher than the average value of 73.49 years. While Lienchiang County's 70.44 years was lowest, with Taitung County next at 71.52 years, and Hualien County third at 71.92 years; all were lower than the average value. (Table 3-4-2)

Table 3-4-2 2018 Average age of death in each city and county

Unit: year-old

County /City	Citizens	Male	Female
Total	73.49	71.41	76.49
New Taipei City	72.26	70.60	74.72
Taipei City	76.73	75.57	78.24
Taoyuan City	72.13	70.90	74.13
Taichung City	72.36	70.46	75.09
Tainan City	73.97	71.53	77.33
Kaohsiung City	72.32	70.53	74.98
Yilan County	74.46	72.34	77.33
Hsinchu County	73.88	71.83	76.90
Miaoli County	74.42	71.47	78.58
Changhua County	74.70	71.64	78.87
Nantou County	74.21	71.30	78.31
Yunlin County	74.78	71.42	79.63
Chiayi County	74.81	71.67	79.20
Pingtung County	72.30	69.67	76.35
Taitung County	71.52	69.32	74.90
Hualien County	71.92	70.06	74.88
Penghu County	76.20	73.46	80.04
Keelung City	72.77	71.03	75.34
Hsinchu City	73.87	72.08	76.27
Chiayi City	74.23	72.52	76.57
Kinmen County	74.38	72.01	78.15
Lienchiang County	70.44	68.34	77.17

Source: Statistical Yearbook of Interior, Department of Statistics, MOI.

5. Population Distribution

(I) Demographic Movements

Population migration reflects the allocation of resources among regions and the scale of development of the city itself. Factors that affect population migration include employment opportunities, convenience of software and hardware of public infrastructure, housing development and social welfare. With regard to the population migration from 2007 to 2017, based on the actual population migration data¹⁶, most of the migration is due to population move out (in)¹⁷, followed by those who changed their addresses in the same towns/cities, and those who moved in from abroad and applied initial household registration. In recent years, the actual migration population showed a downward trend, it was reduced from 1,885,275 people in 2008 to 1,666,027 people in 2018, with this the migration rate¹⁸ dropped from 81.98 ‰ to 70.65‰. Within the 10-year period, the migration rate had decreased by 11.33‰. However, from 2017 to 2018, the migration rate increased by 2.43‰.

By observing the international migration situation, Taiwan completely renewed the new national identity card in 2006. In the same year, the number of immigrants from foreign countries increased by 22,575, and the international net migration rate reached 1.66‰. In November 2008, the amendments to the Nationality Law Enforcement Rules were relaxed to relax foreigners. The property restriction of the spouse's naturalization and the "Taiwan and Mainland China People's Relations Regulations", which was amended in August 2009, shortened the residence period of the spouses in Mainland China, Hong Kong and Macao to settle in Taiwan for 6 years, and retrospectively, to the beginning of 2009. The number of

¹⁶ Actual population migration data includes move-out, moved in from abroad, initial household registration and changed addresses in the same towns/cities.

¹⁷ Population move out includes moving out to other counties/cities, to other towns of the same counties/cities, and to other countries; population move in includes moving in from other counties/cities, from other towns of the same counties/cities, and from other countries as well as initial household registration.

¹⁸ Actual migration rate refers to the actual migration per 1,000 population.

registered households has increased by 23,316, and the international net migration rate has reached 1.55‰. Since 2010, it has begun to fall back to 0.94‰. After that, they all showed a downward trend to a minimum of 0.38‰ in 2015. In 2018, there were 53,794 people moved in from foreign countries and applied initial household registration, while there were 44,485 people moved out to foreign countries, which were increase to 2.49% and 2.81%, respectively as compared with the data in 2017. The international net migration population was 9,309 people, which is equivalent to a migration rate of 0.39‰ as compared with the migration rate in 2017 (Table 3-5-1-1).

Table 3-5-1-1 Overview of Community increase of population over the years

Unit: People; ‰

Year	Actual migration population	Actual migration rate	Moved in	From foreign countries, and initially registered household	Moved out	From foreign countries	Address change in township, city or district	International net migration	International net migration rate	Community increase	Natural increase	Total increase
2006	2,217,248	97.15	1,414,340	80,239	1,376,816	42,247	760,193	37,992	1.66	37,524	68,620	106,144
2007	1,853,539	80.88	1,173,040	82,428	1,154,510	63,150	616,601	19,278	0.84	18,530	63,303	81,833
2008	1,885,275	81.98	1,196,407	74,841	1,172,845	50,529	637,589	24,312	1.06	23,562	55,109	78,671
2009	1,895,124	82.12	1,198,561	98,333	1,163,548	62,579	633,243	35,754	1.55	35,013	47,728	82,741
2010	1,889,559	81.65	1,213,899	77,074	1,192,662	55,213	619,823	21,861	0.94	21,237	21,114	42,351
2011	1,760,317	75.90	1,128,449	71,198	1,109,372	51,523	579,747	19,675	0.85	19,077	43,712	62,789
2012	1,743,385	74.92	1,118,006	66,593	1,102,326	50,250	574,466	16,343	0.70	15,680	75,230	90,910
2013	1,676,657	71.82	1,079,702	62,009	1,065,212	47,224	549,436	14,785	0.63	14,490	43,205	57,695
2014	1,717,771	73.40	1,073,783	57,930	1,060,001	44,170	599,840	13,760	0.59	13,782	46,454	60,236
2015	1,704,419	72.64	1,004,108	54,934	995,527	45,947	653,958	8,987	0.38	8,581	49,740	58,321
2016	1,638,767	69.69	964,536	56,888	952,829	44,807	629,050	12,081	0.51	11,707	36,035	47,742
2017	1,606,988	68.22	948,049	52,488	939,240	43,270	615,260	9,218	0.39	8,809	22,602	31,411
2018	1,666,027	70.65	984,815	53,794	975,927	44,485	636,306	9,309	0.39	8,888	8,817	17,705
Increase or decrease from 2017 (%)	3.67	①2.43	3.88	2.49	3.91	2.81	3.42	②91	①0.00	②79	②-13,785	②-13,706

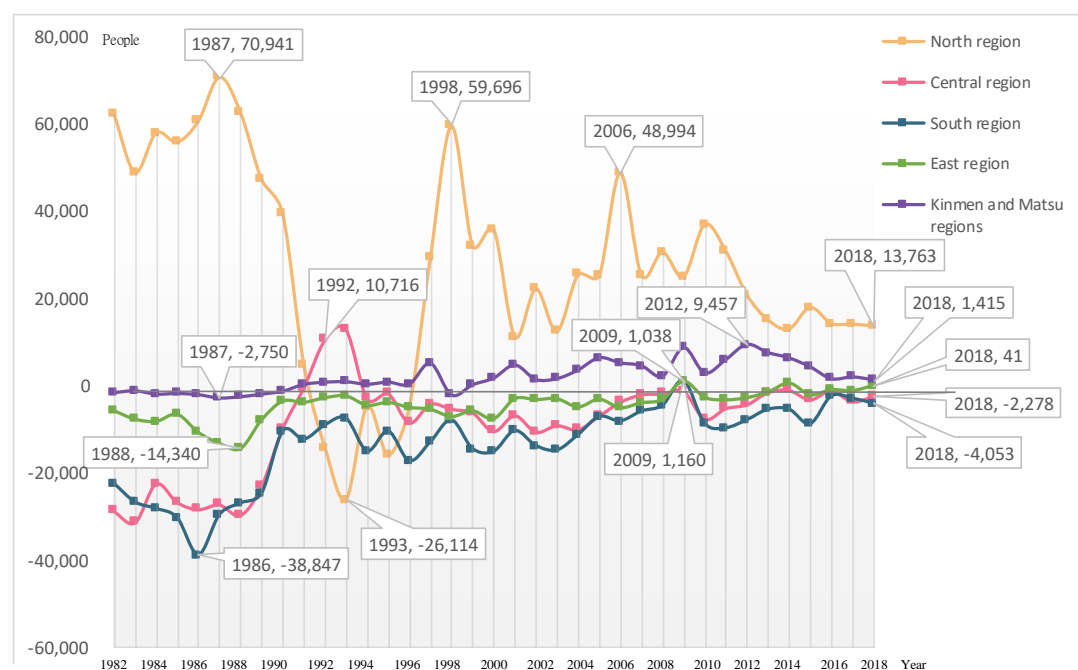
Source: MOI statistics notification, Department of Statistics, MOI

Explanation: ① refers to an increase or decrease of thousand points. ② refers to the number of increase or decrease.

The tendency of demographic migration towards the North region reached a peak in 1987; the community increase figures were 70,941 people, after which this gradually eased off. From 1992 to 1996, an outward migration phenomenon was evident, and by 2018, the community increase figure was 13,763 people; the Central region reached a peak in the number of net outward migration in 1988, at 29,584 people, after which this had decreased until 1990 and the trend became flat thereafter and in 1992 and

III. POPULATION CHANGE

1993 there was a demographic influx phenomenon; by 2018 the net outward migration was 2,278 people; in the South region, the number of net outward migration reached a peak of 14,340 people in 1988, falling thereafter until 1990, when the trend flattened, and in 2018 the net outward migration was 4,053 people; the East region has been showing a continuous flattening trend; in 2009 and 2014 there were a demographic influx phenomenon, by 2018 the net outward migration was 41 people; Kinmen and Matsu region's net outward migration reached a peak of 2,750 people in 1987, and after 1991 a demographic influx phenomenon became evident, but with outward migration re-appearing in 1998, and by 2018 the community increase figure was 1,415 people. (Table 3-5-1-2, Chart 3-5-1)



Source: Interior Statistics Report, Department of Statistics, MOI.

Chart 3-5-1 Population society increasing trend in the 4 major areas and the Kinmen/Matsu region

Table 3-5-1-2 Community increase of population figures for the four main regions, & Kinmen and Matsu regions

Unit: People

Region Year	North Region	Central Region	South Region	East Region	Kinmen and Matsu regions
1987	70,941	-27,184	-29,616	-13,168	-2,750
1988	62,804	-29,584	-26,943	-14,340	-2,463
1989	47,403	-22,911	-24,657	-7,785	-1,871

1990	39,558	-9,625	-10,435	-3,522	-1,207
1991	4,911	-269	-12,302	-3,807	345
1992	-14,129	10,716	-9,012	-2,746	846
1993	-26,114	13,107	-7,510	-2,352	951
1994	-4,743	-2,764	-15,010	-4,474	377
1995	-15,942	-1,588	-10,438	-3,810	866
1996	-4,900	-8,334	-17,269	-4,952	401
1997	29,512	-4,018	-12,892	-5,387	5,165
1998	59,696	-5,184	-7,883	-7,042	-2,081
1999	32,230	-6,019	-14,475	-5,748	260
2000	36,053	-10,313	-15,067	-7,521	1,779
2001	11,335	-6,633	-10,314	-2,970	4,771
2002	22,262	-10,450	-13,775	-3,182	1,459
2003	12,536	-8,944	-14,768	-2,980	1,661
2004	25,608	-9,887	-11,252	-4,849	3,625
2005	25,323	-6,776	-7,075	-3,089	6,422
2006	48,994	-3,585	-8,105	-5,029	5,249
2007	25,502	-1,862	-5,832	-3,895	4,617
2008	30,726	-1,683	-4,500	-3,190	2,210
2009	25,084	-1,026	1,160	1,038	8,757
2010	37,083	-7,460	-8,678	-2,671	2,963
2011	31,014	-5,029	-9,669	-3,233	5,994
2012	20,944	-4,153	-7,834	-2,734	9,457
2013	15,167	-1,380	-5,433	-1,457	7,593
2014	13,079	-846	-5,421	589	6,381
2015	18,036	-2,998	-8,751	-2,066	4,360
2016	14,352	-987	-2,374	-926	1,642
2017	14,208	-3,422	-2,893	-1,123	2,039
2018	13,763	-2,278	-4,053	41	1,415

Source: Interior Statistics Report, Department of Statistics, MOI.

Note: North region refers to New Taipei City, Taipei City, Taoyuan City, Keelung City, Hsinchu City, Yilan County and Hsinchu County; Central region refers to Taichung City, Miaoli County, Changhua County, Nantou County and Yunlin County; south region refers to Tainan City, Kaohsiung City, Chiayi City, Chiayi County, Pingtung County and Penghu County; east region refers to Taitung County and Hualien County; Kinmen and Matsu regions refer to Kinmen County and Lienchiang County.

Table 3-5-1-3 Community increase of population circumstances over the past 7 years by county or city, and region

Unit: People

County / City / Region	2012	2013	2014	2015	2016	2017	2018	Accumulated for 7 years
Total	15,680	14,490	13,782	8,581	11,707	8,809	8,888	81,937
North Region	20,944	15,167	13,079	18,036	14,352	14,208	13,763	109,549
New Taipei City	2,287	455	-4,780	-10,312	-2,511	-605	4,030	-11,436
Taipei City	9,339	2,959	3,952	-9,386	-19,116	-20,022	-19,632	-51,906
Taoyuan City	7,967	8,077	8,799	36,668	30,834	29,518	23,110	144,973
Keelung City	-2,492	-1,574	-1,032	-582	387	24	-452	-5,721
Hsinchu City	1,225	778	543	-335	1,395	2,169	3,126	8,901
Yilan County	-920	-103	569	-364	-317	-252	-538	-1,925
Hsinchu County	3,538	4,575	5,028	2,347	3,680	3,376	4,119	26,663
Central Region	-4,153	-1,380	-846	-2,998	-987	-3,422	-2,278	-16,064
Taichung City	7,192	7,351	7,948	14,367	14,060	12,397	11,268	74,583
Miaoli County	291	755	393	-4,229	-4,390	-4,255	-3,295	-14,730
Changhua County	-7,459	-6,148	-6,808	-5,677	-5,349	-7,297	-6,650	-45,388

III. POPULATION CHANGE

Nantou County	-2,125	-1,838	-1,720	-3,616	-3,006	-2,558	-2,414	-17,277
Yunlin County	-2,052	-1,500	-659	-3,843	-2,302	-1,709	-1,187	-13,252
South Region	-7,834	-5,433	-5,421	-8,751	-2,374	-2,893	-4,053	-36,759
Tainan City	804	796	40	-181	1,028	1,712	125	4,324
Kaohsiung City	-1,829	-1,131	-3,123	-2,035	61	-1,351	-1,990	-11,398
Chiayi City	-678	-477	-201	-717	-638	-409	-560	-3,680
Chiayi County	-3,021	-2,497	-1,820	-2,575	-1,708	-1,400	-1,136	-14,157
Pingtung County	-4,646	-3,600	-1,643	-3,816	-2,046	-2,064	-887	-18,702
Penghu County	1,536	1,476	1,326	573	929	619	395	6,854
East Region	-2,734	-1,457	589	-2,066	-926	-1,123	41	-7,676
Taitung County	-1,471	-731	411	-1,202	-623	-367	205	-3,778
Hualien County	-1,263	-726	178	-864	-303	-756	-164	-3,898
Kinmen & Matsu Regions	9,457	7,593	6,381	4,360	1,642	2,039	1,415	32,887
Kinmen County	8,368	6,828	6,150	4,430	1,703	1,829	1,308	30,616
Lienchiang County	1,089	765	231	-70	-61	210	107	2,271

Source: Interior Statistics Report, Department of Statistics, MOI.

