



[Unofficial Translation]

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## Disclosure of European Embedded Value as of March 31, 2018

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Dai-ichi Life Holdings, Inc. (hereinafter “Dai-ichi Life Holdings”) hereby discloses the European Embedded Value (“EEV”) of Dai-ichi Life Group (hereinafter “the Group”) as of March 31, 2018.

The Group EEV includes the EEV of the Dai-ichi Life Insurance Company, Limited (hereinafter “Dai-ichi Life”), The Dai-ichi Frontier Life Insurance Co., Ltd (hereinafter “Dai-ichi Frontier Life” or “DFL”), The Neo First Life Insurance Company, Limited (hereinafter “Neo First Life” or “NFL”), Protective Life Corporation (hereinafter “Protective Life”) and TAL Dai-ichi Life Australia Pty Limited (hereinafter “TAL”) and the EV of Dai-ichi Life Insurance Company of Vietnam, Limited (hereinafter “Dai-ichi Life Vietnam” or “DLVN”) calculated using traditional embedded value (“TEV”) methodology.

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## **1. Outline**

### **1-1 EEV Principles**

The EEV Principles and related guidance were published in May 2004 by the CFO Forum, an organization comprising the chief financial officers of Europe's leading life insurers, in order to improve consistency and transparency in embedded value reporting. In October 2005, further guidance on minimum required disclosures of sensitivities and other items was provided by the CFO Forum. In May 2016, the CFO Forum issued amended EEV Principles and guidance, where the disclosure requirements have been amended, allowing flexibility while ensuring that the scope of a company's disclosures are commensurate with the EV results shown and the level of disclosures are sufficient to enable users to understand the methodology and assumptions, key judgements and sensitivities of results to changes in key assumptions.

### **1-2 EEV Methodology**

In the calculation of EEV, the Group has mainly adopted a market-consistent approach. More specifically, the EEV for Dai-ichi Life, Dai-ichi Frontier Life, Neo First Life, TAL and variable annuity (hereinafter "VA") business of Protective Life are calculated based on a market-consistent approach, while the EEV for non-VA businesses of Protective Life is calculated based on a top-down approach.

A market-consistent approach is an approach which values cash flows from both assets and liabilities of a company consistently with comparable financial instruments traded in the market. A number of insurers, mainly in Europe, have implemented similar market-consistent approaches. A top-down approach is an approach which calculates an enterprise value using a discount rate which is determined in accordance with the risk characteristics of a company, business, product or geographic region. Both approaches are permitted under the EEV Principles.

The EV of Dai-ichi Life Vietnam is calculated by using TEV methodology in the Group EEV calculation process.

The Group has fully adopted the EEV Principles, while also taking into account a market-consistent approach, in calculating its EV.

## 2. EEV as of March 31, 2018

### 2-1 Group EEV

The Group EEV as of March 31, 2018 increased compared to the end of the previous fiscal year mainly due to (1) acquisition of new business and (2) an increase in unrealized gains on securities mainly attributable to stock market gains. The Group EEV as of March 31, 2018 is as follows:

(billions of yen)

	March 31, 2017	March 31, 2018	Increase (Decrease)
Group EEV	5,495.4	6,094.1	598.7
Covered business EEV	5,690.1	6,320.8	630.7
Adjusted net worth	6,073.5	6,723.9	650.3
Value of in-force business	(383.4)	(403.0)	(19.6)
Adjustment related to non-covered business	(194.6)	(226.6)	(32.0)

	Year ended March 31, 2017	Year ended March 31, 2018	Increase (Decrease)
Value of new business	145.5	190.2	44.7

(Note 1) Covered business EEV as of March 31, 2017 and as of March 31, 2018 is calculated as follows: Dai-ichi Life's EEV plus DFL's, NFL's, Protective Life's, TAL's EEV and DLVN's TEV attributable to Dai-ichi Life Holdings' equity stake in Dai-ichi Life, DFL, NFL, Protective Life, TAL and DLVN less Dai-ichi Life's carrying amount of preferred equity of TAL. Dai-ichi Life Holdings held 100.0% of the shares of Dai-ichi Life, DFL, NFL, Protective Life, TAL and DLVN as of March 31, 2017 and as of March 31, 2018 (i.e., including indirect holding of TAL's preferred equity through Dai-ichi Life, which was ¥21.5 billion as of March 31, 2017, and ¥21.0 billion as of March 31, 2018).

(Note 2) Adjustment related to non-covered business as of March 31, 2017 and as of March 31, 2018 includes total net assets of non-consolidated Dai-ichi Life Holdings, the unrealized gains (losses) of assets and liabilities of Dai-ichi Life Holdings and deduction of Dai-ichi Life Holdings' carrying amount of equity of Dai-ichi Life, DFL, NFL, Protective Life and TAL and investment in capital of DLVN, which is as follows:

*Dai-ichi Life Holdings' carrying amount of equity of the subsidiary insurance companies*

(billions of yen)

	March 31, 2017	March 31, 2018
Dai-ichi Life	530.0	530.0
Dai-ichi Frontier Life	181.9	181.9
Neo First Life	35.7	18.0
Protective Life	578.3	578.3
TAL	119.8	119.8
Dai-ichi Life Vietnam	11.8	27.9

(Note 3) The Group's value of new business for the year ended March 31, 2018 includes the value of new business of DLVN.

(Note 4) The Group EEV as of March 31, 2017 and as of March 31, 2018 includes Protective Life's EEV as of December 31, 2016 and as of December 31, 2017, respectively, in accordance with Protective Life's account closing date for the Group's consolidated financial statements. The Group's value of new business for the year ended March 31, 2017 and the year ended March 31, 2018 includes Protective Life's value of new business for the year ended December 31, 2016 and the year ended December 31, 2017, respectively.

(Note 5) The Group EEV as of March 31, 2017 and as of March 31, 2018 includes DLVN's TEV as of December 31, 2016 and as of December 31, 2017, respectively, in accordance with DLVN's account closing date for the Group's consolidated financial statements. The Group's value of new business for the year ended March 31, 2018 includes DLVN's value of new business for year ended December 31, 2017.

(Reference)

Unrealized gains (losses) which constitute a part of adjusted net worth are expected to be realized as accounting profits in the future, therefore the sum of value of in-force business and unrealized gains (losses) may be considered to represent expected future profits from in-force business.

The breakdown of Group EEV based on this idea is as follows.

(billions of yen)

	March 31, 2017	March 31, 2018	Increase (Decrease)
Group EEV	5,495.4	6,094.1	598.7
Total net assets on the balance sheet + Retained earnings in liabilities <sup>(Note 1)</sup>	1,524.5	1,770.7	246.2
Value of in-force business + Unrealized gains (losses) of fixed income assets <sup>(Note 2)</sup>	2,400.8	2,416.2	15.3
Unrealized gains (losses) of assets other than fixed income assets <sup>(Note 3)</sup>	1,570.0	1,907.1	337.1

(Note 1) This item is calculated by deducting the amount of unrealized gains (losses) from sum of the Group's adjusted net worth and adjustment related to non-covered business. It represents accumulated amount of realized profits.

(Note 2) The sum of the Group's value of in-force business, unrealized gains (losses) of fixed income assets of Dai-ichi Life and unrealized gains (losses) of assets of DFL or NFL is reported. It is a component of unrealized profits which is mainly affected by interest rate; the change in the value of in-force business due to interest rate fluctuation is offset by the change in unrealized gains (losses) of fixed income assets.

(Note 3) The amount of unrealized gains (losses) of assets other than fixed income assets of Dai-ichi Life, including equities, un-hedged foreign bonds and real estate, is reported.

## 2-1-1 Adjusted Net Worth

Adjusted net worth represents the net assets attributed to shareholders and represents the market value of assets in excess of statutory policy reserves (excluding contingency reserve), and other liabilities (excluding reserve for price fluctuations).

In other words, adjusted net worth is calculated by adjusting the total net assets on the balance sheet for the retained earnings in liabilities, general reserve for possible loan losses, unrealized gains/losses in assets/liabilities not accounted for under the mark-to-market methodology, unfunded retirement benefit obligations, and tax effect equivalent of the items above. The methodology for deriving adjusted net worth is described in Appendix A and Appendix C.

Adjusted net worth as of March 31, 2018 increased from the end of previous fiscal year mainly due to an increase in unrealized gains attributable to domestic and foreign stock market gains.

The breakdown of the Group's adjusted net worth is as follows:

(billions of yen)

	March 31, 2017	March 31, 2018	Increase (Decrease)
Adjusted net worth	6,073.5	6,723.9	650.3
Total net assets on the balance sheet <sup>(Note 1)</sup>	1,168.0	1,368.4	200.3
Retained earnings in liabilities <sup>(Note 2)</sup>	935.8	984.6	48.8
General reserve for possible loan losses	0.7	0.4	(0.2)
Unrealized gains (losses) on securities and miscellaneous items <sup>(Note 3)</sup>	5,600.1	6,056.5	456.3
Unrealized gains (losses) on loans	247.7	221.1	(26.6)
Unrealized gains (losses) on real estate <sup>(Note 4)</sup>	185.2	262.2	76.9
Unrealized gains (losses) on liabilities <sup>(Note 5)</sup>	(21.3)	(9.3)	11.9
Unfunded retirement benefit obligation <sup>(Note 6)</sup>	(27.6)	(9.5)	18.0
Tax effect equivalent of above items	(1,887.7)	(2,045.2)	(157.5)
Consolidation adjustment regarding Covered business <sup>(Note 7)</sup>	(21.5)	(21.0)	0.5
Adjustment for deferred tax assets in Protective Life and miscellaneous items <sup>(Note 8)</sup>	(37.7)	(21.2)	16.5
Adjustment for intangible assets in TAL and miscellaneous items <sup>(Note 9)</sup>	(68.2)	(63.0)	5.1

(Note 1) The total of valuation and translation adjustments is excluded. An adjustment amount regarding the surplus relief reinsurance for DFL is added to the total net assets.

(Note 2) The sum of reserve for price fluctuations, contingency reserve, the unallocated portion of reserve for policyholder dividends, and asset valuation reserve is reported.

(Note 3) For purposes of EEV calculations, domestic listed stocks are recorded at their market value as of the end of the reporting period, whereas for accounting purposes under Japanese GAAP, they are recorded on the balance sheet at their average value during the last month of the reporting period. The difference (the value for purposes of EEV calculations less the value recorded on our balance sheet) (after tax) was ¥(50.9) billion as of March 31, 2017, and ¥6.0 billion as of March 31, 2018.

(Note 4) With respect to land, the difference between fair value and carrying value before revaluation is posted.

*(Note 5) The figure includes the unrealized gains (losses) in subordinated debt that Dai-ichi Life issued.*

*(Note 6) The sum of unrecognized gains/losses on plan amendments and unrecognized actuarial differences is reported.*

*(Note 7) With respect to the covered business EEV as of March 31, 2017 and as of March 31, 2018, Dai-ichi Life' carrying amount of preferred equity of TAL, which are included in "Total net assets on the balance sheet" and "Unrealized gains (losses) on securities and miscellaneous items", is deducted to offset.*

*(Note 8) An adjustment is made for Protective Life's deferred tax assets, non-admitted assets on its statutory balance sheet and for other miscellaneous items.*

*(Note 9) An adjustment is made for TAL's intangible assets, including goodwill and value of in-force business.*

*(Note 10) All the items from "Total net assets on the balance sheet" to "Tax effect equivalent of above items" display the sum of the figures for Dai-ichi Life, DFL, NFL, Protective Life TAL and DLVN.*

## 2-1-2 Value of In-force Business

The value of in-force business is the amount of (i) present value of future profits, less (ii) time value of financial options and guarantees, less (iii) cost of holding required capital, less (iv) cost of non-hedgeable risks. Investment cash flows to determine the certainty equivalent present value of future profits for business valued using a market-consistent approach are calculated assuming that investment yields of all assets are equivalent to the risk-free rate. Value of in-force business as of March 31, 2018 decreased from the end of previous fiscal year mainly because the effect of a decrease of domestic interest rates exceeded the effect of acquisition of new business.

The methodology for deriving value of in-force business is described in Appendix A and Appendix C, and the assumptions for the risk-free rates are shown in Appendix B and Appendix C.

The breakdown of the Group's value of in-force business is as follows:

(billions of yen)

	March 31, 2017	March 31, 2018	Increase (Decrease)
Value of in-force business	(383.4)	(403.0)	(19.6)
Present value of future profits <sup>(Note 1)(Note 2)</sup>	110.0	85.7	(24.3)
Time value of financial options and guarantees	(141.3)	(137.1)	4.1
Cost of holding required capital <sup>(Note 3)</sup>	(137.8)	(139.2)	(1.3)
Cost of non-hedgeable risks	(214.4)	(212.3)	2.0

(Note 1) An adjustment regarding the surplus relief reinsurance is made for DFL's EEV calculation.

(Note 2) Including the certainty equivalent present value of future profits for business valued using a market-consistent approach and present value of future profits for business valued using a top-down approach and a traditional methodology.

(Note 3) Including the frictional cost of capital for business valued using a market-consistent approach and the cost of capital for business valued using a top-down approach and a traditional methodology.



