

May 14, 2020

Ryosuke Mori, President

LIFENET INSURANCE COMPANY

(Securities Code: 7157, TSE Mothers)

## **European Embedded Value as of March 31, 2020**

**EEV as of March 31, 2020: 73,431 million yen**

TOKYO, May 14, 2020 - LIFENET INSURANCE COMPANY (TSE Mothers 7157, President Ryosuke Mori, URL: <https://ir.lifenet-seimei.co.jp/en/>) hereby announces its Embedded Value ("EV") as of March 31, 2020.

EV is an indicator used to measure the corporate value and earnings performance of life insurance companies. EV is the total of adjusted net worth, based on balance sheet values, and the value of in-force business, based on projected cash flows from policies-in-force. In general, life insurance policies provide a steady level of premium income over a long period of time, while advertising expenses, policy appraisal costs, etc. are expensed intensively in a short period around the time of policy sales. This timing difference in recognizing revenues and expenses and the long time it takes before profits are recognized after a policy is sold are the characteristics of life insurance accounting. As these characteristics make it difficult to evaluate a life insurance business based on single-year financial results, disclosing EV is seen as a useful way of giving investors a more accurate picture of operating conditions. European Embedded Value ("EEV") is the EV calculated in accordance with the EEV Principles and Guidance.

Lifenet's EEV as of March 31, 2020 and the summary of the results are as follows:

### **Summary of EEV results as of March 31, 2020**

- Lifenet's EEV as of March 31, 2020 was 73,431 million yen, an increase of 10,052 million yen from the end of the previous fiscal year.
- Adjusted net worth was 12,553 million yen, a decrease of 2,307 million yen from the end of the previous fiscal year, mainly due to the net loss.
- Value of in-force business was 60,878 million yen, an increase of 12,359 million yen from the end of the previous fiscal year, mainly due to acquisition of new business and updates made to mortality and expense assumptions.
- Value of new business was 2,977 million yen, an increase of 533 million yen from the previous fiscal year, mainly due to an increase in the volume of new business acquired.

## EEV as of March 31, 2020

(In millions of yen)

	Mar. 31, 2019	Mar. 31, 2020	Increase (Decrease)
EEV	63,378	73,431	10,052
Adjusted net worth <sup>*1</sup>	14,860	12,553	(2,307)
Value of in-force business <sup>*2</sup>	48,518	60,878	12,359

## Value of new business

(In millions of yen)

Fiscal year ended Mar. 31	2018	2019	Increase (Decrease)
Value of new business <sup>*3</sup>	2,443	2,977	533

- \*1 Adjusted net worth is defined as the excess of the market value of a life insurance company's assets over the market value of its policy reserves and other liabilities, and is considered to be the value attributable to the company's shareholders. In other words, it is calculated as the sum of the total net assets, appropriate adjustments for unrealized gains/losses and other items.
- \*2 Value of in-force business is the present value at the valuation date of future after-tax profits distributable to shareholders from in-force business as of the valuation date, calculated under a set of assumptions.
- \*3 Value of new business represents the impact on the EV of new business written during the fiscal year, calculated applying the same assumptions as those used for the EEV. New business used for value calculation is defined as that arising from the sale of new life insurance policies during the fiscal year and excludes future new business.

**About Lifenet** URL: <https://ir.lifenet-seimei.co.jp/en/>

Remembering the original purpose of life insurance - mutual support - LIFENET INSURANCE COMPANY was founded with the goal of offering simple, convenient and competitively priced products and services based on the highest levels of business integrity. We sell these products and services directly to customers over the Internet. We aim to be the leading company driving the growth of the online life insurance market.

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May 14, 2020

LIFENET INSURANCE COMPANY

## **Disclosure of European Embedded Value**

**as of March 31, 2020**

LIFENET INSURANCE COMPANY (“Lifenet” or “the company”) is disclosing its European Embedded Value (“EEV”) results as of March 31, 2020.

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# 1. Outline of EEV

## (1) What is EV?

The income and expenses of life insurance contracts are typically not matched in timing of occurrence, with substantial acquisition and other costs in the first year and with a delay between acquisition of the contract and the emergence of profit. This makes it difficult to evaluate a life insurance operation on the basis of a single year's income and outgo. Embedded Value ("EV"), calculated as the sum of net asset value and the present value of future after-tax shareholder profits from the in-force business at the valuation date, has been adopted among life insurers in Europe, Canada, Japan and elsewhere as an approach to the valuation of a life insurer and to the evaluation of its performance.

## (2) What is EEV?

European Embedded Value ("EEV") is the EV calculated in accordance with the EEV Principles and Guidance.