If we look at regional population migration trends¹⁹ over the past seven years the biggest net inward migration has been in the North region, at 109,549 people, regional balance issues deserve to be paid attention, with the net migration into the population of Kinmen and Matsu regions next at 32,887 people, which is related to Kinmen County's welfare measures and the "Minor Three Exchanges." Besides, the central, southern and eastern regions, there is a phenomenon of net outward population migration.

If we look at the migration trends²⁰ of each city and county population over the past seven years, the positive population growth in four counties (cities) including Taoyuan City, Taichung City, Kinmen County, Hsinchu County, and so forth all exceed 10,000 people, and these are currently the cities and counties for net inward migration. Those with cumulative negative population growth in excess of 10,000 people were, in order of nine counties (cities), Taipei City, Changhua County, Pingtung County, Nantou County, Miaoli County, Chiayi County, Yunlin County, New Taipei City and Kaohsiung City; these are currently the main cities and counties with net outward population migration. (Table 3-5-1-3)

¹⁹ This is analyzed based on cumulative community increase growth figures over the past 7 years.

²⁰ As above note.

(II) Population Density ²¹

Looking at Taiwan's 2018 population density is 652 people per square km, among them; the North Region was most densely populated, with 1,457 people per square km, with the South Region next at 636 people per square km, the Central Region third at 553 people per square km, and East Region last at 67 people per square km. (Table 3-5-2-1)

Table 3-5-2-1 Population density of the four main regions

Unit: People/square km

Region Year	Total	North region	Central region	South region	East region
1991	570	1,188	491	606	75
1996	595	1,243	519	627	75
2001	619	1,317	537	641	73
2006	632	1,366	545	644	71
2007	634	1,375	546	644	71
2008	637	1,384	548	644	70
2009	639	1,392	549	644	70
2010	640	1,400	548	643	70
2011	642	1,409	549	642	69
2012	644	1,418	550	642	69
2013	646	1,425	551	641	69
2014	647	1,432	552	641	69
2015	649	1,440	553	639	68
2016	650	1,447	553	638	68
2017	651	1,452	553	637	67
2018	652	1,457	553	636	67

Source: Interior Monthly Statistics Report, Department of Statistics, MOI

Looking at the population density of each city and county in 2018, Taipei City had the highest density, at 9,818 people per square km, followed by Chiayi City, at 4,475 people per square km; and Hsinchu City was next, at 4,279 people per square km. Cities and counties with the lowest population density were, in order, Taitung County, at 62 people per square km, Hualien County, at 71 people per square km, and Nantou County, at 122 people per square km. (Table 3-5-2-2)

²¹ This refers to the population within each unit's land area; it is the population per square kilometer.

**Table 3-5-2-2 Population density of each county or city
over the past 3 years**

Unit: People/square km

County /City	2016	2017	2018
New Taipei City	1,939	1,942	1,947
Taipei City	9,918	9,872	9,818
Taoyuan City	1,759	1,792	1,819
Taichung City	1,249	1,258	1,266
Tainan City	861	861	860
Kaohsiung City	942	941	940
Yilan County	213	213	212
Hsinchu County	384	387	390
Miaoli County	307	304	302
Changhua County	1,198	1,194	1,189
Nantou County	123	122	121
Yunlin County	538	535	531
Chiayi County	271	269	266
Pingtung County	301	299	297
Taitung County	63	62	62
Hualien County	71	71	71
Penghu County	814	820	823
Keelung City	2,803	2,798	2,788
Hsinchu City	4,199	4,235	4,279
Chiayi City	4,496	4,488	4,475
Kinmen County	891	906	918
Lienchiang County	437	447	453

Source: 2016 to 2018 Population Statistics Annual Report, Dept. of
Household Registration, MOI

IV. PRACTICAL IMPLEMENTATION OF POPULATION POLICY

1. Population Policy Content and Important Measures of the Past Five Years of Ministry of the Interior

Currently, the "Republic of China Population Policy Guidelines" is the highest guiding principle for the formulation and promotion of population policies by ministries and departments in Taiwan. With regard to the fewer children, Taiwan has faced the problem in which the total fertility rate of women with childbearing age dropped to as low as 1.3 in 2003, and continued to decline for a long period of time, which made Taiwan one of the countries in the world with the lowest fertility rate. In terms of population aging, the proportion of elderly population with age over 65 years old to the total population has reached more than 14% in March 2018, entering the so-called "Aged Society". With the low birth rate and the extension of average life expectancy, the phenomenon of population aging will accelerate in the future. Moreover, due to the fewer children and population aging, the working-age population will decrease year by year. The utilization of labor will be an important issue. With regard to immigration, the migration of population due to foreign marriage and working abroad may increase, causing multiple impacts on the population of Taiwan.

Considering the population issues, such as the fewer children, the reduction of working-age population, the aging population and the change of population migration, in Taiwan which are more urgent than those in western countries and the challenges for future development will be more severe, it is best to plan for countermeasures as soon as possible. In response to the population issues, the Ministry of the Interior, in line with the Republic of China Population Policy Guidelines, also proposed relevant population policies and welfare measures accordingly.

(I) Basic Idea and Content of Population Policy

1. Reasonable population structure: promoting age-appropriate marriage and childbearing, respecting the value of life, maintaining family functions, and keeping a reasonable demographic structure.
2. Improve the quality of population: strengthening citizen's childbirth health care & nutrition balance, physical & mental health, cultural construction and education to improve the quality of population.
3. Ensure labor rights and expand labor involvement: improving the capability of citizens to seek jobs, creating suitable working environment and conditions to effectively increase labor involvement, ensuring employment safety and labor rights.
4. Improve social safety network: establishing a complete social safety network to provide comprehensive social welfare for children, adolescents, women, senior citizens, people with physical & mental disabilities, indigenous people and other minority groups.
5. Implement sex equality: implementing sex equality awareness and establishing a population policy that considers sex perspective.
6. Promote ethnic equality: safeguarding the basic human rights for all ethnic groups and building a multicultural society.
7. Promote appropriate distribution of population: promoting environmental protection and sustainable development, implementing the balance between life, ecology and production, and carrying out land planning to promote appropriate distribution of population.
8. Advance immigration policy and protect the related rights and interests: ensuring the basic rights of the move-in population, creating a friendly environment for foreigners, and strengthening

the bonding between citizens and overseas nationals or expatriates to create an open and diverse new society.

(II) Measures promoted by the Ministry of the Interior in line with the ROC Population Policy Guidelines in the past five years

1. Appropriate population structure

- (1) The Ministry of the Interior held 10 “Listen with Love, Happiness Forever” seminars. The seminars were held in the northern, middle, southern and eastern regions of Taiwan from July to October 2014. During the seminar, professor Cheng-Tai Hsueh, who is an expert of population policies, Hui-Ying Liao and Chuan-Yu Wu, well-known authors in sexual relations, marriage, and family issues, were invited to share with the public their experience and opinions on marriage and family issues as well as other interesting topics. 1,648 people participated in this event. It is hoped that this event can enhance the awareness of the Taiwan people on fewer children issues and lead the young generation to put emphasis on family importance and values, realizing the goal of “Willing to Marry, Willing to Give Birth, and Capable of Parenting.”
- (2) On September 27, 2015, the Ministry of the Interior held the “Good Fortune, Good Luck in Pregnancy” event at Taipei Xia-Hai City God Temple, hoping to bring good fortune and luck to newly marriage couples in pregnancy. During this event, “Good luck pregnancy suits” and “Good luck pregnancy cards” were given out to participants, hoping they could promote marriage and a willingness for pregnancy.
- (3) To attract young generation’s attention on marriage and family issues and to collect the opinions of general public on the governmental departments holding match-making activity for singles, the Ministry of the Interior posted related questions on the public policy web-based participation platform (policy consultation) of the National Development Council (NDC) from January 15 to February 14, 2016. The questions of “Do you think

it is appropriate for governmental departments to hold the match-making activities for singles?”, “How to share the cost for holding the match-making activities?”, and “Can the match-making activities be carried out in what ways?” were posted online to collect people’s opinions. Over 80% of the people voted supported governmental departments to hold match-making activities for singles, over 81% of the people voted agreed that the cost of the match-making activities should be shared by the participants, and over 84% of the people voted preferred that the match-making activities should be carried out in different varieties including parties, outdoor hiking, etc. that are interesting, creative and not dull.

- (4) In 2016, 2017, 2018 and 2019, the Ministry of the Interior organized the match-making activities including "Happy Match-Making Train ", "Meet the First LOVE", "You are My Love" and "You & Me together with love", for singles. Through participating in these diversified activities, single people are more likely to find the other half with the same hobbies and values, which may further lead to marriage and formation of a family, alleviating the impact brought about by fewer children and aging society in Taiwan.
- (5) To implement the policy of "government caring, serviceman at ease, family rest assured", The Conscription Agency of the Ministry of the Interior have recently amended related rules and regulations. According to current regulations, as for the preferential in-service category, service district and service term for draftees who have parenting needs are as follows:
 - ① Serviceman who has more than 2 children under the age of 12, or a child under the age of 12 and a spouse who has been pregnant for more than 6 months may apply for substitute military service or early retirement from the military service.
 - ② Serviceman who has a child or a spouse is pregnant may apply for substitute military service.

- (6) The Construction and Planning Agency of the Ministry of the Interior has proposed the "Implementation Program for Integrating Residential Subsidy Resources", which can be applied every year from July to August to provide rent subsidies, loan interest subsidies for house purchasing or repair, helping low- and middle-income families to reduce their living burden. The Program is targeted to help “families” and adopts the score-based evaluation system. For families with minor child (under age child), each minor child will receive 2 points for the score, allowing the family to have greater chances of receiving subsidies. With regard to interest subsidy, families with more than 3 minor children can have the benefit to enjoy the first-class interest rate (currently 0.562%), which is 0.575% lower than the regular family interest rate benefit (currently 1.137%).
- (7) The Construction and Planning Agency of the Ministry of the Interior has proposed the "Social Housing Development Plan" to directly construct 120,000 houses and help the owners of 80,000 houses to manage their rental services. The target is to reach a total of 200,000 social housing in 2024. Moreover, in accordance with Article 4 of the Housing Act, social housing should provide more than 30% of the housing to those who are economically or socially disadvantaged, including those with more than 3 minor children. In addition, a certain proportion of social housing is provided to those who are studying or working in the area but do not have household registration in the same area. Therefore, promoting social housing should be able to reduce the burden of living for young people, which will have the benefits to encourage marriage and childbirth.
- (8) Promoting the idea of "Equality, Mutual Aid and Tolerant - Modern National Wedding". It is realized that young people nowadays often experienced delay of the marriage process due to complicated, expensive and sex-inequality weddings. Therefore, by strengthening the promotion of national wedding that fulfills the concept of modernity, sex equality, and simple

wedding policy, the marriage barriers, such as financial pressure, for young people can be effectively reduced, leading to increase the marriage rate and fertility rate.

- (9) Implementing the "Public Production Awards and Management Measures" to encourage the promotion of relevant public production projects, attracting young people to return to their hometowns to balance the population structure and density of the region and ease the pressure on young people to buy houses in the metropolitan area. These measures can increase the willing of single people in getting married and having child.
- (10) Implementing the "Promotion & Implementation Plan for Population Policy and Related Measures" to allow the citizens of Taiwan to understand the population policy and related measures implemented by the Ministry of the Interior in response to the fewer children, the aging society and the immigration issues in Taiwan. Strengthening the sense of responsibility for citizens on family, society and the nation to achieve the population policy objectives, enhancing national development and social well-being.

2. Improve Social Safety Network

- (1) In order to strengthen the safety of elderly people and prevent them from becoming the victims of crime, the National Police Agency, Ministry of the Interior continues to urge municipal, county, city police stations to conduct theme-based anti-fraud campaigns for groups who are under the risk of fraud. Besides issuing weekly news on anti-fraud propaganda and preparing promotional videos which are released via online and electronic media, seminars were also held for educating and issuing promotional materials to elderly people. In addition, efforts to coordinate with hospitals for printing promotional material on medicine bags and outpatient documents were made to expand the propaganda channels.

- (2) The National Police Agency of the Ministry of the Interior has requested the municipal, county (city) police stations to cooperate with the social administration offices to conduct the fingerprinting card for chronic mental patients as well as the voluntary fingerprint archiving for physical & mental disabilities, and to promote the wearing of love bracelets, hoping to reduce the loss of mentally retarded elderly people and improve the long-term caring service system.
- (3) The National Fire Agency of the Ministry of the Interior assisted the promotion of minority group (such as seniors) evacuation, and installation of residential fire alarms for escape or rescue sites, and other high-risk groups with poor economic conditions, construction conditions or operation, providing "Elderly people house fire protection safety diagnosis report", hoping to improve the living of the elderly people and protect the physical & mental safety of the elderly people.
- (4) To strengthen the emergency rescue treatment technology and enhance the rescue quality for the elderly people before arriving at the hospital, the National Fire Agency of the Ministry of the Interior enhanced the training of rescue personnel for the rescuing of elderly people based on the "Rescue Personnel Management Guideline".
 - ① For the beginner-level rescue personnel training course base module six comprehensive (full scenario procedure) drill, one hour is assigned to get to know special patients, such as children, pregnant women or the elderly people and the commonly seen conditions.
 - ② For the intermediate-level rescue personnel training course base module six special patient and condition assessment, treatment and scenario operation, 2 hours are assigned for elderly people emergency and trauma assessment, treatment and situational operation.

