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JAPAN

FINANCIAL SECTOR ASSESSMENT PROGRAM

September 2017

TECHNICAL NOTE—INSURANCE SECTOR REGULATION AND SUPERVISION

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INSURANCE SECTOR REGULATION AND SUPERVISION

Prepared by
Monetary and Capital Markets Department

This Technical Note was prepared in the context of an IMF Financial Sector Assessment Program (FSAP) mission in Japan during November and December 2016, led by Mr. Gaston Gelos, IMF and overseen by the Monetary and Capital Markets Department, IMF. Further information on the FSAP program can be found at http://www.imf.org/external/np/fsap/fssa.aspx

CONTENTS

Glossary

CCG	Code of Corporate Governance
ERM	Enterprise Risk Management
ESR	Economic solvency ratio
JFSA	Financial Services Agency of Japan
FSAP	Financial Sector Assessment Program
IAIS	International Association of Insurance Supervisors
IBA	Insurance Business Act
ICP	Insurance Core Principle
IFRS	International Financial Reporting Standards
IMF	International Monetary Fund
JER	Japan Earthquake Reinsurance Company Limited
JGAAP	Japanese Generally Acceptable Accounting Principles
JGB	Japan Government Bond
OEIBA	Ordinance for the Enforcement of Insurance Business Act
ORSA	Own Risk and Solvency Assessment
ROE	Return on equity
SMR	Solvency margin ratio

EXECUTIVE SUMMARY

The Japanese insurance sector is characterized by a mature market, high concentration, and the predominance of life insurance products with interest guarantees. The insurance sector represents 13 percent of total financial sector assets. Life insurance is about 12 times the size of non-life by assets. Five largest life insurers, three of which are mutual in structure, account for 67 percent of life insurance sector assets; and the four largest non-life insurers 88 percent of non-life insurance sector assets. Japan Post Insurance is the largest life insurer with 22 percent market share by assets. Most of savings-type products (whole life and endowment) have interest guarantees. While insurers have reduced the guarantees over the years, there are still old policies in force with guarantees in excess of 5 percent according to industry sources.

Consumers have shifted to living benefits. Japan has one of the fastest ageing populations. Population size has been declining since 2005, and the trend is expected to continue. Against this demographic change and prevailing low interest rates, consumers have shifted away from savings products to products offering living benefits: annuities, medical insurance, and nursing home care. Notably, 80 percent of the annuities are fixed-term annuities. There is little longevity risk to insurers according to industry data.

Keeping up with interest guarantees in a prolonged low-interest rate environment has driven insurers to higher yielding non-yen denominated securities. The four major life insurers have increased their non-yen investments from 14 percent in 2011 to 20 percent in 2015. The foreign-currency exposure is partially hedged. The rate of return on life insurance assets has hovered between 1.8 to 2.5 percent per year since 2009. Foreign securities have been the best performing asset class, helped by the Yen depreciation in recent years.

Insurers are still profitable and the statutory solvency ratios are high. The majority of the profits come from underwriting results. With the memory of the failure of seven life insurers during the 1997−2001 period still fresh in their minds, customers are less price sensitive and more alert to financial soundness of the institution in making purchase decisions. The solvency margin ratios are high, but closer analysis is required, as they are not on an economic value basis.

Insurers have turned to overseas markets for growth. The shrinking domestic market has driven major insurers to expand overseas through acquisitions and strategic investments. The main target markets are U.S., U.K., and emerging Asia. The United States have received the lion share of this investment. The number and amount of M&A transactions have increased in the past two years.

Key risks for the non-life sector is exposure to equities and natural disasters. In search of yield, non-life insurers have high exposures to equities, down to 22 percent in 2015 from 27 percent in 2014. Japan is susceptible to earthquakes and typhoons. While the private insurers' exposure to residential earthquake losses is substantially reduced, due to the reinsurance arrangement with the government, exposure to commercial earthquake losses remains.

The regulatory and supervisory framework has been enhanced since the 2012 FSAP. The Financial Services Agency of Japan (JFSA) is an integrated supervisory body for the whole financial sector funded by government budget. One of the strategic priorities for 2016 is to explore a forward-looking, holistic supervisory approach which focuses on the substance of business models and risk management. Work is underway to develop a risk assessment methodology for insurance supervision. Corporate governance and solvency standards are two key elements supporting risk-based supervision. Recognizing the importance of sound corporate governance, Japan has strengthened requirements in this area by introducing a more stringent definition of an outside (independent) director in the Companies Act and the Tokyo Stock Exchange has issued a voluntary Code of Corporate Governance (CCG) for listed companies. JFSA has conducted three field tests of an economic value based solvency regime. The third field test results will be available in March 2017.

The JFSA should take further steps to implement an economic-value-based solvency regime as soon as practicable. Economic valuation provides reliable measurement and enhances transparency. A number of major insurers already disclose economic solvency information to institutional investors. Implementing the economic value based solvency regime will enhance policyholder protection by eliminating information asymmetries where such information is not available to individual policyholders.

A risk assessment methodology need to be completed as part of the risk-based supervision framework. The risk and impact assessment will enable JFSA to determine the appropriate supervisory intensity for each insurer, and a holistic supervisory plan. Implemented in 2013, onsite inspection through horizontal review is a good way to benchmark insurers against industry practice, and should be supplemented by entity-specific inspections as identified by the outcome of the offsite risk assessment to identify entity-specific risks.

Corporate governance has strengthened, but there is still room for improvement. It is recommended that JFSA consider extending key elements of good governance, including those which could be found in CCG, to all insurers on a legally enforceable manner. These include the minimum two independent directors, and disclosure of governance structure.

The monitoring of FX exposure can be enhanced. The JFSA monitors FX exposure based on the country of domicile of the issuers. Since an issuer of Country A may choose to issue securities in the currency of Country B, JFSA should collect more granular data to monitor insurers' exposure by currencies to get a more precise picture of insurers' FX exposure, as well as statistics on foreign currency denominated policies.

Table 1. Japan: Main Recommendations		
Recommendations	**Responsible Authority**	**Priority**
JFSA should take further steps to implement an economic-value-based solvency regime as soon as practicable. A communication strategy should be developed to help the public understand the potentially large variance from the current, published statutory solvency ratio.	JFSA	Near Term
JFSA should continue to develop its risk-based supervisory framework. The framework should include a risk and impact assessment based on objective criteria, the resultant supervisory intensity, and a holistic supervisory plan for offsite and onsite supervision.	JFSA	Immediate
The frequency and scope of onsite inspections should be part of the holistic supervisory plan to address entity-specific risks. Onsite verification of the qualitative and quantitative information used in offsite analysis provides the necessary feedback loop to the risk-based supervision.	JFSA	Near Term
JFSA should consider extending key elements of good governance practice, including those which could be found in CCG, to all insurers in a legally enforceable manner, such as minimum of two independent directors, and disclosure of governance information.	JFSA	Near Term
JFSA should collect more granular data to monitor insurers' foreign exchange exposure more precisely, as well as statistics on foreign currency denominated policies.	JFSA	Immediate
In light of the increased cross-border M&A activities, JFSA need to continue to periodically review the membership of the supervisory colleges for insurers with material overseas operations and establish new supervisory colleges when necessary.	JFSA	Near Term
Immediate = within a year; Near Term = 1 to 3 years; Medium Term = 3 to 5 years.		

