

## Country: Japan

### 1. Geographic information

(a) Capital: *Tokyo*

(b) Area of national land: *377,923 km<sup>2</sup> (as of October 1, 2006)*

### 2. Demographic information

(a) Data

	2002	2003	2004	2005	2006 (If available)	(Unit)
<b>Total population</b>						
Total	127,435	127,619	127,687	127,768		Thousand
Male	62,252	62,304	62,295	62,349		Thousand
Female	65,183	65,315	65,392	65,419		Thousand
<b>Active population</b>						
Population aged 15 and over	10,927	10,962	10,990	11,007		Thousand
Population in labor force	6,689	6,666	6,642	6,650		Thousand
Employed	6,330	6,316	6,329	6,356		Thousand
Unemployed	359	350	313	294		Thousand
Population not in labor force	4,229	4,285	4,336	4,346		Thousand
Housewife	1,758	1,751	1,728	1,721		Thousand
Student	788	780	772	750		Thousand
Population growth rate	0.11%	0.14%	0.05%	0.06%		
National population mortality	7.8	8.0	8.2	8.6		Per thousand
<b>Life expectancy</b>						
Male	78.32	78.36	78.64	78.53		
Female	85.23	85.33	85.59	85.49		
Total fertility rate	1.32	1.29	1.29	1.26		

### Demographic composition by age group in FY (2005)

Unit: (Thousand)

Age	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80-89	90-	Total
Male	5,891	6,454	7,953	9,336	7,933	9,461	7,700	5,296	1,778	256	62,349
Female	5,616	6,129	7,677	9,155	7,873	9,591	8,278	6,604	3,484	822	65,419
Total	11,507	12,583	15,631	18,491	15,806	19,052	15,977	11,900	5,262	1,077	127,768

(Figures for each age group do not include those of unknown age.)

(b) Topics

- *The total population is expected to decline due to the lower total fertility rate.*
- *It is predicted that Japan will become a super-aging society.*

3. Economy  
 (a) Data

	2002	2003	2004	2005	2006 (If available)	(Unit)
GNP <i>[Nominal]</i>	499,506	498,818	507,948	513,192	522,174	Billion yen
<i>[Real]</i>	505,092	510,786	522,145	527,522	533,680	Billion yen
GDP <i>[Nominal]</i>	491,312	490,294	498,328	501,343	507,560	Billion yen
<i>[Real]</i>	505,369	512,513	526,578	536,559	548,125	Billion yen
Currency exchange rate	119.37	106.97	103.78	117.48	118.92	Yen/Dollar
Balance of payments	14,140	15,767	18,618	18,259		Billion yen
Inflation rate	-0.90%	-0.30%	0.00%	-0.30%	0.7%	
Long-term interest rate (10yr government bond yield)	0.90%	1.36%	1.44%	1.47%	1.68%	

(b) Topics

- *Japan's economy has allegedly been on a recovery track in recent years.*
- *It is reported that impacts of the recovery spread to the household sector at a slower pace compared to the corporate sector, which has already demonstrated better performance.*
- *The zero interest rate policy was terminated in 2006.*

4. Insurance (Enter information for life insurance and non-life insurance separately if necessary)

(a) Number of insurance companies

*(Life insurance company)*

<i>Japanese-affiliated insurance company (Mutual company)</i>	23 (6)
<i>Foreign-affiliated insurance company</i>	15
<i>Total</i>	38

*(Non-life insurance company)*

<i>Japanese-affiliated insurance company</i>	26
<i>Foreign-affiliated insurance company</i>	22
<i>Total</i>	48

(b) Product range

i) Insurance contracts in force by product type: Number of contracts in force, amount, gross premium