- ③ For senior rescue personnel training course base module six special patients and conditions, four hours are assigned for elderly people emergency introduction, treatment principle and scenario operation.

With regards to the emergency rescue for elderly people, due to their slowly degraded vital signs and their complicated medical history, it is difficult to perform a related assessment. The National Fire Agency, Ministry of the Interior has invited ER (emergency room) doctors and senior emergency medical technicians (EMTs) to revise the training materials for new and intermediate-level EMTs, incorporating the latest emergency assessment and technology for elderly people and standardizing the training quality of EMTs in fire-fighting agencies to maintain the safety of elderly people.

- (5) The Architecture and Building Research Institute, Ministry of the Interior promoted the "Medium Term Project for Holistic Caring and Living Environment Technology Development" from 2012 to 2016 to study the accessibility living environment, the spatial perception of elderly with Dementia and the community environment for elderly people, and carry out the elderly-friendly building evaluation activities. From 2017 to 2020, the Architecture and Building Research Institute promoted the "Project on the Planning of a Safe, Reassuring Living Environment for Elderly People," which carried out plans for creating healing environments, reutilizing idle spaces as daycare centers for seniors, social housing, and indoor environments for the elderly with low vision. In addition, the Architecture and Building Research Institute also published its research achievements on elderly-friendly environments accumulated in recent years to the Assistive Technology for Life (ATLife) Taiwan, promoting them to the public and encouraging the industry to implement high-quality designs for the aged society.

- (6) The Construction and Planning Agency of the Ministry of the Interior implemented the "Living-Circle Traffic System (Urban Roads) Construction Project" to ensure the fair use of facilities for the disabled and elderly people, improve the leisure activities of elderly people, and promote the social involvement of elderly people. The concept of universal design was utilized to promote the elderly-friendly accessing area and public transportation facilities, creating an access-free and age-friendly living environment. The concept of environmental friendly was demonstrated in road construction, taking full account of the "accessibility", "transportation", "environmental ecology" and "community humanity".
- (7) On September 26, 2014, the Construction and Planning Agency of the Ministry of the Interior revised the self-implementation updated guideline for Central Urban Renewal Fund Subsidy, and added the subsidies for installing elevator equipment and improving access-free facilities.
- (8) The Construction and Planning Agency of the Ministry of the Interior continues to conduct the National "Urban Road Maintenance & Management and Pedestrian Environment Accessibility Assessment Project" to ensure the rights of elderly pedestrians and provide a respectful, safe and comfortable environment for pedestrian.
- (9) The Construction and Planning Agency of the Ministry of the Interior invites experts as well as scholars from relevant governmental units and representatives from disabled groups to form a supervision and assessment team every year. The Team conducted supervision and on-site inspection of the access-free environment for public building in municipalities and counties (cities). The tidying of public buildings and pedestrian arcades was incorporated as the criteria for assessment. After the completion of the supervision and assessment, a review meeting will be held to urge municipalities and counties (cities) to implement access-free environment for public buildings, and the

performance of the assessment will be sent to the supervisory authority, serving as the reference for the year-end performance evaluation. The results of the assessment as well as the performance of the supervised agencies will be announced to the media for publication, and considered for the issuing of the “Annual General Subsidy from Central to Local Government Own by the Directorate-General of Budget, Accounting and Statistics, Executive Yuan (20% of the points)”. From 2013 to 2017, a total of 396 public buildings and 83 pedestrian arcades were inspected.

- (10) The Construction and Planning Agency of the Ministry of the Interior implemented the "National Park Sustainable Development Project" to encourage retired people to participate in the National Park Volunteer Service. The volunteer recruitment and training were conducted by the Management (Preparatory) Department (Station) of the Construction and Planning Agency, Ministry of the Interior. National Park volunteers include preservation, touring and trail volunteers.
- (11) The Construction and Planning Agency of the Ministry of the Interior implemented the environment improvement projects for access-free facilities in various National Parks to continuously supervise the improvement of environmental facilities in various National Parks. In March 2015, the long-term plan was added. In the period of 2016 to 2019, at least one access-free trail will be provided each year. In addition, each National Park (excluding Dongsha Marine and South Penghu Marine National Park) has provided one access-free travel route and webpage information to improve the quality of touring services for elderly people.

3. Promote Appropriate Population Distribution

- (1) The Construction and Planning Agency of the Ministry of the Interior implemented the "Urban Landscape Modeling Project" to encourage municipalities, counties (cities) to form an inter-

departmental integration platform and select areas with development potential for resource inventory and overall planning. Through cross-domain integration, the relevant resources from central government projects are jointly invested to guide local regions for appropriate development, and further highlight the local characteristics and create value.

- (2) The Construction and Planning Agency of the Ministry of the Interior implemented the "Regional Planning Act" to review national land and space planning as well as land use policies in response to changes in land conservation, population structure and industrial development. In addition, the "Revised National Regional Plan" was proposed and implemented on May 16, 2017 in accordance with Subparagraph 3, Paragraph 1, Article 5 of the Regional Planning Act. The development trend of total population in municipality or county (city) was estimated based on the current population, residential attraction, transportation cost, and industrial development status of each municipality or county (city). In other words, the estimation process takes into account factors such as residential attraction, industrial economic attraction and environmental tolerance to estimate the total population of each municipality or county (city) in the future, which acts as the reference for carrying out land use planning by each municipality or county (city).

4. Improve Immigration Policy and Protect Rights

- (1) In accordance with the "Fund for Caring Foreign Spouses" proposed in the 2900th meeting of the Executive Yuan held on July 28, 2004, the fund for caring and guiding foreign spouses was established in 2005, and since then, a total of 3 billion NTD has been raised in the next 10 years. The fund was established in and managed by the Ministry of the Interior to further strengthen the new immigration system and promote comprehensive caring counseling services. The new resident caring and guiding work promoted by the fund has covered the caring work for foreign spouses as well as spouses from Mainland China and expended

to their children in recent years. The fund also helps to cultivate new residents and their children to become new resources for our nation. According to the resolution of the 1st meeting of the New Residents Coordination Committee of the Executive Yuan on August 4, 2015, the name of the fund was revised as the "New Resident Development Fund", and the amount of the fund is maintained at 1 billion NTD per year.

- (2) The National Immigration Agency of the Ministry of the Interior, promoted a three-year, intermediate-term "National New Resident Torch Project" from 2012 to July of 2015, hoping to carry out an inter-departmental and cross-domain cooperation between the Ministry of the Interior, the Ministry of Education, schools and private local groups at all levels to provide a comprehensive cultural, educational, and life guiding system and a single contact comprehensive service for the new residents and their children, so that they can live happily and grow continuously in Taiwan. It is also hoped to cultivate people's understanding of international multiculturalism, respecting and involving in international cultural and educational exchanges, at the same time, striving to establish social harmony and common prosperity, pursuing social fairness and justice, promoting multicultural understanding and creating a prosperous and just society, building a home for sustainable happiness, and integrating with the development worldwide.
- (3) The National Immigration Agency of the Ministry of the Interior conducted the "2013 Living Demand Survey for Foreign Spouses and Spouses from Mainland China". The Survey includes basic information, family member status, employment status, personal living conditions, overall living environment, and caring service needs of foreign spouses and spouses from Mainland. The related research results were distributed to government departments and agencies, municipalities, counties (cities) and private local groups in March of 2015 as the reference for promoting marriage and immigration counseling.

In addition, new resident living demand survey will be conducted again in 2018.

- (4) Worked together with the private human resources company, 1111 Human Bank to set up the "New resident Employment Counseling Service Section" in January, 2013 for free. The 1111 Human Bank has provided job training courses, employment & job interview skills, and job related information as well as match-making services to new residents. In addition, the 1111 Human Bank regularly provided the match-making data to the National Immigration Agency as references for future counseling services. As of September 2018:
 - ①The website has accumulated a total of 1,027,011 visits
 - ②Number of members: 16,741 people
 - ③13,594 people were successfully matched for a job
- (5) The "Personal Biometrics System for Foreign Population" was completed in December 2014 at various airports and harbors across Taiwan. The system was fully operational in August 2015, providing information archiving and fingerprint matching functions to effectively identify foreigners. As of September 2018, the system has archived a total of 26,653,402 files and performed a total of 39,019,716 data matching operations.
- (6) On April 22, 2014 the Ministry of the Interior amended some provisions on the "Guideline of Temporary Stay, Residence and Permanent Residence in Taiwan for Foreigners". The provisions of Article 22-1 were amended, which stated that after graduation, foreign students may apply to the National Immigration Agency for extension of residence. The extension is 6 months from the expiration of the original residence period. This amendment will greatly help foreign graduates in their employment and career planning in Taiwan after the graduation.
- (7) Regarding to the foreigners applying for residence extension and permanent residence which is applicable to Paragraph 1, Article 7 of the Enforcement Rules of the Immigration Act, the Ministry

of the Interior announced on April 19, 2014 that foreigners who have already entered or who have not yet entered Taiwan and who are applying for residence extension and permanent residence shall apply with a letter of attorney. For applicants applying by a legal agent, the letter of attorney is not required.

- (8) On April 22, 2014 the Ministry of the Interior amended some provisions on the “Guideline of Temporary Stay, Residence and Permanent Residence in Taiwan for Foreigners”. The provisions of Article 22-1 were amended, which stated that after graduation, foreign students may apply to the National Immigration Agency for extension of residence. The extension is 6 months from the expiration of the original residence period. This amendment will greatly help foreign graduates in their employment and career planning in Taiwan after the graduation.
- (9) The Ministry of the Interior amended the “Submission Directions for Foreigners who have made a special contribution to the nation, Senior Professionals and Investment Immigrants Applying for the Alien Permanent Resident Card (Plum Blossom Card)” on August 19, 2014 by simplifying the application and administration SOP and opening up overseas mission offices for application to attract senior professionals with a special contribution to the nation and society of Taiwan to stay in Taiwan. By September 30, 2018, 168 Plum Blossom Cards had been issued.
- (10) To strengthen the inter-departmental operation and coordination, and more specifically protect the rights and interests of new residents and their family members, the "Executive Yuan New Resident Coordination Report" was established in June 2015 to strengthen the service for new residents through inter-departmental operation. Meetings will be held every 6 months to promote new resident related business and the idea of "respecting diversity and appreciating differences", creating a friendly and diverse environment.

- (11) On June 18, 2015, Article 18 of the “Guidance for the Application of Residence Permit in Taiwan for People without Household Registration” was amended. The amendment stated that residence period for overseas Chinese graduates can be extended for 6 months after the expiration date for employment purpose. This amendment will greatly help overseas Chinese graduates in their employment and career planning after the graduation in Taiwan.
- (12) In order to provide real-time analysis of the multi-dimensionality of the immigration population and to enhance the efficiency of decision-making, the National Immigration Agency of the Ministry of the Interior conducted the "Immigration Information Cloud Service Outsource Construction Project" in December 2015. The Project was aimed to establish the "New Resident Management and Analysis System", which was launched on July 1, 2017, providing relevant statistical analysis for policy making. In addition, cloud online service was incorporated to provide real-time immigration population entry and exit records, which can be applied by other external units for related services.
- (13) In order to make good use of the limited resources of various government units, stimulate the potential of new residents and their children, provide employment opportunities, promote social participation and enhance international competition, the Ministry of the Interior established a new Project – Comprehensive New Residents Cultivation and Development Project in November 2015. The implementation period of the Project was from January 2016 to December 2017. The scope of the new Project includes: Language Improvement, First Generation Employment, Second Generation Enhancement, Diversified Services and Care Assistance. The development needs of the new residents' families will be integrated. It is hoped that positive energy can be introduced to enable the families of new residents to demonstrate cultural advantages

and increase self-confidence, injecting new resources into national development.

- (14) Subsidies for the "New Resident Social Security Network Service Project", the "New Resident Family Learning and Child Care, Multicultural Promotion and Related Promotion Project", the "Family Service Centre Project" and the "New Resident Innovative Services, Talent Cultivation and industrial Community Stimulation Project" were provided.
- (15) In order to attract foreign talents to come to Taiwan and increase the incentives for them to stay in Taiwan permanently, the "Review Criteria for Foreigners Applying Permanent Residency in Taiwan" was amended and issued on July 12, 2018. Important amendments are listed as follows:
 - ① Addition professional talents who have been invited or selected to participate in internationally renowned cultural and art competitions, have outstanding performance, or have been invited to participate in internationally renowned performances, exhibitions, related cultural events or festivals, and have been well recognized.
 - ② Talents with legal excellence and professional knowledge, who have been or have worked for many years in domestic and foreign well-known legal business institutions for outstanding performance, have won domestic or international and law-related important awards, have been recognized in the legal field for domestic and international research, or in international procedural law with excellent performance.
- (16) The National Immigration Agency of the Ministry of the Interior implemented the "Taiwan Talent Retention Environment Improvement Program": through various surveys and symposiums, the problems of foreign talents coming to and staying in Taiwan were re-examined, and 27 reform strategies from the 7 perspectives of visas, work, residence, finance, taxation, insurance and international living were proposed,

which were approved by the Executive Yuan on October 19, 2016.

(17) The Ministry of the Interior amended some provisions of the Nationality Act. The President amended the provisions of Articles 3, 4, 9, 11, and 19 on December 21, 2016 under No. Hua-tsung-yi-yi-tzu-10500160001, mainly to recruit outstanding professionals, safeguard the rights of marriage immigrants, and improve the procedures for foreigners to naturalize. The amendments are as follows:

- ① Talents who have special honors for Taiwan, and have been submitted to the Executive Yuan for approval by the Ministry of the Interior, or have been recommended by the central government agency as senior professionals in science and technology, economy, education, culture, art, sports and other fields to help Taiwan's interests, and have been approved by social justice person and relevant authorities invited by the Ministry of the Interior in the review meeting. The application for naturalization does not require the loss of the original nationality.
- ② Foreign spouse applying for naturalization does not need to prove the proof of living security. In addition, the foreign spouse who is divorced because of domestic violence and has not remarried, or who is not remarried and still is in connect with the relatives of his/her deceased spouse for more than 2 years, or is taking care of a child who has Taiwan nationality and is incapacitated or has limited capacity to act, exercising the rights and obligations, the period for applying legal resident naturalization is reduced from 5 years to 3 years.
- ③ In order to avoid the situation of losing the original nationality while failing to naturalize, the foreigner is allowed to first naturalize before providing the proof for the lost of the original nationality.

