

To whom it may concern:

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 (Securities Code: 8630 TSE, OSE)

Announcement of Embedded Value of Life Insurance Subsidiaries as of March 31, 2011

NKSJ Holdings Inc. hereby announces the embedded value (“EV”) of its life insurance subsidiaries, namely Sompo Japan Himawari Life Insurance Co., Ltd. (“Sompo Japan Himawari Life”) and NIPPONKOA Life Insurance Co., Ltd. (“Nipponkoa Life”), as of March 31, 2011.

Sompo Japan Himawari Life discloses market consistent embedded value (“MCEV”), while Nipponkoa Life discloses traditional embedded value (“TEV”).

<Sompo Japan Himawari Life>

Sompo Japan Himawari Life’s MCEV as of March 31, 2011 is 345.6 billion yen, increased by 54.8 billion yen from the end of the previous fiscal year.

(Billion yen)			
	March 31, 2011	March 31, 2010	Change
MCEV	345.6	290.7	+54.8
Adjusted net worth	77.9	75.0	+2.9
Value of in-force business	267.6	215.7	+51.9
New business value	31.0	23.8	+7.3

<Nipponkoa Life>

Nipponkoa Life’s TEV as of March 31, 2011 is 101.4 billion yen, increased by 5.4 billion yen from the end of the previous fiscal year.

(Billion yen)			
	March 31, 2011	March 31, 2010	Change
TEV	101.4	96.1	+5.4
Adjusted net worth	28.9	29.0	-0.1
Value of in-force business	72.5	67.1	+5.5
New business value	1.6	1.3	+0.3

[Attachment]

- Sompo Japan Himawari Life's Disclosure of Market Consistent Embedded Value as at March 31, 2011
- NIPPONKOA Life Insurance Discloses its Embedded Value as of March 31, 2011

May 19, 2011

Sompo Japan Himawari Life Insurance Co., Ltd.

## **Disclosure of Market Consistent Embedded Value as at March 31, 2011**

Sompo Japan Himawari Life Insurance Co., Ltd. (“Himawari Life”, President: Toshio Matsuzaki) herein reports its market consistent embedded value (“MCEV”) with respect to its life insurance business, prepared and disclosed in compliance with the European Insurance CFO Forum Market Consistent Embedded Value Principles<sup>1</sup> (“MCEV Principles”) as at March 31, 2011.

### **Highlights**

The MCEV of Himawari Life as at March 31, 2011 is 345.6 billion Yen, up by 54.8 billion Yen compared with its level at March 31, 2010.

(in Billions of Yen)

	As at March 31, 2011	As at March 31, 2010	Change
MCEV	345.6	290.7	54.8
Adjusted net worth	77.9	75.0	2.9
Value of in-force	267.6	215.7	51.9
New business value	31.0	23.8	7.3

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## **1. Introduction**

### **1.1. About MCEV**

Embedded values have been widely used in Europe and Canada as an effective measure to calculate the value and business results of life insurance companies in order to reinforce financial information available from statutory accounting standards, considering the nature of life insurance business where there is generally a time lag from acquisition of new policies to realization of profits arising from those policies.

MCEV represents the present value of current and future distributable earnings to shareholders generated from assets allocated to the covered business after sufficient allowance for the aggregate risks in the covered business. MCEV can be expressed as the EV evaluated using methods consistent with the market valuation of financial products traded in the financial markets and consists of the “corporate net asset value” and the “present value of future profits from existing business”.

Insurance companies have widely disclosed EV in compliance with the EEV Principles since the CFO Forum formed by the Chief Financial Officers (CFO) of major insurance companies in Europe issued the EEV Principles in May 2004. The CFO Forum released the MCEV Principles in June 2008, defining market consistent valuation methods to further enhance the consistency of valuation standards. MCEV Principles has been positioned by the CFO Forum as one of the important standards and forms to be based in reporting embedded values.

Himawari Life has been disclosing its EV in compliance with the MCEV Principles beginning at the end of March 2010 in order to facilitate understanding of the status of Himawari Life, as EV disclosure in compliance with the EEV Principles or the MCEV Principles has been promoted in Japan.

### **1.2. Covered business**

The business covered in this report is the life insurance business written by Himawari Life. Any calculation results in this report do not reflect life insurance business or non-life insurance business written by other life and non-life insurance companies in the NKSJ Group.

### **1.3. Statement of directors**

The Board of Directors of Himawari Life states that the MCEV results presented here were prepared in compliance with the MCEV Principles except for points of special notice. Please refer to “1.5. Compliance with MCEV Principles” for areas of non-compliance with the individual Principles and Guidelines defined in the MCEV Principles.

#### 1.4. Opinion of outside specialist

Himawari Life requested Milliman, Inc., an external actuarial consulting firm with expert knowledge in the area of MCEV valuations, to review the methodology, assumptions and calculations and obtained an opinion from Milliman, Inc. Please refer to “5. Opinion of Outside Specialist” for details.

#### 1.5. Compliance with MCEV Principles

We have calculated our MCEV in accordance with the calculation methodologies and assumptions prescribed in the MCEV Principles. Areas of non-compliance with individual Principles and Guidance in the MCEV Principles are as follows:

- MCEV results in this report are solely for the life insurance business written by Himawari Life, and they are not the consolidated results of the NKSJ Group. The MCEV results do not reflect the life or casualty insurance business written by any other life or casualty insurance companies within the NKSJ Group.
- Group MCEV, as prescribed in the MCEV Principles, is not considered in this report, as the report is for Himawari Life on a standalone basis.
- Adjusted net worth is based on Japanese GAAP, not on International Financial Reporting Standards (IFRS).

## 2. MCEV Results

### 2.1. MCEV results

The MCEV of Himawari Life as at March 31, 2011, is 345.6 billion Yen, up by 54.8 billion Yen compared with its level at March 31, 2010.