### 2-1-3 Adjustment related to non-covered business

With respect to the business of Dai-ichi Life Holdings and its subsidiaries/affiliated companies (except for subsidiaries categorized in the scope of covered business which are operating life insurance business), the value of their business is included in the Group EEV as “Adjustment related to non-covered business.” This item includes total net assets of non-consolidated Dai-ichi Life Holdings and appropriate adjustments.

(billions of yen)

	March 31, 2017	March 31, 2018	Increase (Decrease)
Adjustment related to non-covered business	(194.6)	(226.6)	(32.0)
Total net assets on the balance sheet of non-consolidated Dai-ichi Life Holdings	1,224.8	1,209.3	(15.5)
Unrealized gains/losses of asset and liabilities of Dai-ichi Life Holdings <sup>(Note 1)</sup>	54.5	35.0	(19.4)
Consolidation adjustment regarding the Group <sup>(Note 2)</sup>	(1,474.0)	(1,471.0)	2.9

*(Note1) With respect to the equity of subsidiaries/affiliated companies of Dai-ichi Life Holdings and debt of Dai-ichi Life Holdings, unrealized gains (losses) have been reflected.*

*(Note2) This item includes the deduction of Dai-ichi Life Holdings' carrying amount of equity of Dai-ichi Life, DFL, NFL, Protective Life and TAL and investment in capital of DLVN.*

## 2-1-4 Value of New Business

The value of new business is the value at the time of sale, after all acquisition-related costs, of new policies (including net increase by conversion) obtained during the reporting period. The value of new business for the fiscal year ended March 31, 2018 increased from the end of previous fiscal year mainly due to Dai-ichi Life's shift to protection-type products. The breakdown of value of new business for the fiscal year ended March 31, 2018 is as follows:

(billions of yen)

	Year ended March 31, 2017	Year ended March 31, 2018	Increase (Decrease)
Value of new business <sup>(Note 1)</sup>	145.5	190.2	44.7
Present value of future profits <sup>(Note 2)</sup>	175.8	211.0	35.1
Time value of financial options and guarantees	(4.9)	(1.4)	3.5
Cost of holding required capital <sup>(Note 3)</sup>	(9.5)	(11.6)	(2.0)
Cost of non-hedgeable risks	(15.7)	(7.6)	8.1

(Note 1) The Group's value of new business for the year ended March 31, 2018 includes the value of new business of DLVN.

(Note 2) Including the certainty equivalent present value of future profits for business valued using a market-consistent approach and present value of future profits for business valued using a top-down approach and a traditional methodology.

(Note 3) Including the frictional cost of capital for business valued using a market-consistent approach and the cost of capital for business valued using a top-down approach and a traditional methodology.

(Note 4) Group's value of new business for the year ended March 31, 2017 includes Protective Life's value of new business for the year ended December 31, 2016. Group's value of new business for the year ended March 31, 2018 includes Protective Life's value of new business for the year ended December 31, 2017.

(Note 5) Group's value of new business for the year ended March 31, 2018 includes DLVN's value of new business for the year ended December 31, 2017.

The new business margins (the ratio of the value of new business to the present value of premium income) are as follows:

(billions of yen)

	Year ended March 31, 2017	Year ended March 31, 2018	Increase (Decrease)
Value of new business	145.5	190.2	44.7
Present Value of Premium Income <sup>(Note)</sup>	4,953.1	4,427.2	(525.8)
New Business Margin	2.94%	4.30%	1.36 points

(Note) Future premium income (as for Protective Life, based on the statutory accounting) is discounted by the risk-free rate or the risk discount rate used for the value of new business calculation.

## 2-2 EEV by Company

### (1) Dai-ichi Life

(billions of yen)

	March 31, 2017	March 31, 2018	Increase (Decrease)
EEV <i>(Note 1)</i>	4,427.6	4,887.0	459.4
Adjusted net worth	5,351.9	5,878.1	526.2
Total net assets <i>(Note 2)</i>	561.2	696.0	134.8
Retained earnings in liabilities <i>(Note 3)</i>	782.5	810.5	28.0
General reserve for possible loan losses	0.7	0.4	(0.2)
Unrealized gains (losses) on securities and miscellaneous items <i>(Note 4)</i>	5,476.3	5,911.1	434.8
Unrealized gains (losses) on loans	247.7	221.1	(26.6)
Unrealized gains (losses) on real estate <i>(Note 5)</i>	185.2	262.2	76.9
Unrealized gains (losses) on liabilities <i>(Note 6)</i>	(21.3)	(9.3)	11.9
Unfunded retirement benefit obligation <i>(Note 7)</i>	(27.6)	(9.5)	18.0
Tax effect equivalent of above items	(1,853.0)	(2,004.5)	(151.5)
Value of in-force business	(924.2)	(991.0)	(66.8)
Certainty equivalent present value of future profits	(597.3)	(675.8)	(78.4)
Time value of financial options and guarantees	(107.1)	(99.9)	7.1
Cost of holding required capital	(18.9)	(16.9)	2.0
Cost of non-hedgeable risks	(200.7)	(198.3)	2.3

	Year ended March 31, 2017	Year ended March 31, 2018	Increase (Decrease)
Value of new business	111.0	149.0	38.0
Certainty equivalent present value of future profits	130.8	155.3	24.4
Time value of financial options and guarantees	(4.0)	(0.8)	3.2
Cost of holding required capital	(1.9)	(0.5)	1.4
Cost of non-hedgeable risks	(13.8)	(4.9)	8.8

*(Note 1) Dai-ichi Life's carrying amount of preferred equity of TAL is included in EEV of Dai-ichi Life as of March 31, 2017 and as of March 31, 2018.*

*(Note 2) The total of valuation and translation adjustments is excluded.*

*(Note 3) The sum of reserve for price fluctuations, contingency reserves and the unallocated portion of reserve for policyholder dividends is reported.*

*(Note 4) For purposes of EEV calculations, domestic listed stocks are recorded at their market value as of the end of the reporting period, whereas for accounting purposes, they are recorded on the balance sheet at their average value during the last month of the reporting period. The difference (the value for purposes of EEV calculations less the value recorded on our balance sheet) (after tax) is ¥(50.9) billion as of March 31, 2017, and ¥6.0 billion as of March 31, 2018.*

*(Note 5) With respect to land, the difference between fair value and carrying value before revaluation is posted.*

*(Note 6) The figure includes the unrealized gains (losses) in subordinated debt that Dai-ichi Life issued.*

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*(Note 7) The sum of unrecognized gains/losses on plan amendments and unrecognized actuarial differences is reported.*

The new business margins are as follows:

(billions of yen)

	Year ended March 31, 2017	Year ended March 31, 2018	Increase (Decrease)
Value of new business	111.0	149.0	38.0
Present Value of Premium Income <sup>(Note)</sup>	3,355.2	2,133.4	(1,221.7)
New Business Margin	3.31%	6.98%	3.68 points

*(Note) Future premium income is discounted by the risk-free rate used for the value of new business calculation.*

## (2) Dai-ichi Frontier Life

(billions of yen)

	March 31, 2017	March 31, 2018	Increase (Decrease)
EEV	353.7	401.9	48.1
Adjusted net worth	156.6	243.9	87.3
Total net assets <i>(Note 1)</i>	93.0	130.0	37.0
Adjustment regarding the surplus relief reinsurance for DFL	(150.6)	(127.0)	23.6
Retained earnings in liabilities <i>(Note 2)</i>	125.1	136.3	11.1
General reserve for possible loan losses	0.0	0.0	0.0
Unrealized gains (losses) on securities and miscellaneous items	123.7	145.3	21.5
Tax effect equivalent of above items	(34.6)	(40.7)	(6.0)
Value of in-force business	197.1	157.9	(39.1)
Certainty equivalent present value of future profits	215.0	172.7	(42.2)
Present value of future profits excluding the item below	64.3	45.6	(18.6)
Adjustment regarding the surplus relief reinsurance	150.6	127.0	(23.6)
Time value of financial options and Guarantees	(12.1)	(8.5)	3.6
Cost of holding required capital	(0.9)	(1.0)	0.0
Cost of non-hedgeable risks	(4.6)	(5.1)	(0.4)

	Year ended March 31, 2017	Year ended March 31, 2018	Increase (Decrease)
Value of new business	17.5	13.1	(4.4)
Certainty equivalent present value of future profits	18.4	14.7	(3.7)
Time value of financial options and guarantees	0.0	0.0	0.0
Cost of holding required capital	(0.1)	(0.4)	(0.2)
Cost of non-hedgeable risks	(0.7)	(1.2)	(0.4)

*(Note 1) The total of valuation and translation adjustments is excluded.**(Note 2) The sum of the reserve for price fluctuations and contingency reserve is reported.*

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The new business margins are as follows:

(billions of yen)

	Year ended March 31, 2017	Year ended March 31, 2018	Increase (Decrease)
Value of new business	17.5	13.1	(4.4)
Present Value of Premium Income <sup>(Note)</sup>	865.3	1,366.6	501.3
New Business Margin	2.03%	0.96%	(1.07) points

*(Note) Future premium income is discounted by the risk-free rate used for the value of new business calculation.*

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### (3) Neo First Life

(billions of yen)

	March 31, 2017	March 31, 2018	Increase (Decrease)
EEV	38.0	50.7	12.7
Adjusted net worth	21.9	18.7	(3.1)
Total net assets <sup>(Note 1)</sup>	21.4	18.1	(3.3)
Retained earnings in liabilities <sup>(Note 2)</sup>	0.5	0.6	0.1
Unrealized gains (losses) on securities and miscellaneous items	0.0	0.0	0.0
Value of in-force business	16.1	31.9	15.8
Certainty equivalent present value of future profits	17.5	33.8	16.2
Time value of financial options and guarantees	0.0	0.0	0.0
Cost of holding required capital	0.0	0.0	0.0
Cost of non-hedgeable risks	(1.3)	(1.7)	(0.4)

	Year ended March 31, 2017	Year ended March 31, 2018	Increase (Decrease)
Value of new business	(3.9)	3.0	6.9
Certainty equivalent present value of future profits	(3.4)	3.8	7.3
Time value of financial options and guarantees	0.0	0.0	0.0
Cost of holding required capital	0.0	0.0	0.0
Cost of non-hedgeable risks	(0.4)	(0.8)	(0.3)

(Note 1) The total of valuation and translation adjustments is excluded.

(Note 2) The sum of the reserve for price fluctuations and contingency reserve is reported.

The new business margins are as follows:

(billions of yen)

	Year ended March 31, 2017	Year ended March 31, 2018	Increase (Decrease)
Value of new business	(3.9)	3.0	6.9
Present Value of Premium Income <sup>(Note)</sup>	21.6	100.0	78.4
New Business Margin	(18.13%)	3.06%	21.18 points

(Note) Future premium income is discounted by the risk-free rate used for the value of new business calculation.

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(Reference) The value of new business based on ultimate unit-costs

For NFL, improvement of operating efficiency is expected in the future with the progress of business expansion because the new business has been operated for only a short period of time. Therefore, based on the projection of new business trend and of operating expenses in the mid-term business plan, unit-costs are assumed to decrease over 8 years; it is expected to reach an ultimate level within 10 years after new business expansion started. In conjunction with this, allowance has been made for the uncertainty in the realization of the projection in the cost of non-hedgeable risks.

Value of new business calculated based on the assumption that the ultimate unit-costs are realized at the time of sale is as follows:

(billions of yen)

	Year ended March 31, 2017	Year ended March 31, 2018	Increase (Decrease)
Value of new business (based on ultimate unit-costs)	2.4	8.6	6.2
Certainty equivalent present value of future profits	2.4	8.8	6.3
Time value of financial options and guarantees	0.0	0.0	0.0
Cost of holding required capital	0.0	0.0	0.0
Cost of non-hedgeable risks <sup>(Note)</sup>	0.0	0.0	0.0

*(Note) In the calculation of value of new business based on ultimate unit-costs, a decrease of unit-costs is assumed to realize. Therefore, the cost of non-hedgeable risks which corresponds to uncertainty in the realization of the projection is set to be zero.*

The new business margins are as follows:

(billions of yen)

	Year ended March 31, 2017	Year ended March 31, 2018	Increase (Decrease)
Value of new business(based on ultimate unit-costs)	2.4	8.6	6.2
Present Value of Premium Income <sup>(Note)</sup>	21.6	100.0	78.4
New Business Margin(based on ultimate unit-costs)	11.21%	8.69%	(2.52) points

*(Note) Future premium income is discounted by the risk-free rate used for the value of new business calculation.*



## (4) Protective Life

(billions of yen)

	December 31, 2016	December 31, 2017	Increase (Decrease)
EEV	589.8	658.6	68.8
Adjusted net worth	421.4	442.1	20.6
Total net assets <sup>(Note 1)</sup>	431.6	426.2	(5.3)
Retained earnings in liabilities <sup>(Note 2)</sup>	27.6	37.0	9.4
Adjustment for deferred tax assets and miscellaneous items <sup>(Note 3)</sup>	(37.7)	(21.2)	16.5
Value of in-force business	168.3	216.5	48.2
Present value of future profits <sup>(Note 4)</sup>	292.0	348.6	56.6
Time value of financial options and guarantees	(21.3)	(28.6)	(7.3)
Cost of holding required capital <sup>(Note 5)</sup>	(101.1)	(102.1)	(1.0)
Cost of non-hedgeable risks	(1.1)	(1.2)	0.0

	Year ended December 31, 2016	Year ended December 31, 2017	Increase (Decrease)
Value of new business	3.8	1.2	(2.6)
Present value of future profits <sup>(Note 4)</sup>	10.5	9.2	(1.3)
Time value of financial options and guarantees	(0.9)	(0.6)	0.3
Cost of holding required capital <sup>(Note 5)</sup>	(5.7)	(7.3)	(1.6)
Cost of non-hedgeable risks	0.0	0.0	0.0

(Note 1) The sum of net assets based on statutory capital and surplus, value of non-life entities and adjustment for holding company's equity.