④ In order to protect the rights and interests of the person in concern, it shall be revoked within 2 years from the date when the Ministry of the Interior knows that it is not in conformity with the provisions of this Law; however it shall not be revoked and shall be revoked for more than 5 years from the date of naturalization, loss or refusal of the nationality of the Republic of China. Before the disposition, representatives of relevant agencies, social justices, scholars and experts should be invited to form a review meeting to give the person in concern an opportunity to present his/her opinions. In order to prevent the use of false marriage and naturalization for obtaining nationality of the Republic of China, the court determined that the naturalization to obtain the nationality of the Republic of China is due to false marriage or adoption, and is not subject to the restriction of the right of revocation, and the revocation of the naturalization does not require a review meeting.

(18) The "Entry and Exit Immigration Management System" newly developed and put into operation by the National Immigration Agency of the Ministry of the Interior has integrated various applications for foreign population (including foreigners, people from Mainland China, Hong Kong and Macao, and citizens without household registration) into the "Foreign Population Dynamics Management Database" for checking and statistical analysis of move-in population.

(III) Countermeasures against the declining birthrate in Taiwan (2018 ~ 2022)

The problem of aging population structure and fewer children in Taiwan is becoming more and more serious. The fewer children not only will delay the time for marriage and childbearing, but will also change the value of marriage and add pressure for women to balance work and family. The heavy economic burden for childcare and the inadequate low-cost childcare services will both affect the willingness for childbirth. On July 25, 2018, the

Executive Yuan approved the "Countermeasures against the declining birthrate in Taiwan (from 2018 to 2022)," which was further amended and approved on June 4, 2019. The amended plan includes "expanding the supply of public preschools," "adjusting the application criteria for public preschools," "adjusting the budget required for parental education, diverse promotion and training in childcare allowances," and "increase the subsidy for in-vitro fertilization (test-tube baby)," proposing new countermeasures for the fewer baby phenomenon as observed in Taiwan.

1. Objectives of the countermeasures

The objectives of the countermeasures include "improving fertility rate", "achieving sex equality", "reducing the burden of childcare for the family", and "improving the quality of infant care".

2. Emphasis of the countermeasures

(1) Comprehensive care for child from age of 0~5

With the three principles of respecting the choice of parents, ensuring that each child is respected and cared for, and seamlessly connection, the main goal is to "expand affordable education & childcare service" and "reduce the burden on parents" as follows:

①Expand public education & childcare services

Promote public childcare homes for child with age of 0 to 2 years old and expand the supply of public or non-profit public education & childcare services for child with age of 2 to 5 years old.

②Establish public system

Cooperate with home-based childcare workers (babysitter or caregivers), private baby-care centers and private kindergartens and allow the government and parents to

share the expenses to accelerate the improvement of affordable education & childcare services.

- ③Expand the issuing of childcare subsidy for child with age of 0~4

The target of childcare is extended from child with age of 0 to 2 years old to child with age of 0 to 4 years old. For those who do not receive public or quasi-public education & childcare services, childcare subsidy is provided as a supporting measure to reduce childcare burden for parents.

- (2) Family-friendly working environment

Promote workplace mutual help education & childcare services, encourage employer to establish childcare facilities or measures, strengthen the promotion of industrial settlements to provide nursery services, promote the popularization of workplace breast feeding (collection), strengthen labor adjustment application or reduce the protection of rights during work, study the Sex Work Equality Act and promote the work leave for public servants in the unit of hour instead of day.

- (3) Child health rights and protection

Include supportive measures for mother and child health care and infertile families during pregnancy and postpartum period. Implement the promotion of child health care and health awareness as well as knowledge, and strengthen the “Social Safety Network Program” to prevent child abuse and negligence. Continue to promote the “Community Care Service Implementation Plan for Mentally Challenged Children”, and the “Children and Youth Future Education and Development Account”, etc.

- (4) Childbirth-friendly supporting measures

- ① With regard to residence, newly married couples and those who are nurturing minors will have the priority to rent social housing and receive housing subsidies, etc.
- ② With regard to rent tax, benefits include the consolidated income tax deduction of the rent and tax concessions, the interest income tax incentives, the social housing as the nursery service, the use of the kindergarten to reduce income tax, business tax, land tax and housing tax, etc.
- ③ With regard to transportation, through the installation of hardware facilities, such as friendly toilets and access-free environments, a transportation-friendly environment is created. In addition, preferential transportation fare is promoted.

3. Implementation status of the Ministry of the Interior

In the aspect of the “Childbirth and caring friendly supporting measures”, the Ministry of the Interior has two strategies: "Housing Strategy Supporting Childbirth and Caring" and "Encouraging Marriage, Childbirth and Family Education" and the key points are as follows:

(1) Housing Strategy Supporting Childbirth and Caring

① Newlyweds and those with minor children have the priority to rent social housing

- Review of current policy

The Housing Act required at least 30% of social housing to be provided for those who are economically or socially disadvantaged, including low-income households or intermediate-low-income households, special situation families, have more than 3 minor children, and others who are in the 12 categories approved by the competent authorities. If the conditions for newlyweds or pre-school children (under 6 years old) are not clarified, misunderstanding may be

resulted which can prohibit people to receive priority for rent.

- Implementation strategy

- I. The Ministry of the Interior has coordinated with the Linkou World Universiade Social Housing to reserve a certain portion of the housing to provide for people who are eligible to rent. People who are eligible shall be married within 2 years or have pre-school children (under the age of 6). The Ministry will also actively coordinate with the local government to reserve a certain portion of the social housing which will be completed in the future for newlyweds and those with child (depending on the number of children, including infants) to have priority in renting.
- II. The Ministry of the Interior continues to cooperate with local governments and state-owned enterprises to promote social housing. In 2024, the Ministry is expected to achieve the goal of 200,000 social housing units to help low-income households, intermediate-low-income households, minority families, newlyweds, and people who are pregnant or have minor children to reduce their burden of living.

- Implementation status

- I. The Ministry of the Interior implemented the "Social Housing Construction Project" to directly construct 120,000 social housing units and manage the rental for 80,000 private houses. The target is to construct 200,000 social housing units in 2024 to help low-income families and intermediate-low-income families, minority families, newlyweds and those with minor children to reduce their burden of living.
- II. The "Housing Act" stated that certain proportion of social housing should be reserved for those who do

not have household registration in the area but have to live in the area due to schooling and work, which can help young people in reducing their burden of living, increasing their willingness to form families.

- III. The Ministry of the Interior analyzed the household data of the "Social Housing in Xinglong District 1 of Taipei City". A total of 13 couples were married after completing household registration with a marriage rate of 9.84‰, which is 1.6 times higher than that nationwide. A total of 20 babies were born after house registration with a fertility rate of 15.13‰, which is 1.8 times higher than that nationwide. Social housing allows young families to have a stable place to live, further promoting marriage and fertility rate.

② Newlyweds and people with minority child have the priority to receive housing subsidy

- Review of current policy

In conjunction with the policy for encouraging childbirth, weightings have been added to families with minor children. However, for the application before 2017, fetuses were not included in the calculation of family members as well as population, and weightings were not provided to newly married families.

- Implementation strategy

- I. To encourage childbirth, the Ministry of the Interior has included fetuses as family members regarding as a minor child since 2018, increasing the chances to meet the acceptance criteria and receiving subsidies.
- II. Also, for the newly married family (married within 2 years before the application date), 2 points are added to the score.

- Implementation status

- I. The “Implementation Program for Integrating Residential Subsidy Resources” conducted by the Ministry of the Interior from July to August each year provides rent subsidies and loan interest subsidies for house self-purchase and repair. All families who meet certain income and property requirements can apply, regardless of their identity.
 - II. Due to the limited housing subsidy resources, the Program only planned certain number of households which is based on the evaluation scoring system. In order to help people with minority child have the priority to receive housing subsidy, the current rule gives 2 points for applicant with one minor child and starting from the third child, each child adds 3 points to the score. This allows the applicant with the most minor children to have higher priority.
 - III. With regard to interest subsidy, families with more than 3 minor children may apply for the 1st category preferential interest rate to reduce their burden of interest.
- (2) Housing strategy supporting childbirth and caring
- ① Increase marriage opportunity
- Review of current policy
- Since the people in Taiwan have the tradition to get a job before establishing a family and get married before childbearing, the Ministry of the Interior has actively organized single match-making activities since 2011. Although only 4,537 quotas were provided due to limited budgets, enthusiastic responses have been received to give a total of 20,107 applications. As of May 2018, 50 couples have been married (both participated in the match-making activity organized by the Ministry of the Interior) and 42 children were born.

In order to strengthen the encouragement of the age-appropriate marriage and childbirth, increase the opportunities for singles to get married, and improve the marriage as well as fertility rate in Taiwan, the Ministry of the Interior continues to organize 17 match-making activities in 2018, providing 1,400 quotas.

- Implementation strategy

- I. The Ministry of the Interior continues to conduct match-making activities for singles, expand the number of events, the number of people and loosen the restrictions for the eligibility of participants: The Population Policy White Paper "encourages government units to joint with private corporation to organize match-making activities for singles" and clearly stated that the various departments and agencies of the Executive Yuan have to organize at least 8 match-making activities for singles. The implementation period was from 2010 to 2016. On average, 293 match-making related sessions (events) are held by governmental departments and agencies (including local government), with about 15,726 people participating in the events. In order to improve the chance of marriage for the people in Taiwan, match-making activities for singles will be held continuously in the future. In addition, the number of match-making events will be increased and the requirements for people attending the events will be relaxed (i.e. changing the match-making for unmarried to match-making for singles, enabling divorced or widowed people to apply for the event), allowing more people to attend the events.
- II. Advocating the idea of simple and modern national wedding: The Ministry of the Interior published in December 2014 the "Equality, Mutual Aid and

Tolerant - Modern National Wedding ". The book is divided into concepts, changes, preparations, ceremonies, and instruments, and provides a new concept for people in Taiwan to plan a wedding. The book provides new thinking to improve traditional complicated rituals, and reduce the economic burden of young in getting married, allowing people in general to quickly understand. The simplified version of the content and the practical essence were placed on the website of the Ministry of the Interior. People are welcome to download and use the information. The Ministry of the Interior also required various governmental units to promote the idea of simple and modern national wedding, helping those who want to get married to reduce their fears and obstacles in preparing for the wedding, and have a smooth wedding.

III. Preparing population education materials: The Ministry of the Interior actively prepares the materials to promote population education. On January 19, 2018, the Ministry of the Interior prepared the education material entitled "Facing the Problem of Population Structure Aging and Fewer children in Taiwan" and requested the Ministry of Education to inform schools and use the materials as reference for promoting population education. In addition, the Ministry of the Interior also prepared the "population education reading materials", which include celebrity interviews, articles of experts, and comics, showing the 5 major themes of "Fewer children problem and impact", "Population structure aging problem and impact", "Seizing the golden age of childbearing", "Age-appropriate marriage and childbearing, get married while starting a career" and "Men sharing parental

responsibility". It is hoped that the material can bring closer population issues and personal relationships, achieving the effect of communication and concept education, and establishing the values of marriage and childbirth for people in Taiwan. The materials can be found in the "Happiness Section" of the website of the Ministry of the Interior for people to see.

- Implementation status

- I. The phenomenon of late marriage and delayed childbirth in Taiwan is becoming more and more serious. The average first-marriage age for people in Taiwan has been increasing. According to the statistical data in 2018, the average first-marriage age for men was 32.5 years old while the average first-marriage age of women was 30.2 years old, and the average age of women with their first childbirth was 30.9 years old. In order to mitigate the impact of the declining birthrate and population aging in Taiwan, we continue to strengthen and create an atmosphere that encourages marriage and childbearing at the right age, allowing more singles who are in their appropriate marriage age to meet someone, which then leads to marriage. The Ministry of the Interior continues to carry out match-making events for singles. By the end of December 2018, there have been 54 couples married (all of them have participated in the match-making events held by the Ministry of the Interior), and 46 babies were born as a result. In order to strengthen and create the atmosphere that encourages marriage at the right age and increases the number of marriage opportunities for singles who are suitable for marriage, which eventually leads to an increase in marriage rate and fertility rate, the Ministry of the Interior continues to carry out and

expand the match-making activities, a total of 18 sessions have been held in 2019 with 1,478 people attending the events.

- II. Preparation of population education materials: The "All-age population education reading materials" were prepared by the Ministry of the Interior. All the contents of the materials were compiled into e-books. Besides sending notification to the Ministry of Education and other related agencies on July 4, 2019, the complete archives were also published in the website of the Ministry of the Interior "Happiness Section", serving as the reference material for the general public.

2. Implementaton Of Population Policy Advocacy

(I) Advocacy Implementation over the Years

Judging by the experiences of the United States and European countries, the government alone cannot solve population problems with any one policy; only through arousing our citizens' consensus to face these problems can they be effectively dealt with. Also, scholars from Taiwan studying Japan's countermeasures to its declining birthrate have found that in addition to using features of the system such as "subsidies, allowances, tax savings," and other economic means, the Japanese government's labor policy advocates that enterprises dynamically introduce "flexible working hours, maternity leave, and parental leave," to enhance advocacy and stimulate the general public's attention to a lifestyle attitude which stresses the meaning of life and equilibrium between work and family life.

Because re-examining the meaning of life and attaching importance to family values can raise the level of male participation in child care, redressing the traditional male support role in parenting of the past, it can also reduce the double burden of work and family pressures married professional women are subject to.

Apart from this, during the nation's early promotion of family planning to reach the goal of successful birth control, those in charge realized that they needed to find the right people at the right time to get the message across. Thus, they used the following four channels to achieve their broadcasting and educational results: promotion through the mass media, group education activities, distribution of printed educational materials and individual educational guidance. The results were impressive, and earned the country first place out of over 120 developed and developing nations in the evaluation of the US Population Crisis Committee in 1987, and again in 1992. Population Action International in 1997 also gave Taiwan joint first place (with full marks), along with Hong Kong, Singapore, South Korea and Tunisia, out of a total of 88 countries assessed, leading to allied states dispatching observers to Taiwan in order to learn from our valuable experience in the implementation of population policy.