(in Billions of Yen)

	As at March 31, 2011	As at March 31, 2010	Change
MCEV	345.6	290.7	54.8
Adjusted net worth	77.9	75.0	2.9
Value of in-force	267.6	215.7	51.9
New business value	31.0	23.8	7.3

### 2.2. Adjusted net worth

The adjusted net worth is defined as the market value of assets allocated to the covered business in excess of statutory policy reserves and other liabilities as at the valuation date. More specifically, the adjusted net worth is the net assets on the statutory balance sheet plus the price fluctuation reserve, contingency reserves, unallocated amount within dividend reserves, general provision for loan losses, unrealized gains or losses on held-to-maturity bonds and unrealized gains or losses on derivatives minus intangible fixed assets and tax adjustments on these seven items. Its breakdown is shown below.

The required capital is set to the amount to maintain a statutory solvency margin ratio of 600%. Please refer to section 4.4 for the method of calculation of required capital.

(in Billions of Yen)

	As at March 31, 2011	As at March 31, 2010	Change
Adjusted net worth	77.9	75.0	2.9
Total net assets	54.0	55.4	(1.4)
Reserve for price fluctuations	0.9	0.8	0.1
Contingency reserves	14.9	15.4	(0.4)
Reserve for possible loan losses	0.0	0.0	(0.0)
Unallocated amount within dividend reserves	0.0	0.0	0.0
Unrealized gains or losses on held-to-maturity securities	25.8	19.1	6.7
Unrealized gains or losses on derivatives	0.0	(0.0)	0.0
Intangible fixed assets	(4.1)	(4.6)	0.5
Tax effect related to above seven items	(13.6)	(11.1)	(2.5)

(in Billions of Yen)

	As at March 31, 2011	As at March 31, 2010	Change
Adjusted net worth	77.9	75.0	2.9
Free surplus	50.5	75.0	(24.6)
Required capital	27.5	0.0	27.5

### 2.3. Value of in-force

The value of in-force reflects the value of distributable earnings to shareholders generated in the future from the existing business, expressed as a present value as at the valuation date (March 31, 2011), which is the certainty equivalent present value of future profits net of the time value of options and guarantees, the frictional costs and the cost of non-hedgeable risks, broken down as below. Please refer to “4. Calculation method of MCEV” for details of each component.



(in Billions of Yen)

	As at March 31, 2011	As at March 31, 2010	Change
Value of in-force	267.6	215.7	51.9
Certainty equivalent present value of future profits	348.7	307.8	40.9
Time value of options and guarantees	(18.0)	(14.5)	(3.5)
Frictional costs	(3.0)	(0.4)	(2.6)
Cost of non-hedgeable risks	(60.1)	(77.1)	17.0

## 2.4. New business value

Policies considered in the calculation of new business value are those issued during the Japanese fiscal year starting April 1, 2010 and ending March 31, 2011 (referred to as “the fiscal year” hereinafter), which is consistent with the financial information we have disclosed. Policies expected to be acquired in the future are not considered in the calculation of new business value. The new business value is evaluated as at the valuation date (March 31, 2011) and is calculated under the same assumptions used for the value of in-force. Actual investment gains and losses during the fiscal year are considered, as the value of new business includes profits and losses from issue to the end of March 2011. A breakdown of the new business value is shown below.

(in Billions of Yen)

	As at March 31, 2011	As at March 31, 2010	Change
Value of new business	31.0	23.8	7.3
Certainty equivalent present value of future profits	41.3	35.8	5.5
Time value of options and guarantees	(0.6)	(0.5)	(0.1)
Frictional costs	(0.2)	(0.0)	(0.2)
Cost of non-hedgeable risks	(9.5)	(11.5)	2.0

## 2.5. New business margin

The new business margin presented below is the ratio of the new business value to the present value of new business premium income<sup>2</sup>.

<sup>2</sup> The present value of new business premium income is calculated applying the same assumptions as are used for the calculation of new business value, and is based on the premiums before the deduction of reinsurance premiums.

(in Billions of Yen)

	As at March 31, 2011	As at March 31, 2010	Change
Value of new business	31.0	23.8	7.3
Present value of new business premiums collected	262.6	224.0	38.6
Value of new business / Present value of new business premiums collected	11.8%	10.6%	1.2%

Relationships between the total annualized amount of regular premiums and the present value of new business premiums collected for the fiscal year are as follows:

(in Billions of Yen)

	As at March 31, 2011	As at March 31, 2010	Change
Single premiums from new business	11.8	2.2	9.6
Total annualized amount of regular premiums <sup>3</sup>	30.5	27.9	2.5
Average annual premium multiplier <sup>4</sup>	8.2	7.9	0.3

## 2.6. Reconciliation analysis from MCEV as at the end of March 2010

The table below shows the reconciliation analysis of the MCEV as at March 31, 2011, with the MCEV as at March 31, 2010, in the format prescribed by the MCEV Principles.

<sup>3</sup> The total annualized amount of regular premiums is calculated as the number of premium payments made in a year multiplied by the premium amount per payment. It should be noted that the definition of annualized premiums here is different from that used in disclosures such as the financial results and annual reports.

<sup>4</sup> The average annual premium multiplier is calculated as (Present value of new business premium income – Single premiums from new business) / Annualized level premiums from new business.

(in Billions of Yen)

	Free surplus	Required capital	Value of in-force	MCEV
Opening MCEV (MCEV as at March 31, 2010)	75.0	—	215.7	290.7
Opening adjustments	—	—	—	—
Adjusted opening MCEV	75.0	—	215.7	290.7
New business value	—	—	31.0	31.0
Expected existing business contribution (risk-free rate)	0.3	—	6.6	6.9
Expected existing business contribution (in excess of risk free rate)	0.9	—	8.0	8.9
Transfers from value of in-force and required capital to free surplus	(1.9)	—	1.9	—
On new business	(20.2)	—	20.2	—
Experience variances	(0.6)	—	(1.2)	(1.8)
Assumption changes	—	—	7.5	7.5
Other operating variance	—	—	22.5	22.5
Operating MCEV earnings	(1.3)	—	76.2	74.9
Economic variances	4.2	—	(21.9)	(17.7)
Other non operating variance	(27.5)	27.5	(2.4)	(2.4)
Total MCEV earnings	(24.6)	27.5	51.9	54.8
Closing MCEV (MCEV as at March 31, 2011)	50.5	27.5	267.6	345.6

## (1) Opening adjustments

This reflects such items as capital and dividend flows and foreign exchange variances of acquired/divested business. There were no dividends paid to shareholders or other adjustments that would usually be part of this line.