(Note 2) Asset valuation reserve is reported.

(Note 3) An adjustment is made for Protective Life's deferred tax assets, non-admitted assets on its statutory accounting and other miscellaneous items.

(Note 4) Including the certainty equivalent present value of future profits for business valued using a market-consistent approach and the present value of future profits for business valued using a top-down approach.

(Note 5) Including the frictional cost of capital for business valued using a market-consistent approach and the cost of capital for business valued using a top-down approach.

[Unofficial translation]

The new business margins are as follows:

(billions of yen)

	Year ended December 31, 2016	Year ended December 31, 2017	Increase (Decrease)
Value of new business	3.8	1.2	(2.6)
Present Value of Premium Income <sup>(Note)</sup>	544.3	527.4	(16.9)
New Business Margin	0.71%	0.24%	(0.47) points

(Note) Future premium income (based on the statutory accounting) is discounted by the risk-free rate or the risk discount rate used for the value of new business calculation.

The breakdowns of value of in-force business and value of new business are as follows:

(billions of yen)

	December 31, 2016	December 31, 2017	Increase (Decrease)
Value of in-force business	168.3	216.5	48.2
Non-VA business (Top-down approach)	171.9	189.9	17.9
Present value of future profits	272.7	291.9	19.1
Cost of capital	(100.8)	(102.0)	(1.2)
VA business (Market-consistent approach)	(3.6)	26.6	30.2
Certainty equivalent present value of future profits	19.2	56.7	37.4
Time value of financial options and guarantees	(21.3)	(28.6)	(7.3)
Cost of holding required capital	(0.3)	(0.1)	0.2
Cost of non-hedgeable risks	(1.1)	(1.2)	0.0

[Unofficial translation]

(billions of yen)

	Year ended December 31, 2016	Year ended December 31, 2017	Increase (Decrease)
Value of new business	3.8	1.2	(2.6)
Non-VA business (Top-down approach)	4.2	0.9	(3.2)
Present value of future profits	9.8	8.1	(1.6)
Cost of capital	(5.6)	(7.2)	(1.6)
VA business (Market-consistent approach)	(0.3)	0.3	0.6
Certainty equivalent present value of future profits	0.7	1.0	0.2
Time value of financial options and guarantees	(0.9)	(0.6)	0.3
Cost of holding required capital	0.0	0.0	0.0
Cost of non-hedgeable risks	0.0	0.0	0.0

The new business margins are as follows:

(billions of yen)

	Year ended December 31, 2016	Year ended December 31, 2017	Increase (Decrease)
Value of new business of non-VA business (Top-down approach)	4.2	0.9	(3.2)
Present Value of Premium Income of non-VA business <sup>(Note 1)</sup> (Top-down approach)	475.2	479.3	4.1
New Business Margin of non-VA business (Top-down approach)	0.89%	0.20%	(0.69) points
Value of new business of VA business (Market-consistent approach)	(0.3)	0.3	0.6
Present Value of Premium Income of VA business <sup>(Note 2)</sup> (Market-consistent approach)	69.1	48.0	(21.0)
New Business Margin of VA business (Market-consistent approach)	(0.47%)	0.69%	1.16 points

(Note 1) Future premium income (based on the statutory accounting) is discounted by the risk discount rate used for the value of new business calculation.

(Note 2) Future premium income (based on the statutory accounting) is discounted by the risk-free rate used for the value of new business calculation.

[Unofficial translation]

(Reference) Protective Life's EEV in US Dollar

(millions of USD)

	December 31, 2016	December 31, 2017	Increase (Decrease)
EEV	5,063	5,828	765
Adjusted net worth	3,618	3,912	294
Total net assets	3,705	3,772	66
Retained earnings in liabilities	236	328	91
Adjustment for deferred tax assets and miscellaneous items	(324)	(188)	136
Value of in-force business	1,444	1,916	471
Present value of future profits	2,507	3,085	578
Time value of financial options and guarantees	(183)	(253)	(70)
Cost of holding required capital	(868)	(904)	(35)
Cost of non-hedgeable risks	(10)	(11)	0

	Year ended December 31, 2016	Year ended December 31, 2017	Increase (Decrease)
Value of new business	33	11	(22)
Present value of future profits	90	81	(9)
Time value of financial options and guarantees	(7)	(5)	2
Cost of holding required capital	(48)	(64)	(15)
Cost of non-hedgeable risks	0	0	0

[Unofficial translation]

(5) TAL

(billions of yen)

	March 31, 2017	March 31, 2018	Increase (Decrease)
EEV	268.9	282.0	13.1
Adjusted net worth	128.4	132.9	4.4
Total net assets	196.6	196.0	(0.6)
Adjustment for intangible assets and miscellaneous items <sup>(Note)</sup>	(68.2)	(63.0)	5.1
Value of in-force business	140.4	149.1	8.6
Certainty equivalent present value of future profits	160.6	168.9	8.3
Time value of financial options and guarantees	(0.6)	0.0	0.6
Cost of holding required capital	(13.0)	(14.0)	(0.9)
Cost of non-hedgeable risks	(6.4)	(5.8)	0.5

	Year ended March 31, 2017	Year ended March 31, 2018	Increase (Decrease)
Value of new business	16.9	18.6	1.6
Certainty equivalent present value of future profits	19.3	20.9	1.5
Time value of financial options and guarantees	0.0	0.0	0.0
Cost of holding required capital	(1.6)	(1.6)	0.0
Cost of non-hedgeable risks	(0.7)	(0.6)	0.0

(Note) An adjustment is made for TAL's intangible assets, including goodwill and value of in-force business.

The new business margins are as follows:

(billions of yen)

	Year ended March 31, 2017	Year ended March 31, 2018	Increase (Decrease)
Value of new business	16.9	18.6	1.6
Present Value of Premium Income <sup>(Note)</sup>	166.6	231.8	65.2
New Business Margin	10.20%	8.04%	(2.15) points

(Note) Future premium income is discounted by the risk-free rate used for the value of new business calculation.

[Unofficial translation]

(Reference) TAL's EEV in Australian Dollar

(millions of AUD)

	March 31, 2017	March 31, 2018	Increase (Decrease)
EEV	3,132	3,453	321
Adjusted net worth	1,496	1,627	131
Total net assets	2,291	2,400	108
Adjustment for intangible assets and miscellaneous items	(794)	(772)	22
Value of in-force business	1,636	1,826	189
Certainty equivalent present value of future profits	1,871	2,068	197
Time value of financial options and guarantees	(7)	0	7
Cost of holding required capital	(152)	(171)	(19)
Cost of non-hedgeable risks	(74)	(71)	3

	Year ended March 31, 2017	Year ended March 31, 2018	Increase (Decrease)
Value of new business	197	228	30
Certainty equivalent present value of future profits	225	255	30
Time value of financial options and guarantees	0	0	0
Cost of holding required capital	(19)	(19)	0
Cost of non-hedgeable risks	(8)	(7)	0

[Unofficial translation]

(6) Dai-ichi Life Vietnam

(billions of yen)

	December 31, 2016	December 31, 2017	Increase (Decrease)
TEV	33.4	61.3	27.8
Adjusted net worth	14.7	28.9	14.2
Value of in-force business	18.7	32.3	13.6
Present value of future profits	22.2	37.3	15.0
Cost of capital	(3.5)	(5.0)	(1.4)

	Year ended December 31, 2017
Value of new business	5.1
Present value of future profits	6.9
Cost of capital	(1.7)

The new business margins are as follows:

(billions of yen)

	Year ended December 31, 2017
Value of new business	5.1
Present Value of Premium Income <sup>(Note)</sup>	67.7
New Business Margin	7.68%

(Note) Future premium income is discounted by the discount rate used for the value of new business calculation.

(Reference) DLVN's TEV in Vietnamese Dong

(billions of VND)

	December 31, 2016	December 31, 2017	Increase (Decrease)
TEV	6,560	12,262	5,702
Adjusted net worth	2,891	5,790	2,898
Value of in-force business	3,668	6,472	2,803
Present value of future profits	4,369	7,476	3,106
Cost of capital	(700)	(1,003)	(302)

	Year ended December 31, 2017
Value of new business	1,039
Present value of future profits	1,382
Cost of capital	(343)

**3. Movement Analysis****3-1 Movement Analysis of Group EEV**

(billions of yen)

	Adjusted net worth	Value of in-force business	Covered business EEV	Adjustment related to non- covered business	Group EEV
Values as of March 31, 2017	6,073.5	(383.4)	5,690.1	(194.6)	5,495.4
(1) Adjustments to the values as of March 31, 2017	(61.9)	(12.2)	(74.2)	(30.7)	(105.0)
Shareholder dividend	0.0	0.0	0.0	(50.7)	(50.7)
Repurchase of the company's shares	0.0	0.0	0.0	(22.9)	(22.9)
Shareholder dividend from the subsidiary insurance companies	(47.9)	0.0	(47.9)	47.9	0.0
Capital increase	4.9	0.0	4.9	(4.9)	0.0
Foreign exchange variance	(19.0)	(12.2)	(31.3)	0.0	(31.3)
Adjusted values as of March 31, 2017	6,011.5	(395.7)	5,615.8	(225.4)	5,390.4
(2) Value of new business	0.0	190.2	190.2	0.0	190.2
(3) Expected existing business contribution (market-consistent approach)	15.4	306.6	322.1	0.0	322.1
Risk-free rate	(14.3)	34.2	19.9	0.0	19.9
In excess of risk-free rate	29.7	272.4	302.2	0.0	302.2
(4) Expected existing business contribution (top-down approach)	11.6	22.7	34.4	0.0	34.4
(5) Expected transfer from VIF to adjusted net worth	(95.7)	95.7	0.0	0.0	0.0
In-force business at beginning of the fiscal year	121.7	(121.7)	0.0	0.0	0.0
New business	(217.5)	217.5	0.0	0.0	0.0
(6) Non-economic experience variances	(6.3)	(18.8)	(25.2)	0.0	(25.2)
(7) Non-economic assumptions changes	0.1	(46.2)	(46.1)	0.0	(46.1)
(8) Economic variances	773.6	(623.1)	150.5	0.0	150.5
(9) Changes in value of non-covered business	0.0	0.0	0.0	14.8	14.8
(10) Other variances	(2.5)	65.3	62.8	0.0	62.8
(11) Adjustments to the values as of March 31, 2018	16.0	0.0	16.0	(16.0)	0.0
Capital increase	16.0	0.0	16.0	(16.0)	0.0
Values as of March 31, 2018	6,723.9	(403.0)	6,320.8	(226.6)	6,094.1

(Note) In the movement analysis of Group EEV, the variance of DLVN's TEV from December 31, 2016 to December 31, 2017 other than foreign exchange variance, value of new business and capital increase is included in "Economic variances".



(1) Adjustments to the values as of March 31, 2017

This item includes the following breakdowns.

- i. A ¥50.7 billion decrease of net assets as Dai-ichi Life Holdings paid out shareholder dividends during the year ended March 31, 2018.
- ii. A ¥22.9 billion decrease of net assets as Dai-ichi Life Holdings repurchased its own shares during the year ended March 31, 2018.
- iii. Adjustment of ¥47.9 billion shareholder dividend to Dai-ichi Life Holdings by covered business during the year ended March 31, 2018, which does not affect the Group EEV.
- iv. Adjustment of ¥4.9 billion capital increase to Neo First Life by Dai-ichi Life Holdings during the year ended March 31, 2018, which does not affect the Group EEV.
- v. The foreign exchange variance of EEVs of Protective Life and TAL and TEV of Dai-ichi Life Vietnam.

(2) Value of new business

The value of new business represents the value at the time of sale, after all acquisition-related costs, attributable to new business obtained during the fiscal year ended March 31, 2018. Protective Life's value of new business reflects the impact of United States tax reform in 2017.

(3) Expected existing business contribution (market-consistent approach)

This item includes the expected existing business contribution of Dai-ichi Life, DFL, NFL, TAL and Protective Life's VA business, including the required capital of VA business, with the following breakdowns.

i. Risk-free rate

In calculating the value of in-force business, future expected profits are discounted back using risk-free rates, which is released over time. This item also includes the release of time value of financial options and guarantees, cost of holding required capital and cost of non-hedgeable risks for the fiscal year ended March 31, 2018. Moreover, this item includes the expected return on the assets backing adjusted net worth using risk-free rates.