To allow Taiwan citizens to understand the population issues and the population policies, strengthen their sense of responsibility for the family, the society and the nation, achieve the goal of population policy, promote economic development, and improve social well-being, various population promotion slogans were proposed in the past depending on the population policies at that time. Some of the catchy slogans can still be remembered by many people, such as the "Two children are just right; boys and girls are just as good" (see Table 4-1).

The Ministry of the Interior established the "Ministry of the Interior's Population Policy Advocacy Implementation Plan" in 1986 and assigned November of each year as the Population Policy Advocacy Month. In November, the promotion theme and key items will be determined (Table 4-2) and passed to the municipal and county (city) governments for implementation. The propaganda matters will be carried out according to the jurisdiction characteristics of the local government and the targets of implementation. In order to encourage the municipal and county (city) governments to effectively implement the promotion of population policy, the "Ministry of the Interior's Population Policy Advocacy Performance

Assessment Guideline” were established in 1989 to recognize the governmental departments (agencies) with excellent performance. In addition, the period from January to October and December of each year was included in 2009 as the routine promotion time, achieving the goal of the population policy.

Table 4-1: Advocacy Slogans over the years

Time of Promotion	Content of Slogan
1964	<ol style="list-style-type: none"> 1. Carry out family planning, further family happiness. 2. Carry out family planning, stay young and healthy.
1967	The Five Threes Slogan: “Have the first child after 3 years of marriage, and after 3 more years have one more, don't have more than 3 at the most, and after you're 33 have no more.”
1969	<ol style="list-style-type: none"> 1. Fewer children, more fortune 2. Small family, with lots of happiness
1971	<ol style="list-style-type: none"> 1. Two children are just right, boys or girls are just as good 2. Three, Three, Two, One: “Have the first child after 3 years of marriage, and after 3 more years have 1 more; two children are just right; boys or girls are just as good.”
1990	Marry at the right age, have the right number of children.
1995	The right years for marriage and having children are from 22 years old to 30.
2005	<ol style="list-style-type: none"> 1. Taiwan's new love culture brings us all together. 2. Let's collectively put importance on marriage, family and having children.
2006	<ol style="list-style-type: none"> 1. Bring in the next generation, their lives will be even more magnificent. 2. Marriage and childbirth let our lives continue. 3. Today's happy elderly, are tomorrow's happy you. 4. Welcome new residents with open arms, let me help you adapt to life.

2010	Children -- our best family heirloom
2011	Three, Two, One Slogan: “Have the first child after 3 years of marriage; two children are just right; boys or girls are just as good.”

Source: Collated by the Dept. of Household Registration, MOI.

Table 4-2: Themes and key items of Population Policy Advocacy over the years

Year	Advocacy Theme	Promotion key items
1997	Improve population quality	<ol style="list-style-type: none"> 1. Implement eugenic health 2. Strengthen sex education 3. Sound marriage and family life 4. Physical and mental health care for middle-aged and elderly people
1998	Improve population quality	<ol style="list-style-type: none"> 1. Age-appropriate marriage, moderate birth 2. Strengthen teenager sex education 3. Middle-aged and elderly people physical and mental health care 4. Implement eugenic health
1999	Improve population quality	<ol style="list-style-type: none"> 1. Age-appropriate marriage, moderate birth 2. Create perfect and happy family. 3. Healthy sex concept for teenagers. 4. Physical and mental health care for elderly people. 5. Implement eugenic health, improve population quality.
2000	Maintain a reasonable population growth	<ol style="list-style-type: none"> 1. Age-appropriate marriage, moderate birth. 2. Two children are just right; boys and girls are just as good. 3. Healthy sex concept for teenagers. 4. Parenting education.
2001	Maintain a reasonable population growth	<ol style="list-style-type: none"> 1. Age-appropriate marriage, moderate birth. 2. Two children are just right; boys and girls are just as good. 3. Mature and healthy sex concept. 4. Happy marriage, happy family.
2002	Maintain a reasonable population growth	<ol style="list-style-type: none"> 1. Appropriate marriage and childbearing age is 22~30 years old. 2. Moderate birth-Two children are just right. 3. Healthy sex concept for teenagers. 4. Happy and joyful family life.

IV. PRACTICAL IMPLEMENTATION OF POPULATION POLICY

Year	Advocacy Theme	Promotion key items
2003	Maintain a reasonable population growth	<ol style="list-style-type: none"> 1. Appropriate-age marriage and birth, and create healthy sex concept. 2. Care for spouses from foreign countries and Mainland China, implement caring and counseling measures to help them blending into Taiwan's social life.
2004	Pay attention to childbearing, parenting, and education	<ol style="list-style-type: none"> 1. Rebuild childbearing and family values. 2. Both parents take the responsibility of marriage and birth. 3. Cherish life and respect inheritance.
	Care for and adapt multiculturalism	<ol style="list-style-type: none"> 1. Taking "integrating new blood and building a harmonious new society" as the main them of policy. 2. Caring and counseling measures for spouses from foreign countries and Mainland China.
2005	Improve the value system of marriage, family and raising children	<ol style="list-style-type: none"> 1. The essence of marriage is like family business run by husband and wife. 2. Once the trend of "fewer children" is formed, the severity of aging population will increase in the future.
	Heart of Taiwan and new culture to integrate all of us together	<ol style="list-style-type: none"> 1. Implement caring and counseling measures for foreign spouses. 2. Accept multi-cultural trend towards "international family".
2006	Let us provide unlimited love to our future generation	<ol style="list-style-type: none"> 1. Create happy and joyful family 2. Implement sex equality education and cultivate the sentiment to respect life.
	Allow elderly people to have healthy and energetic life	<ol style="list-style-type: none"> 1. Middle-aged and elderly people physical and mental health care. 2. Career plan for senior people; promote leisure life for elderly people.
	New residents, new society happy together	<ol style="list-style-type: none"> 1. Foreign spouse life counseling, language learning and child after-school caring implementation plan. 2. Create a harmonious new society with diversity.
2007	Cherish your love and marriage, children are the treasures	<ol style="list-style-type: none"> 1. Cherish your husband/wife; bring love and harmony to your marriage. 2. With the nourishing of love, children will have a joyful life.

Year	Advocacy Theme	Promotion key items
	In response to an ageing society	<ol style="list-style-type: none"> 1. Encourage senior people to participate in leisure activities and strengthen intergenerational education. 2. Protect the elderly of national health activities and improve the quality of life.
	Welcome new immigration, helping them to adapt the new life	<ol style="list-style-type: none"> 1. Strengthen the caring and counseling for new immigration families. 2. Improve the value system of citizens for diversified cultures.
2008	Your lovable child has unlimited hope	<ol style="list-style-type: none"> 1. Once the trend of “fewer children” is formed, the severity of aging population will increase in the future. Educate citizens to respect life, and know the responsibilities for future generations. 2. Love your husband/wife, share the family chores, raising child is the responsibility of both parents. Encourage parents and children to learn together and grow happily together.
	Care for senior people today is caring for yourself tomorrow	<ol style="list-style-type: none"> 1. Continue to promote adult, middle-aged and elderly people health care programs, strengthen the promotion of disease prevention and home caring measures for elderly people; continue to promote leisure and cultural touring services for elderly people, providing them diverse leisure activities and learning courses. 2. Strengthen senior education, build a comprehensive senior education platform through social education networks and family networks, and foster a good attitude towards respecting the elderly people.
	Welcome new residents, build a new society with diversity	<ol style="list-style-type: none"> 1. Strengthen the immigration counseling network and communication platform, strengthen the promotion of various social service resources and service programs for marriage immigrants; guide the new residents to activate their economic potential, and cultivate the labor force required for Taiwan's economic development. 2. Encourage or support various multicultural promoting activities through many channels, and establish the concept of “ethnic equality, mutual respect and acceptance, and appreciate the richness of multiculturalism”.

IV. PRACTICAL IMPLEMENTATION OF POPULATION POLICY

Year	Advocacy Theme	Promotion key items
2009	Sound marriage and family life	<ol style="list-style-type: none"> 1. Proclaim that marriage is the family business for both husband and wife. It is necessary for both to accept and share the responsibility and joy of marriage and childbearing. Increase marriage rate will have the benefit to improve fertility rate. 2. Establish the right concept of marriage and understand the significant impact of divorce on families and individuals. 3. Incorporate the values of childrearing and parenting into relevant courses through educational institutions or schools, and advocate the right concept of sex relations and democratic family, guiding young people's perception of marriage.
	Pay attention to the physical and mental health care of middle-aged and elderly people	<ol style="list-style-type: none"> 1. Conduct disease prevention and health promotion measures, continue to promote the health care plans for middle-aged and elderly people, and implement the oral health plans for senior people. 2. Promote mobile leisure and recreational touring services and various learning activities for elderly people. Improve the life adjusting ability of elderly people and enhance their satisfaction in life. 3. Strengthen the programs for integrating community medical groups, community public health groups, community overall environment creation, and community caring stations, ensuring the health of senior people. 4. Strengthen the employment service for middle-aged and elderly people, promoting the employment of middle-aged and elderly people as well as human resources utilization.
	Create a society with diversified cultures	<ol style="list-style-type: none"> 1. Conduct various multicultural life-long learning programs and promotion activities. Foster the values of "Diverse Respect", continuing the original culture of immigrants. 2. Construct a multicultural community development environment and promote the interaction between foreign spouses, their families and other members of the society.

Year	Advocacy Theme	Promotion key items
		<ol style="list-style-type: none"> 3. Through school education, actively create a good learning environment to improve the physical and mental development of the new residents' children. 4. Strengthen the functions of family service centers in municipalities, and counties (cities) for foreign spouses. Provide professional counseling services, and promote foreign spouse related policies.
2010	The importance of continuing life	<ol style="list-style-type: none"> 1. Proclaim that marriage is the family business of both husband and wife. It is necessary for both to accept and share the responsibility and joy of marriage and childbearing. Increase marriage rate will have the benefit to improve fertility rate. 2. Incorporate the values of childrearing and parenting into relevant courses through educational institutions or schools, and advocate the right concept of sex relations and democratic family, guiding young people's perception of marriage. 3. Promote and implement the concept of child protection, and fully advocate the positive education of "no physical punishment".
	Care for the vitality and health of middle-aged and elderly people	<ol style="list-style-type: none"> 1. Strengthen the promotion of middle-aged and elderly people's health knowledge and common sense. Promote the concept of disease prevention and oral health care for senior people. 2. Actively promote the concept of "senior learning" and encourage life-long learning for middle-aged and elderly people. 3. Advocate the concept of middle-aged and elderly people participating in volunteer services, allowing them to contribute their professional knowledge and enrich their life after retirement, while promoting the use of middle-aged and elderly human resources.
	New residents, new motivation, creating a happy new world	<ol style="list-style-type: none"> 1. Strengthen the promotion of various social service resources and service programs for marriage immigrants. Assist them in overcoming life obstacles and improving life satisfaction.

IV. PRACTICAL IMPLEMENTATION OF POPULATION POLICY

Year	Advocacy Theme	Promotion key items
		2. Educate citizens to show respect to the original culture of new residents and promote the tolerance of multiculturalism, deeply embedding the concept of "Ethnic equality, mutual respect and acceptance".
2011	The importance of life inheritance	<ol style="list-style-type: none"> 1. Proclaim that marriage is the family business of both husband and wife. It is necessary for both to accept and share the responsibility and joy of marriage and childbearing. Increase marriage rate will have the benefit to improve fertility rate. 2. Incorporate the values of childrearing and parenting into relevant courses through educational institutions or schools, and advocate the right concept of sex relations and democratic family, guiding young people's perception of marriage. 3. Promote and implement the concept of child protection, and fully advocate the positive education of "no physical punishment".
	Pay attention to the physical and mental health care of middle-aged and elderly people	<ol style="list-style-type: none"> 1. Strengthen the promotion of middle-aged and elderly people's health knowledge and common sense. Promote the concept of disease prevention and oral health care for senior people. 2. Promote the concept of healthy living and assist elderly people to age successfully. 3. Actively promote the concept of "senior learning" and encourage life-long learning for middle-aged and elderly people. 4. Incorporate aging knowledge into Education for All, creating an elderly friendly concept and society.
	New residents, new motivation, creating beautiful future life	<ol style="list-style-type: none"> 1. Strengthen the promotion of various social service resources and service programs for marriage immigrants. Assist them in overcoming life obstacles and improving life satisfaction. 2. Educate citizens to show respect to the original culture of new residents and promote the tolerance of multiculturalism, deeply embedding the concept of "Ethnic equality, mutual respect and acceptance".