*(Life insurance)*

<i>Insurance type</i>		<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>Unit</i>
<i>Individual insurance</i>	<i>Number of contracts in force at year-end</i>	109,341	109,615	109,989	<i>Thousand</i>
	<i>Amount of insurance contracts at year-end</i>	1,152,648,515	1,112,170,505	1,070,570,886	<i>Million yen</i>
<i>Individual annuity</i>	<i>Number of contracts in force at year-end</i>	13,242	14,014	14,923	<i>Thousand</i>
	<i>Amount of insurance contracts at year-end</i>	69,563,905	74,109,481	80,416,425	<i>Million yen</i>
<i>Group insurance</i>	<i>Amount of insurance contracts at year-end</i>	387,060,658	382,382,304	380,595,282	<i>Thousand</i>
<i>Group annuity</i>	<i>Amount of insurance contracts at year-end</i>	34,937,905	32,666,737	32,744,253	<i>Million yen</i>

*(Non-life insurance)*

<i>Insurance type</i>		<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>Unit</i>
<i>Fire</i>	<i>Net premium income</i>	1,044,867	1,030,154	1,080,722	<i>Million yen</i>
	<i>Direct net claims paid</i>	310,507	853,409	476,474	<i>Million yen</i>
<i>Automobile</i>	<i>Net premium income</i>	3,558,174	3,507,923	3,507,502	<i>Million yen</i>
	<i>Direct net claims paid</i>	2,017,372	2,092,717	2,079,897	<i>Million yen</i>
<i>Personal Accident</i>	<i>Net premium income</i>	631,012	649,832	666,360	<i>Million yen</i>
	<i>Direct net claims paid</i>	250,299	243,492	259,012	<i>Million yen</i>
<i>Miscellaneous Casualty</i>	<i>Net premium income</i>	766,194	779,402	803,847	<i>Million yen</i>
	<i>Direct net claims paid</i>	417,692	457,285	408,078	<i>Million yen</i>
<i>Marine and Inland Transit</i>	<i>Net premium income</i>	241,279	252,668	270,257	<i>Million yen</i>
	<i>Direct net claims paid</i>	143,435	129,314	131,799	<i>Million yen</i>

ii) New insurance contracts by product type: Number of new contracts, amount  
(Life insurance)

Insurance type		2003	2004	2005	Unit
Individual insurance	Number of new contracts	13,167	12,592	12,208	Thousand
	Amount of new insurance contracts	101,381,191	91,159,270	80,753,423	Million yen
Individual annuity	Number of new contracts	1,114	1,369	1,547	Thousand
	Amount of new insurance contracts	5,199,863	7,467,278	8,621,670	Million yen
Group insurance	Amount of new insurance contracts	13,797,401	10,165,905	7,796,858	Thousand
Group annuity	Amount of new insurance contracts	23,669	27,882	12,139	Million yen

(c) Regulations

- Insurance companies are prohibited from concurrently conducting life insurance and non-life insurance businesses while it is allowed for both life and non-life insurance companies to underwrite and sell the specific type of medical insurance known as “third sector products”.

i) Pricing regulations

- Requiring prior approval, with the exception of some products

ii) Assessment of reserves

- Standard policy reserves calculated based on the assumed rate of interest and assumed mortality rate designated by the law
- Assumptions are “lock-in”.

iii) Solvency

- Requiring the securement of risk-based capital (similar to the RBC requirements in the U.S.)

iv) Other

(d) Recent topics

i) Changes in hot-selling products

- Expansion of the third sector
- Rapid growth in sales of individual annuities such as variable annuities since lifting of the ban on over-the-counter sales by banks (life insurance)

ii) Changes in regulations

- Introduction of a Small-amount and Short-term Insurance Businesses system: Mutual Aid Associations, etc. that used to underwrite insurance without any governing laws are now under control of the Insurance Business Law.
- Establishment of funding rules for IBNR reserves (non-life insurance): The scope of insurance categories has been expanded to include all insurance contracts except compulsory automobile liability insurance and earthquake insurance (previously provided only for specific types of insurance such as voluntary automobile insurance, personal accident insurance, etc.).