INTRODUCTION[1]

A. Scope and Approach of this Note

1. **This technical note provides an update on the Japanese insurance sector and an analysis of certain key aspects of the regulatory and supervisory regime.** The note has been prepared as part of the 2017 Financial Sector Assessment Program (FSAP), drawing on discussions in Japan from November 30 to December 20, 2016. The technical note refers to the Insurance Core Principles (ICPs) issued by the International Association of Insurance Supervisors (IAIS) in October 2011, as revised in November 2015. A separate technical note addresses the results of stress testing carried out on the insurance sector.

2. **The technical note includes an analysis of Japanese practice in relation to selected ICPs.** The note does not include a detailed assessment of observance of the ICPs. (The most recent detailed assessment was carried out in 2012, conducted on the basis of the October 2011 version of the ICPs.) The main focus of the note is on recent developments in the sector and key vulnerabilities, including, for life insurance, those associated with the continuing low interest rate environment; a supervisory approach that is forward-looking and promotes a holistic view of supervised entities' risks; the continuing effort to introduce economic value-based solvency regime; and corporate governance.

3. **This assessment focuses on the insurance activities that are regulated by the Insurance Business Act (IBA) and supervised by the JFSA.** The IBA identifies some insurance activities as being outside its scope and therefore not supervised by the JFSA. These include insurance activities of cooperatives (Kyosai) which are subject to other legislation and are supervised by the government ministries responsible for the relevant sectors. As a gauge of the size of the excluded insurance activities, assets held by the two largest sectors of cooperatives were less than 2 percent of those by insurers supervised by JFSA.[2]

4. **The selected ICPs are analyzed but without scoring the level of observance**. The Technical Note refers to laws, regulations and other supervisory requirements and practices in place at the time of the discussions in Japan, and takes account of major developments of supervisory practices. The authorities provided a full self-assessment in respect of the 15 ICPs analyzed in this note. The ICPs selected for review are broadly those with macro-financial relevance and/or related to areas where material regulatory changes have been implemented in recent years. They include the ICPs on:

- supervisory approach: supervisory authority, supervisory review, preventive and corrective measures, and macroprudential surveillance;

[1] This Technical Note has been prepared by Mimi Ho (IMF external expert), with inputs from Timo Broszeit (IMF external expert).

[2] Assets held by cooperatives supervised by the Ministry of Agriculture, Forestry & Fisheries were ¥5.9 trillion and assets held by cooperatives supervised by the Ministry of Health and Labor were ¥1.6 trillion, as compared to the total private industry assets of ¥399 trillion at the end of 2015.

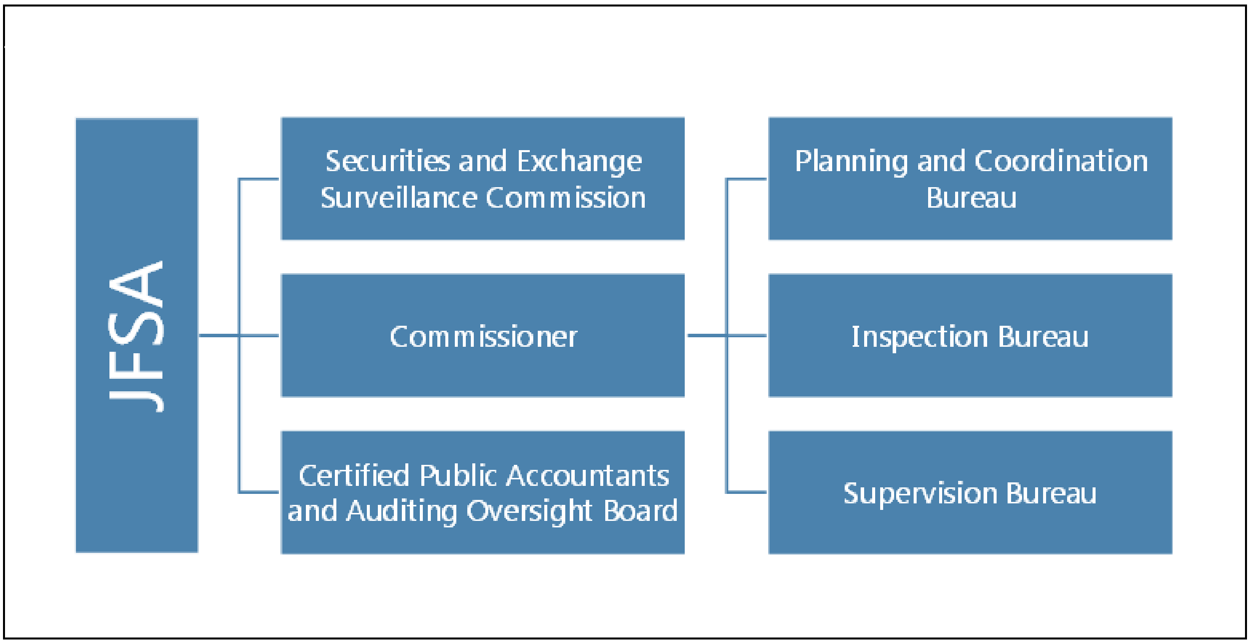
- corporate governance: suitability of persons, governance, risk management, and internal controls;
- solvency requirements: valuation of assets and liabilities, investment, enterprise risk management (ERM), capital adequacy; and
- supervision of large insurance groups: group-wide supervision, cross-border cooperation and winding-up and exits from markets.

5. **The 2012 FSAP indicated a high degree of compliance[3] with (the previous version of) the IAIS ICPs.** Some of the key recommendations to improve observance with ICPs that are relevant to the scope of this technical note are outlined in Appendix 1.

6. **The author is grateful to the authorities and private sector participants for their cooperation.** The author benefitted greatly from the inputs and views expressed in meetings with the authorities, insurance companies and industry and professional organizations.

B. Overview of Institutional Framework and Arrangements

7. **The JFSA is the principal insurance supervisor**. The JFSA was established in 1998 as an integrated financial supervisor under the Prime Minister's Office, taking over from the Ministry of Finance (MoF) the responsibility for supervision of private sector financial institutions (banks, insurers and capital markets service providers) and surveillance of securities markets. In 2001, the JFSA came under the Cabinet Office with the added responsibility for disposition of failed financial institutions. Headed by a Commissioner, the JFSA is accountable to the Minister for Financial Services, which currently is also the Minister for Finance. The MoF continues to be responsible for planning and policy-making relating to financial system stability and financial risk management (see organizational chart below).



[3] Of 26 ICPs, Japan was rated 12 Observed, 10 Largely Observed, and 4 Partly Observed.