This item includes the expected profit/loss over time derived from derivative transactions, which Dai-ichi Frontier Life utilizes to reduce minimum guarantee risks of variable annuities.

ii. In excess of risk-free rate

Rates of future expected returns are assumed to be risk-free rates in calculating EEV. However, the Group expects higher rates of returns on these assets than the risk-free rates. In calculating this item, the Group uses the expected rates of returns described in Appendix B and Appendix C.

This item includes the expected profit/loss from the higher rate of returns than the risk-free rates derived from derivative transactions for reducing minimum guarantee risks of variable annuities by Dai-ichi Frontier Life.

This item also includes the expected profit/loss from derivative transactions for hedging against the VA business of Protective Life.

(4) Expected existing business contribution (top-down approach)

This item reflects Protective Life's non-VA business including free surplus and required capital of non-VA business.

In calculating the value of in-force business, future expected profits are discounted back using the risk discount rates, which is released over time. This item also includes the release for the fiscal year ended March 31, 2018 of the cost of capital. Moreover, this item includes the expected return on the assets backing adjusted net worth.

(5) Expected transfer from VIF (value of in-force business) to adjusted net worth

The total expected profit during the fiscal year ended March 31, 2018 on a statutory accounting basis is transferred to the adjusted net worth. This item includes the profit expected to emerge from business in-force at the beginning of the reporting period and the expected emergence of profits/losses in the adjusted net worth, including the impact of acquisition costs which arise from the new business issued in the period. Note that the transferred amounts do not affect the total amount of Group EEV.

(6) Non-economic experience variances

This item represents the difference between (i) the non-economic assumptions, which were used for calculating EEV as of March 31, 2017 and (ii) the actual experience during the fiscal year ended March 31, 2018 corresponding to such assumptions.

(7) Non-economic assumptions changes

This item quantifies the amount of change attributable to increase/decrease in future profits/losses after March 31, 2018 due to making changes in the non-economic assumptions.

(8) Economic variances

This item represents the impact of differences between actual investment returns in the period and the expected investment returns and the impact on the value of in-force business from the change to the end of period economic assumptions.

This item includes the impact of changing the risk discount rate of Protective Life (including the impact of changing the weighting of capital and debt utilized to derive the risk discount rate).

(9) Changes in value of non-covered business

This item includes earnings of Dai-ichi Life Holdings and its subsidiaries/affiliated companies (excluding earnings from covered business) and changes in unrealized gains (losses) of assets and liabilities of Dai-ichi Life Holdings.

(10) Other variances

This item includes the impact of factors other than stated above. The impact of model changes is included in this item. Further, Protective Life's EEV increased ¥50.1 billion due to the United States tax reform in 2017. The impact of the tax reform on new business is reflected in the value of new business and is not part of this item.

(11) Adjustments to the values as of March 31, 2018

This item includes the capital increase of Dai-ichi Life Vietnam by Dai-ichi Life Holdings, which does not affect the Group EEV.

### 3-2 Movement Analysis by Company

#### (1) Dai-ichi Life

(billions of yen)

	Adjusted net worth	Value of in-force business	EEV
Values as of March 31, 2017	5,351.9	(924.2)	4,427.6
Adjustments to the values as of March 31, 2017	(29.9)	0.0	(29.9)
Shareholder dividend <sup>(Note)</sup>	(29.9)	0.0	(29.9)
Adjusted values as of March 31, 2017	5,321.9	(924.2)	4,397.6
Value of new business	0.0	149.0	149.0
Expected existing business contribution (market-consistent approach)	31.7	236.8	268.6
Risk-free rate	(9.7)	17.8	8.1
In excess of risk-free rate	41.4	219.0	260.4
Expected existing business contribution (top-down approach)	0.0	0.0	0.0
Expected transfer from VIF to adjusted net worth	(208.5)	208.5	0.0
In-force at beginning of the fiscal year	(18.4)	18.4	0.0
New business	(190.1)	190.1	0.0
Non-economic experience variances	(2.9)	(10.2)	(13.2)
Non-economic assumptions changes	0.0	(28.3)	(28.3)
Economic variances	736.0	(617.9)	118.0
Other variances	0.0	(4.7)	(4.7)
Values as of March 31, 2018	5,878.1	(991.0)	4,887.0

(Note) Adjusted net worth decreased by ¥29.9 billion, as Dai-ichi Life paid out shareholder dividends to Dai-ichi Life Holdings during the year ended March 31, 2018.

(2) Dai-ichi Frontier Life

(billions of yen)

	Adjusted net worth	Value of in-force business	EEV
Values as of March 31, 2017	156.6	197.1	353.7
Adjustments to the values as of March 31, 2017	0.0	0.0	0.0
Adjusted values as of March 31, 2017	156.6	197.1	353.7
Value of new business	0.0	13.1	13.1
Expected existing business contribution (market-consistent approach)	(10.9)	47.5	36.6
Risk-free rate	(5.8)	8.0	2.2
In excess of risk-free rate	(5.0)	39.4	34.3
Expected existing business contribution (top-down approach)	0.0	0.0	0.0
Expected transfer from VIF to adjusted net worth	43.2	(43.2)	0.0
In-force at beginning of the fiscal year	55.3	(55.3)	0.0
New business	(12.1)	12.1	0.0
Non-economic experience variances	22.3	(24.1)	(1.8)
Non-economic assumptions changes	0.0	3.2	3.2
Economic variances	32.7	(35.6)	(2.9)
Other variances	0.0	0.0	0.0
Values as of March 31, 2018	243.9	157.9	401.9

(3) Neo First Life

(billions of yen)

	Adjusted net worth	Value of in-force business	EEV
Values as of March 31, 2017	21.9	16.1	38.0
Adjustments to the values as of March 31, 2017	4.9	0.0	4.9
Capital increase from Dai-ichi Life Holdings <sup>(Note)</sup>	4.9	0.0	4.9
Adjusted values as of March 31, 2017	26.9	16.1	43.0
Value of new business	0.0	3.0	3.0
Expected existing business contribution (market-consistent approach)	0.0	0.2	0.2
Risk-free rate	0.0	0.2	0.2
In excess of risk-free rate	0.0	0.0	0.0
Expected existing business contribution (top-down approach)	0.0	0.0	0.0
Expected transfer from VIF to adjusted net worth	(9.3)	9.3	0.0
In-force at beginning of the fiscal year	(1.7)	1.7	0.0
New business	(7.5)	7.5	0.0
Non-economic experience variances	1.1	0.0	1.2
Non-economic assumptions changes	0.0	2.6	2.6
Economic variances	0.1	0.4	0.5
Other variances	0.0	0.0	0.0
Values as of March 31, 2018	18.7	31.9	50.7

(Note) In 2017, Neo First Life has received a capital increase from Dai-ichi Life Holdings. The capital increase which is capital transactions within the group has no impact on the Group EEV.

(4) Protective Life

(billions of yen)

	Adjusted net worth	Value of in-force business	EEV
Values as of December 31, 2016	421.4	168.3	589.8
Adjustments to the values as of December 31, 2016	(28.8)	(5.0)	(33.9)
Shareholder dividend <sup>(Note1)</sup>	(16.2)	0.0	(16.2)
Foreign exchange variance	(12.6)	(5.0)	(17.6)
Adjusted values as of December 31, 2016	392.6	163.2	555.8
Value of new business <sup>(Note2)</sup>	0.0	1.2	1.2
Expected existing business contribution (market-consistent approach)	(6.1)	19.0	12.9
Risk-free rate	0.4	5.1	5.5
In excess of risk-free rate	(6.5)	13.8	7.3
Expected existing business contribution (top-down approach)	11.6	22.7	34.4
Expected transfer from VIF to adjusted net worth	66.2	(66.2)	0.0
In-force as of January 1, 2017	75.2	(75.2)	0.0
New business	(8.9)	8.9	0.0
Non-economic experience variances	(27.1)	8.7	(18.4)
Non-economic assumptions changes	0.0	(20.9)	(20.9)
Economic variances	7.4	15.3	22.7
Other variances <sup>(Note3)</sup>	(2.5)	73.3	70.7
Values as of December 31, 2017	442.1	216.5	658.6

(Note1) Adjusted net worth decreased by ¥16.2 billion, as Protective Life paid out shareholder dividends to Dai-ichi Life Holdings during the fiscal year ended December 31, 2017.

(Note2) This item reflects the impact of United States tax reform in 2017.

(Note3) The item includes ¥50.1 billion due to the impact of the United States tax reform in 2017.

(5) TAL

(billions of yen)

	Adjusted net worth	Value of in-force business	EEV
Values as of March 31, 2017	128.4	140.4	268.9
Adjustments to the values as of March 31, 2017	(8.6)	(6.8)	(15.4)
Shareholder dividend <i>(Note)</i>	(2.4)	0.0	(2.4)
Foreign exchange variance	(6.1)	(6.8)	(12.9)
Adjusted values as of March 31, 2017	119.8	133.6	253.4
Value of new business	0.0	18.6	18.6
Expected existing business contribution (market-consistent approach)	0.8	2.8	3.7
Risk-free rate	0.8	2.8	3.7
In excess of risk-free rate	0.0	0.0	0.0
Expected existing business contribution (top-down approach)	0.0	0.0	0.0
Expected transfer from VIF to adjusted net worth	12.6	(12.6)	0.0
In-force at beginning of the fiscal year	11.3	(11.3)	0.0
New business	1.2	(1.2)	0.0
Non-economic experience variances	0.2	6.7	6.9
Non-economic assumptions changes	0.1	(2.8)	(2.6)
Economic variances	(0.8)	5.9	5.0
Other variances	0.0	(3.1)	(3.1)
Values as of March 31, 2018	132.9	149.1	282.0

*(Note) Adjusted net worth decreased by ¥2.4 billion, as TAL paid out shareholder dividends to Dai-ichi Life Holdings and Dai-ichi Life during the fiscal year ended March 31, 2018.*



#### 4. Sensitivity Analysis

##### 4-1 Sensitivity Analysis of Group EEV

The following table shows a sensitivity analysis of Group EEV to changes in assumptions (increase/decrease are shown). Although each figure in the table indicates the sensitivity in response to a change in one parameter, it should be noted that the sum of two or more figures in the table does not indicate the sensitivity to a change in two or more parameters corresponding to such figures.

The sensitivities are calculated based on the assumption that the Group's management actions would remain unaffected by changes in parameters.

(billions of yen)

	Adjusted net worth	Value of in-force business	Covered business EEV	Adjustment related to non-covered business	Group EEV
Values as of March 31, 2018	6,723.9	(403.0)	6,320.8	(226.6)	6,094.1
Sensitivity 1: 50bp upward parallel shift in risk-free yield curve	(1,398.1)	+ 1,822.4	+ 424.2	+ 5.3	+ 429.6
Sensitivity 2: 50bp downward parallel shift in risk-free yield curve	+ 1,520.9	(2,076.0)	(555.1)	(5.4)	(560.5)
Sensitivity 3: 10% decline in equity and real estate values	(456.3)	(19.0)	(475.4)	(15.4)	(490.9)
Sensitivity 4: 10% decline in maintenance expenses	0.0	+ 244.5	+ 244.5	0.0	+ 244.5
Sensitivity 5: 10% decline in surrender and lapse rate	0.0	+ 184.9	+ 184.9	0.0	+ 184.9
Sensitivity 6: 5% decline in mortality and morbidity rates for life insurance products	+ 2.6	+ 198.2	+ 200.8	0.0	+ 200.8
Sensitivity 7: 5% decline in mortality and morbidity rates for annuities	(0.3)	(26.1)	(26.4)	0.0	(26.4)
Sensitivity 8: Setting required capital at statutory minimum level	+ 2.1	+ 82.1	+ 84.3	0.0	+ 84.3
Sensitivity 9: 25% increase in implied volatilities of equity and real estate values	+ 2.8	(34.4)	(31.6)	0.0	(31.6)
Sensitivity 10: 25% increase in implied volatilities of swaptions	0.0	(10.5)	(10.5)	0.0	(10.5)

(Note) The sensitivity of DLVN's TEV is not included in the sensitivity analysis of Group EEV.

## Sensitivity analysis of the Group's value of new business

(billions of yen)

	Value of new business
Values for the year ended March 31, 2018	190.2
Sensitivity 1: 50bp upward parallel shift in risk-free yield curve	+ 13.8
Sensitivity 2: 50bp downward parallel shift in risk-free yield curve	(17.6)
Sensitivity 3: 10% decline in equity and real estate values	(0.1)
Sensitivity 4: 10% decline in maintenance expenses	+ 15.9
Sensitivity 5: 10% decline in surrender and lapse rate	+ 19.7
Sensitivity 6: 5% decline in mortality and morbidity rates for life insurance products	+ 9.6
Sensitivity 7: 5% decline in mortality and morbidity rates for annuities	(0.3)
Sensitivity 8: Setting required capital at statutory minimum level	+ 7.2
Sensitivity 9: 25% increase in implied volatilities of equity and real estate values	(0.4)
Sensitivity 10: 25% increase in implied volatilities of swaptions	(0.1)

(Note) The sensitivity of DLVN's value of new business is not included in the sensitivity analysis of the Group's value of new business.