A new calculation method based on the statistical analysis of data was

*also introduced for significant, “long-tail” products (previously calculated based on a certain calculation formula).*

- *Changes in involvement of actuaries (non-life insurance): The scope of insurance categories which require involvement of actuaries has been expanded to include all insurance contracts except compulsory automobile liability insurance and earthquake insurance (previously provided only for savings-type insurance and long-term third-sector insurance).*
- *Introduction of funding rules for policy reserves for third-sector products: New rules have been developed in order to enable insurance companies to execute risk management properly and set aside funds to fulfill future obligations for the third-sector insurance products which don't have sufficient data of past results.*
- *More flexibility in pricing of insurance products: Expected expense rates have been deleted from the requirements. Instead, insurance companies must periodically submit product-specific reports, etc. in order for the FSA to confirm the relativity between actual expenses and premiums.*
- *Revision of the standard mortality rate for valuation: The standard mortality rate for valuation has been revised based on the improved experience mortality mainly among elderly population.*

iii) Other

## 5. Pension

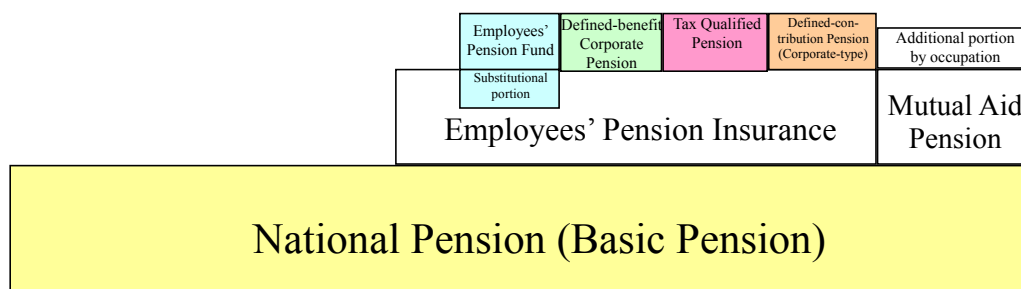
### (a) System

#### i) Outline of the pension system

[First tier] “National Pension (Basic Pension)” designed to provide people with the common pension benefits

[Second tier] “Employees’ Pension” providing the income-related pension on top of the National Pension (Employees’ Pension Insurance, employees in private sector, Mutual Aid Pension, public employees)

[Third tier] “Corporate Pension” (Employees’ Pension Fund, Tax Qualified Pension, Defined-benefit Corporate Pension, Defined-contribution Pension)



#### ii) Public pensions

Number of participants (participation rate), annual premium, annual amount of benefits, reserves

<i>National Pension</i>	<i>End of March, 2003</i>	<i>End of March, 2004</i>	<i>End of March, 2005</i>
<i>No. of participants</i>	<i>70.46 million</i>	<i>70.29 million</i>	<i>70.29 million</i>
<i>No. of beneficiaries</i>	<i>22.12 million</i>	<i>22.84 million</i>	<i>23.55 million</i>
<i>Reserves</i>	<i>¥ 9.5 trillion</i>	<i>¥ 9.9 trillion</i>	<i>¥ 9.7 trillion</i>

<i>Employees’ Pension Insurance</i>	<i>End of March, 2003</i>	<i>End of March, 2004</i>	<i>End of March, 2005</i>
<i>No. of participants</i>	<i>32.14 million</i>	<i>32.12 million</i>	<i>32.49 million</i>
<i>No. of beneficiaries</i>	<i>10.15 million</i>	<i>10.69 million</i>	<i>11.17 million</i>
<i>Reserves</i>	<i>¥ 132.1 trillion</i>	<i>¥ 137.4 trillion</i>	<i>¥ 137.7 trillion</i>

#### iii) Corporate pensions

##### 1. Defined-benefit plan (DB plan)

Number of plans, number of participants, annual premium, annual amount of benefits, reserves

##### 2. Defined-contribution plan (DC plan)

Number of plans, number of participants, annual premium, annual amount of benefits, reserves

<i>Employees’ Pension Fund</i>	<i>End of March, 2003</i>	<i>End of March, 2004</i>	<i>End of March, 2005</i>
<i>No. of participants</i>	<i>10.39 million</i>	<i>8.35 million</i>	<i>6.15 million</i>
<i>No. of plans</i>	<i>1,656</i>	<i>1,357</i>	<i>838</i>
<i>Reserves</i>	<i>¥ 45.5 trillion</i>	<i>¥ 40.7 trillion</i>	<i>¥ 26.9 trillion</i>