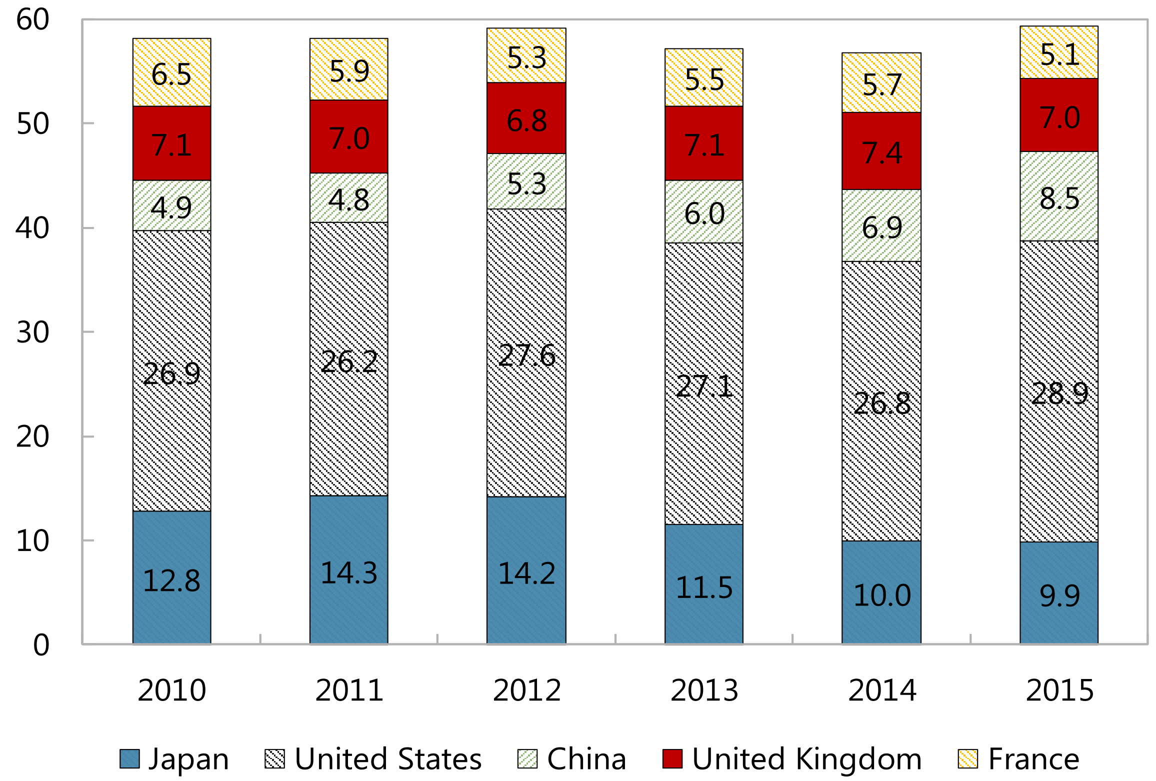
8. The supervision of insurance activities in Japan is primarily based on the IBA. The IBA identifies some insurance activities as being outside its scope and therefore not supervised by the JFSA. They include captives and business transacted by certain closed groups such as labor unions with their members, neither of which is subject to supervision. They also include insurance activities of cooperatives (Kyosai) which are subject to other legislation and are supervised by the government ministries responsible for the relevant sectors. For example, the insurance activities of agricultural cooperatives are regulated by the Agricultural Cooperatives Act and supervised by the Ministry of Agriculture, Forestry, and Fisheries. The legislation related to the insurance activities of cooperatives is similar to the IBA and the various ministries communicate with the JFSA on policy matters.

C. Market Structure, Products, and Industry Performance

9. Japan has the second largest insurance market in the world by premium size. Its insurance penetration (insurance premium as a percentage of GDP) ranked 7th highest in the world, and its insurance density (insurance premium per capita) ranked 14th highest.[4] Industry growth has lagged behind global average due to declining population and market saturation. As a result, Japan's share of global insurance premium has declined since 2011 (Figure 1).

Figure 1. Changing Market Shares of Key Markets

(In percent)



Source: Swiss Re.

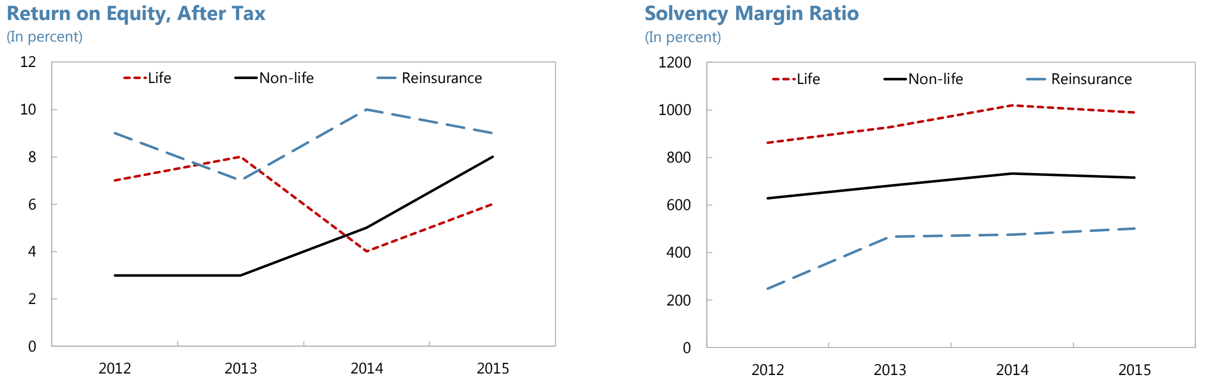
4 Ranking is according to World Insurance in 2015 by Swiss Re.

10. There are 93 insurers in Japan as of the end 2016, comprising 41 life insurers (including five mutual insurers), 44 non-life insurers and eight reinsurers. The number of insurers declined mildly from 97 in 2012 through mergers and takeovers. The book value of assets stood at ¥399 trillion (¥367 trillion for life and ¥31 trillion for non-life) at the end of fiscal year 2015, which represents 13 percent of total financial sector assets. (The fiscal year for the industry is April 1 to March 31. Unless otherwise indicated, "year" refers to fiscal year in this note.)

11. The industry is highly concentrated. The top five life insurers account for 67 percent of life insurance market assets, and the top four non-life insurers (belonging to three insurance groups) account for 88 percent of non-life insurance market assets. Mutual insurers play a significant role in Japan: three of the top five life insurers are mutual insurers, and the fourth was demutualized and listed in 2010. The remaining direct insurers have market shares of 3 percent or less each. Japan Post Insurance[5] is the largest life insurer with 22 percent market share, 5 percent higher than the next largest insurer. A dedicated unit within JFSA supervises Japan Post Insurance and Japan Post Bank. The reinsurance sector is even more concentrated. The top two reinsurers represent 90 percent of the market (by assets).

12. The insurance industry is profitable with high statutory solvency ratios, although further analysis of solvency ratios is needed, especially in the case of life insurers. Industry average return on equity (ROE) in the last four years has fluctuated for life insurers and reinsurers, while steadily improving for non-life insurers (see Figure 2.) Underwriting results formed the bulk of profits and have helped to counter the effect of low investment performance. Japanese consumers are not very price-sensitive, placing more emphasis on service and financial soundness in their choice of insurers. Investment performance has been improving in the past few years, mainly due to increased foreign-currency denominated investments. Statutory solvency margin ratios (SMR) have been improving for all three sectors, standing at 990 percent for life, 715 percent for non-life and 500 percent for reinsurers at the end of 2015. However, economic value-based solvency ratios may present a different solvency picture.