## (2) New business value

This reflects the value of new business acquired during the fiscal year as at the valuation date (March 31, 2011). With regards to the calculation method of new business value, please refer to section 2.4.

## (3) Expected existing business contribution (risk-free rate)

This includes the amount of release of the time value of options and guarantees and allowance for non-hedgeable risks, in addition to the impact of the unwinding of the discount effect in accordance with the elapse of time, as the expected future distributable earnings to shareholders are discounted at the risk-free rate.

(4) Expected existing business contribution (in excess of risk-free rate)

Future asset investment income is calculated using a risk free rate, as the value of in-force is calculated based on a market consistent valuation method. This item reflects the profits expected in excess of the risk-free rate generated by holding risky assets such as corporate bonds and foreign securities. The expected yield used to calculate the expected profit in excess of the risk-free rate for the fiscal year was 1.66%, which was calculated by reflecting our view of the market environment and annual investment plans for the fiscal year against the market value of the asset balance at the end of the previous fiscal year.

(5) Transfers from value of in-force and required capital to free surplus

This reflects changes in the free surplus arising from the transfer of the profits expected in the fiscal year from the existing business value to the free surplus and from changes in the required capital under the adjusted net worth. The transfer of profits, the first item, includes the transfer of expected profits that it was assumed would be realized during the fiscal year under the MCEV calculation as at March 31, 2010, and the transfer of profits for the fiscal year calculated under the new business value for the fiscal year. The value of MCEV itself does not change as a result of this transfer as the transfer merely constitutes an internal shift among MCEV components.

(6) Experience variances

These variances reflect the impact on MCEV of the differences between actual and expected profits transferred to the adjusted net worth during the fiscal year, and of the differences between the actual policies in-force as at March 31, 2011 and the sum of expected business remaining as at March 31, 2011 and the new business acquired during the fiscal year in-force as at March 31, 2011.

(7) Assumption changes

This shows the impact of changes in the non-financial assumptions, mainly mortality and morbidity rates, surrender and lapse rates and operating expense rates. The positive impact on MCEV is explained by changes in operating expense rates.

(8) Other operating variance

This reflects the impact of model improvements and updates in calculating MCEV. The major source of the impact is due to the change that, while the cost of non-hedgeable risks of the MCEV value as at March 31, 2010 was based on the fourth Quantitative Impact Study (QIS4) of the EU Solvency II, it has now been calculated based on the fifth Quantitative Impact Study (QIS5) in determination of the MCEV value as at March 31 2011. Please refer to "4.10 Cost of non-hedgeable risks".

(9) Operating MCEV earnings

This reflects the aggregate amount of items (2) through to (8).

(10) Economic variances

This reflects the impact of changes in economic assumptions, such as risk free rates and implied volatilities, from

those reflecting the market environment when calculating MCEV as at March 31, 2010 to those as at the end of March 2011 and the impact of the difference between actual and expected asset investment income for the fiscal year including that in excess of risk free rate. The former impact contributed approximately to a 21.9 billion yen decrease in MCEV due to a decrease in interest swap rates, while the latter contributed approximately to a 4.2 billion yen impact on adjusted net worth.

(11) Other non operating variance

While the required capital assumption was calculated based on the conventional solvency margin regulation before its revision effective from the period ending March 2012 in calculating the MCEV for the period ending March 2010, it has now been calculated based on the revised solvency margin regulation effective from the period ending March 2012 as described in “4.4 Required capital” in calculating the MCEV for the period ending March 2011. Its impact is mainly due to difference of the regulations.

2.7. Sensitivity analysis

The impacts of changing various underlying assumptions of the MCEV calculation are as follows.

**Sensitivity analysis**

(in Billions of Yen)

Assumption	Change in Assumption	MCEV	Change in Amount	Rate of Change
Base case	No change	345.6	0.0	0%
Interest rates	100bp decrease	319.1	(26.5)	(8%)
	100bp increase	354.8	9.3	3%
Stock / Real estate market values	10% decrease	345.6	(0.0)	(0%)
Stock / Real estate implied volatility	25% increase	345.6	0.0	0%
Interest swaption implied volatility	25% increase	341.8	(3.7)	(1%)
Maintenance expenses	10% decrease	355.3	9.8	3%
Surrender and lapse rates	x 0.9	368.4	22.9	7%
Mortality rates	Death protection products x 0.95	352.6	7.1	2%
	Third-segment (A&H) products and annuity products x 0.95	345.4	(0.1)	(0%)
Morbidity rates	x 0.95	319.1	(26.5)	(8%)
Required capital	Target statutory solvency	347.7	2.1	1%

	margin ratio of 200%			
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The change in adjusted net worth under the sensitivities to interest rates and market values of stock and real estate are shown in the table below. For the other sensitivities only the value of in-force has changed.

Interest rates	100bp decrease	65.2
	100bp increase	(59.7)
Stock / Real estate market value	10% decrease	(0.0)

#### Sensitivity analysis of new business value

(in Billions of Yen)

Assumption	Change in Assumption	New Business Value	Change in Amount	Rate of Change
Base case	No change	31.0	0.0	0%
Interest rates	100bp decrease	27.1	(4.0)	(13%)
	100bp increase	32.7	1.6	5%
Stock / Real estate market values	10% decrease	31.0	0.0	0%
Stock / Real estate implied volatility	25% increase	31.0	0.0	0%
Interest swaption implied volatility	25% increase	30.9	(0.1)	(0%)
Maintenance expenses	10% decrease	32.6	1.6	5%
Surrender and lapse rates	x 0.9	34.7	3.7	12%
Mortality rates	Death protection products x 0.95	31.7	0.7	2%
	Third segment (A&H) products and annuity products x 0.95	31.0	0.0	0%
Morbidity rates	x 0.95	32.0	1.0	3%
Required capital	Target statutory solvency margin ratio of 200%	31.2	0.1	0%

#### (1) Interest rates

This analysis shows the impact of an immediate parallel shift up or down by 100bp of the risk free rates (swap curve) as at March 31, 2011. The adjusted net worth changes due to the change in market values of bonds and other assets. The value of in-force also changes as the discount rate and the future asset investment yields change. In generating stochastic economic scenarios the volatility parameters of the

interest rate model are the same as for the base case parameters. Only the term structure parameters are changed. Interest rates are floored at 0%.