### ● Sensitivity 1

The item represents the effect on EEV of an upward parallel shift of 50bp in the yield curve of risk-free forward rates. As prices of bonds and loans change, the adjusted net worth changes. Also, as future expected investment yields change, the value of in-force business changes.

The ultimate forward rate used for the extrapolation beyond the last liquid data point of Japanese interest rates is not shifted in this sensitivity. For the business valued using a top-down approach, the item is calculated based on simultaneous upward parallel shift of 50bp in both the investment yields and the risk discount rate.

### ● Sensitivity 2

The item represents the effect on EEV of a downward parallel shift of 50bp in the yield curve of risk-free forward rates. The risk-free forward rates are reduced by 50bp without lower limitation of zero. The ultimate forward rate used for the extrapolation beyond the last liquid data point of Japanese interest rates is not shifted for this sensitivity. For the business valued using a top-down approach, the item is calculated based on simultaneous downward parallel shift of 50bp in both the investment yields and the risk discount rate.

- Sensitivity 3

This item represents the effect on EEV of a decline of 10% in equity and real estate values.

- Sensitivity 4

The item represents the effect on EEV of a decline of 10% in estimated maintenance expenses associated with maintaining in-force business.

- Sensitivity 5

The item represents the effect on EEV of a decline of 10% in surrender and lapse rates.

- Sensitivity 6

The item represents the effect on EEV of a decline of 5% in mortality and morbidity rates for life and medical insurance products.

- Sensitivity 7

The item represents the effect on EEV of a decline of 5% in mortality and morbidity rates for annuities.

- Sensitivity 8

The item represents the effect on EEV in the event that required capital was changed to the statutory minimum level in Japan (Dai-ichi Life, DFL and NFL), the United States (Protective Life) and Australia (TAL). As items such as subordinated debt and policy reserves in excess of surrender values are regarded as solvency margin within a certain limit under the Japanese solvency margin framework, the cost of holding required capital is not proportional to the level of capital, and the cost to satisfy the statutory minimum level can be nil.

- Sensitivity 9

The item represents the effect on EEV of an increase of 25% in the implied volatilities of equity and real estate values.

- Sensitivity 10

The item represents the effect on EEV of an increase of 25% in the implied volatilities of swaptions.

## 4-2 Sensitivity Analysis by Company

### (1) Dai-ichi Life

(billions of yen)

	Adjusted net worth	Value of in-force business	EEV
Values as of March 31, 2018	5,878.1	(991.0)	4,887.0
Sensitivity 1: 50bp upward parallel shift in risk-free yield curve	(1,249.1)	+ 1,692.6	+ 443.5
Sensitivity 2: 50bp downward parallel shift in risk-free yield curve	+ 1,365.3	(1,935.9)	(570.5)
Sensitivity 3: 10% decline in equity and real estate values	(462.1)	+ 2.5	(459.6)
Sensitivity 4: 10% decline in maintenance expenses	0.0	+ 214.8	+ 214.8
Sensitivity 5: 10% decline in surrender and lapse rate	0.0	+ 157.2	+ 157.2
Sensitivity 6: 5% decline in mortality and morbidity rates for life insurance products	0.0	+ 148.4	+ 148.4
Sensitivity 7: 5% decline in mortality and morbidity rates for annuities	0.0	(22.1)	(22.1)
Sensitivity 8: Setting required capital at statutory minimum level	0.0	+ 14.6	+ 14.6
Sensitivity 9: 25% increase in implied volatilities of equity and real estate values	0.0	(17.7)	(17.7)
Sensitivity 10: 25% increase in implied volatilities of swaptions	0.0	(10.6)	(10.6)

### Sensitivity analysis of Dai-ichi Life's value of new business

(billions of yen)

	Value of new business
Values for the year ended March 31, 2018	149.0
Sensitivity 1: 50bp upward parallel shift in risk-free yield curve	+ 13.6
Sensitivity 2: 50bp downward parallel shift in risk-free yield curve	(16.9)
Sensitivity 3: 10% decline in equity and real estate values	+ 0.1
Sensitivity 4: 10% decline in maintenance expenses	+ 13.0
Sensitivity 5: 10% decline in surrender and lapse rate	+ 14.5
Sensitivity 6: 5% decline in mortality and morbidity rates for life insurance products	+ 3.6
Sensitivity 7: 5% decline in mortality and morbidity rates for annuities	(0.3)
Sensitivity 8: Setting required capital at statutory minimum level	+ 0.4
Sensitivity 9: 25% increase in implied volatilities of equity and real estate values	(0.2)
Sensitivity 10: 25% increase in implied volatilities of swaptions	0.0

## (2) Dai-ichi Frontier Life

(billions of yen)

	Adjusted net worth	Value of in-force business	EEV
Values as of March 31, 2018	243.9	157.9	401.9
Sensitivity 1: 50bp upward parallel shift in risk-free yield curve	(135.4)	+ 132.5	(2.9)
Sensitivity 2: 50bp downward parallel shift in risk-free yield curve	+ 140.6	(136.7)	+ 3.9
Sensitivity 3: 10% decline in equity and real estate values	(5.5)	(0.8)	(6.3)
Sensitivity 4: 10% decline in maintenance expenses	0.0	+ 4.4	+ 4.4
Sensitivity 5: 10% decline in surrender and lapse rate	0.0	(2.5)	(2.4)
Sensitivity 6: 5% decline in mortality and morbidity rates for life insurance products	0.0	+ 1.6	+ 1.6
Sensitivity 7: 5% decline in mortality and morbidity rates for annuities	0.0	+ 0.1	0.0
Sensitivity 8: Setting required capital at statutory minimum level	0.0	+ 0.5	+ 0.5
Sensitivity 9: 25% increase in implied volatilities of equity and real estate values	0.0	(4.9)	(4.9)
Sensitivity 10: 25% increase in implied volatilities of swaptions	0.0	+ 0.4	+ 0.4

## Sensitivity analysis of Dai-ichi Frontier Life's value of new business

(billions of yen)

	Value of new business
Values for the year ended March 31, 2018	13.1
Sensitivity 1: 50bp upward parallel shift in risk-free yield curve	(0.5)
Sensitivity 2: 50bp downward parallel shift in risk-free yield curve	+ 0.3
Sensitivity 3: 10% decline in equity and real estate values	0.0
Sensitivity 4: 10% decline in maintenance expenses	+ 1.1
Sensitivity 5: 10% decline in surrender and lapse rate	(1.2)
Sensitivity 6: 5% decline in mortality and morbidity rates for life insurance products	+ 0.9
Sensitivity 7: 5% decline in mortality and morbidity rates for annuities	0.0
Sensitivity 8: Setting required capital at statutory minimum level	+ 0.2
Sensitivity 9: 25% increase in implied volatilities of equity and real estate values	0.0
Sensitivity 10: 25% increase in implied volatilities of swaptions	0.0

## (3) Neo First Life

(billions of yen)

	Adjusted net worth	Value of in-force business	EEV
Values as of March 31, 2018	18.7	31.9	50.7
Sensitivity 1: 50bp upward parallel shift in risk-free yield curve	0.0	(0.1)	(0.1)
Sensitivity 2: 50bp downward parallel shift in risk-free yield curve	0.0	0.0	0.0
Sensitivity 3: 10% decline in equity and real estate values	0.0	0.0	0.0
Sensitivity 4: 10% decline in maintenance expenses	0.0	+ 1.5	+ 1.5
Sensitivity 5: 10% decline in surrender and lapse rate	0.0	+ 3.4	+ 3.4
Sensitivity 6: 5% decline in mortality and morbidity rates for life insurance products	0.0	+ 2.0	+ 2.0
Sensitivity 7: 5% decline in mortality and morbidity rates for annuities	0.0	0.0	0.0
Sensitivity 8: Setting required capital at statutory minimum level	0.0	0.0	0.0
Sensitivity 9: 25% increase in implied volatilities of equity and real estate values	0.0	0.0	0.0
Sensitivity 10: 25% increase in implied volatilities of swaptions	0.0	0.0	0.0

## Sensitivity analysis of Neo First Life's value of new business

(billions of yen)

	Value of new business
Values for the year ended March 31, 2018	3.0
Sensitivity 1: 50bp upward parallel shift in risk-free yield curve	+ 0.6
Sensitivity 2: 50bp downward parallel shift in risk-free yield curve	(0.6)
Sensitivity 3: 10% decline in equity and real estate values	0.0
Sensitivity 4: 10% decline in maintenance expenses	+ 0.7
Sensitivity 5: 10% decline in surrender and lapse rate	+ 0.9
Sensitivity 6: 5% decline in mortality and morbidity rates for life insurance products	+ 0.7
Sensitivity 7: 5% decline in mortality and morbidity rates for annuities	0.0
Sensitivity 8: Setting required capital at statutory minimum level	0.0
Sensitivity 9: 25% increase in implied volatilities of equity and real estate values	0.0
Sensitivity 10: 25% increase in implied volatilities of swaptions	0.0

(4) Protective Life

(billions of yen)

	Adjusted net worth	Value of in-force business	EEV
Values as of December 31, 2017	442.1	216.5	658.6
Sensitivity 1: 50bp upward parallel shift in risk-free yield curve	(12.7)	+ 4.7	(8.0)
Sensitivity 2: 50bp downward parallel shift in risk-free yield curve	+ 14.3	(11.4)	+ 2.9
Sensitivity 3: 10% decline in equity and real estate values	+ 9.9	(20.5)	(10.5)
Sensitivity 4: 10% decline in maintenance expenses	0.0	+ 18.2	+ 18.2
Sensitivity 5: 10% decline in surrender and lapse rate	0.0	(6.2)	(6.2)
Sensitivity 6: 5% decline in mortality and morbidity rates for life insurance products	0.0	+ 34.6	+ 34.6
Sensitivity 7: 5% decline in mortality and morbidity rates for annuities	0.0	(4.1)	(4.1)
Sensitivity 8: Setting required capital at statutory minimum level	+ 2.1	+ 66.6	+ 68.8
Sensitivity 9: 25% increase in implied volatilities of equity and real estate values	+ 2.8	(11.7)	(8.8)
Sensitivity 10: 25% increase in implied volatilities of swaptions	0.0	(0.3)	(0.3)
Sensitivity 11: 50bp upward shift in risk discount rate	0.0	(17.1)	(17.1)
Sensitivity 12: 50bp downward shift in risk discount rate	0.0	+ 18.3	+ 18.3

## Sensitivity analysis of Protective Life's value of new business

(billions of yen)

	Value of new business
Values for the year ended December 31, 2017	1.2
Sensitivity 1: 50bp upward parallel shift in risk-free yield curve	+ 1.1
Sensitivity 2: 50bp downward parallel shift in risk-free yield curve	(1.4)
Sensitivity 3: 10% decline in equity and real estate values	(0.2)
Sensitivity 4: 10% decline in maintenance expenses	+ 0.5
Sensitivity 5: 10% decline in surrender and lapse rate	0.0
Sensitivity 6: 5% decline in mortality and morbidity rates for life insurance products	+ 2.5
Sensitivity 7: 5% decline in mortality and morbidity rates for annuities	0.0
Sensitivity 8: Setting required capital at statutory minimum level	+ 6.5
Sensitivity 9: 25% increase in implied volatilities of equity and real estate values	(0.2)
Sensitivity 10: 25% increase in implied volatilities of swaptions	0.0
Sensitivity 11: 50bp upward shift in risk discount rate	(1.2)
Sensitivity 12: 50bp downward shift in risk discount rate	+ 1.3

### ● Sensitivity 11

The item represents the effect on EEV of an upward shift of 50bp of the risk discount rate for a top-down approach.

### ● Sensitivity 12

The item represents the effect on EEV of a downward shift of 50bp of the risk discount rate for a top-down approach.



(5) TAL

(billions of yen)

	Adjusted net worth	Value of in-force business	EEV
Values as of March 31, 2018	132.9	149.1	282.0
Sensitivity 1: 50bp upward parallel shift in risk-free yield curve	(0.8)	(7.3)	(8.1)
Sensitivity 2: 50bp downward parallel shift in risk-free yield curve	+ 0.5	+ 7.9	+ 8.5
Sensitivity 3: 10% decline in equity and real estate values	(0.1)	(0.1)	(0.2)
Sensitivity 4: 10% decline in maintenance expenses	0.0	+ 5.3	+ 5.4
Sensitivity 5: 10% decline in surrender and lapse rate	0.0	+ 33.0	+ 33.0
Sensitivity 6: 5% decline in mortality and morbidity rates for life insurance products	+ 2.6	+ 11.3	+ 14.0
Sensitivity 7: 5% decline in mortality and morbidity rates for annuities	(0.2)	0.0	(0.2)
Sensitivity 8: Setting required capital at statutory minimum level	0.0	+ 0.2	+ 0.2
Sensitivity 9: 25% increase in implied volatilities of equity and real estate values	0.0	0.0	0.0
Sensitivity 10: 25% increase in implied volatilities of swaptions	0.0	0.0	0.0

Sensitivity analysis of TAL's value of new business

(billions of yen)

	Value of new business
Values for the year ended March 31, 2018	18.6
Sensitivity 1: 50bp upward parallel shift in risk-free yield curve	(1.0)
Sensitivity 2: 50bp downward parallel shift in risk-free yield curve	+ 1.0
Sensitivity 3: 10% decline in equity and real estate values	0.0
Sensitivity 4: 10% decline in maintenance expenses	+ 0.3
Sensitivity 5: 10% decline in surrender and lapse rate	+ 5.4
Sensitivity 6: 5% decline in mortality and morbidity rates for life insurance products	+ 1.6
Sensitivity 7: 5% decline in mortality and morbidity rates for annuities	0.0
Sensitivity 8: Setting required capital at statutory minimum level	0.0
Sensitivity 9: 25% increase in implied volatilities of equity and real estate values	0.0
Sensitivity 10: 25% increase in implied volatilities of swaptions	0.0

## **5. Note on Using EV**

In calculating the embedded value of the Group, numerous assumptions (some of which are shown in Appendix B and Appendix C) are required concerning the Group's lines of business with respect to industry performance, business and economic conditions and other factors, many of which are outside the Group's control. Although the assumptions used represent estimates that the Group believe are appropriate for the purpose of embedded value reporting, future operating conditions may significantly differ from those assumed in the calculation of the embedded value. Consequently, the disclosure of embedded value herein should not be regarded as a statement by the Group, Willis Towers Watson or any other entity, that the stream of future after-tax profits discounted to produce the embedded value will be achieved.