Figure 2. Profitability and Solvency

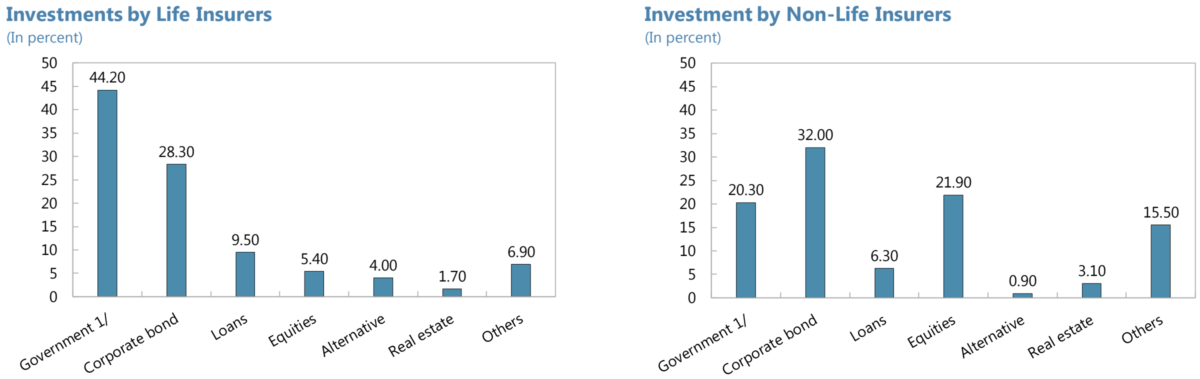


Source: Japan Financial Services Agency.

[5] Japan Post Insurance commenced operation in 2007 following the privatization of Japan Post in 2006. It is listed on the Tokyo Stock Exchange and Government owns 89 percent of its shares.

13. Life insurers have high exposure to government bonds and non-life insurers to equities. To match the long-term nature of their liabilities, life insurers had 44 percent of their assets invested in long-duration Japanese government and semi-government bonds at the end of 2015. Non-life insurers, on the other hand, had a much lower exposure to government bonds at 20 percent and a 22 percent exposure to equities, a reduction from 27 percent in 2014. The life sector had 4 percent of assets in alternative investments, which are mainly investment funds including hedge funds (see Figure 3.)

Figure 3. Investments of Insurance Assets



Source: Japan Financial Services Agency.
1/ Include semi-government entities.

14. Exposure to high-yield foreign currency denominated securities has increased. Products with guarantees still dominate the life insurance market. Most of savings products (whole life and endowment) have minimum interest guarantees. Given the prolonged domestic low interest rate environment, insurers have turned to non-yen denominated securities to provide the yield needed to meet the guarantees. At the end of 2015, non-yen denominated investments accounted for about 20 percent of total assets of the four major life insurers, increased from 14 percent in 2011.[6] These non-yen securities comprise bonds, listed equity, private equity and managed funds including hedge funds. Bonds may include structured bonds with complex embedded derivatives. While quantitative analysis is difficult due to lack of data, it would appear that insurers are taking on non-yen related risks to enhance yield. About 60 percent of the foreign currency exposure is in U.S. dollars, and 20 percent in euro. Currency hedges, mostly shorter-term currency swaps, range from 20 percent to 80 percent. Foreign securities were the best performing asset class, helped by the depreciation of the yen in recent years (Table 2.)

15. Consumers' needs for life insurance have shifted to living benefits. Japan's population started to contract in 2005, when the number of deaths overtook the number of births. By 2060, it is projected that the age 60 and above segment will be close to half of total population (Figure 4). In light of these demographic developments and prevailing low interest rates, consumers have shifted from savings products to products offering living benefits (such as annuity, medical insurance, and nursing home care). According to industry statistics as of March 2016, annuities comprised 28 percent of total new business premium, and medical

[6] Extracted from the annual reports of the four major life insurers. Industry-wide exposure by currency is not available.

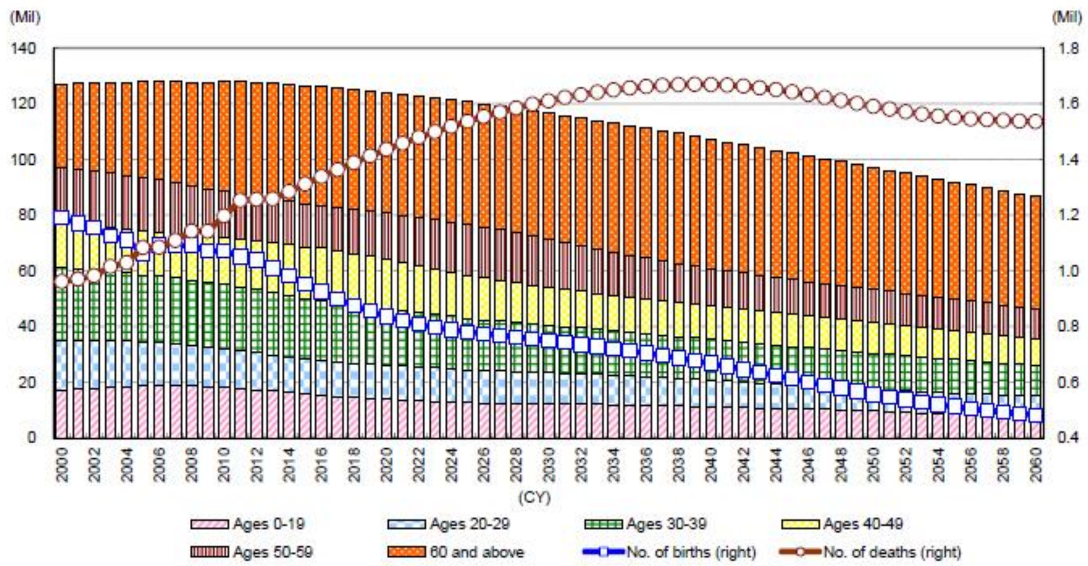
insurance (including cancer insurance) 23 percent. In terms of number of policies sold, medical insurance has represented more than one third of new business for the past nearly two decades. More than 80 percent of annuities are fixed-term annuities, which provide periodic payments for a pre-determined time period. Thus, insurers' annuity portfolios entail little longevity risk.

Table 2. Japan: Investment Return by Asset Class (Life Insurance Sector)

(In percent)	Overall Return	Bonds	Domestic Stocks	Foreign Securities	Loans	Real Estate
2009	1.86	1.64	2.33	2.52	2.23	2.87
2010	1.79	1.86	1.25	2.06	1.98	2.52
2011	1.92	1.91	1.56	2.91	1.94	2.27
2012	2.36	2.00	0.61	5.25	2.18	2.35
2013	2.40	1.95	5.14	4.60	2.15	2.43
2014	2.58	1.88	5.31	5.50	2.28	2.50
2015	1.92	1.75	5.17	2.24	1.70	2.62

Source: Life Insurance Association of Japan.