(2) Stock and real estate market value

This analysis shows the impact of an immediate 10% drop in market values of stock and real estate as at March 31, 2011. The adjusted net worth decreases as the market values of stock and real estate decrease.

(3) Implied volatility of stock and real estate

We have assumed zero for the impact of changes in the implied volatilities of stock and real estate used in calculating the time value of options and guarantees. This is because there are no assets, such as derivatives, which would be sensitive to the implied volatilities of stock and real estate.

(4) Interest swaption implied volatility

This analysis shows the impact of an increase in the implied volatility of interest swaptions used in calculating the time value of options and guarantees. We have only calculated the impact on the time value of options and guarantees, as there are no assets sensitive to the implied volatilities of interest swaptions.

(5) Maintenance expenses

This analysis shows the amount of increase in the value of in-force due to a 10% decrease in maintenance expenses. It should be noted that maintenance expenses subject to this sensitivity do not include agents' commissions payable to the in-force policies in future periods.

(6) Surrender and lapse rates

This analysis shows the amount of change in the value of in-force due to a 10% decrease in surrender and lapse rates. The existing business value increases as future profits would increase through an increase in the persistency rate of the existing policies.

(7) Mortality rates

This analysis shows the amount of change in the value of in-force due to a 5% decrease in mortality rates. We have shown the impact on death protection products and the impact on A&H insurance and annuity products separately, as they behave differently under this sensitivity. We have covered base policies and riders of which the primary benefits are accidental death, sickness and various medical risks such as cancer, and individual annuities with respect to the A&H insurance and annuity product segment. Regarding group life policies, it is assumed that changes in death benefits are entirely reflected in changes in policyholder dividends. Other management actions were not reflected in the calculations.

(8) Morbidity rates

This analysis shows the amount of change in the value of in-force due to a 5% decrease in the morbidity rates of A&H products. No management actions were reflected in the calculations.

(9) Statutory minimum required capital

This analysis shows the amount of change in the value of in-force when the minimum statutory requirement of a solvency margin ratio of 200% is assumed.

(10) Other

Other items to note are as follows:

- The frictional costs and the cost of non-hedgeable risks are assumed to remain unchanged under the sensitivity analyses, except that for the required capital sensitivity analysis, the frictional costs are assumed to change.
- The time value of options and guarantees of variable life policies is assumed to remain unchanged because a simplified approach is employed as described in “4.8 Time value of options and guarantees”
- Each of the sensitivity analyses above show only the impact of changing one assumption. The impact of changing multiple assumptions at a time would not be equal to the sum of the impacts for each assumption.



### 3. Assumptions

#### 3.1. Economic assumptions

##### (1) Risk-free rates

The risk free rates, used for the investment yields and discount rates for the calculation of the certainty equivalent present value of future profits are set to the Japanese yen interest swap rates as at March 31, 2011. As there are no data available for interest rates beyond 50 years, it is assumed that forward rates in the 51<sup>st</sup> year and thereafter are equal to the 1-year forward rate in the 50<sup>th</sup> year. The data source for the swap rates is Bloomberg. The spot yields of the swap rates for major terms are shown below.

Term (in years)	As at March 31, 2011	As at March 31, 2010
1	0.36%	0.45%
5	0.62%	0.76%
10	1.29%	1.46%
20	2.02%	2.19%
30	2.16%	2.32%
40	2.24%	2.37%
50	2.31%	2.42%

We have decided not to include a liquidity premium assumption given that definitions in the MCEV Principles regarding methods for its derivation and the insurance liabilities to consider are not completely clear and generally accepted actuarial practice has not yet been established.

##### (2) Future asset allocation

Segment accounting is carried out for the general account assets of individual life insurance and individual annuities with the following segment classifications: non-participating product segment, participating individual insurance product segment, participating individual annuity segment and total company segment. Future asset allocations for the general account assets for the calculation of the time value of options and guarantees were determined based on the actual asset allocation in each segment as at March 31, 2011, which is assumed to continue thereafter. Furthermore, for the participating individual insurance product segment and participating individual annuity segment, it is assumed that assets are all invested in Japanese bonds, as these segments do not contain equities and foreign assets.

##### (3) Interest-rate model

We have used the Heath-Jarrow-Morton interest rate model and calibrated this to the market at the end of each year ending March 31. Parameters are estimated from the swap curve and the implied volatilities of interest swaptions with different terms, where the interest rate is floored at 0%. We have used 1,000 scenarios generated

by Milliman, Inc. using this interest rate model in calculating the time value of options and guarantees. The implied volatilities of the interest swaptions used in our estimation of parameters are shown below.