## **Appendix A: EEV Methodology**

The primary methodology and assumptions adopted by the Group to calculate EEV are market-consistent and in accordance with the EEV Principles and related Guidance issued by the CFO Forum in May 2004 (revised in May 2016).

### **1. Covered Business**

Covered business is a scope of the business which the EV methodology as defined in the EEV principles is applied and the principles require disclosure of the scope of covered business.

The Group defines life insurance business of the subsidiary insurance companies of Dai-ichi Life Holdings (Dai-ichi Life, DFL, NFL, Protective Life, TAL and DLVN and their subsidiaries/affiliated companies) as its covered business in the EEV calculations.

Consolidated subsidiaries/affiliated companies operating life insurance businesses are treated as follows:

- Dai-ichi Life, DFL, NFL and TAL  
EEV of the company attributable to Dai-ichi Life Holdings' equity stake in each company is calculated and included in the Group EEV. Methodology and assumptions for these companies are described in Appendix B.
- Protective Life  
EEV of the company attributable to Dai-ichi Life Holdings' equity stake in the company is calculated and included in the Group EEV. EEV for all of its businesses except for the variable annuity business is calculated with a top-down approach. EEV for the variable annuity business is calculated with a market-consistent approach. For asset protection business, net assets based on US-GAAP balance sheet are included in adjusted net worth.  
Methodology and assumptions for Protective Life are described in Appendix C.
- DLVN  
The company calculated the EV by using TEV and included it in the Group EEV.

EV methodology is not applied to Dai-ichi Life Holdings and its subsidiaries/affiliated companies (except for subsidiary insurance companies as above), which are not included in covered business. Their value is included in Group EEV as "Adjustment related to non-covered business." The Adjustment related to non-covered business includes total net assets of non-consolidated Dai-ichi Life Holdings, the unrealized gains (losses) of assets and liabilities of Dai-ichi Life Holdings and deduction of Dai-ichi Life Holdings' carrying amount of equity of Dai-ichi Life, DFL, NFL, Protective Life, TAL and DLVN.

## **2. Adjusted Net Worth (Dai-ichi Life, DFL, NFL and TAL)**

Adjusted net worth is calculated by adjusting the total net assets on the company's balance sheet for the following:

- In order to mark to market, differences in market value and book value of assets have been reflected, specifically differences of bonds held to maturity, policy-reserve-matching bonds, loans, land, building, debt and borrowings etc., after adjusting for tax. For retirement benefits, the sum of unrecognized gains/losses on plan amendments and unrecognized actuarial differences has been used after adjustment for tax.
- Liabilities that are appropriate to be added to the adjusted net worth (contingency reserve, reserve for price fluctuations, unallocated portion of reserve for policyholder dividends, and general reserve for possible loan losses) have been added on an after-tax basis.
- Adjusted net worth of DFL is shown after the adjustment regarding the surplus relief reinsurance.

*(Note) Under current statutory accounting practices applicable to life insurance companies in Japan, the initial cost is recognized at the time of sale, and the profit is collected gradually over the contract period. Because the ability of an insurance company to recover the initial cost is subject to the future economic environment, DFL reduces the risk of failing to recover the cost by a surplus relief reinsurance. DFL receives commission to cover the initial cost at the time of sale, and the commission is amortized over the contract period. As a result, DFL can reduce the capital cost of new business. For EEV purposes, we reclassify the future cost for reinsurance from VIF to ANW because we consider the reclassification more appropriately expresses VIF and ANW.*

- An adjustment is made for TAL's intangible assets, including goodwill and value of in-force business.

### **3. Value of in-force business (Dai-ichi Life, DFL, NFL and TAL)**

The value of in-force business is calculated as (i) certainty equivalent present value of projected after-tax profits, less (ii) time value of financial options and guarantees, less (iii) cost of holding required capital, less (iv) cost of non-hedgeable risks.

Future profits for each year are estimated based on the assumption that policy reserves are held on a statutory basis in each country.

With regard to reinsurance, both outward and inward reinsurance contracts are reflected.

#### **3-1 Certainty equivalent present value of future profits**

The certainty equivalent present value of future profits is the after-tax profits based on the projected cash flows calculated on a deterministic basis, and discounted by the risk-free rate. Investment cash flows are calculated assuming that investment yields of all assets are equivalent to the risk-free rate. The certainty equivalent present value of future profits reflects the intrinsic value of options and guarantees. As described in “2. Adjusted Net Worth (Dai-ichi Life, DFL, NFL and TAL)”, the certainty equivalent present value of future profits of DFL is shown after the adjustment regarding the surplus relief reinsurance.

#### **3-2 Time value of financial options and guarantees**

The time value of financial options and guarantees is calculated as the difference between (i) the certainty equivalent present value of future profits and (ii) the average of the present value of future after-tax profits calculated by stochastic methods where economic assumptions are consistent with current market prices for traded assets. For NFL, the time value of financial options and guarantees is defined as zero in consideration of products characteristics. For TAL, it is calculated assuming a simple normal distribution, taking into account the limited impact on the results.

Asset allocation is assumed to be the same as the one at the valuation date over the projection periods and any discretion of management in terms of investment strategy is not incorporated.

There are various options in the insurance contracts. The following principal options and guarantees are considered in calculating the time value of financial options and guarantees of the Group using stochastic methods.

##### **- Participating policies options**

When profits arise, policyholder dividends are paid out. On the other hand, when losses arise, the cost of guarantees is not attributed to policyholders. Such asymmetric nature emerges in the net surplus after distribution of policyholder dividends. The value of this option is calculated in the time value of financial options and guarantees by assuming future policyholder dividends along with future profits by stochastic scenarios.

- Minimum guarantees for variable life insurance

When investment performance is good, policyholders will be entitled to the full amount of the account. On the other hand, when investment performance is poor, an insurance company will bear the cost of guarantees attached to variable life insurance policies. The value of this option is calculated in the time value of financial options and guarantees of the Group.

- Policyholder behavior

Policyholders have options depending on the movement of financial markets. The cost of selective lapses, such as the lapses based on the “moneyness” in variable annuities or the relation between assumed interest rate and interest rate in saving products, is reflected in the time value of financial options and guarantees of the Group.

### **3-3 Cost of holding required capital**

This is referred to as “frictional cost” in market-consistent methodology. In order to maintain financial soundness, life insurance companies are required to hold additional assets in excess of the statutory liability. The cost of holding required capital is the cost incurred through the payment of taxes on the investment income of the assets backing the required capital and the related investment expenses incurred for the management of the assets.

The EEV Principles define the minimum required capital to be equal to the statutory minimum capital requirement, and if the required capital calculated by an internal model exceeds the statutory requirement, an internal model may be used. Dai-ichi Life, DFL and NFL define required capital as the level required to maintain 400% level of solvency margin ratio. TAL defines required capital as the level required by the regulations in Australia.

The values of required capital as of March 31, 2017 and March 31, 2018 are ¥1,302.2 billion and ¥1,377.8 billion, respectively (free surplus as of March 31, 2017 and March 31, 2018 are ¥4,771.3 billion and ¥5,346.0 billion, respectively; required capital and free surplus include those of Protective Life and DLVN; the adjusted net worth is represented by the sum of required capital and free surplus).

The European Insurance CFO Forum Market Consistent Embedded Value Principles<sup>1</sup>(the “MCEV Principles”) state that required capital should be at least the statutory minimum capital level and should include amounts required to meet internal objectives. The Group will continue investigation in reviewing the definition of required capital, taking into account worldwide trends and discussions on economic value based solvency assessment.

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### **3-4 Cost of non-hedgeable risks**

EEV Principles define the EV to be the present value of distributable profits attributable to shareholders arising from assets allocated to the covered business, calculated taking into account all the risks of the covered business including non-hedgeable risks.

The uncertainty around the return on most risks can be diversified away. Thus, for some risks such as mortality, no further allowance is required, provided the best estimate assumptions are set to provide the mean expected financial outcome to shareholders.

There are some non-hedgeable risks where the existing best estimate experience assumptions do not reflect the mean expected financial outcome to shareholders. A typical example is operational risk. When profits arise, the company pays tax. On the other hand, when losses arise, tax cannot be negative. In such cases, carrying losses on a tax accounting basis are collectable in most cases. However, there is a risk of uncollectibility within the deferrable period, which has also been included in this cost of non-hedgeable risks. And for risk-free rates beyond the last liquid data point, there is a risk of uncertainty due to the low liquidity, which has also been included.

The Group quantified non-hedgeable risks by a simplified model.

### **4. Value of new business (Dai-ichi Life, DFL, NFL and TAL)**

The value of new business for the fiscal year ended March 31, 2018 is the value of new policies issued during the twelve months period, and is calculated by the same method as the value of in-force business. The value of new business is generally calculated based on economic and non-economic assumptions as of the end of the fiscal year. However, the value of new business for some products of DFL on which the economic assumptions have significant impact is calculated based on the economic assumptions as of the end of the month of contract issue. The value of new business is the value at the time of sale of new policies. The profit during the first year of acquisition of new business is calculated based on the same assumptions as described above.

In addition to the new policies, net increases in conversions and addition of riders have been included in the value of new business, while renewal of policies is not included. With regard to the corporate insurance written by Dai-ichi Life, such as group insurance, corporate pension and workers compensation insurance, the increase of the proportion underwritten by an insurance company in a group scheme, the increase of members in a group scheme and the increase of the sum insured by members in a group scheme are included in the value of new business.

## **Appendix B: Principal EEV Assumptions (Dai-ichi Life, DFL, NFL, TAL and DLVN)**

### **1. Economic assumptions and discount rate**

#### **(1) Risk-free rate (Dai-ichi Life, DFL, NFL and TAL)**

Issues such as appropriate reference rates for risk-free rates and extrapolation beyond the last liquid data point are discussed broadly in the context of Solvency II or the Insurance Capital Standard (ICS) being developed by the International Association of Insurance Supervisors. With regard to extrapolation method, term structures of interest rates for various currencies are set based on a method using ultimate forward rates<sup>2</sup> in the technical specifications for ICS field testing.

##### **i. Reference interest rate**

For the certainty equivalent calculation, the Japanese Government Bond (JGB) for Japanese yen and swap rates for foreign currencies are used as reference rates, taking into account each company's asset portfolio and the market liquidity.

##### **ii. Extrapolation method for Japanese Yen**

For Japanese yen risk-free rates (forward rates), an ultimate forward rate is set at 3.5% and the last liquid data point is set at the 30th year. Beyond the 30th year, we extrapolate the yield curve to the ultimate forward rate over a convergence period of 30 years by using the Smith-Wilson method. These parameters are set based on the developing ICS discussions.

##### **iii. Extrapolation method for foreign currencies**

For foreign currencies, the forward rates in the 31st year and beyond are assumed to be equal to those in the 30th year.

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<sup>2</sup> ICS field testing technical specification used the word “long term forward rate”.



[Unofficial translation]

The table below shows, for selected terms, the risk-free rates (spot rates) which are used in the calculations.

Term	JGB rate		Australian swap rate	
	March 31, 2017	March 31, 2018	March 31, 2017	March 31, 2018
1 Year	-0.254%	-0.134%	2.028%	2.136%
2 Year	-0.204%	-0.137%	2.155%	2.237%
3 Year	-0.179%	-0.118%	2.290%	2.347%
4 Year	-0.148%	-0.118%	2.420%	2.454%
5 Year	-0.124%	-0.108%	2.552%	2.538%
10 Year	0.068%	0.043%	3.036%	2.866%
15 Year	0.375%	0.293%	3.306%	3.063%
20 Year	0.663%	0.542%	3.456%	3.127%
25 Year	0.828%	0.709%	3.533%	3.126%
30 Year	0.881%	0.778%	3.526%	3.086%
35 Year	1.038%	0.950%	3.509%	3.051%
40 Year	1.271%	1.194%	3.496%	3.025%
45 Year	1.491%	1.423%	3.486%	3.004%
50 Year	1.682%	1.620%	3.478%	2.988%

(Source: Ministry of Finance Japan and Bloomberg, after interpolation/extrapolation)

## (2) Discount rate (DLVN)

In the TEV calculation for Dai-ichi Life Vietnam, discount rates are used.