Figure 4. Past and Projected Japanese Population



Sources: Compiled by Daiwa Institute of Research based on statistics from the Statistics Bureau, Ministry of Health, Labor and Welfare, and National Institute of Population and Social Security Research.

16. **Insurers are expanding overseas for growth.** The declining population and shrinking workforce is limiting the growth potential of domestic market. Seeking growth opportunities, major Japanese insurers have been expanding their overseas operations through acquisitions and strategic investments in emerging Asian and developed markets in the past 10 years. The

U.S. market is the top target. The pace of expansion has sped up in the last two years, with a number of major deals in the U.S. market (Appendix II).

17. The distribution of insurance is still predominantly through agency sales force, but other distribution channels are slowly emerging in the life sector. Over 90 percent of non-life insurance is distributed through general agency sales force. In the life sector, sales through agents have remained stable at 73 percent, but the volume has shifted away from in-house agents to general agents.[7] Bancassurance has very slowly increased from 3.3 percent in 2006 to 5.5 percent in 2015. Direct sales through internet, TV, print media, and at insurers' premises have lost some ground from 11.2 percent in 2006 to 8.7 percent in 2015.[8]

18. A key risk for the life sector is low interest rates.[9] While insurers have reduced the interest guarantees[10] on new policies, they still have a large stock of old policies in force with interest guarantees in excess of 5 percent according to industry sources. The consistently low and recently negative interest rate environment is the key challenge for life insurers. The negative interest rate on Japanese Government Bonds (JGB) earlier this year has led some insurers to stop selling single premium products.

19. Key risks to the non-life sector are exposures to equities and natural disasters. The distribution of non-life business lines has been stable over the years. Motor insurance is the dominant line of business at 55 percent of total gross written premium; fire insurance contributes 17 percent; personal accident insurance 12 percent; and miscellaneous casualty insurance 12 percent. Earthquake insurance for residential properties is an optional add-on to fire insurance policies. 28.8 percent of households had earthquake insurance in 2015, showing a steady increase from 23.7 percent in 2010.[11] The premium rates for residential earthquake insurance are standardized by region, and the bulk of the losses are reinsured by the government.[12] (Premium rates for residential earthquake and compulsory motor insurance are set by the General Insurance Rating Organization, a private non-profit institution supervised by the JFSA.) Thus, private insurers' exposure to earthquake losses is mainly in the commercial line.

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[7] In 2015, in-house agents accounted for 59 percent of sales and general agents 14 percent, compared to 66 percent and 7 percent, respectively, in 2006, according to industry statistics.

[8] Source: FY 2015 and FY2006 surveys on life insurance by Japan Institute of Life Insurance.

[9] Risks to life and non-life insurers will be analyzed in detail through stress testing in the forthcoming Technical Note on Systemic Risk.

[10] The reduction in the standardized discount rate for valuing liabilities could also have influenced the insurer's decision to reduce guarantee rates to avoid new business strain.

[11] The General Insurance Association of Japan estimates that the maximum coverage ratio is approximately 50 percent, due to the fact that (a) some households reside in rental properties thus having no need for earthquake insurance, and (b) about 20 percent of households take up coverage through cooperatives.

[12] The Earthquake Insurance Act requires all insurers to reinsure their earthquake insurance on dwelling risks with the Japan Earthquake Reinsurance Company (JER). JER enters into retrocessions with direct insurers and an excess of loss treaty with the Japanese Government. The indemnity limit is approved by the Diet each year. For earthquakes occurring after April 1, 2016, Government pays 50 percent of claims between ¥115.3 billion and ¥437 billion; and 99.7 percent of claims above ¥437.9 billion, up to ¥11.3 trillion. The Government reduced the ¥437.9 billion threshold to ¥182.7 billion from Oct 19, 2016 to recognize the insurers' reduced reserves following claims payments due to the Kumamoto Earthquake occurred on April 16, 2016.

Besides earthquakes, insurers are highly susceptible to losses resulting from typhoons, and to market risk from their high exposure to equities.

20. Bank-insurance linkages and interconnectedness with other parts of the financial sector appear to be limited.[13] Japan Post Holdings, which is 80 percent owned by the government, owns 89 percent of Japan Post Bank and 89 percent of Japan Post Insurance. All three entities are listed on the Tokyo Stock Exchange. Other than Japan Post, none of the significant insurers is part of a group that also includes significant banking activities, and none of the insurance groups has significant market share in both life and non-life.

MAIN FINDINGS AND RECOMMENDATIONS

A. Solvency Standards

Valuation of assets and liabilities

21. Assets and liabilities are valued according to Japanese Generally Acceptable Accounting Principles (JGAAP). Statutory valuation of assets adopts the accounting values, partly on an amortized cost basis. On the liabilities side, JGAAP adopts the statutory liability valuation methods. Therefore, statutory and accounting valuations are the same. There is an ongoing discussion on whether JGAAP should be made more consistent with IFRS, which may result in differences between statutory valuation and valuation for general financial reporting purposes.

22. There are inherent mix of conservatism and optimism in the valuation of life insurance liabilities. Valuation of life insurance liabilities is based on discounted future cash flows using assumptions locked-in at the inception of the insurance contract. The standardized valuation discount rate is referenced to the 10- or 20-year JGB rates and revised yearly for regular premium policies and quarterly for single premium policies. The standard discount rates have been steadily declining from 2.75 percent in 1996 to one percent for regular premium policies and 0 to 0.75 percent for single premium policies in 2016. Inforce policies are valued at the historical locked-in rates, despite the low rates in which matured assets are reinvested. On the other hand, mortality assumptions are also locked in from inception, despite improving mortality rates, resulting in an overvaluation of liabilities.

23. A 10-year cash flow analysis is prepared to gauge the adequacy of premium reserves. The use of the locked-in discount rates under the declining interest rate environment understates the life insurance premium reserves, somewhat offset by the conservatism in the mortality assumption. A 10-year cash flow analysis is used by actuaries to assess whether the reserves are adequate under two scenarios relating to future market conditions. In 2015, the JFSA introduced an additional cash flow analysis covering the full time horizon of the policies under four scenarios. Based on the results of the cash flow analyses, the appointed actuary

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[13] Interconnectedness will be analyzed in detail in the forthcoming Technical Note on Systemic Risk.

makes recommendation to the management on the need to increase the premium reserves or to reduce policy liabilities, such as reducing dividends to participating policyholders.

24. In addition to the premium reserves, insurers are required to hold special reserves. IBA and Supervisory Guidelines require insurers to hold additional reserves as provision for future adverse developments. These include contingent reserves for future adverse experience in mortality, morbidity, minimum guarantee, etc.; catastrophe reserves for extraordinary losses resulting from catastrophes; price fluctuation reserves for insurers' assets that are susceptible to losses due to price fluctuation. According to analysis by the JFSA, these special reserves have served well to absorb the losses from the financial crisis and the 2011 Great East Japan Earthquake.