<i>Tax Qualified Pension</i>	<i>End of March, 2003</i>	<i>End of March, 2004</i>	<i>End of March, 2005</i>
<i>No. of participants</i>	<i>8.59 million</i>	<i>7.78 million</i>	<i>6.55 million</i>
<i>No. of plans</i>	<i>66,741</i>	<i>59,163</i>	<i>52,761</i>

<i>Reserves</i>	<i>¥ 21.4 trillion</i>	<i>¥ 21.0 trillion</i>	<i>¥ 17.2 trillion</i>
<i>Defined-contribution Pension (Corporate-type)</i>	<i>End of March, 2003</i>	<i>End of March, 2004</i>	<i>End of March, 2005</i>
<i>No. of participants</i>	<i>0.33 million</i>	<i>0.71 million</i>	<i>1.26 million</i>
<i>No. of plans</i>	<i>361</i>	<i>845</i>	<i>1,402</i>

(b) Other recent topics

i) Changes in regulations

- *Public Pension Reform: Raised premium for Employees' Pension Insurance, reduction in the benefit level for public pensions, gradual raising of the pensionable age (60 -65 years of age)*
- *Enforcement of the Defined-Benefit Corporate Pension Law in April 2002: Allowing adoption of a cash balance plan*
- *Enforcement of the Defined-Contribution Pension Law in October 2001.*
- *Reinforcement of the reserve standards for Corporate Pensions: Making it compulsory to check reserves against the "continuing" and "discontinuing" standards*
- *Elimination of regulations on pension fund management in the Employees' Pension Fund plan: So-called 5:3:3:2 regulation (stipulating the investment rule of 50% or more principal guaranteed asset, 30% or less domestic stocks, 30% or less asset in foreign currency, and 20% or less fixed property) was eliminated.*
- *Secured and reinforced portability: Workers have the option of transferring lump-sum withdrawal payments between Corporate Pension plans.*

ii) Other

- *Changes in accounting standards: an Unfunded Corporate Pension plan must be disclosed as a projected benefit obligation.*
- *Emergence of new types of risk management and asset management such as Pension ALM and LDI (Liability Driven Investment)*

6. Actuarial organization

(a) Year of establishment, address

*Year of establishment: 1899*

*2F Harumi Island Triton Square Office Tower X, 1-8-10 Harumi, Chuo-ku, Tokyo*

(b) Membership (*as of end of FY 2006*)

<i>Specialized field</i>	<i>Full-fledged member</i>	<i>Associate member</i>	<i>Research member</i>	<i>Total</i>
<i>Life insurance</i>	490	298	654	1,442
<i>Non-life insurance</i>	169	101	280	550
<i>Pension</i>	178	71	125	374
<i>Other</i>	345	279	667	1,291
<i>Total</i>	1,182	749	1,726	3,657

(c) Professional activities

(1) IAJ Certification as Designated Corporation

The legal status of “designated corporation” was recognized under the revision of June 2000 to the Insurance Business Law. Accordingly, the Financial Services Agency was allowed to designate public interest corporations that perform services related to training actuarial specialists, establish the standards for coefficients to serve as the basis for computing liability reserves set forth in the Insurance Business Law, and undertake other activities involving actuarial expertise. The IAJ was recognized as a designated corporation by the Director of the Financial Services Agency, resulting in the creation of the legal foundation for the IAJ under the revised Insurance Business Law revised in June 2000.

(2) Activities of Actuaries in Each Field

(i) Life Insurance Field

- The Role of the Appointed Actuary

Based on the revision of the Insurance Business Law in 1996, the duty of confirmation by the appointed actuary is clarified under the law. And, an appointed actuary is required to confirm whether the liability reserves are calculated on the basis of sound actuarial principles and whether surpluses are distributed fairly and equitably. And he is required to submit the results in the form of a statement of opinion to the board of directors of the company, and further to submit its copy to the supervisory authorities.

An added duty imposed from the 2000 fiscal year involves forecasting future revenue and expenses, to confirm whether future assets in comparison with the liabilities are sufficient from the viewpoint of a going-concern. These results are then to be included in the statement of opinion.

