# III. Statistical Analysis

## 1. Enrollment and Underwriting

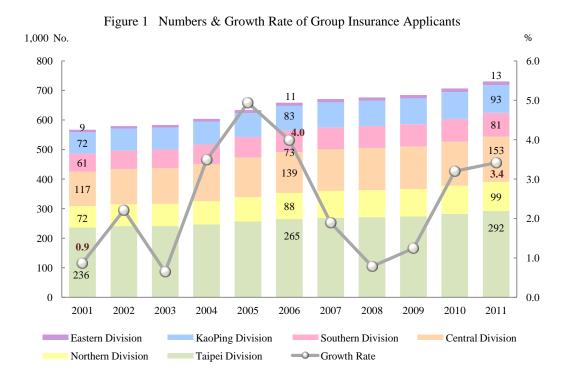
National Health Insurance (NHI) provides all nationals with compulsory coverage. The purpose is to ensure that individuals receive adequate healthcare through the arrangement of a cooperative scheme. Under the NHI scheme, beneficiaries are divided into six categories; each differs in their insured payroll-related amount, premium contribution rate, and premium calculation method. Application(s) are to be made at the agency, school, enterprise, institution, employer, group, or designated departments to which the insured belongs.

#### (1) Group Insurance Applicants

There was a maximum average annual increase of 4.3% in 2001–2011 from the Eastern Division and a minimum of 2.1% from the Taipei Division.

As of the end of 2011, the number of group insurance applicants was 730,720 in total, an increase of 24,121 from the previous year. There has been an average annual increase of 2.6% since 2001.

When broken down by NHI Regional Division, the Taipei Division accounted for the greatest number at 39.9%, followed by the Central Division at 21.0%, the Northern Division at 13.5%, the KaoPing Division at 12.8%, the Southern Division at 11.0% and the Eastern Division at 1.8%.



When broken down by NHI Regional Division, the number of group insurance applicants showed positive growth for all divisions over the past ten years; the Northern Division, at 0.7 percentage points, had the highest increase in share of group insurance applicants. The Taipei Division exhibited a negative trend and the highest decrease at 1.7 percentage points.

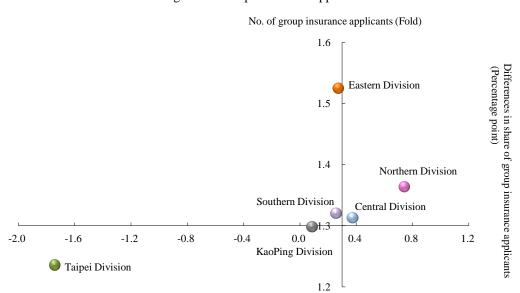


Figure 2 Group Insurance Applicants 2011 vs. 2001

The X-axis and Y-axis value at the Origin (0.3, 1.3) respectively represents the "median of growth (percentage point)in the share of group insurance applicants' and 'the median of folds in the number of group insurance applicants" in the six BNHI branches.

#### (2) Beneficiaries

Over the past ten years, in terms of structural ratio, Categories 3 has gone down, while Categories 1, 2, 5 and 6 have gone up.

The purpose of NHI is to enhance the health of all nationals and provide fair access to medical treatment. At present, with the exception of those in corrective institutions, all nationals are covered under the insurance scheme.

By the end of 2011, the number of NHI beneficiaries was 23,198,664, increased by 124,177 from the end of the previous year, with an average annual increase of 0.7% over the past ten years. The insured increased by 2,578,782 individuals or 20.7% from the end of 2001, with an average annual increase of 1.9%; dependents decreased by 1,033,673 or 11.3% with an average annual decrease rate 1.2%. At the end of 2011, the insured accounted for 64.9% of beneficiaries, an increase of 7.3% from the end of 2001; the average number of dependents decreased by 0.2 individuals.