As at March 31, 2011

Term of swap (in years)	Term of option (in years)	Japanese yen
1	1	53.83%
5	1	60.14%
5	5	32.48%
5	7	26.74%
5	10	23.58%
5	15	22.46%
5	20	24.91%
10	1	40.63%
10	5	28.18%
10	7	25.28%
10	10	23.99%
10	15	24.40%
10	20	26.25%
15	1	32.60%
15	5	26.74%
15	7	25.27%
15	10	24.80%
15	15	25.42%
15	20	26.22%
20	1	30.38%
20	5	26.93%
20	7	25.81%
20	10	25.75%
20	15	25.78%
20	20	26.49%

As at March 31, 2010

Term of swap (in years)	Term of option (in years)	Japanese yen
1	1	40.30%
5	1	41.80%
5	5	27.10%
5	7	23.40%
5	10	20.90%
5	15	20.54%
5	20	22.46%
10	1	30.30%
10	5	23.60%
10	7	21.40%
10	10	20.40%
10	15	21.13%
10	20	22.53%
15	1	25.20%
15	5	22.23%
15	7	21.39%
15	10	21.03%
15	15	21.70%
15	20	22.54%
20	1	23.68%
20	5	22.27%
20	7	21.46%
20	10	21.54%
20	15	21.96%
20	20	22.37%

(4) Foreign exchange

Assets denominated in foreign currencies are converted to Japanese yen using the TTM (telegraphic transfer middle exchange rate) as at March 31, 2011. Exchange rates of major currencies are shown below.

Currency	Exchange rate (¥)
US dollar	83.15
Euro	117.57

(5) Miscellaneous

We have not applied assumptions regarding implied volatilities of stocks and foreign exchanges or correlation factors between asset classes.

### 3.2. Other assumptions

Assumptions including mortality and morbidity rates, surrender and lapse rates and operating expense rates were developed based on best estimates as at March 31, 2011. Best-estimate assumptions are developed to reflect past and current experience as well as expected experience in the future.

(1) Mortality and morbidity rates

Developed based on experience over the 3-6 most recent years or those up to the last fiscal year.

(2) Surrender and lapse rates

Surrender and lapse rates were developed based on experience over the three most recent years.

We have also developed dynamic surrender and lapse rates in accordance with the level of interest rates for the following products:

Whole life insurance with interest gain dividends payable every 5 years

Non-participating whole life insurance

(3) Flexible premium policies

No assumptions were developed as Himawari Life does not have flexible premium policies.

(4) Renewal rates

Renewal rates were developed based on the experience of the most recent 3 years.

(5) Operating expense rates

We have developed unit costs of the expenses incurred for the maintenance and administration of policies and

payments of claims based on the actual operating expenses in the most recent year.

It is assumed that Himawari Life's holding company incurs no expenses in respect of the business defined in "1.2 Covered business".

In addition, unit costs for policy maintenance expenses were developed based on the actual operating expenses of a standalone Himawari Life, since all the operating expenses of the covered business are recorded as operating expenses of Himawari Life. The look-through effect has not been considered with regards to other companies in the NKSJ Group.

There are no one-time expenses that we should deduct in developing the unit-costs.

(6) Tax rate

Based on the most recent effective tax rate.

(7) Inflation

Inflation is set to 0% based on the break-even inflation rate derived from the 10-year Consumer Price Index (CPI) and indexed Japanese government bonds.

(8) Policyholder dividends

We have assumed the portfolio yield less the assumed interest rate (floored at 0%) to be the interest gain dividend rate of each future year for each of the following segments: individual life insurance with interest gain dividends payable every 5 years and individual annuity with interest gain dividends payable every 5 years. With respect to group life policies, it is assumed that the most recent level of dividend payouts will continue in the future.

(9) Reinsurance

As the mortality risk of part of the death protection insurance is ceded, the projection assumes reinsurance premiums as expenses and reinsurance claims as income. We have developed the level of reinsurance premiums and reinsurance claims based on the experience of the most recent 3 years.

## **4. Calculation method of MCEV**

### **4.1. Covered business**

The business covered on this report is life insurance business operated by Himawari Life. Any calculation results in this report do not reflect life insurance business or non-life insurance business operated by other life and non-life insurance companies in the NKSJ Group.

### **4.2. MCEV**

MCEV represents the present value of current and future distributable earnings to shareholders generated from assets allocated to the covered business after sufficient allowance for the aggregate risks in the covered business. MCEV can be expressed as the EV evaluated in a method consistent with valuation of prices of financial products traded in the financial markets and consists of "corporate net asset value" and "present value of future profit from existing business".

### **4.3. Adjusted net worth**

The adjusted net worth is defined as the market value of assets allocated to the covered business in excess of statutory policy reserves and other liabilities as at the valuation date. More specifically, the adjusted net worth is the net assets on the statutory balance sheet plus the price fluctuation reserve, contingency reserves, unallocated amount within dividend reserves, general provision for loan losses, unrealized gains or losses on held-to-maturity bonds and unrealized gains or losses on derivatives minus intangible fixed assets and tax adjustments on these seven items.

It is made up of the required capital and free surplus.

### **4.4. Required capital**

The required capital is the portion of assets held in excess of statutory liabilities whose distribution to shareholders is restricted in order to meet insurance obligations. As the MCEV Principles define that the level of required capital should be the larger of the solvency capital to meet the statutory minimum required level and the capital required to meet internal objectives, we have set our required capital to the amount of capital required to maintain a solvency margin ratio of 600% under the statutory standard. As the Japanese statutory required minimum levels will be revised from the year ending March 31, 2012, we have calculated the required capital based on the revised solvency margin regulation.

#### 4.5. Free surplus

The free surplus is calculated as the adjusted net worth minus the required capital.

#### 4.6. Value of in-force

The value of in-force is the value of distributable earnings to shareholders generated in the future from the existing business as at the valuation date (March 31, 2011) converted to a present value as at the valuation date, which is the certainty equivalent present value of future profits deducting the time value of options and guarantees, frictional costs and the cost of non-hedgeable risks. The new business value is also calculated using the same method.

#### 4.7. Certainty equivalent present value of future profits

The certainty equivalent present value of future profits is the present value of future profits under a single scenario, reflecting future cash flows arising from the covered business. Risk free rates are used for the investment yield assumptions and the discount rates. The intrinsic value of options and guarantees is included in the certainty equivalent present value of future profits.

#### 4.8. Time value of options and guarantees

We have calculated the time value of options and guarantees using 1000 risk-neutral scenarios. The time value of options and guarantees is calculated as the difference between the average present value of future profits based on the future cash flows under each scenario and the certainty equivalent present value of future profits.