- Revision of Standard Mortality Table

The development of Standard Mortality Table (SMT) for the calculation of the standard valuation of insurance companies is one of the IAJ’s as the designated corporation. The IAJ revised the SMT 1996 and developed the SMT 2007, which is applicable beginning from fiscal 2007.

- The Role of Actuaries in Asset Management Field (Investment Risk Control)

Heightened volatility in interest rates, stock prices, and exchange rates accompanying the liberalization and internationalization of financial markets in recent years, and the resulting heightened investment risks have raised the need for participation by actuaries, not only in traditional fields involving actuarial practices related to insurance and pensions, but also in the field of asset management.

Specifically, actuaries are expected to engage in the development of products, applying actuarial techniques to the fields of risk analysis, valuation, and investment, and to manage risk carried by financial institutions based on quantitative analysis and valuation

and ALM methods.

The circumstances make it more important than ever before for actuaries to improve their investment and financial knowledge and skills.

(ii) Non-Life Insurance Field

- Role of Appointed Actuary

Based on the revision of the Insurance Business Law in 1996, the appointed actuary system was also adopted for non-life insurance companies. The first appointed actuary system was stipulated similarly to that of the life insurance companies, etc., and the appointed actuary was regulated to confirm the soundness and appropriateness of the liability reserves and actuarial participation required concerning long-term maturity-refund-type non-life insurance and nursing care payment insurance.

After several years, the Enforcement Regulations of the Insurance Business Law was partially revised, following the mutual entries of both life and non-life insurance companies into the fields of accident, sickness and nursing care. And, this expanded the areas in which the appointed actuary was to be involved, including outstanding claim reserve and contractual values.

The role of the appointed actuary of non-life insurance company has been expanded since May 2006 due to the regulation changes. The area that appointed actuaries need to be involved in has been enlarged from long-term maturity-refund-type non-life insurance and nursing care payment insurance to all types of non-life insurance except the compulsory automobile insurance and earthquake insurance. As a result, every non-life company licensed in Japan is basically required to nominate an appointed actuary. Also, the new regulation requires non-life companies to calculate IBNR reserves by statistical methods and confirmation on IBNR reserves has been added to the duties of appointed actuaries.

(iii) Pension Field

- Pension ALM

The Tax-qualified pension plan scheme and the employees' pension fund represent typical corporate pension systems in Japan. Pension actuaries have been playing a central role in pension actuarial services.

Pension ALM provides usual pieces of information for sponsoring company to support serious decisions for the purpose of efficient management of assets in pension plans, especially coexistence between the soundness of pension finances and long-term profitability is a significant theme for efficient management. Recently pension actuaries participate in throughout the process, from preparation of basic figures related to assets and liabilities to analysis.

In the field of pension ALM, actuaries must be not only capable of analyzing liabilities, etc., traditional field for actuaries, but they must also have knowledge of asset management.

- Defined Benefit Corporate Pension Plans

The scope of involvement of pension actuaries is expanding to such fields as pension plan consulting, financial verification, actuarial revaluation, etc. in case of shifting to the defined benefits pension plans under the Law of Defined Benefit Corporate Pensions which allows to return the substitutional portion of the Employee's Pension Fund to the government.

- Accounting for Retirement Benefits

Following the development of accounting standards for retirement benefits, for fiscal years beginning on April 2000, the obligation and the cost for defined benefit plans are measured by using actuarial techniques called Projected Unit Credit Method to make a reliable estimate of the amount of benefit that employees have earned for their services in the current and prior period, in keeping with international accounting standards and US FAS Standards. Due to these changes in accounting standards, for many companies, the obligation and the cost of retirement benefit plans are recognized as serious management issue.

Pension actuaries participate in accounting for defined retirement benefits, as experts on

that field, for examples calculate projected benefit obligations and retirement benefit costs, hold consultations for changes of retirement benefit plans, and advise the effect of changes for retirement benefit costs, and so on. As stated above, corporate recognition of accounting for retirement benefits as a management issue has raised the profile of actuaries in corporate finance.