The discount rates are as follows:

	December 31, 2016	December 31, 2017
Discount rate	13.5%	12.5%

(3) Principal dynamic assumption (Dai-ichi Life, DFL, NFL and TAL)

In the EEV calculation for Dai-ichi Life and DFL, dynamic assumptions are used. For NFL and TAL, dynamic assumptions are not used.

i. Interest rate model

As an interest rate model, the Group has adopted a single-factor Hull-White model, in which interest rates associated with Japanese yen, U.S. dollars, Euro, Australian dollars and New Zealand dollar are calculated. The model has been adjusted to be in line with a risk-neutral approach in which Japanese yen is set as a base currency, and correlations between the interest rates have been also taken into account. The interest rate model has been calibrated consistently with the market environment as of each reporting date, and parameters used are estimated from the yield curve and implied volatilities of interest rate swaptions with various maturities. 5,000 scenarios are used in calculating time value of financial options and guarantees through stochastic method.

These scenarios have been generated by Willis Towers Watson.

For implied volatilities of interest rate swaptions, the Group has adopted volatilities derived from the “Normal Model” due to limited availability of Black Model volatilities under current market environment with negative interest rate in Japan and Euro area.

Interest rate swaptions

		March 31, 2017				March 31, 2018			
Option Term	Swap Term	JPY	USD	EUR	AUD	JPY	USD	EUR	AUD
5 Year	5 Year	27.0bp	30.6%	69.1bp	21.1%	21.4bp	27.1%	62.8bp	20.1%
5 Year	7 Year	28.7bp	30.8%	70.0bp	20.3%	22.8bp	26.5%	62.5bp	19.4%
5 Year	10 Year	31.7bp	29.7%	70.8bp	19.4%	25.2bp	25.8%	61.7bp	18.8%
7 Year	5 Year	30.4bp	28.3%	71.6bp	19.0%	24.6bp	25.9%	64.3bp	18.6%
7 Year	7 Year	31.3bp	28.2%	71.6bp	18.4%	25.9bp	25.6%	63.8bp	18.0%
7 Year	10 Year	33.3bp	27.9%	71.4bp	17.6%	27.4bp	25.0%	62.9bp	24.9%
10 Year	5 Year	33.4bp	25.0%	71.8bp	17.1%	28.0bp	24.2%	63.7bp	17.4%
10 Year	7 Year	33.9bp	25.0%	71.0bp	16.8%	29.2bp	24.2%	63.3bp	17.3%
10 Year	10 Year	35.7bp	25.2%	69.6bp	16.2%	30.3bp	23.2%	62.4bp	16.2%

(Source: Bloomberg)

## ii. Implied volatilities of equities and currencies

Volatilities of traditional equity indices and currencies are calibrated based on implied volatilities of relevant options traded in the market. Implied volatilities used to calibrate the scenarios are as follows:

### Stock Options

Currency	Underlying Asset	Option Term	Volatility	
			March 31, 2017	March 31, 2018
JPY	Nikkei 225	3 Year	19.4%	18.5%
		4 Year	19.4%	18.5%
		5 Year	19.4%	18.6%
USD	S&P 500	3 Year	17.1%	18.6%
		4 Year	18.4%	19.2%
		5 Year	19.7%	19.9%
EUR	EuroStoxx 50	3 Year	18.6%	16.2%
		4 Year	19.1%	16.4%
		5 Year	19.6%	16.6%

(Source: Willis Towers Watson analysis of Markit data)

### Currency Options

Currency	Option Term	Volatility	
		March 31, 2017	March 31, 2018
USD	10 Year	12.3%	10.7%
EUR	10 Year	12.5%	11.0%
AUD	5 Year	13.7%	13.4%

(Source: Bloomberg)

## iii. Volatilities of real estate and other asset classes

Market-consistent implied volatilities have not been observed with regard to real estate. Therefore, the volatility of real estate has been derived by multiplying the historical volatility ratio (95.7%) of Tokyo Stock Exchange REIT index to Nikkei 225 (Nikkei stock average) by the implied volatility of Japanese equity.

In addition, REIT and emerging equity/bond markets are modeled as an asset class in stochastic calculation for variable type products. Volatilities of those asset classes have been derived in the same manner.

## iv. Correlations

In addition to implied volatilities described above, Dai-ichi Life and DFL have calculated implied volatilities reflecting its asset portfolio and correlation factors. The share of each asset is assumed to be unchanged over the projection periods.

With regard to correlation factors, market-consistent data from exotic options with sufficient liquidity have not been observed in the market. Therefore, we estimated correlation factors based on historical market data. Specifically, the monthly data for 10 years to most recent have been used. The following table shows correlation factors between major variables.

	Short Term Rate /JPY	Short Term Rate /USD	Short Term Rate /EUR	Ex- change Rate /USD	Ex- change Rate /EUR	Stock Index /JPY	Stock Index /USD	Stock Index /EUR	REIT Index /TSE REIT Index
Short Term Rate /JPY	1.00	0.39	0.40	0.35	0.24	0.38	0.24	0.24	0.10
Short Term Rate /USD	0.39	1.00	0.60	0.47	0.34	0.40	0.29	0.25	0.15
Short Term Rate /EUR	0.40	0.60	1.00	0.27	0.53	0.40	0.42	0.38	0.26
Exchange Rate /USD	0.35	0.47	0.27	1.00	0.64	0.59	0.19	0.25	0.22
Exchange Rate /EUR	0.24	0.34	0.53	0.64	1.00	0.68	0.55	0.46	0.40
Stock Index /JPY	0.38	0.40	0.40	0.59	0.68	1.00	0.71	0.70	0.63
Stock Index /USD	0.24	0.29	0.42	0.19	0.55	0.71	1.00	0.82	0.55
Stock Index /EUR	0.24	0.25	0.38	0.25	0.46	0.70	0.82	1.00	0.41
REIT Index /TSE REIT Index	0.10	0.15	0.26	0.22	0.40	0.63	0.55	0.41	1.00

(Source: Ministry of Finance Japan and Bloomberg)

(4) Assumed investment yield on each asset used for the expected return calculation (Dai-ichi Life, DFL, NFL and TAL)

Assumed investment yield on each asset used for the calculation of “Expected existing business contribution (market-consistent approach)” in “3. Movement Analysis” for Dai-ichi Life and DFL is as follows:

	Assumed investment yield
Cash and deposits, call loans	-0.25%
Fixed income assets	-0.05%
Domestic stocks	4.34%
Foreign bonds	3.46%
Other assets	4.63%

The assumed investment yield used for the calculation of “Expected existing business contribution (in excess of risk-free rate)” is calculated by multiplying the share of each asset as of March 31, 2017 by the assumed investment yield of each asset above. For Dai-ichi Life, the weighted-average assumed investment yield is 0.83%. For fixed products of DFL, assumed investment yield is calculated separately to correspond to the property of the assets.

For NFL and TAL, no expected return in excess of risk-free rate is assumed.

(5) Exchange rate (TAL and DLVN)

TAL’s EEV and DLVN’s TEV are calculated in local currency and converted into JPY by following rates;

	March 31, 2017	March 31, 2018
AUD 1.00	JPY 85.84	JPY 81.66

	December 31, 2016	December 31, 2017
VND 1.00	JPY 0.0051	JPY 0.0050

## 2. Non-economic assumptions

All cash flows (premium, operating expense, benefits and claims, cash surrender value, tax, etc.) are projected applying the best estimate assumptions up to the termination of the policies, by product, referring to past, current and expected future experience.

(1) Operating expenses (maintenance expenses) (Dai-ichi Life, DFL, NFL and TAL)

- Operating expenses are set based on the experience of each company. The look-through basis is applied in terms of operating expenses of insurance business in the Group. In addition, each company reflects a business

management fee to be paid to Dai-ichi Life Holdings.

- For Dai-ichi Life and DFL, adjustments are made for one-time expenses which are considered to be non-recurrent in the future. For Dai-ichi Life, the amount excluded from the expense assumption is ¥0.6 billion (for the fiscal year ended March 31, 2018) which mainly corresponds to the one-time reinsurance premium for receiving reinsurance. For DFL, the amount excluded from the expense assumption is ¥0.3 billion (for the fiscal year ended March 31, 2018) which corresponds to the one-time costs related to IT system development.
- For NFL, improvement of operating efficiency is expected in the future with the progress of business expansion because the new business has been operated for only a short period of time. Therefore, based on the projection of new business trend and of operating expenses in the mid-term business plan, unit-costs are assumed to decrease over 8 years; it is expected to reach an ultimate level within 10 years after new business expansion started. This rate of improvement is set equal to 19% p.a. for the EEV calculation.
- Future inflation rate is assumed to be zero for Dai-ichi Life, DFL and NFL. It is assumed to be 2.50% p.a. for TAL.

(2) Policyholder dividends (Dai-ichi Life, DFL, NFL and TAL)

For Dai-ichi Life and TAL, policyholder dividend rate is set based on the current dividend policy.

For DFL and NFL, no assumption of policyholder dividend rate is set because only non-participating policies are sold.

(3) Effective tax rates (Dai-ichi Life, DFL, NFL, TAL and DLVN)

Effective tax rates are set based on the most recent effective tax rate (including local tax) for each company.

	For the fiscal year ended March 31, 2018	Thereafter
Dai-ichi Life	28.16%	27.92%
Dai-ichi Frontier Life Neo First Life	28.24%	28.00%
TAL	30.00%	30.00%
Dai-ichi Life Vietnam	20.00%	20.00%

(Note) Effective tax rates of Dai-ichi Life Holdings are applied to the adjustment related to non-covered business, which are 30.85% for the fiscal year ended March 31, 2018 and 30.62% thereafter.

## **Appendix C: EEV Methodology and Assumptions of Protective Life**

### **1. Adjusted Net Worth (“ANW”)**

#### **(1) Total net assets**

Total net assets on the balance sheet is comprised of the following three components:

- Statutory capital and surplus (sum of Protective Life’s subsidiaries):  
The starting point for the ANW is the statutory capital and surplus of the life insurance companies. This is taken directly from the statutory annual statement for Protective Life’s subsidiaries as of December 31, 2017 (4,282 million USD).
- Value of non-life entities:  
The GAAP equity book value of non-life entities is reflected in this component rather than in statutory capital and surplus.
- Adjustment for holding company’s equity:  
The ANW is adjusted to reflect the net GAAP equity position of the holding company (Protective Life).

#### **(2) Retained earnings in liabilities**

Liabilities that are appropriate to be added to the adjusted net worth have been added. The asset valuation reserve is a required liability in the statutory balance sheet of U.S. life insurance companies. The asset valuation reserve is regarded as allocated surplus and is included in ANW.

#### **(3) Adjustment for deferred tax assets and miscellaneous items**

This includes (i) deduction of the deferred tax assets on the statutory balance sheet and (ii) addition of assets which have a certain economic value but which are not recorded on the statutory balance sheet.

### **2. Value of in-force business**

- VA business (market-consistent approach)  
The value of in-force business for the VA business is calculated based on the same methodology as described in “3. Value of in-force business (Dai-ichi Life, DFL, NFL and TAL)” section in Appendix A. Protective Life defines required capital as the level required to maintain 400% of NAIC Company Action Level (“CAL”) Risk-Based Capital (“RBC”).
- Non-VA businesses (top-down approach)  
The value of in-force is calculated by deducting the cost of holding required capital from the present value of future profits. The time value of financial options

and guarantees is not material for the non-VA business.

The present value of future profits is the after-tax statutory profits of non-VA in-force covered business based on projected cash flows calculated on a deterministic basis, and discounted by an appropriate risk discount rate. Investment cash flows are calculated based on the economic assumptions at the reporting date and on asset allocations on the reporting date and expected in the future.

The cost of holding required capital is a spread between the after tax investment yield and the discount rate for holding the required capital.

Protective Life defines required capital as the level required to maintain 400% of CAL RBC for most of its business.

### **3. Value of new business**

The value of new business of Protective Life for the fiscal year ending December 31, 2017 is represented by the value of new policies issued during the twelve months period, and is calculated using the same method as the value of in-force business. The value of new business is calculated separately for the new business acquired during the 1st and the 2nd half of the fiscal year, based on average economic assumptions for each period and non-economic assumptions at the time of new policies (however, some of the products are calculated separately for quarter basis). The value of new business is the value at the time of sale of new policies. The profit during the fiscal year ended December 31, 2017 from new business is calculated based on the same assumptions above. Premium for investment products is included as premium income revenue in this report as we are reporting on a statutory basis, which is not commonly accounted as premium income revenue in US-GAAP. Projected cash flows of the value of new business reflect the impact of US tax reform.

### **4. Economic Assumptions for VA business**

U.S. Dollar based market-consistent assumptions as of each reporting date are used for the VA business, which are determined based on an approach which is similar to the approach described in Appendix B.



### (1) Risk-free rate

For Protective Life's VA business, US dollar swap rates are used as a proxy for risk-free rates. The table below shows, for selected terms, the risk-free rates (spot rates) which are used in the calculations.