Solvency requirement

25. Solvency Margin Ratios (SMR) are disclosed to the public four times a year. SMR is the ratio of solvency margin (net assets and special reserves based on accounting balance sheet, excluding items such as intangible assets) to half of risk requirements calculated based on standard factors stipulated in subsidiary legislation. In other words, a 200 percent SMR means that the "margin" exactly covers the "risks." An SMR of 200 percent triggers early remedial action such as submission of a management plan to restore the SMR. An SMR of 100 percent triggers more severe remedial action, such as capital injection, restraint/prohibition on paying dividend to policyholders or bonuses to directors, etc. SMRs are disclosed to the public four times a year. Since the failure of seven life insurers in 1997−2001,[14] consumers have become more alert to the financial soundness of insurers based on industry feedback. They rely on the SMRs as indication of the financial strength of insurers.

26. Solvency on gone-concern basis is also considered. Adjusted net assets are calculated to approximate the insurer's liquidation value. For this purpose, assets are re-valued at fair value including bonds held to maturity, and liabilities are set to total surrender value. JFSA may order insurers to suspend business if the adjusted net assets are negative.

27. An economic value-based solvency regime has been under consideration since 2006. Recognizing economic solvency ratio (ESR) as a useful tool that provides more reliable and transparent information, the JFSA conducted a review of the solvency regime in 2006 and a report was published in 2007. Three field tests were conducted in 2010, 2014 and 2016. The results of the 2014 field test showed that aggregate ESR was between 150 to 190 percent for life insurers and 190 to 220 percent for non-life insurers, though the impact of a shift to economic value-based regime varies by insurers depending on the characteristics of their assets and liabilities. The results of the 2016 field test will be available in March 2017. Due to the decline in interest rates since 2014, the ESRs are likely to be lower compared to the second field test. JFSA has exercised caution in carefully evaluating the impact of introducing ESR in a volatile interest rate environment taking into account the long term nature of Japanese insurance policies.

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[14] Nissan Mutual (April 1997), assets of ¥1.8 trillion at the time of failure; Toho Mutual (June 1999), ¥2.2 trillion; Daihyaku Mutual (May 2000), ¥1.3 trillion; Taisho Life (August 2000), ¥0.2 trillion; Chiyoda Mutual (October 2000), ¥2.2 trillion; Kyoei Life (October 2000), ¥3.7 trillion; Tokyo Mutual (March 2001), ¥0.7 trillion.

28. A number of insurers already voluntarily calculate and disclose their ESRs. A number of insurers accessing capital markets or having significant overseas operations already disclose ESR and the embedded value of their business in response to institutional investors' request. Since ESR is not a required disclosure item, the information may not be available in the public domain in all cases.

Conclusions and recommendations

29. The JFSA has made significant effort in promoting an economic-value-based solvency regime. While there are pros and cons with any solvency regime, JFSA recognizes the benefits of having an economic valuation[15] that provides reliable measurement and market transparency. It has conducted three field tests of a preliminary economic value based solvency regulation. The results of the field tests provide valuable information for JFSA to assess the impact on insurers. There is a need to protect policyholders from possible information asymmetry, where institutional investors have access to more decision-useful information compared to ordinary policyholders. This could happen if the insurer calculated the ESR for institutional investors and securities analysts but choose not to publish it. The implication may be serious if the ESR presents a different picture of an insurer's financial condition compared to the SMR, resulting in the ordinary policyholder having a partial or even distorted view of the insurer.

30. It is recommended that JFSA should take further steps to implement an economic value based solvency regime as soon as practicable. This supports JFSA's strategic priority to move towards a risk-based prudential supervision regime. The economic valuation, without the encumbrance of implicit conservatism based on conservative assumptions, provides a more transparent basis to assess prudential risks. Due to the potentially large differences between ESR and SMR, it is recommended that JFSA develop a public communication strategy before implementation.

B. Insurance Supervision

Forward-looking, risk-based prudential supervisory framework

31. Transforming its supervisory approach is one of JFSA's priorities in 2016. One of the strategic priority in fiscal year 2016 is to move toward a forward-looking, holistic prudential supervisory framework. Some organizational and process initiatives necessary to support the transformation have begun as early as 2013, such as the implementation of Own Risk and Solvency Assessment (ORSA) reporting, and a new approach to onsite supervision. JFSA recognizes that more work is needed to achieve the strategic objective.

32. A dedicated Prudence Monitoring Office is responsible for the risk analysis and prudential supervision of the insurance sector. The establishment of the Prudence Monitoring Office in 2016 is to facilitate the implementation of planning and proposing measures relating to

[15] ICP 14.4.1 states: "An economic valuation is a valuation such that the resulting assessment of an insurer's financial position is not obscured by hidden or inherent conservatism or optimism in the valuation. Such an approach is appropriate in the context of risk-based solvency requirements which satisfy these ICPs and standards and shares their objectives of transparency and comparability."

consolidated risks and prudential supervision, and to assist in other supervisory work. In broad terms, insurers submit financial information to JFSA on quarterly, half-yearly and yearly basis. JFSA analyzes the information received and conducts interviews with insurers (mainly in the risk management and business divisions), particularly with those that trigger early warning. Formal interviews with senior management may be conducted.

33. A new risk-based assessment methodology is under trial. The JFSA is developing a new risk-based approach for offsite monitoring and analysis. The results of the risk assessment form the basis for dialogue with insurers' senior management, and input to the planning of onsite supervision. It is still work in progress.

34. Onsite supervision has shifted away from compliance with minimum standards towards principle-based best practices. The JFSA publishes its detailed inspection manual. In the past, inspections were conducted with a view to verify compliance with the minimum standards in the manual. Since 2013, the inspection bureau has adopted horizontal reviews as the primary inspection tool for major insurers. A horizontal review involves an examination of a common topic across a number of selected major insurers. The purpose of the horizontal reviews is to identify industry best practices, problems and concerns for feedback to insurers. The JFSA has conducted a number of horizontal reviews such as M&A activities, corporate governance practices, management of product-selling practices, and compliance. For the smaller insurers, JFSA conducts offsite supervision and limited-scope inspections only.

35. Onsite supervision has become more qualitative. The approach of the horizontal reviews focuses more on interviews with senior level staff to understand the practice, and less on examination of systems, books, and records. The JFSA believes that the quality of inspections has improved because of greater interaction with directors and senior management. Besides the horizontal reviews, entity-specific inspections may be conducted if a risk profiling process (conducted by inspectors, with input from the offsite supervisors) identifies concerns. The JFSA has only conducted 17 entity-specific inspections in the past three years, including two in 2015. There are no minimum requirements for supervisory work on any insurer, such as an onsite inspection every three years.

36. The JFSA has substantially enhanced macroprudential surveillance since the last FSAP. A Macroprudential Policy Office was established in the Planning and Coordination Bureau in July 2015 and a staff of 25 as of end Jun 2016. The office analyzes the state of the global markets and the macro-economy, and monitors potential threats to the stability of financial systems. The results of the analysis are shared with the insurance supervisors to feed into their industry-wide and entity-specific monitoring.