Year	Advocacy Theme	Promotion key items
		3. Construct a diverse learning environment and cultivate students to have the potential for diverse development. Enrich the multicultural society, and embrace the diverse values of human beings.
2012	Sustainable management of life	<ol style="list-style-type: none"> 1. Promote the value of marriage and family and encourage single young people to get married and have children in time to increase the rate of marriage and fertility. 2. Advocate sex equality and emphasize the fact that girls are as good as boys to ensure balance of sex ratio. 3. Promote and implement the concept and practice of child protection and deliver the message that children are future citizens to protect children's rights and enhance children's values.
	Active aging, enjoy the aging life	<ol style="list-style-type: none"> 1. Strengthen the awareness and common sense of preventive health care for elderly people. Encourage elderly people to participate in health promotion activities, allowing them to have a healthy life. 2. Encourage elderly people to participate in life-long learning, which improves their ability to adjust their living and improve their quality of life. 3. Advocate the correct aging knowledge to the public, promoting generation integration, and creating an elderly friendly social environment for senior people.
	New residents, new motivation, no gap between each other's way of living	<ol style="list-style-type: none"> 1. Strengthen the promotion of various social service resources and service programs for marriage immigrants. Assist them in overcoming life obstacles and improving life satisfaction. 2. Build a multicultural learning environment, cultivate the values of "diverse respect" for our citizens, continue the original culture of immigrants, and enrich the multicultural society.
	Pay attention to family value and life inheritance	1. Improve marriage opportunities and rebuild family values. Increase the match-making opportunities for single men and women to

IV. PRACTICAL IMPLEMENTATION OF POPULATION POLICY

Year	Advocacy Theme	Promotion key items
2013		<p>improve marriage rate. Rebuild family values, and actively promote marriages.</p> <ol style="list-style-type: none"> 2. Advocate sex equality and emphasize the fact that girls are as good as boys to ensure balance of sex ratio. 3. Strengthen the promotion of human rights for children and adolescents. Combine various local society groups to carry out propaganda activities in various forms throughout the nation to strengthen the awareness of citizens on children protection and human rights.
	Create an active and healthy life for elderly people	<ol style="list-style-type: none"> 1. Create multiple opportunities of social participation and leisure activities for elderly people. Enhance the life adjusting ability of elderly people to improve their quality of life. 2. Provide a life-long learning environment for elderly people to meet the needs of re-education and learning; offer the right aging knowledge to the general public, promote generation integration, and create an elderly friendly social environment for senior people. 3. Actively encourage elderly people to participate in volunteer services. Effectively use the human resources of the elderly people. Promote intergenerational mutual aid and social integration. Build elderly people's trust in the community to eliminate social isolation and alienation. 4. Maintain the physical activity of elderly people. Reduce health risk factors, promoting a healthy diet and balanced nutrition. Avoid the abuse of substances such as tobacco and alcohol. Establish correct ways of taking medications to delay aging and enable elderly people to live a healthy life.
	Mutual aid and harmony to create a diverse world	<ol style="list-style-type: none"> 1. Strengthen the promotion of various social service resources and service programs for marriage immigrants. Assist them in overcoming life obstacles and improving life satisfaction. 2. Educate citizens to show respect to the original culture of new residents and promote the

Year	Advocacy Theme	Promotion key items
		tolerance of multiculturalism, deeply embedding the concept of "Ethnic equality, mutual respect and acceptance".
2014	Pay attention to marriage and family values	<ol style="list-style-type: none"> 1. Promote the family education on sex equality, learn to manage marriage, pay attention to and rebuild family values, and promote the image of happy family for young people. 2. Advocate sex equality and emphasize the fact that girls are as good as boys to ensure balance of sex ratio. 3. Improve the workplace environment and work style, promote equality in the workplace. Promote flexible working hours to achieve work-family balance.
	Maintain the vitality, dignity and autonomy of elderly people	<ol style="list-style-type: none"> 1. Strengthen the awareness of preventive health care for elderly people and helping them to maintain their physical and mental health, in order to achieve independence, autonomy, and delayed aging in their daily routines, realizing a healthy life. 2. Integrate private resources to provide activities suitable for elderly people. Create multiple opportunities of social participation and leisure activities for elderly people. Enhance the life adjusting ability of elderly people to improve their quality of life. 3. Offer the right aging knowledge to the general public, promote generation integration, and create an elderly friendly social environment for senior people.
	Build a harmonious and diverse society	<ol style="list-style-type: none"> 1. Actively use the power and experience of private local groups to provide appropriate life care counseling services for elderly people to overcome life barriers and improve their life satisfaction. 2. Encourage public and private sectors to organize various new resident related cultural activities, strengthen the promotion of immigrants' contribution to Taiwan's society and economy, increase the interaction between our citizens,

IV. PRACTICAL IMPLEMENTATION OF POPULATION POLICY

Year	Advocacy Theme	Promotion key items
		foreign spouses and their families, and create a friendly environment for marriage immigration. 3. Strengthen the promotion for employers that when they are recruiting employees, they should treat the new residents equally as our citizens. Do not discriminate against them in order to increase the Labor force participation rate.
2015	Create a society with happy marriage, a willing to give birth and able to raise children	1. Promote sharing the responsibility of family work and child care, and reshape the family value of love and care. 2. Continue to advocate sex equality and emphasize the fact that girls are as good as boys to ensure balance of sex ratio. 3. Strengthen the promotion of the correlation between fewer children with individuals, businesses and nation, and encourage family value activities.
	Create a friendly environment for elderly people	1. Strengthen the knowledge and services of preventive health care for elderly people and improve the ability of elderly people to adjust their living to ensure the dignity and physical and mental health of elderly people. 2. Build a friendly living environment for elderly people and create a society that is non-discriminatory and friendly for elderly people. 3. Provide multi-learning channels and resources for elderly people, and encourage life-long learning for elderly people to improve their quality of life.
	Create a happy and harmonious home	1. Assist immigrants to learn Chinese language and social culture, and strengthen their environmental adaptability to improve their life satisfaction. 2. Strengthen the employability of immigrants to increase the Labor force participation rate of new residents. 3. Educate our citizens' understanding, respect and appreciation for the culture of other countries to build a multicultural society.

Year	Advocacy Theme	Promotion key items
2016	Creating the society of “happy to marry, willing to have children and able to support them.”	<ol style="list-style-type: none"> 1. Re-creating love marriage and family values, improving the advocacy of family importance on oneself and the nation. 2. Improving marriage opportunities, promoting the correct concept of proper-age marriage and birth. 3. Promoting sex equality and emphasizing the idea of "both boy and girl are perfect" to enable sex balance. 4. Improving the advocacy of birth importance on oneself, corporations and the nation. 5. Creating a child-friendly, elderly-friendly and new resident-friendly living environment. 6. Strengthening the safeguard of citizen's life, and property.
	Creating a multicultural homeland	<ol style="list-style-type: none"> 1. Promoting multicultural respect, creating a friendly residence and living environment, and assisting new residents with special needs. 2. Improving the advocacy of increasing support to new residents and their children to increase competitiveness. 3. Encouraging foreign students to work in Taiwan, recruiting diverse professional talents.
2017	Good planning for age-appropriate marriage and childbirth will ease the raising of children	<ol style="list-style-type: none"> 1. Enhance marriage opportunities, pay attention to family values, and implement age-appropriate marriage to make the society sustainable. 2. Emphasize the fact that girls are as good as boys to ensure balance of sex ratio.
	Convenient and safe environment, making both young and old to feel at ease	<ol style="list-style-type: none"> 1. Encourage the improvement of access-free environments in private buildings and national parks, and enhance the space quality of friendliness and convenience. 2. Promote residential fire protection equipment and fire alarms to create a safe and secure living environment. 3. Strengthen the safety of senior people to avoid becoming victims of crime.
	New vitality of new residents, new	<ol style="list-style-type: none"> 1. Advocate the importance of paying respect to multiculturalism and help new residents in

IV. PRACTICAL IMPLEMENTATION OF POPULATION POLICY

Year	Advocacy Theme	Promotion key items
	potential for diverse development	<p>special situations, creating a friendly and diverse environment.</p> <p>2. Strengthen the promotion of empowerment programs for new residents and their children to enhance competitiveness.</p>
2018	Both son and daughter are treasures, no worry in child caring and military service	<p>1. Support child-caring families, continue the future of society</p> <p>2. Both son and daughter are treasures, keep sex ratio in balance</p> <p>3. Family-friendly military service system, no worry in child caring and military service</p>
	Work hard for social housing and urban renewal, which makes childcare easy	<p>1. Social housing and rental management policy, safeguard minority's living rights</p> <p>2. Encourage childbirth and three generations under one roof for more benefits in housing subsidy</p> <p>3. Urban renewal talent cultivation and education promotion, support automatic renewal, expand urban renewal promotion power</p> <p>4. Create an age-friendly living environment and access-free environment for National Parks</p>
	Be friendly to the neighboring new resident, have global perspective to work hard for the economy	<p>1. Assist new residents to adapt new life in Taiwan, promote harmony between society and family</p> <p>2. Promote the cultivation of new residents' children, trigger the potential in international development</p>
2019	Marriage and childbearing at the right age to have a happy family	<p>1. Appropriate age for marriage to seize the golden period for childbearing.</p> <p>2. Friendly military recruiting system to achieve balance between family and military service.</p> <p>3. Boys and girls are all treasures, and child caring is the happiest moment.</p>
	Housing policy helps families, friendly environment suitable for all ages	<p>1. Social housing, house rental and managing, and housing subsidies work together to encourage marriage and childbirth for better living.</p> <p>2. Subsidies for building renovation to improve the quality of living and the environment.</p> <p>3. Create elderly-friendly and safe buildings, overhangs of storefronts, welfare agencies and national parks.</p>

Year	Advocacy Theme	Promotion key items
	New inhabitants are the local gems, overseas Chinese staying in Taiwan to make contributions	<ol style="list-style-type: none"> 1. Help new inhabitants with special circumstances to create a friendly and diverse environment. 2. Digital and diverse learning to empower connection to the world 3. Overseas Chinese talents staying in Taiwan, amend laws and regulations to make it easier.

Source: Collated by Dept. of Household Registration, MOI.

(II) Explanation of the changes in the population policy of the Ministry of the Interior and the implementation status

To implement the practice of related population policy measures, to resolve the tight position that only one single bureau is handling population policies in Special Municipalities, Counties (and Cities), and to strengthen the communication, coordination and cooperation between units in the Executive Yuan and local governments to enable effective population policy promotion, the Executive Yuan issued the “Implementation Key Points on the Communication, Coordination and Cooperation of Population Policies among Affiliated Bodies under Executive Yuan” on May 20, 2015. It not only stated the purpose of the implementation key points and the operational scope of the National Development Council and the Ministry of the Interior, but also specified the issues that central authorities and local governments have to handle, including the establishment of two-way communications and informing reporting systems, and stipulated methods to review and examine implementation progress. In addition, since the "Board of Population and Talent Policy Establishment Guideline, Executive Yuan" was amended to the "Board of Population Policy Establishment Guideline, Executive Yuan" in 2016, the related regulations of the "Population Policy Coordination and Implementation Guideline for Various Units of the Executive Yuan" were amended on December 16 2016. The key points can be seen in “Appendix 2 -- Related Population Policy Legal Regulations.”

In accordance with the above-mentioned implementation key points, the Ministry of the Interior also reviewed the “MOI Population Policy

Advocacy Implementation Plan” and the “MOI Population Policy Advocacy Assessment Key Points” and made amendments to issue the “MOI Promoting Population Advocacy Measures Advocacy Implementation Plan” and the “MOI Promoting Population Policy Measures Advocacy Assessment Key Points” on December 25, 2015. In the amendments, the advocacy items performed by the Special Municipalities, Counties (and Cities) will focus on the relevant measures promoted by the Ministry of the Interior. Moreover, the original assessment basis for quantification calculation was modified into qualification assessment, based on encouraging innovation and cross-bureau, division collaboration. In addition, the local governments were encouraged to be creative in developing more effective and resource-integrated population policy measure advocacy. The above-mentioned advocacy implementation plan and assessment key points can be seen in “Appendix 2 -- Related Population Policy Legal Regulations.”

The amended regulations were implemented since 2016. After each individual local government submitted its annual population policy measure advocacy implementation plan, the Ministry of the Interior will review it and send back suggestions based on the population statistical data, and then the local government will carry out the plan. Among these, the local governments of Taoyuan City, Taichung City and Hsinchu County established cross-bureau division platforms or meetings for population policy. Also, many local governments incorporated urban development and transportation related bureaus and divisions into this platform, hoping to improve adolescent and senior people’s living conditions via measures such as social housing and rent subsidies. These measures had been originally carried out separately by the Civil Administration, Health and Social Bureau.

In 2019, this Ministry conducted the performance evaluation of local governments for their implementation achievements in year 2018, and selected 10 local governments with excellent performance, among them 4 local governments achieved outstanding performance, including Taipei City Government, Kaohsiung City Government, Yunlin County

Government and Hsinchu City Government. After reviewing the results, a number of local governments have established integrated portal websites for childbirth/parenting welfare related information or new resident related services, providing mobile convenience services, and even provided multi-language versions of the websites to effectively integrate different local resources in achieving the goal of marketing and promotion. There are also a number of local governments that combine innovative elements such as annual event, innovative pop, VR virtual reality, religious & folk tradition or indigenous characteristics, or combine the local forces of the neighboring communities to jointly carry out relevant promotion activities, effectively expanding the scope of promotion and increase the number of people exposed during the promotion.

Table 4-3: Performance evaluation results of the implementation achievements in the promotion of population policy measures conducted by the Ministry of the Interior in 2018

Division	Outstanding performance (excellent) local government
1 st Division (Special municipalities)	New Taipei City Government Taipei City Government (Outstanding performance) Kaohsiung City Government (Outstanding performance)
2 nd Division (Counties and cities with population greater than 500 thousand people)	Changhua County Government Yunlin County Government (Outstanding performance) Pingtung County Government
3 rd Division (Counties and cities with population less than 500 thousand people)	Yilan County Government Keelung City Government Hsinchu City Government (Outstanding performance)
Offshore islands of Taiwan	Penghu County Government

3. Target Values for the Nation's Marriage and Childbirths

For the benefit of weighing up future population policy promotion work, the Ministry of the Interior has made reference to the standards of other countries, and starting out from the perspective of population policy, included factors such as the extension of our citizens' life expectancy, to then set the following marriage and childbirth index targets values for the country.

(I) Target Values for the Crude Marriage Rate

After reaching a peak of 11.83‰ since 1947, Taiwan's crude marriage rate fell consistently to its lowest point of 5.07 ‰ in 2009, with the arrival of the Year of the Solitary Phoenix. Since 2011 is the Centennial year of the Republic of China, symbolizing the “One Hundred Years of Goodness ”to bring good luck to marriage, the crude marriage rate was increased to 7.13‰. The crude marriage rate reached 6.32‰ in 2013. Referring to the data of the Department of Statistics of the Ministry of the Interior, the marriage rate in Taiwan is higher than that of most major countries in the world. This was because our citizens still have the concept of marrying first, then having children, unlike other countries where children born outside marriage are more accepted, or where there are marriages along with co-habitation systems (such as France and Canada).

The target value of crude marriage rate for 2014 was determined. The marriage age for most people in Taiwan over the past years was in the range of 15 to 49 years old. However, the population of such age group continues to decrease and the degree of reduction is increasing. Observing the crude marriage rate from 2004 to 2013, except the crude marriage rate in 2009 (inauspicious year for marriage) and 2011 which were not included in the calculation due to large deviation of the values, the average crude marriage rate for the rest of the years was 6.17‰. Moreover, the total population in 2024 estimated by the National Development Council showed no growth, implying that maintaining the crude marriage rate at current level is quite difficult. Therefore, the target value of crude marriage rate is set at 6.0‰.