Term	US dollar swap rate	
	December 31, 2016	December 31, 2017
1 Year	1.19%	1.91%
2 Year	1.46%	2.09%
3 Year	1.69%	2.18%
4 Year	1.86%	2.23%
5 Year	1.98%	2.26%
10 Year	2.36%	2.42%
15 Year	2.54%	2.53%
20 Year	2.61%	2.57%
25 Year	2.63%	2.58%
30 Year	2.63%	2.57%
35 Year	2.65%	2.56%
40 Year	2.60%	2.54%
50 Year	2.57%	2.48%

(Source: Bloomberg, after interpolation)

### (2) Interest rate models

Implied volatilities of interest rate swaptions used to calibrate the scenarios are summarized as follows:

#### Interest rate swaptions

		December 31, 2016	December 31, 2017
Option Term	Swap Term	USD	USD
5 Year	5 Year	33.5%	29.7%
5 Year	7 Year	32.3%	28.8%
5 Year	10 Year	31.1%	25.3%
7 Year	5 Year	32.4%	28.8%
7 Year	7 Year	31.8%	28.3%
7 Year	10 Year	28.6%	24.8%
10 Year	5 Year	26.9%	27.1%
10 Year	7 Year	27.5%	27.0%
10 Year	10 Year	28.5%	25.9%

(Source: Bloomberg)

[Unofficial translation]

### (3) Implied volatilities of equities and other assets

Implied volatilities used to calibrate the scenarios are as follows:

Stock Options Currency	Underlying Asset	Option Term	Volatility	
			December 31, 2016	December 31, 2017
USD	S&P 500	1Year	16.4%	13.6%
		2Year	18.2%	15.9%
	Russell 2000	1Year	20.9%	17.2%
		2Year	21.8%	18.7%
	Barclays US Aggregate Bond Fund	1Year	4.7%	3.2%
		2Year	4.7%	3.2%

(Source: Willis Towers Watson analysis of Markit data, Bloomberg)

### (4) Correlations

The following table shows correlation factors between major variables as of December 31, 2017.

	USD Risk-free rate	S&P 500	Russell 2000	Barclays US Aggregate Bond Fund
USD Risk-free rate	1.00	0.24	0.30	-0.81
S&P 500	0.24	1.00	0.92	0.05
Russell 2000	0.30	0.92	1.00	-0.04
Barclays US Aggregate Bond Fund	-0.81	0.05	-0.04	1.00

(Source: Bloomberg)

### (5) Assumed investment yield used for the expected return calculation

The assumed investment yield of VA fund return used for the calculation of “Expected existing business contribution (market-consistent approach)” in “3. Movement Analysis” is as follows:

	Assumed investment yield	
	Six months ended June 30, 2017	Six months ended December 31, 2017
Bonds	4.75%	4.75%
Equity	8.50%	8.25%

## 5. Economic Assumptions and Risk Discount Rate for Non-VA businesses

### (1) Economic assumptions

Investment cash flows for the top-down approach are based on the economic assumptions on the reporting date and on the asset allocations on the reporting date and expected in the future. Key economic assumptions include the level of government bond rates, default rates and investment expenses. Government bond rates and credit spreads were set equal to prevailing levels at each reporting date. No changes to the levels were projected. Credit spreads in the in-force model graded from initial levels to historical averages over projected years 6 – 10.

Existing yields are as follows:

	Current Yield	
	December 31, 2016	December 31, 2017
Corporate Bonds	5.28%	5.19%
Others	4.35%	4.32%
Grand Total	4.94%	4.87%

(Note) Statutory basis, before deduction of default cost

Reinvestment yields vary by liability group, in accordance with the characteristics of the liabilities and actual practice, and are determined based on the reinvestment strategy on the reporting date and expected in the future.

Reinvestment rates by main liability group are as follows:

Main Products	Reinvestment Rates	
	December 31, 2016	December 31, 2017
Universal Life and VUL	4.04 - 5.12%	3.89 - 4.85%
Traditional and term life	4.04 - 5.12%	3.64 - 4.85%
Fixed annuities	2.94 - 4.87%	3.00 - 4.55%
MVA annuities	2.42 - 3.28%	2.60 - 3.57%

(Note 1) Before deduction of default cost

(Note 2) Rates vary by product type

[Unofficial translation]

Default rates, which apply to existing assets and reinvestments, are determined by asset type, duration, and rating, where applicable, based on historical records.

Expected default costs net of recovery are as follows:

	Default cost	
	December 31, 2016	December 31, 2017
Existing assets	25bp	18bp
Reinvested assets <sup>(Note)</sup>		
Universal Life and VUL	20 - 33bp	14 - 19bp
Traditional and term life	14 - 33bp	11 - 19bp
Fixed annuities	14 - 28bp	11 - 16bp
MVA annuities	13 - 14bp	10 - 11bp

(Note) Costs vary by product type

## (2) Risk discount rate

The risk discount rate is set using a weighted average cost of capital approach (WACC) taking into account the cost of equity and cost of debt.

Risk discount rates are as follows:

	In-force business	
	December 31, 2016	December 31, 2017
Risk discount rate	7.00%	7.00%
Risk free rate (10 year U.S. government bond yield)	2.45%	2.41%
Risk margin	4.55%	4.59%

	New business			
	Six months ended June 30, 2016	Six months ended December 31, 2016	Six months ended June 30, 2017	Six months ended December 31, 2017
Risk discount rate	6.25%	6.50%	7.00%	7.00%
Risk free rate (10 year U.S. government bond yield)	1.84%	1.82%	2.35%	2.32%
Risk margin	4.41%	4.68%	4.65%	4.68%

## **6. Non-economic assumptions**

All cash flows (premium, operating expense, benefits and claims, cash surrenders, tax, etc.) are projected by applying the best estimate assumptions up to the termination of the policies by product. The assumptions are based on the past, current and expected future experience.

Future credited rates and policyholder dividends are based on current credited rate setting methods and policyholder dividend strategies.

Dynamic policyholder behavior is applied where appropriate.

The future inflation rate is assumed to be 2.5% - 2.85% p.a. varies by the expense type and is applied to the best estimate unit expense assumptions.

The tax rate is set at 21.00% and is applied to the projected taxable income which reflects US tax reform in 2017.

## **7. Exchange rate**

The EEV of Protective Life is calculated in local currency and converted into JPY using the following rate:

	December 31, 2016	December 31, 2017
USD 1.00	JPY 116.49	JPY 113.00

## **Appendix D: Actuarial Opinion**

Dai-ichi Life Holdings requested Willis Towers Watson, an independent actuarial firm, to review the calculation of the Group's EEV and obtained the following opinion.

Willis Towers Watson has reviewed the methodology and assumptions used to determine the embedded value results as at March 31, 2018 for Dai-ichi Life Group. The review covered the embedded value as at March 31, 2018, the value of new business issued in the fiscal year 2017, the analysis of movement in the embedded value during the fiscal year 2017 and the sensitivities of the embedded value and new business value to changes in assumptions.

Willis Towers Watson has concluded that the methodology and assumptions used, together with the disclosure provided in this document, comply with the EEV Principles and Guidance. In particular:

- The methodology makes allowance for the aggregate risks in the covered business:
  - For Dai-ichi Life Group excluding Protective Life's non-VA businesses, through Dai-ichi Life Group's bottom-up methodology as described in Appendix A of this document, which includes a stochastic allowance for financial options and guarantees, and deductions to allow for the frictional cost of required capital and the impact of non-hedgeable risks, and
  - For Protective Life's non-VA businesses, through Dai-ichi Life Group's top-down methodology as described in Appendix C of this document, which incorporates risk margins in the discount rates applied to best estimate deterministic projections of after-tax statutory profits and the deduction of the cost of risk-based capital relating to the business. Consequently, it should be noted that the results for Dai-ichi Life Group, in particular Protective Life's non-VA business, may materially differ from a capital market valuation of such risk (so called "market consistent valuation");
- The operating assumptions have been set with appropriate regard to past, current and expected future experience;
- The economic assumptions used are internally consistent and consistent with observable market data; and
- For participating business, the assumed policyholders' dividend rates, and the allocation of profit between policyholders and shareholders, are consistent with the projection assumptions, established company practice and local market practice.

Willis Towers Watson has also reviewed the results of the calculations, without however undertaking detailed checks of all the models, processes and calculations involved. On the basis of our review, Willis Towers Watson is satisfied that the disclosed results have been prepared, in all material respects, in accordance with the methodology and assumptions set out in this disclosure document.

In arriving at these conclusions, Willis Towers Watson has relied on data and information provided by Dai-ichi Life Holdings, including estimates for the market value of assets for which no market prices exist. This opinion is made solely to Dai-ichi Life Holdings in accordance with the terms of Willis Towers Watson's engagement letter. To the fullest extent permitted by applicable law, Willis Towers Watson does not accept or assume any responsibility, duty of care or liability to anyone other than Dai-ichi Life Holdings for or in connection with its review work, the opinions it has formed, or for any statement set forth in this opinion.

## Appendix E: Glossary

Best Estimate Assumption	An assumption that represents the mean expected financial outcome to shareholders from the range of possible outcomes for future experience of that assumption.
Certainty Equivalent Present Value of Future Profits / Present Value of Future Profits	<p>For a market consistent approach, the Certainty Equivalent Present Value of Future Profits is the present value of future statutory after-tax profits, projected over the life time of the policies in a scenario where all investments are assumed to earn the risk-free rate and future statutory after-tax profits are discounted at the risk-free rate.</p> <p>For a top-down approach, the Present Value of Future Profits is the present value of future statutory after-tax profits, projected over the life time of the policies in a scenario where assumed investment returns include allowance for expected investment risk premiums and future statutory after-tax profits are discounted at a risk discount rate.</p>
CFO Forum	The CFO Forum is a high-level discussion group formed and attended by the Chief Financial Officers of major European insurance companies. Its aim is to discuss issues relating to financial reporting developments for their businesses and how they can create greater transparency for investors. The CFO Forum was created in 2002.
Cost of Holding Required Capital	<p>Cost of Holding Required Capital is the decrease in present value of distributable profits attributable to shareholders, related to holding required capital.</p> <p>For a market-consistent approach, this is called “frictional cost”, and this reflects the investment and taxation costs incurred by shareholders through investing required capital in the company rather than directly.</p> <p>For a top-down approach, a spread between the investment yield and the discount rate for holding the required capital is included.</p>
Cost of non-hedgeable Risks	Explicit cost for asymmetric non-hedgeable risks such as operational risks.



Covered business	The scope of the business which the EV methodology as defined in the EEV principles is applied. The EEV principles require disclosure of the scope of covered business.
Discount rate / Risk discount rate	A discount rate is used for discounting future profits in calculating the value of in-force and new business. For a market-consistent approach, a risk-free rate is used as the discount rate. For a top-down approach, the discount rate includes a risk margin. For the purpose of this report, risk discount rate indicates the risk discount rate for a top-down approach.
EEV Principles	European Embedded Value (EEV) Principles were published by the CFO Forum in May 2004, together with additional guidance on disclosures in October 2005, addressed the treatment of options and guarantees and provided the insurance industry with improved sensitivities and disclosures. In May 2016, revised EEV principles were issued.
ICS	Insurance capital standard (ICS) is a new capital standard which International Association of Insurance Supervisors (IAIS) is developing as a part of ComFrame. ComFrame is a common framework for supervision of internationally active insurance groups (IAIGs).
Implied Volatility	The implied volatility of an option contract is the volatility implied by the market price of the option.
Look-through Basis	A basis via which the impact of an action on the whole group, rather than on a particular part of the group, is measured.
Market-consistent Approach	A measurement approach where economic assumptions are such that projected asset cash flows are valued consistently with current market prices for traded assets.
MCEV Principles	The European Insurance CFO Forum Market Consistent Embedded Value Principles (Copyright© Stichting CFO Forum Foundation 2008) were published by CFO Forum in June 2008 to ensure the valuation to be on a market consistent basis and to improve comparability between companies. In May 2016, revised MCEV Principles were issued.

Required Capital	The amount of assets, over and above the value placed on liabilities in respect of covered business, whose distribution to shareholders is restricted.
Risk-free Rate	Prospective yields on securities to be considered to be free of default or credit risk.
Solvency II	Solvency II is an economic capital based new regulatory framework for insurance companies in Europe. It was be effective from January 1, 2016.
Stochastic Method	Techniques that incorporate the potential future variability in assumptions affecting their outcome.
Swaption	A swaption is an option giving the holder the right to enter into a certain swap at a certain time in the future.
Time Value of Financial Options and Guarantees	An option feature has two elements of value, the time value and intrinsic value. Intrinsic value is that of the most valuable benefit under the option under conditions at the valuation date. Time value is the additional value ascribable to the potential for benefits under the option to increase in value prior to expiry.
Top-down approach	A measurement approach that uses a risk discount rate, typically based on a company's weighted average cost of capital to allow for risk.
Ultimate forward rate	Based on the idea that future forward rate should converge with a fixed level, an ultimate forward rate is the fixed level of future forward rate. It is common to set the fixed level based on macro-economic analysis, etc.