The time value of options and guarantees reflects the following components:

- 5-year interest dividends  
In the case where the investment return exceeds the credited interest rate, the outperforming portion is paid to policyholders as interest dividends, while interest losses would all be attributable to shareholders. This represents a policyholder option. We have valued such options by calculating the interest gain dividend rate under each of the multiple scenarios.
- Dynamic Surrenders  
We have reflected the cost of policyholders exercising the right to surrender in the event of increased interest rates for whole life insurance with interest gain dividends payable every 5 years and non-par whole life insurance, since policyholders of savings type insurance products are considered to be interest

rate sensitive and surrender rates could change in line with movements in market interest rates. It is also generally considered that distributable earnings for shareholders may decrease compared with the assumption of no dynamic surrenders.

- **Minimum guaranteed death benefits on Variable Life**

An excess of account value over the scheduled policy reserves would be attributable to policyholders. However, the cost of guaranteed minimum death benefits for variable life insurance incurred when the account value is less than the scheduled policy reserve is attributable to shareholders. This is similar to a policyholder option. We have assumed the minimum guarantee policy reserve as at the valuation date to be the approximate value of such an option; as the in-force business is very small<sup>5</sup> its impact on MCEV is immaterial.

#### 4.9. Frictional costs

We have assumed the frictional costs to be the present value of investment costs and taxes on assets backing the required capital.

#### 4.10. Cost of non-hedgeable risks

In the cost of non-hedgeable risks we have reflected an allowance for the uncertainty of non-economic assumptions and the portion of economic assumptions considered to be non-hedgeable.

Specifically, we have assumed a risk margin calculated based on the methods (cost of capital approach) prescribed in the technical specification of the QIS5 (the fifth quantitative impact study) published in July 2010 as part of the Solvency II framework whose introduction is being discussed in Europe, as the cost of non-hedgeable risks. The following points are major differences between the applied methods and the methods prescribed in QIS5:

- Counterparty default risk is not considered in the non-hedgeable risks as its impact is immaterial.
- We have calculated each of the risk amounts based on cash flows after policyholder dividends without adjustments, while QIS5 requires adjustments to keep the risk mitigation effect, defined as the difference between assuming policyholder dividends and assuming no policyholder dividends, to be less than the present value of policyholder dividends.

#### 4.11. Cost of capital rate

In QIS5 (part of the EU Solvency II development), the cost of capital rate is set at 6%, which is used for the risk

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<sup>5</sup> Variable life policies' share of premium reserves is 1% as at Mar 31, 2011.

margin calculation under the cost of capital method. On the other hand, the CRO (Chief Risk Officers') Forum, in which CROs from major insurance companies in Europe participate, suggested that 2.5% to 4.5% is the appropriate level for the cost of capital rate. .

In this report, the rate is set at 6%, as it is employed in QIS5, since there is no standardized method for determining the cost of capital rate. We may revise the cost of capital rate in the future as required, considering trends in MCEV disclosures in Japan and abroad.



## 5. Opinion of Outside Specialist

We have requested review of reasonableness of calculation method, assumptions used and calculated results of the MCEV to a third-party with actuarial expertise, Milliman, Inc., and received the opinion.

Milliman, Inc. (“Milliman”) has been engaged to review the methodology, assumptions and calculations used by Sampo Japan Himawari Life Insurance Co., Ltd. (“Himawari Life”) to determine the Market Consistent Embedded Value (“MCEV”) as at March 31, 2011. Specifically, the scope of our review included the embedded value as at 31 March 2011, the sensitivities, the new business value and the movement analysis from the MCEV as at 31 March 2010.

The board of directors made a statement in its News Release Form dated May 19, 2011 that the methodology, assumptions and calculations have been made in accordance with the MCEV Principles<sup>6</sup>, with the following exceptions:

- MCEV results in this report are solely for the life insurance business written by Himawari Life, and they are not the consolidated results of the NKSJ Group. The MCEV results do not reflect the life or casualty insurance business written by any other life or casualty insurance companies within the NKSJ Group.
- Group MCEV, as prescribed in the MCEV Principles, is not considered in this report, as the report is for Himawari Life on a standalone basis.
- Adjusted net worth is based on Japanese GAAP, not on International Financial Reporting Standards (IFRS).

Milliman has concluded that the methodology and assumptions used comply with the MCEV Principles except for the points described in the above paragraph. In particular:

- The non economic assumptions have been set with regard to past, current and expected future experience;
- The economic assumptions used in the calculations are internally consistent and consistent with observable market data as per the valuation date;
- The methodology makes allowance for the aggregate risks in the covered business through Himawari Life’s market consistent embedded value methodology, which includes:
  - a stochastic allowance for the cost of financial options and guarantees
  - a deduction for the cost of non-hedgeable risks
  - a deduction for the frictional costs of the required capital

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- for participating insurance contracts, the assumed policyholder dividend rates, allocation of dividends between policyholders and shareholders and other management actions are consistent with the assumptions and scenarios used in the projections and where applicable local market practice.

Milliman has reviewed the MCEV methodology, assumptions, calculations and analysis prepared by Himawari Life, but this does not mean that Milliman has conducted a detailed review in all aspects. During its review Milliman identified and discussed various MCEV calculation and definition issues with Himawari Life staff. Based upon those discussions and follow-up actions Milliman is not aware of any issues that would materially impact the disclosed market consistent embedded values, new business values, sensitivities or movement analysis from the prior period. In arriving at this conclusion, Milliman has relied on data and information provided by Himawari Life.

The calculation of MCEV is based on numerous assumptions with respect to economic conditions, operating conditions, taxes and other matters, many of which are beyond the control of Himawari Life. Although the methodology and assumptions used comply with the MCEV Principles, deviations between projection assumptions and actual experience in the future are to be expected. Such deviations may materially impact the value calculated.

This opinion is made solely to Himawari Life in accordance with the engagement letter between Himawari Life and Milliman. Milliman does not accept or assume any responsibility, duty of care or liability to anyone other than Himawari Life for or in connection with its review work, the opinion Milliman has formed or for any statements set forth in this opinion, to the fullest extent permitted by applicable law.