The crude marriage rate in Taiwan in 2018 was 5.74‰, which has declined compared with 5.84‰ in 2017 and 6.31‰ in 2016. This is due to the rapid industrial development and the improvement in female education level, leading to changes in the idea of marriage and childbirth for the people in Taiwan. Therefore, it is necessary to strengthen the promotion of population and family education, consolidate the consensus of the people in Taiwan, and rebuild the values of marriage and family in order to increase the willingness of people to marry and have children, thereby increasing the fertility rate.

(II) Target Values for the Number of Children Born

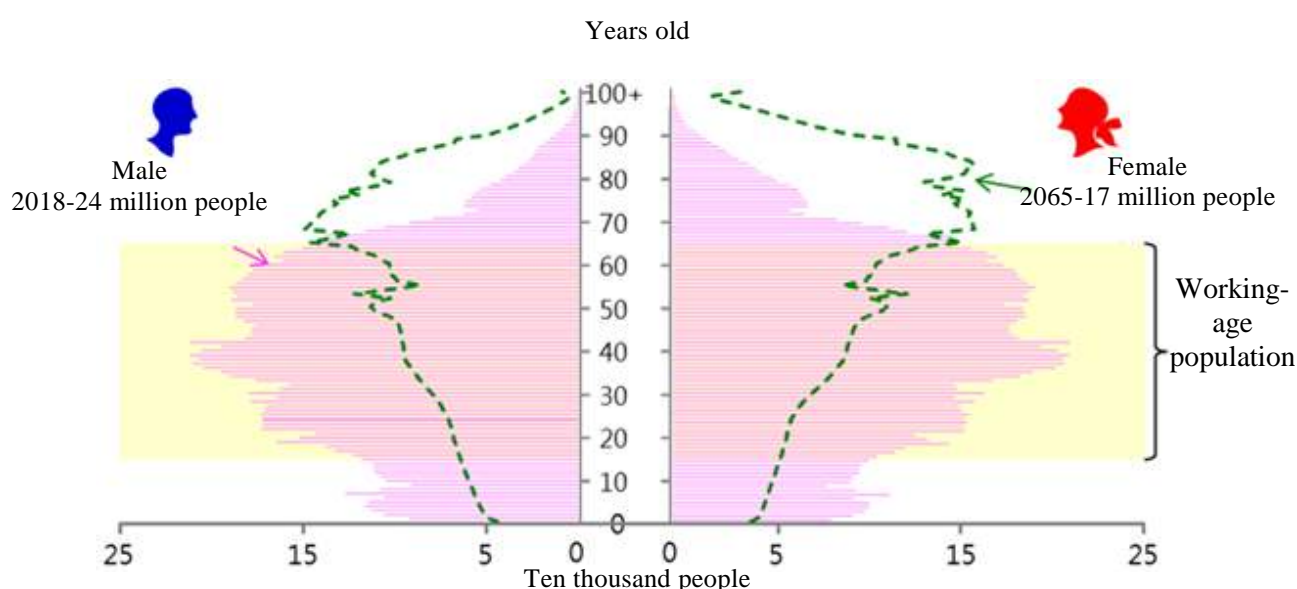
When the Executive Yuan published its White Paper in 2008, the Vision section stated it was expected that by 2015, Taiwan's total fertility rate would return to the standard level of births for OECD countries of 1.6 children (284,300 children). Considering that the number of women with childbearing age (age 15 to 49) in Taiwan is decreasing gradually, even though the birth rate is maintained at current levels, the number of births will still decrease. Hence, in 2013, an amendment to the White Paper's Vision was approved beyond the Vision and set the target total fertility rate, and the target 10-year average annual number of children born at 180,000 children to be included in the President's Golden Decade National Vision, which was arrived at based on the use of this indicator.

By considering Taiwan's conditions and related indicators, such as fertility rate, and referring to international experience, in order to increase Taiwan's total fertility rate in 2030 to 1.4 people, the Executive Yuan continues to promote childbirth related policies in recent years. For example, the "Program for improving childbirth and caring environment" was promoted in 2016 to strengthen the cooperation mechanism between families, communities, employers and the government, and implement the three strategies of "Public child education and caring popularization", "Balancing work and family" and "supporting childbirth and family parenting", increasing the willingness of people in Taiwan to "give birth to child and care for the child".

As for the goal of "improving the fertility rate" Countermeasures against the declining birthrate in Taiwan (2018-2022), in response to the phenomenon of the declining birthrate, the former Premier of the Executive Yuan, Mr. Ching-Te Lai, proposed the "Sustainable Population" policy at the Executive Yuan's press conference on December 27, 2017, targeting children with an age from 0 to 2 and 2 to 5 to promote public pre-school (i.e., community public kindergartens, public kindergartens and non-profit kindergartens) and quasi-public pre-school (collaboration between government and private kindergartens) policy, and expanding the distribution of childcare allowances to reduce the burden of parenting in order to achieve the goal of an increasing fertility rate. As for the goals and schedule for increasing the fertility rate, it is expected that by 2030, Taiwan's total fertility rate can reach 1.4.

V. FUTURE POPULATION GROWTH PROJECTIONS

Based on the relevant 2017 population statistical data, the National Development Council has produced a population projection and basic data for the long-term composition of the population. According to indications of that council's ROC population projection (from 2018 to 2065), Taiwan's total population will turn into negative growth in 3 to 10 years and its' population structure will be a lantern-form of the able-bodied population by 2065 has been transformed to a top-broad, bottom narrow inverse-bell population age structure (Chart 5-1). Here is the analysis of the future population changing trends made according to the Medium projection data.



Source: 1. National Development Council's ROC population projection (From 2018 to 2065).

Chart 5-1 2018 and 2065 population pyramid - Medium projection

1. Population Change Trends

Taiwan's population growth will continue to slow down in the future. The total population will increase year by year from 23.59 million people in 2018 to 23.61 million people in 2021. After reaching the peak in 2021,

the population growth will become negative, reducing the population to 17.35 million people in 2065. (Table 5-1)

Table 5-1 Overview of total population – Medium projection

Item	Year end of 2018	Population peak 2021	Year end of 2065
Population figures	23.59 million people	23.61 million people	17.35 million people
(Compared to 2018)	-	Increase of 0.025 million people	Decrease of 6.236 million people
Community increase of population rate	0.8‰	0.2‰	-13.2‰

Source: National Development Council, ROC Population Projection (from 2018 to 2065)

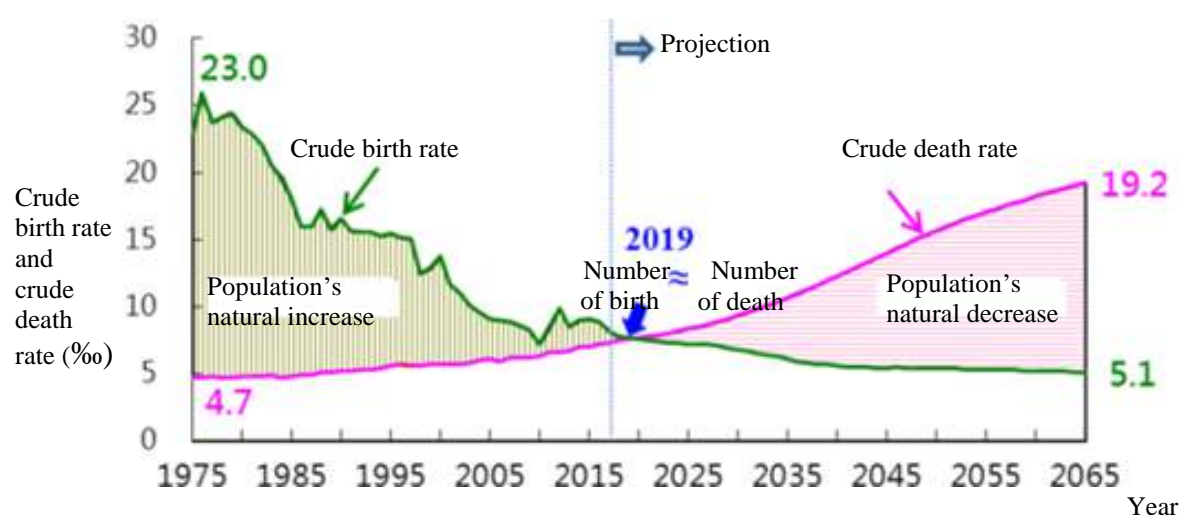
The birth rate will fall from 2018's 7.8‰, to 5.1‰ by 2065 (Table 5-2); while the death rate over the same period will rise year by year from 7.5‰ to 19.2‰. In other words, the number of births will fall from 2018's 185,000 children, to about 90,000 children by 2065, while over the same period, the number of deaths will rise year by year from 176,000 people to 336,000 people.

Table 5-2 Birth rate and death rate – Medium projection

Item	2018	2025	2045	2065
Birth status				
Birth figure	0.185 million people	0.171 million people	0.119 million people	0.09 million people
(Compared to 2018)	-	Decrease of 0.014 million people	Decrease of 0.066 million people	Decrease of 0.095 million people
Crude birth rate	7.8‰	7.2‰	5.5‰	5.1‰
Total fertility rate	1.09 people	1.13 people	1.20 people	1.20 people
Death status				
Death figure	0.176 million people	0.197 million people	0.305 million people	0.336 million people
(Compared to 2018)	-	Increase of 0.021 million people	Increase of 0.128 million people	Increase of 0.160 million people
Crude death rate	7.5‰	8.4‰	14.0‰	19.2‰

Source: National Development Council, ROC Population Projection (from 2018 to 2065)

The natural increase rate is expected to fall year on year from 2018's 0.3‰, to zero growth by 2019, after which it will enter negative growth, reaching -14.1‰ by 2065 (Chart 5-2), while the community increase rate is expected to drop from 2018's 0.4‰, to 0.8‰ by 2065. By number of people, the natural increase rate's number of people will fall over the years, from 2018's 8,000 people and it will become negative growth in 2020, and will decrease by 247,000 people by 2065; while the community increase rate's number of people will rise from 2018's net increase of 10,000 people, and after rising to a net increase of 10,000 ~ 15000 people by 2065.



Source: National Development Council, ROC Population Projection (from 2018 to 2065)

Chart 5-2 Birth rate, death rate and natural increase rate trends - Medium projection

2. Age of population and dependency rate in three stages

Table 5-3 and Chart 5-3 show the changing trends in the age three stages of the population (child, young able-bodied and elderly). Of these, the 15-64 year-old able-bodied population (also known as the working-age population) reached a peak of 17,370,000 people in 2015, and then began

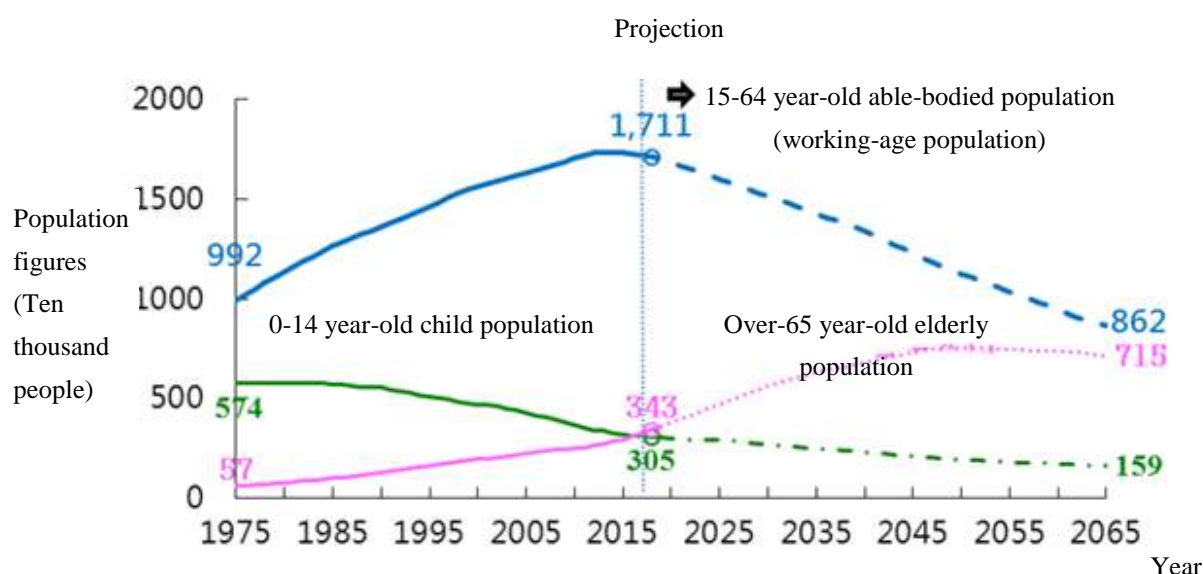
to decrease. It is expected that the population will decline to 8,620,000 people in 2065, compared with 2018, the number of people decreased by nearly 50%. In the child population (age 0-14) continues to decrease from 1984, decreased from 3,050,000 in 2018 to 1,590,000 in 2065, a reduction of 48.0%. The elderly population (age over 65) continues to increase, by 2017, the size of the elderly population will exceed that of the child population. This population will increase from 3,430,000 people in 2018 to 7,150,000 people in 2065, compared with 2018, an increase by 1.1 times.

The 0-14years-old child proportion of the population will fall from 2018's 12.9% to 9.1% by 2065; secondly, the 15 year-old to 64 year-old able-bodied population fallen from 2018's 72.5% to 2065's 49.7%; further, 2018's over-65 year-old elderly proportion of the population of 14.5% will increase to 41.2% by 2065. The future composition of the population will change from one in which every 5.0 able-bodied persons support 1 elderly person in 2018, to one in which every 1.2 able-bodied persons will support 1 elderly person by 2065, an increasingly heavy burden of dependency.