Conclusions and Recommendations

37. The effort to focus on risk in offsite and onsite supervision is commendable and more is needed. The risk-based supervisory approach more efficiently prioritizes the supervisory resources to areas that are impactful. The prolonged low interest rate environment has driven insurers to take on more risks in search of yield. Insurers have increased allocation to corporate bonds (in the case of life insurers), and non-yen securities. The higher cross-border M&A activities in search of growth also present more risks and challenges to insurers. The current business environment no doubt creates a strong need for the JFSA to understand individual insurers' business strategy, governance, risk management, operations and financials, since they are the bases for its risk-based supervision. At the same time, there is a need for JFSA to monitor the commonalities in insurers' exposures, to assess the degree of susceptibility to common and/or aggregate shocks.

38. It is recommended that:

a. The JFSA should continue the development of its risk-based supervisory framework. The framework should include a risk and impact assessment based on objective criteria, the resultant supervisory intensity, and a holistic supervisory plan for offsite and onsite supervision.

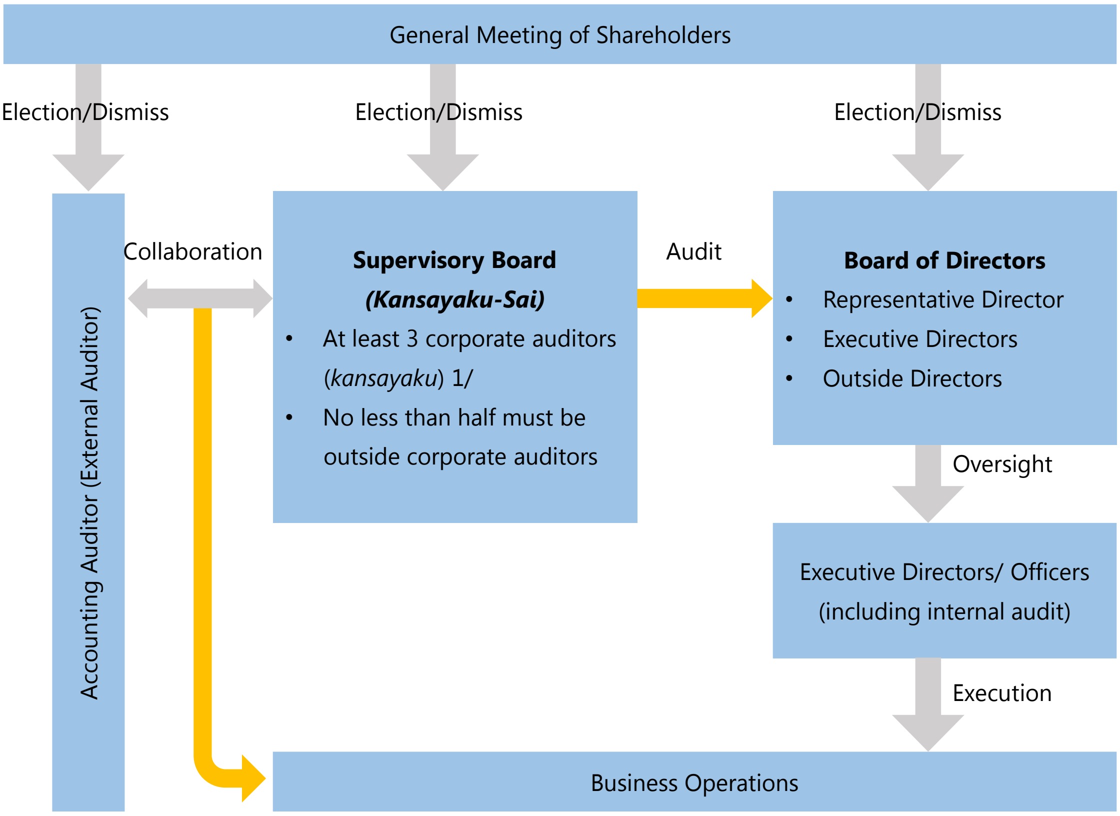
b. The frequency and scope of onsite inspection should be part of the holistic supervisory plan to address entity-specific risks. Onsite verification of the qualitative and quantitative information used in offsite analysis provides the necessary feedback loop to the risk based supervision.

C. Corporate Governance

39. Japan has a unique governance structure. The Companies Act allows corporations to choose any one of three main governance structures. The majority of Japanese firms adopt the traditional structure of a supervisory board (*kansayaku-kai)* comprising of corporate auditors (*kansayaku*) appointed by shareholders, and a board of directors comprising mostly executive officers of the firm (since mutual companies are not covered by the Companies Act, the IBA duplicates the governance provisions in the Companies Act to be consistent.) The duty of the supervisory board is to monitor whether the directors perform their duty with due care and diligence, and report to the board of directors should it discover that any director engages or is likely to engage in improper behavior. If such behavior is likely to cause substantial detriment to the company, corporate auditors may demand the director to cease such behavior. It oversees the audit performed by external auditors, and prepares audit policy. The members of the supervisory board—corporate auditors—are often selected from among the senior management of the firm, or are former directors of related companies. The independence of the supervisory board has been secured with the requirement for it to have more than half of outside (independent) corporate auditors in the board. Moreover, Companies Act has been amended to require stringent eligibility for these outside corporate auditors. Corporate auditors attend board of directors' meetings but have no voting rights.

40. More companies are adopting features of the Anglo Saxon governance structure. Some companies with international operations or fund-raising activities have either converted to the Anglo Saxon model outright, or established voluntary committees under the board of directors such as nominating committee and remuneration committee in addition to Kansayaku-kai, or appointing more independent directors to the board. In some cases, the internal audit function collaborates with the supervisory board for greater independence from management.

Figure 5. Governance Structure with Supervisory Board (Kansayaku-Kai)



Source: Author.
1/ At least three for the company with the supervisory board, otherwise at least one.

41. Governance requirements are found in various sources. The Companies Act specifies the basic governance requirements applicable to all corporations, such as qualification of directors and outside directors, the duty of loyalty of directors, shareholders' approval of directors' remuneration, and establishment of an internal control system to ensure the appropriateness of the operation of the company. IBA duplicates the Companies Act requirements and applies them to mutual companies that are not subject to the Companies Act. The IBA stipulates additional governance requirements for insurers, such as having internal control systems to ensure regulatory compliance, and disclosure of various information. OEIBA specifies in detail the items to be disclosed, which include organizational, operational, financial, statistical, and risk management information. The Financial Instrument and Exchange Act requires listed companies to disclose information on governance. Aside from these legal requirements, the Supervisory Guidelines provides JFSA's expectations of directors, including:

- Cultivate a corporate culture that emphasizes the importance of governance.
- Articulate a corporate management policy for achieving the insurer's overall targets.
- Develop a corporate management plan and a risk management policy.
- Approve internal audit policies and internal audit plans, and take appropriate actions with respect to the results of internal audits.

- Establish a system that enables the internal audit division to perform its functions, including ensuring its independence.
- Develop an appropriate design and management of the remuneration system.
- Listed insurers and insurance holding companies should have at least two outside directors.

42. CCG articulates the corporate governance principles for listed entities. Issued in 2015 by the Tokyo Stock Exchange, CCG articulates the principles on shareholder rights, cooperation with other stakeholders, transparency, responsibilities of the board, and dialogue with shareholders. These principles are designed to provide the appropriate checks and balances that are fundamental to good governance. CCG is applied on a comply-or-explain basis. There are less than 20 listed insurers that are subject to CCG.