## 6. Glossary

	Term	Definition
B	Best estimate assumption	The assumption that is the most reasonably expected outcome as at the valuation date. Actual experience, the current situation and future expectations are considered. Margins for adverse deviation are not considered in the assumption.
C	Calibration	In this report this means the process whereby economic scenarios used for stochastic valuations are made consistent with the actual financial markets' relevant parameters.
	Cost of capital approach	One of the approaches to assess the risk that the actual value will diverge from the best estimate value. The allowance for the risk is set as the present value of the cost of holding capital until the risk is released.
	Cost of non-hedgeable risks	Allowance for risks not reflected in the time value of options and guarantees or in the certainty equivalent present value of future profits. Insurance risks that future experience will diverge from assumptions, such as mortality or lapses, are included. Economic risks related to assumptions for which no experience exists in the capital markets, such as extra-long term interest rates or volatility are also included.
E	EU Solvency II	An integrated new solvency framework on an economic value basis among EU countries, scheduled to be effective in January, 2013.
F	Free surplus	The portion of assets held in excess of statutory liabilities that it is not required to retain.
	Frictional costs	Allowance for investment costs and taxes due to investment in required capital, compared with direct investment in the capital markets.
I	Implied volatility	Theoretical volatility of option prices derived from the current market prices of the options, based on option pricing models.
L	Look through basis	A basis on which the impact of an action on an entire business group is considered, rather than only on a particular part of the group.
O	Options and guarantees	Policyholders are eligible for various options embedded in insurance policies, and the cost of providing such options is deducted from the MCEV. The intrinsic plus time value is the value of options and guarantees, and the value changes asymmetrically in response to changes in the observable capital markets.
P	Certainty equivalent present value of future profits	The present value of profits under a single scenario, reflecting future cash flows arising from the covered business. Risk free rates are used for the investment yield assumptions and the discount rates. The intrinsic value of options and guarantees is included in the certainty equivalent present value of future profits.

	Term	Definition
Q	QIS	Quantitative Impact Study, conducted prior to implementation of EU Solvency II. Especially, the fifth study conducted from August to November 2010 is called QIS5.
R	Required capital	The portion of assets held in excess of statutory liabilities whose distribution to shareholders is restricted...
	Risk-free rate	In this report, the risk-free rate means the reference rate prescribed in the MCEV Principles. The reference rate differs depending on currency, term and liquidity. Unless future cash flow is reasonably predictable the interest swap rate is used. If future cash flow is reasonably predictable a liquidity premium is added to the interest swap rate where appropriate.
	Risk margin	In the context of Solvency II, the risk margin is the cost of retaining capital for non-hedgeable risks reflected in the evaluation of insurance liabilities on an economic value basis.
	Risk neutral scenario	Risk neutrality means that market participants are indifferent to risk, being neither risk averse nor risk seeking. Risk neutral scenarios are those generated assuming risk neutrality.
T	Time value and intrinsic value	An option value can be thought of consisting of two parts, time value and intrinsic value. The intrinsic value of an option is the option pay-off that would be realized if the option was settled on the valuation date. The time value corresponds to the possibility of the option value increasing up to expiry.

# NEWS RELEASE

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May 19, 2011

## NIPPONKOA Life Insurance Discloses its Embedded Value as of March 31, 2011

NIPPONKOA Life Insurance Co., Ltd. (President: Kazuo Hashimoto) hereby announces its embedded value as of March 31, 2011 (end of FY2010).

### 1. Summary of embedded value

Embedded value (EV) is one of the measures of the corporate value of a life insurance company. It is the sum of the company's adjusted net worth (ANW), calculated using balance sheet and other data, and the present value of policies in force (value of in-force business; VIF).

Financial accounting measures currently used by life insurance companies recognize the value of newly written policies as accounting profits only after some time has passed. On the other hand, EV recognizes future profits from in-force business at the valuation date, and is useful as supplementary information to financial accounts.

### 2. Embedded value for the past three years

(Billion yen)

	March 31, 2009		March 31, 2010		March 31, 2011	
		change		change		change
<b>Embedded value</b>	<b>85.9</b>	<b>+2.4</b>	<b>96.1</b>	<b>+10.1</b>	<b>101.4</b>	<b>+5.4</b>
Adjusted net worth	26.4	-3.5	29.0	+2.6	28.9	-0.1
Value of in-force business	59.5	+5.9	67.1	+7.6	72.5	+5.5
Of which, value of new business	1.3	-1.6	1.3	-0.0	1.6	+0.3

#### Attachment:

NIPPONKOA Life Insurance's Embedded Value as of March 31, 2011

## NIPPONKOA Life Insurance's Embedded Value as of March 31, 2011

### 1. Embedded Value as of March 31, 2011

EV as of March 31, 2011, is as follows.  
(Billion yen)

	March 31, 2009		March 31, 2010		March 31, 2011	
		change		change		change
<b>Embedded value</b>	<b>85.9</b>	<b>+2.4</b>	<b>96.1</b>	<b>+10.1</b>	<b>101.4</b>	<b>+5.4</b>
Adjusted net worth (Note 1)	26.4	-3.5	29.0	+2.6	28.9	-0.1
Value of in-force business (Note 2)	59.5	+5.9	67.1	+7.6	72.5	+5.5
Of which, value of new business (Note 3)	1.3	-1.6	1.3	-0.0	1.6	+0.3

Note 1: Adjusted net worth = Net assets on the B/S + Price fluctuation reserve (after tax) + Contingency reserve (after tax) + Unallocated amount of policyholders' dividend reserve (after tax)

Note 2: Value of in-force business is the present value of future profits (after tax) discounted using the risk discount rate. Costs related to the capital required to maintain solvency are subtracted from future profits (after tax).

Note 3: Value of new business is the amount of total EV due to new policies written in the relevant fiscal year.

## 2. Major Assumptions

Major assumptions used in the EV calculation are as follows.