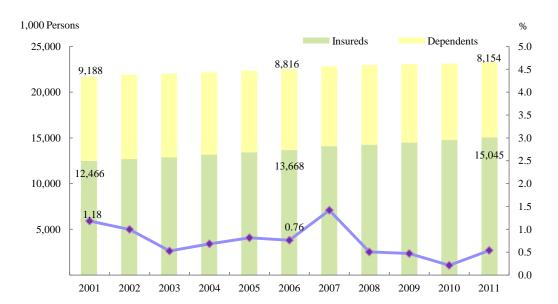


Figure 3 Numbers & Growth Rate of Beneficiaries

Broken down by the gender of beneficiaries, there were 11,529,426 (49.7%) male beneficiaries as at the end of 2011, an increase of 52,566 from the previous year. The average annual rate of growth in five years was 0.3%. Males of 60–64 had increased by 194,426 from 2006, being the most significant increase of all. It was followed by the 55–59 group (187,641). Males in the age group of 5–9, however, showed a decrease of 162,500. As at the end of 2011, there were 11,669,238 (50.3%) female employees, an increase of 71,611 from the previous year. The average annual rate of growth in five years was 0.6%. The number of female beneficiaries of 60–64 has increased by 204,160 since 2006, being the most significant increase of all. It was followed by the 55–59 group (200,628). Females in the age group of 5–9, however, showed a decrease of 152,788. Furthermore, the male/female ratio of NHI beneficiaries in 2011 was 98.8. It was 99.9 five years ago.

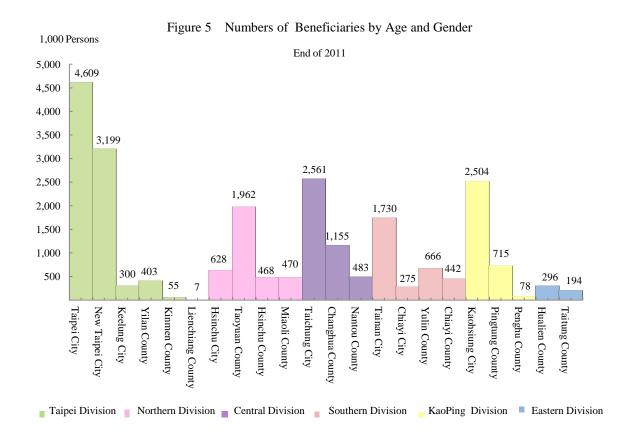
When broken down by age, there were more male beneficiaries than females in the < 25 age group, whereas females outnumbered males for age 25 and over. At the end of 2011, the average age of beneficiaries was 38.0, an increase of 4.4 from 2001; the average age of the insured who paid the premium was 43.6, an increase of 1.6 years from 2001. In addition, the number of beneficiaries above 65 had reached 2,495,895, an increase of 545,161 from 2001, of which 376,498 were female.

At the end of 2011, 7,819,576 individuals were male insured and 7,225,153 were female insured, and the sex ratio of 108.2; 3,709,850 individual were male dependents, 4,444,085 were female dependents, the sex ratio of 83.5.

End of 2011 100+ 95-99 90-94 Male 49.7% 50.3% Female 85-89 15↓ 15.5% 15↓ 15 - 64 14.0% 80-84 15 - 64 74.2% 74.7% 75-79 10.2% 65 +70-74 65 + 11.3% 65-69 60-64 55-59 50-54 45-49 40-44 35-39 30-34 25-29 20 - 2415-19 10 - 145 - 9 0 - 4 1,000 1,200 1,000 800 600 400 200 200 400 600 800 1,200 1,000 Persons 1,000 Persons

Figure 4 Beneficiaries by Age and Gender

When broken down by city/county, Taipei City had the highest number of beneficiaries at 4,608,881 (19.9%), followed by New Taipei City at 3,199,246 (13.8%), while Lienjiang County had the smallest number at 7,034 (0.0%). Excluding the outer islands, Taitung County had the smallest number of beneficiaries at 193,801 (0.8%), followed by Chiayi City at 274,508 (1.2%).