Conclusions and recommendations

43. Overall, governance standards have been raised in Japan. The Companies Act, IBA, and Supervisory Guidelines have been amended to introduce a higher standard for independence of outside director. As of December 2015, outside directors represent 29.7 percent of the insurer's board of directors in the aggregate, although the percentages may vary widely depending on the size of board.

44. Good governance is important to the implement of risk based supervision. The rising complexity of risk management associated with a search for yield, cross-border expansions, and increased market and FX risks has heightened the need for good governance. JFSA recognizes the importance of governance to achieving its strategic goal and has strengthened the standard for insurers. A recommendation is to consider further extending the key elements of good governance practices, including those which could be found in CCG, to all insurers in a legally enforceable manner.

D. Other Issues

45. JFSA monitors insurers' FX exposure by country of domicile of the issuer. The country of domicile matches the currency most of the time. However, an issuer of Country A may choose to issue securities in the currency of Country B. Monitoring currency exposure by country may therefore not provide an accurate picture of the true exposure. As the demand for foreign currency denominated policies is not high, JFSA currently does not collect information on these policies.

Conclusions and recommendations

46. The JFSA could strengthen the monitoring of the increased foreign currency exposure. JFSA currently monitors insurers' asset exposure to countries. Due to the increased allocation to foreign currency denominated investments, it is recommended that JFSA collect more granular information to monitor insurers' exposure by currencies to get a more precise picture of insurers' exposure. JFSA should also consider collecting statistics on foreign-currency denominated policies.

47. Increased cross-border M&A necessitates close cross-border coordination. The JFSA is the group-wide supervisor of Japanese insurers with material overseas operations. The JFSA has established supervisory colleges with relevant supervisors. As the overseas expansion activities continue, it is recommended that JFSA continues to periodically review the membership of the supervisory colleges and establish new colleges when necessary.

Appendix I. Overview of Implementation of Relevant Recommendations from the 2012 FSAP

Ref.	2012 FSAP Recommendations	Comments
ICP 2	To improve supervisory capacity by increasing resources (particularly in the area of onsite inspections) and making regulatory expectation known to the industry through primary and subsidiary legislation and guidelines.	The number of staff dedicated to supervision has not changed meaningfully (from 90 to 88). However, JFSA has hired 10 staff with industry experience or specialty knowledge to deepen its internal capability. The IBA and Supervisory Guidelines have been amended in a number of areas to clarify supervisory expectation.
ICP 5	To extend suitability test to all directors, senior management and persons in key control functions, and to increase JFSA's power to disqualify unsuitable persons from holding office.	The IBA was amended in 2014 to extend suitability requirements to corporate auditors. The Companies Act was amended in 2015 to stipulate more stringent eligibility requirements for outside (i.e., independent) directors, and outside (independent) corporate auditors.
ICP 7	To revise corporate governance requirements to strengthen independent oversight, and consider making some of its expectations regarding corporate governance legally-binding.	The Tokyo Stock Exchanged issued the CCG in June 2015 for listed companies on a comply-or-explain basis. Less than 20 insurers are listed. The applicability of CCG to non-listed insurers is optional. Supervisory Guidelines has been amended to indicate JFSA's expectation for listed insurers and financial holding companies to have at least two outside directors.
ICP 9 ICP 10	To enhance the risk-assessment methodology and increase the frequency of inspection of large insurers; to make greater use of the enforcement tools available.	The risk assessment methodology is still work in progress. There has been a shift in supervisory approach that has lowered the reliance on onsite inspection, with increased interaction with board directors and senior management.
ICP 14 ICP 17	To adopt economic valuation of assets and liabilities, and capital requirements.	JFSA is field-testing an economic value-based methodology. In addition, the long-term cash-flow analysis is introduced for appointed actuaries to check adequacy of premium reserves.
ICP 16	To enhance requirements on enterprise risk management (ERM) and capital adequacy.	JFSA has implemented ORSA based on ERM in 2015, after a pilot study in 2014.
ICP 25 ICP 26	To establish supervisory colleges for Japanese insurers with material foreign operations; and to require	FSA has established supervisory colleges for Japanese insurers with material overseas operations.

Ref.	2012 FSAP Recommendations	Comments
	insurers to prepare contingency plans including specific procedures for use in a gone-concern situation.	While no formal requirement for insurers to develop contingency plans, the ORSA report includes a description of an action plan in case of large loss due to turmoil in financial markets.

Appendix II. Cross-Border M&A by Japanese Insurers

Year	Acquirer	Country	Target	Amount (¥ billions)
2006	Tokio Marine	Malaysia/ Singapore	Asia General Holdings Ltd	44.6
2008	Tokio Marine	U.K., U.S.	Kiln Ltd	95
2008	Tokio Marine	U.S.	Philadelphia Consolidated Holding	471.5
2009	Sompo	Brazil	Maritima Seguros S.A.	16.5
2010	MS&AD	China	Sinatay Life Insurance Co.	2.4
2010	MS&AD	Malaysia	Hong Leong Assurance Berhad	25.4
2010	Sompo	Singapore	Tenet Insurance Company Limited	6.4
2010	Sompo	Turkey	Fiba Sigorta Anonim Sirketi	27.4
2011	MS&AD	Malaysia	Hong Leong MSIG Takaful	0.9
2011	MS&AD	Indonesia	PT Asuransi Jiwa Sinarmas MSIG	67.2
2011	Sompo	Malaysia	Berjaya Sompo Insurance Berhad	13.3
2012	Tokio Marine	U.S.	Delphi Financial Group	205
2012	Tokio Marine	Malaysia	MUI Continental Insurance Berhad	4.8
2012	Tokio Marine	Saudi Arabia	Alinma Tokio Marine Company	1.4
2012	Tokio Marine	Indonesia	PT Tokio Marine Life Insurance	0.8
2012	Tokio Marine	China	The People's Insurance Company (Group) of China Limited	4
2012	MS&AD	India	Max Life	39.1
2013	Tokio Marine	Egypt	Tokio Marine Egypt General Takaful, and Family Takaful	1.0
2013	Sompo	Brazil	Maritima Seguros S.A.	9.6
2013	Sompo	U.K.	Canopius Group	99.2
2014	Tokio Marine	Philippines	Malayan Insurance Company	2
2014	MS&AD	U.K.	Box Innovation Group	20
2014	Dai-ichi Life	U.S.	Protective Life	575
2015	Tokio Marine	U.S.	HCC Insurance Holdings	941.3
2015	MS&AD	U.K.	Amlin	635
2015	MS&AD	India	Cholamandalam MS General Insurance	16.2
2015	Meiji Yasuda Life	U.S.	StanCorp Financial Group	620
2015	Sumitomo Life	U.S.	Symetra Financial Corp	470
2015	Nippon Life	Australia	MLC Ltd	180
2016	Tokio Marine	India	Edelweiss Tokio Life Insurance	9.5
2016	Sompo	Bermuda/U.S.	Endurance Specialty Holding	637.5

Source: General Insurance Association of Japan.

Note: List may not be complete.