Assumption	Basis of assumption	
Morbidity	Based on actual past experience by insurance type, policy year, and on industry statistics	
Persistency	Based on actual past experience by insurance type, payment method, and policy year	
Expenses	Based on actual past expenses	
Investment yield on assets	March 31, 2010	March 31, 2011
	Assume investment of new funds in 10-year JGB (yield of approx. 1.39%) and 30-year JGB (yield of approx. 2.29%)  Investment yield in selected fiscal years: 2.06% (FY2011) 2.06% (FY2012) 2.07% (FY2013) 2.10% (FY2015) 2.15% (FY2020) 2.16% (FY2025) 2.16% (FY2030)	Assume investment of new funds in 10-year JGB (yield of approx. 1.25%) and 30-year JGB (yield of approx. 2.18%)  Investment yield in selected fiscal years: 1.96% (FY2011) 1.95% (FY2012) 1.96% (FY2013) 1.99% (FY2015) 2.05% (FY2020) 2.05% (FY2025) 2.06% (FY2030)
Corporate tax	Most recent effective tax rate (36.20%)	Most recent effective tax rate (36.19%)
Solvency margin	Maintenance of solvency margin ratio at 1000%	
Risk discount rate	8%	
	Set by adding the risk premium (6%) to the risk-free interest rate* *Assumed yield on 20-year JGB (approx. 2.17% as of March 31, 2010, and approx. 2.04% as of March 31, 2011)	

### 3. Impact of Changes in Assumptions (Sensitivity)

The impact on EV as of March 31, 2011, of changes to assumptions is as follows.

(Billion yen)

Change in assumptions	Impact on EV	EV amount
110% of morbidity rate	-5.2	96.1
110% of surrender rate	+0.3	101.7
110% of expenses (expenses associated with policy maintenance)	-2.0	99.4
0.25% lower investment yield on assets (new investments only)	-2.1	99.3
0.25% higher investment yield on assets (new investments only)	+2.1	103.6
Maintenance of solvency margin ratio at 800%	+0.0	101.5
Maintenance of solvency margin ratio at 1200%	-0.1	101.3
1% lower risk discount rate (to 7%)	+5.5	107.0
1% higher risk discount rate (to 9%)	-4.8	96.6

### 4. Factors Contributing to Change in EV

Factors contributing to change in EV from end-FY2008 to end-FY2009 and from end-FY2009 to end-FY2010 are as follows.

(Billion yen)

	FY2009	FY2010
EV at the end of the previous fiscal year	85.9	96.1
Value of new business	1.3	1.6
Expected return on embedded value at the end of the previous fiscal year (Note 1)	5.1	5.7
Impact of investment (Note 2)	3.2	-1.9
Differences between expected and actual performance for other items (Note 3)	0.5	-0.0
EV at fiscal year-end	96.1	101.4

Note 1: This is the expected increase in EV during the year by unwinding of the risk discount rate (VIF) and investment return assumptions (ANW).

Note 2: This is the impact of (a) changes in asset investment yield assumptions and (b) differences between expected and actual investment performance.

Note 3: This excludes the impact of differences between expected and actual investment performance and includes the impact of changes in assumptions other than the assumed investment yields on assets.

### 5. Cautionary Statement on the Use of Embedded Value

The calculation of EV involves certain assumptions, including assumptions as to future prospects, that are subject to risks and uncertainties. Actual outcomes may differ materially from those expressed or implied by these assumptions. Although EV is an indicator of the value of a life insurance company, the EV does not include the expected value of future new business, and the actual market value may differ materially from the EV for this and other reasons. Sufficient consideration is therefore required in the use of EV.



## Opinion of Independent Firm

NIPPONKOA Life Insurance requested Towers Watson, an independent firm with actuarial expertise, to review the appropriateness of the assumptions and valuation methods used in the EV calculation and the calculation results, and obtained the following opinion.

### TOWERS WATSON OPINION ON EMBEDDED VALUE OF NIPPONKOA LIFE AS AT 31 MARCH 2011

Towers Watson has reviewed the methodology and assumptions used to determine the embedded value results of Nipponkoa Life as at 31 March 2011, and has also reviewed the results of the calculations. The scope of Towers Watson's review covered the embedded value as at 31 March 2011, the value of new business issued in fiscal year 2010, the analysis of movement in the embedded value during fiscal year 2010 and the sensitivities of the embedded value to changes in assumptions, as calculated by Nipponkoa Life.

Towers Watson has concluded that

- the methodology used is consistent with recent industry practice as regards traditional actuarial embedded value calculations (based on discounted values of projected deterministic after-tax profits);
- the economic assumptions are internally consistent and have been set with regard to current economic conditions;
- the operating assumptions have been set with appropriate regard to past, current and future expected experience of Nipponkoa Life, taking into account the nature of Nipponkoa Life's business;
- the disclosed results have been prepared, in all material respects, in accordance with the methodology and assumptions set out in this disclosure document. To come to this conclusion, Towers Watson has performed checks on the results of the calculations, without, however, undertaking detailed checks of all the models, processes and calculations involved; and
- the allowance for risk has been made through the use of a single risk discount rate and assumptions on required capital and is consistent with recent industry practice as regards traditional actuarial embedded value calculations. This may not correspond to a capital markets valuation of such risk (so called "market consistent valuation").

In performing its review, Towers Watson relied extensively on a substantial body of information supplied by Nipponkoa Life and did not carry out an independent review of this information.

Financial projections used as a basis for the embedded value were developed based on a number of assumptions as to the current and future operating environment of Nipponkoa Life. It should be recognised that actual results can vary from those projected, even though the assumptions are considered to be appropriate.

The values shown are not intended to represent an opinion of market value and should not be interpreted in that manner.

This opinion is made solely to Nipponkoa Life in accordance with the terms of Towers Watson's engagement letter. To the fullest extent permitted by applicable law, Towers Watson does not accept or assume any responsibility, duty of care or liability to anyone other than Nipponkoa Life for or in connection with its review work, the opinions it has formed, or for any statement set forth in this opinion.