When broken down by NHI Regional Division, the Taipei Division accounted for the greatest number of beneficiaries at 8,572,980 (37.0%), followed by the Central Division at 4,198,625 (18.1%) while the Eastern Division accounted for the smallest number at 489,948 (2.1%). Compared to the end of 2001, the Taipei and Northern Divisions showed positive trends in both number of beneficiaries and share of beneficiaries; the Northern Division had the highest increase in share of beneficiaries at 1.4 percentage points. On the other hand, the Eastern, Central, Southern, and KaoPing Divisions showed negative trends in share of beneficiaries; the KaoPing Division had the highest decrease at 0.8 percentage points.

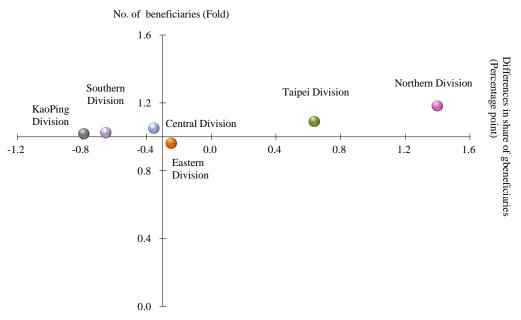


Figure 6 Beneficiaries 2011 vs. 2001

The X-axis and Y-axis Values at the Origin (-0.3, 1.0) respectively represents "the median of growth (percentage point) in share in terms of the number of NHI beneficiaries" and "the median of folds in the number of NHI beneficiaries" in the six

The national economy was adversely affected by the international financial crisis. In 2011, while Category 1 had the highest number of beneficiaries (53.8%), the proportion of Category 1 increased by 0.9 percentage points compared to 2001, Category 2 decreased by 0.3 percentage points, and Category 3 decreased by 3.5 percentage points. On the other hand, Categories 5 and 6 increased by 0.6 and 1.6 percentage points, respectively. The proportion of disadvantaged minority groups also significantly increased.

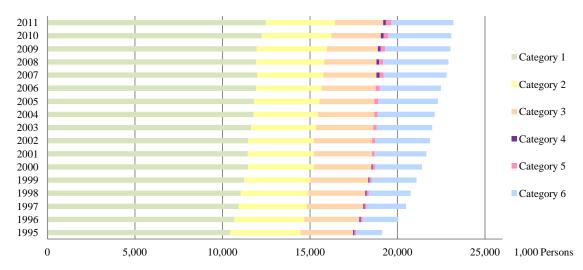


Figure 7 Numbers of Beneficiaries by Category

Note: Numbers of beneficiaries of category 4 where not included between 2001 and 2006.

### (3) The Insured Payroll-Related Amount

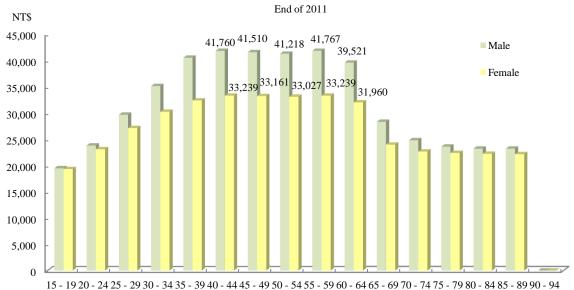
# At the end of 2011, the average insured payroll-related amount was NT\$33,505; the average increase of the insured payroll-related amount from 2001–2011 was 2.7%

In 2011, in order to strengthen the premium collection base, the BNHI guided people to insure in correct insurance status. In addition, the BNHI also held reviews regarding the insured payroll-related amount. For those with lower than the correct insured amount, the BNHI notified group insurance applicants to adjust premiums directly to increase premium revenues.

At the end of 2011, the average insured payroll-related amount was NT\$33,505. The average insured payroll-related amounts for Categories 1 to 3 were NT\$38,343, NT\$26,884, and NT\$21,900, respectively, with the highest for professional and technical personnel at NT\$70,709, followed by teaching personnel from public and private institutions and government employees at NT\$57,758. The premiums for Category 4 and 5 were the same, at NT\$1,367, and was NT\$1,249 for Category 6. When broken down by the insured payroll-related amount, the number of insured was largest at NT\$21,900, with 3,374,015 individuals (22.4%), followed by NT\$17,880, with 1,568,616 individuals (10.4%).