A pension actuary is, as an expert of pension benefits, involved in the whole area of the retirement benefit accounting such as measurement of retirement benefit liabilities and retirement benefit expense, change of the retirement system and consulting concerning accounting procedures. And, as stated before, it has helped to increase a recognition degree of actuaries even in the field of private enterprise finance.

(iv) Other Fields

- Consulting Services

Comparing to Europe and North America, the activities performed by consulting actuaries in Japan have been in conspicuous. But, with growing financial liberalization and internationalization, global consulting firms providing actuarial services around the world have established their offices in Japan.

In Japan, reforms in the financial industry, deregulation, and the adoption of the international accounting standards have resulted in increasing demand for consulting actuaries. The number of actuaries working in this field is expected to increase gradually.

- Supervisory authorities, Etc.

At the Financial Services Agency which supervises insurance companies and at other government agencies, actuaries are serving in the fields of product inspection and others. Actuaries are needed to various operations of businesses and services in excess of the traditional insurance field, and the scope of their activities are expanding.

(d) Educational activities

(1) Examination System of IAJ

The IAJ has been carrying on its qualification examination since 1936 and at present, the examination subjects for the Basic Level are fixed as Mathematics (including Modeling beginning from 2005), Life insurance mathematics, Non-life insurance mathematics, Pension Mathematics, and Accounting, economics and investment theory. And, in the Advanced Level, there are 3 elective Examination courses for Life insurance, Non-life insurance and Pension. There are 2 subjects for each Advanced Level course. Candidates who passed all the subjects of the Basic Level Examination are qualified to take the Advanced Level Examination. A Passer of all the subjects of both level Examinations, upon the completion of Professionalism Course, a one-day seminar, is qualified as a Fellow of the IAJ after the approval of the Board of Directors. To a passer of the 5 basic subjects, the title of Associate is afforded after the approval of the Board of Directors.

(2) Continuing Education System

Continuing education maintains the qualifications of those who have become Fellows, a practice not yet made compulsory by IAA. Since 2000, the IAJ has recommended that Fellows complete 50 hours or more per year of continuing education. The materials covered and time spent are self-reported. Continuing education is implemented through annual meetings, seminars hosted by the Institute, and other forms of self-study. But the IAJ believes that it is necessary to expand the contents of its seminars in order to keep Fellows up to date on insurance and annuity system amendments, new actuarial mathematics, and other knowledge required for appropriate maintenance of Fellow qualifications. For the time being, there are no plans to make the continuing education mandatory, but the names of the Fellows who have completed the 50 hours or more are being listed in the IAJ Bulletin, the Institute's internal publication.

(e) Future prospects for actuarial professionals: Challenges, issues

The IAJ, as already stated above, has been pouring its full energies for maintaining and enhancing the professional level of its members as actuaries. On the other hand, the IAJ believes it indispensable to strengthen ties with universities, research institutes and other professional bodies, etc. not only to constantly attract, as our colleagues, excellent students and talented person wishing to be an actuary but also to produce active research results by increasing the number of the researchers of actuarial science.

Concerning our international activities, the IAJ has been paying its utmost efforts for contribution to the development of actuarial science and actuarial works through its activities with IAA and other actuarial associations of the world. In the environmental changes of financial and economic internationalization and introduction of International Accounting Standards, the IAJ wishes to continue its positive participation and involvement in international affairs.

As the IAJ's cooperation to actuarial associations around East Asian region, the IAJ has been paying its efforts for education and upbringing, etc. of actuaries through its positive participation and involvement in EAAC and through establishing friendly relationships with actuarial association in this region. The IAJ wishes to further promote actuarial techniques through active mutual exchange of opinions and personal visitations in the future.

The IAJ has been holding ASEA for upbringing and education of actuaries in East Asian region. The official name of ASEA is "Actuarial Seminar of East Asia". ASEA started in 1970, and until today, it was held 36 times. The number of the participants each time were more than 20, and the total number of the participants reached approximately 600 from 14 countries in Asia. The IAJ believes that the participants gain valuable experience, not only from the lectures but also from exchanges of actuaries from the other countries and through their touches with the Japanese culture. The IAJ is accepting ASEA participants through recommendations of the actuarial associations in the Asian region.

## 7. Other