Table 5-3 Age of population and composition in three stages- Medium projection

Item		2018		2065	
		Population figures (Ten thousand people)	Portion of total population (%)	Population figures (Ten thousand people)	Portion of total population (%)
Medium projection	Child population (0-14years-old)	305	12.9	159	9.1
	Able-bodied population (15-64 years-old)	1,711	72.5	862	49.7
	Elderly population (over 65 years-old)	343	14.5	715	41.2

Source: National Development Council, ROC Population Projection (from 2018 to 2065)



Source: National Development Council, ROC Population Projection (from 2018 to 2065)

Chart 5-3 Population change trends in three stages - Medium projection

3. Changes in the preschool and school-age population composition

(I) Preschool Population (0-5 years-old)

With the decrease in the number of births, the future 0 to 5 years-old preschool population will consequently also decrease. In the 2018 school year, the preschool population is 1,231,000, 20 years later (2038 school year), it will have decreased by 367,000 persons to 864,000 persons, which is 70.2% compared to 2018.

(II) School-age population (6-21 years old)

In the 2018 school year, the 6 to 21 years-old school-age population is 3,777,000 people. Twenty years later (2038 school year), it will have decreased by 949,000 people. Of this, the 6 to 11 years-old elementary school population will reduce by 196,000 persons (a reduction of 16%), the 12 to 17 junior high/ senior high school-age population will reduce by 332,000 persons (a reduction of 23.8%), and the 18 to 21 university age

population will reduce by 421,000 persons (a reduction of 35.6%), which is less than 70% of the population for the 2018 school year.

Table 5-4 Preschool and school-age population figures in the future 10 and 20 years- Medium projection

Item	2018 school year (Ten thousand people)	2028 school year (Ten thousand people)	2038 school year (Ten thousand people)	Change in 2018-2028 school year		Change in 2018 -2038 school year	
				No. of People (Ten thousand people)	Change rate (%)	No. of People (Ten thousand people)	Change rate (%)
0-5 year-old preschool - age population	123.1	103.8	86.4	-19.3	-15.7%	-36.7	-29.8%
6-21 year-old school-age population	377.7	316.5	282.8	-61.2	-16.2%	-94.9	-25.1%
6-11 year-old (elementary school)	119.8	112.0	100.2	-7.8	-6.5%	-19.6	-16.4%
12-17 year-old (junior high/ senior high school)	139.7	126.2	106.5	-13.5	-9.7%	-33.2	-23.8%
18-21 year-old (university)	118.2	78.2	76.1	-40.0	-33.8%	-42.1	-35.6%

Source: National Development Council, ROC Population Projection (from 2018 to 2065)

4. Composition trends in the population of women of childbearing age²²

The number of women of childbearing age will drop from 2018's 5,860,000 people, to 2,650,000 people by 2065, a fall of more than 50%; the proportion of the population will fall from 49.4% of the total population to 29.3%. A factor directly influencing the number of births, apart from the number of women and their standard of fertility, is the composition of the population of women of childbearing age. Due to fewer children, the age distribution of childbearing women has an increasing trend. In 2018 the 25-39 years-old age group accounts for the largest number of women of childbearing age, which is 44.4%. The proportion will be reduced to 42.8% in 2065. The proportion of the 40-49 years-old age group women among childbearing age women will increase year by year, from 32.1% to 35.2%. (Table5-5)

²²Refers to women with age 15-49 regardless of their marriage or childbirth status.

Table 5-5 Age composition in the population of women of childbearing age - Medium projection

Item		2018			2065		
		No. of People (Ten thousand people)	Female Portion of total population (%)	Portion of women of childbearing age (%)	No. of People (Ten thousand people)	Female Portion of total population (%)	Portion of women of childbearing age (%)
Medium projection	Total	586	49.4	100.0	265	29.3	100.0
	15-24 year-old	138	11.6	23.5	58	6.4	22.0
	25-39 year-old	260	21.9	44.4	113	12.5	42.8
	40-49 year-old	188	15.9	32.1	93	10.3	35.2

Source: National Development Council, ROC population projection (From 2018 to 2065)

5. Composition trends in the working-age population

Taiwan's working-age population has started to decrease after reaching its peak in 2015. It is expected that the population will decrease from 17,110,000 people in 2018 to 8,620,000 people in 2065. With respect to the composition of the age groups, the decreasing trend of the 15 to 44 years-old age group and the increasing trend of the 45 to 64 years-old age group will be seen. From 2007, the population of the 45 to 64 years-old age group exceeded that of the 15 to 29 years-old age group and the 30 to 44 years-old age group, becoming the major working-age population in Taiwan. In the future, the trend towards a higher age group will become more obvious. The proportion of the 45 to 64 years-old age group in the working-age population will increase from 41.2% in 2018 to 47.6% in 2065, suggesting that about half of the working population will be in the mid-high age group. (Table 5-6)

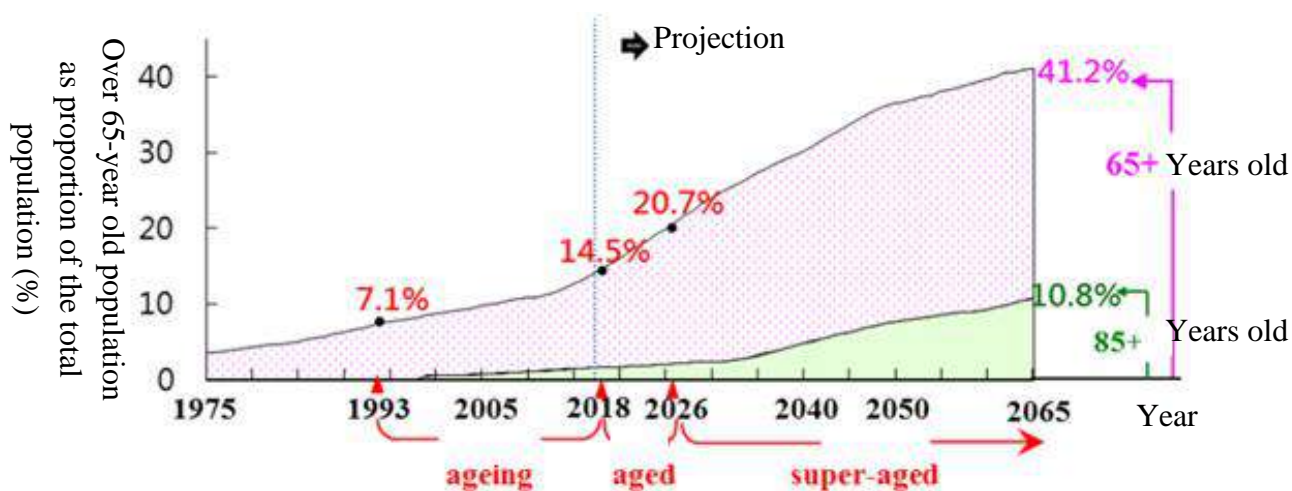
Table 5-6 Age composition of the working-age population - Medium projection

Item		2018			2065		
		No. of People (Ten thousand people)	Portion of total population (%)	Portion of working-age population (%)	No. of People (Ten thousand people)	Portion of total population (%)	Portion of working-age population (%)
Medium projection	Total	1,711	72.5	100.0	862	49.7	100.0
	15-29 year-old	447	19.0	26.1	194	11.2	22.5
	30-44 year-old	558	23.7	32.6	258	14.8	29.9
	45-64 year-old	706	29.9	41.2	410	23.6	47.6

Source: National Development Council, ROC Population Projection (from 2018 to 2065)

6. Composition Trends in the Elderly Population

By 1993, Taiwan's elderly proportion of the population already exceeded 7% of the total, making the country an aging society; In March 2018 this proportion will be over 14%, making the country officially enter an aged society, it is expected that by 2026 this proportion will exceed 20%, making the country a super-aged society (Chart 5-4).



Source: National Development Council, ROC Population Projection (from 2018 to 2065)

Chart 5-4 Aging timescale - Medium projection

In the future, the proportion of over 65 years-old people in the total population will continue to increase year by year, which leads Taiwan towards a super-aged society. It is projected that the proportion of over 65 years-old people in the total population will increase from 14.5% in 2018 to 41.2% in 2065, meaning that 4 out of 10 people will be over 65 years old. The proportion of the 65 to 74 years-old age young elderly people group will decrease from 59.4% in 2018 to 38.7% in 2065. The proportion of the over 85 years-old age group will increase from 11.0% in 2018 to 26.1% in 2065, meaning that 1 out of 4 elderly people will be over 85 year-old, super-aged elderly people. (Table 5-7, 5-8)

The elderly population has exceeded the child population in 2017. In 2018, the ratio of the elderly population to the child population is around 1:0.9, giving an aging index of 112.4. Due to the trend of fewer children and an aging society, in 2065, the aging index will reach 450.1, meaning that the elderly population will be 4.5 times higher than the child population.

Table 5-7 Aging index and middle-age - Medium projection

Year	Proportion of age over 65(%)	Ratio of elderly population to child population ¹⁾	Aging index ²⁾ (%)	Middle-age (years old)
2018	14.5	1 : 0.9	112.4	41.6
2025	19.9	1 : 0.6	162.2	45.4
2035	27.3	1 : 0.4	252.5	50.5
2045	33.7	1 : 0.3	351.6	54.2
2055	38.0	1 : 0.2	415.2	57.1
2065	41.2	1 : 0.2	450.1	57.8

Source: National Development Council, ROC Population Projection (from 2018 to 2065)

Explanation: 1. An elderly population implies a population with an age over 65 years old; a child population implies a population with an age from 0 to 14.

2. Aging index = $\frac{\text{over 65 year-old group population}}{\text{0-14 year-old group population}} \times 100\%$

Table 5-8 Age composition of the elderly population — Medium projection

Year	Elderly Population of 65-year-old and over (Ten thousand people)			
	Total	65-74 year-old young elderly people	75-84 year-old elderly people	Over 85 year-old, super-aged elderly people
2018	343	204	102	38
2025	470	295	127	49
2035	629	325	232	73
2045	729	332	260	136
2055	746	306	272	168
2065	715	277	251	187
Year	Age distribution percentage (%)			
2018	100.0	59.4	29.6	11.0
2025	100.0	62.7	27.0	10.3
2035	100.0	51.6	36.9	11.5
2045	100.0	45.6	35.7	18.7
2055	100.0	41.0	36.5	22.5
2065	100.0	38.7	35.1	26.1

Source: National Development Council, ROC Population Projection (from 2018 to 2065)

7. Population Key Indicators

1984	Total fertility rate reduced to 2.055 people, lower than the population replacement level of 2.1 people
1989	Total population exceeded 20 million people, the middle-age group had age of 27.0 years old
1990	Working age (15~64 years old) population accounted for over 2/3 of the total population
1993	Elderly population with age of over 65 years old accounted for over 7% of the total population, Taiwan officially entered the aging society
2010	Owing to the Year of Tiger in Lunar Calendar and the fact that the previous year is the “inauspicious year for marriage”, total fertility rate was significantly dropped to 0.895 people
2015	Working age (15~64 years old) population reached the peak of 17.37 million people

2016	Population with age of 18 years old (age of university freshman) dropped below 300,000 people
2017	Aging index exceeded 100, elderly population in Taiwan exceeded young population, becoming the major group to support by the young and middle-aged population
2018	Elderly population with age of over 65 years old accounted for over 14% of the total population, Taiwan officially entered the aged society
2019	Population growth rate has dropped to less than 1‰, with the record-low population and population growth rate
2020	Death population exceeds birth population, natural increase rate changes from positive value to negative value
2021	Total population reaches the peak of 23.61 million people
2026	Elderly population with age of over 65 years old accounts for over 20% of the total population, Taiwan officially enters the super aged society
2027	Working age (15~64 years old) population accounts for less than 2/3 of the total population, elderly population with age of over 65 years old exceeds 5 million people
2034	The middle-age group has age of 50.1 years old, suggesting that one out of two people in Taiwan is over 50 years old
2036	Population with age of 18 years old (age of university freshman) drops below 200,000 people
2040	Elderly population with age of over 65 years old accounts for over 30% of the total population, young and middle-age population with age of 15~64 years old accounts for less than 60% of the total population; one every elderly people will be supported by two young and middle-age people
2043	Elderly population with age of over 65 years old exceeds 7 million people
2045	Death population exceeds 300,000 people, which is 1.7 times more than the number in 2018
2054	Total population drops to less than 20 million people, with a middle-age of 56.8.

Source: National Development Council, ROC Population Projection (from 2018 to 2065)

VI. CONCLUSION

Population is one of the key elements for building a nation. Due to changes in society as well as the idea of marriage and childbearing in recent years, the population problem in Taiwan has become worse. The Population Policy is the basic national policy for solving population problems and should be adjusted depending on objective as well as subjective conditions such as international political & economic situations, the domestic social & economic environment, and the demographic structure. Currently, the biggest challenge of the government in Taiwan is how to carefully formulate a suitable population policy by considering factors such as economics, society, education, culture, land planning, optimal total population, and demographic changes in order to meet the goals of our nation and the interests of the citizens.

Due to Taiwan's limited lands, natural resources, the weak global economic growth, the continuous falling of agricultural, industrial raw material and crude oil prices, the crowding out effect of China's supply chain independence & international competition, and the industry facing international competition, as well as the population issues such as a low fertility rate, aging population and foreign population migration etc., these not only affect Taiwan's economic development, but also have an impact on the life and living standards of people in Taiwan. The "Republic of China Population Policy Guidelines" is the guiding principle for formulating national population policy. Since its promulgation in 1969, it has been adjusted and revised several times in accordance with the developing trend of Taiwan's population structure, acting as the government's long-term policy emphasis to respond to the low fertility rate, population aging, foreign population immigration and economic development issues.

The change of the population structure towards a declining childbirth and aging society is a common problem faced by countries worldwide. It involves a wide range of issues; hence it is difficult to solve the problems involved in a short period of time. It is the responsibility of the government

to require all its relevant departments and agencies to implement the "Republic of China Population Policy Guidelines" and related programs to achieve the goal of maintaining a reasonable demographic structure, improving the quality of the population, safeguarding labor rights and interests, expanding labor involvement, improving social safety networks, implementing gender equality, promoting ethnic group equality, promoting rational population distribution, improving immigration policies, and safeguarding the rights and interests of citizens, continuously proposing more advanced and comprehensive plans. In addition, the consensus and efforts of our citizens are also indispensable. Therefore, it is important to allow citizens to understand the significance and importance of our population policy, and work together to achieve success.