Analyzed by gender and age group, the average insured payroll-rated amount for category 1, 2 and 3 beneficiaries as at the end of 2011 was NT\$36,653 for males and NT\$30,347 for females. For males, the age group of 55–59 had the highest average insured amount of NT\$41,767, which was followed by the group of 40–44 (NT\$41,760). For females, the age group of 55–59 and 40–44 had the highest average insured amount of NT\$33,239. It was followed by the group of 45–49 (NT\$33,161).

Figure 8 The Insured Payroll-Related Amount for Categorites 1 to 3 by Age and Gender



When broken down by the average insured payroll-related amount and taking into consideration the effects of the global economic recession, the average insured payroll-related amount for Category 1 increased by only 2.0% over the previous year, of which Item 5 of Category 1 had the highest average annual increase (7.5%) over the past ten years; Category 2 increased by 4.2%, with an average annual increase of 2.9%. The average insured payroll-related amount for Category 3 increased from NT\$16,501 by the end of 1995 to NT\$19,200 by the end of 1998, and was adjusted again to NT\$21,000 by the end of 2007. it was adjusted again to NT\$21,900 from Apr 2011.

1,000 NT\$ 45 38 40 35 30 25 20 19 15 10 Category 2 Category 3 Category 1 5 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011

Figure 9 Historical Average Insured Payroll-Related Amounts by Category

#### (4) Premium Receivables

The average annual increase of premium contributions in 2001–2011 was 4.3% for beneficiaries, 6.4% for group insurance applicants, and 3.8% for government subsidies.

Premium revenues are the main source of funds for NHI. The rates of premium contributions vary by the type of insured. Category 4 Compulsory Military Servicemen, and the Social Servicemen, Category 5 low-income households, and Category 6 unemployed veterans receive full subsidies from the government.



Figure 10 Historical Premium Receivables

Premium receivables were NT\$469 billion in 2011, an increase of NT\$31,422 million from the previous year. The average annual increase in the most recent 10 years was 4.9%. Of which, Category 1 showed an increase of NT\$23,357 million from the previous year, with an average annual increase of 6.0%. Category 2 showed an increase of NT\$5,228 million from the previous year, with an average annual increase of 5.8%. Category 3 showed an increase of NT\$1,834 million from the previous year, with an average annual increase rate 1.5%. Category 4 showed a decrease of NT\$34 million from the previous year, with an average annual increase of NT\$409 million from the previous year, with an average annual increase of 10.4%. Category 6 showed an increase of NT\$628 million from the previous year, with an average annual increase of 2.3%.

8.4 0.5 1.0 12.5 63.6 14.0 Category 1 2011 Category 2 Category 3 8.6 0.5 1.0 Category 4 62.8 13.8 2010 Category 5 Category 6 1.0 0.6 57.6 12.9 16.1 2001 0 20 40 60 80 100

Figure 11 Premium Receivables by Category

When broken down by source, the amount of premium receivables in 2011 was NT\$177 billion (37.6%) from the insured, an increase of 10 billion from the previous year. The average annual increase in the most recent 10 years was 4.3%. Of which, NT\$174 billion (37.2%) was from the group insurance applicants, an increase of NT\$15 billion from the previous year, and an increase of 81 billion from 2001 with an average annual increase of 6.4%, NT\$118 billion (25.2%) was from government subsidies (NT\$80 billion (17.1%) from the central government, NT\$35 billion (7.5%) from the provincial/municipal governments, and NT\$3 billion (0.6%) from the county/city governments), an increase of NT\$7 billion from the previous year with an average annual increase of 3.8%.

0.6% 1.5% Beneficiaries Inner ring: 23.8% Premium receivable of 37.6% Group Insurance Applicants \$290 billion in 2001 39.8% Central Government Subsidies Outer ring: Premium receivable of Provincial/Municipal Government Subsidies \$469 billion in 2011 County/City Government Subsidies 32.3% 37.2%

Figure 12 Premium Receivables by Source

End of 2011 vs . End of 2001