The EEV Principles and Guidance were published in May 2004 by the CFO Forum<sup>1</sup>, a group consisting of CFOs from leading European insurance companies. The aim of the EEV Principles and Guidance is to improve the consistency and transparency of the financial reporting of embedded values. Additional EEV Guidance was published by the CFO Forum in 2005 which covered sensitivities and aspects of disclosure.

In May 2016 the EEV principles were amended by the CFO Forum to permit alignment with methodology and assumptions applied for Solvency II, which has been effective since January 2016. In addition, the European Insurance CFO Forum Market Consistent Embedded Value Principles<sup>©2</sup> ("MCEV Principles") were published in June 2008 by the CFO Forum with more clearly defined allowances for risk. Revisions to these MCEV Principles were published in October 2009 and in May 2016.

## (3) EEV Approach

The allowance for risk in the shareholder cash flows is a key feature of the EEV Principles. Lifenet's EEV has been calculated following the EEV Principles and Guidance, using a bottom-up market-consistent approach, in which the discount rate is set individually for each product or cash flow according to the risk characteristics of the product or cash flow.

EEV is calculated such that future cash flows arising from assets and liabilities are valued consistently with cash flows arising from similar traded market instruments, with allowance included for non-traded or non-diversifiable risk.

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<sup>1</sup> <http://www.cfoforum.nl/>

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These approaches have been increasingly adopted among leading European insurers; moreover, the MCEV Principles define a bottom-up market consistent approach.

## 2. EEV results of Lifenet

The EEV results are presented below. For more details on the methodology employed, please refer to “4. EEV Methodology”.

The embedded value on an EEV basis as of March 31, 2020 is 73,431 million yen, an increase of 10,052 million yen (15.9%) from March 31, 2019. The adjusted net worth is 12,553 million yen. The value of in-force business increased to 60,878 million yen, primarily due to acquisition of new business and updates made to mortality and expense assumptions (see Section 3).

The value of new business issued in the fiscal year ending in March 31, 2020 is 2,977 million yen.

(Millions of yen)

	March 31, 2019	March 31, 2020	Increase (Decrease)
EEV	63,378	73,431	10,052
Adjusted net worth	14,860	12,553	(2,307)
Value of in-force business	48,518	60,878	12,359

	March 31, 2019	March 31, 2020	Increase (Decrease)
Value of new business	2,443	2,977	533

## (1) Adjusted net worth

Adjusted net worth represents the market value of assets in excess of reserves and other liabilities.

Adjusted net worth is the sum of the net assets on the balance sheet and appropriate adjustments for unrealized gains/losses and other items. The adjusted net worth has been derived as follows.

(Millions of yen)			
	March 31, 2019	March 31, 2020	Increase (Decrease)
Adjusted net worth	14,860	12,553	(2,307)
(a) Shareholders' equity on the balance sheet	11,773	9,400	(2,372)
(b) Unrealized gains/losses on securities	1,893	1,907	14
(c) Internal reserves as quasi-equity liabilities ( <i>Note1</i> )	1,723	1,779	55
(d) Tax effect ( <i>Note2</i> )	(530)	(534)	(3)

*Note1: Price fluctuation reserve and contingency reserve*

*Note2: Tax effect on (b)*

## (2) Value of in-force business

Value of in-force business represents the present value as at the valuation date (March 31, 2020) of future after-tax profits distributable to shareholders from the in-force business as of the valuation date, calculated under a set of assumptions (see Section 5), and consists of the following components.

(Millions of yen)			
	March 31, 2019	March 31, 2020	Increase (Decrease)
Value of in-force business	48,518	60,878	12,359
Certainty equivalent present value of future profit	64,172	82,661	18,488
Time value of financial options and guarantees	—	—	—
Frictional cost of capital	(93)	(66)	26
Allowance for non-hedgeable risk	(15,560)	(21,715)	(6,155)

- The certainty equivalent present value of future profit is the present value of future profit calculated deterministically by assuming the investment yield is equal to the risk-free rate and using the risk-free rate as the discount rate.

The table below shows the present value of in-force business premiums included in the calculation of the certainty equivalent present value of future profit.

(Millions of yen)			
	March 31, 2019	March 31, 2020	Increase (Decrease)
Present value of in-force business premiums	229,544	303,251	73,707

- The time value of financial options and guarantees could be calculated stochastically using a set of market-consistent risk-neutral economic scenarios for the cash flows with options or guarantees. However, the time value of options and guarantees is set to nil as the products of Lifenet are non-participating death and medical coverage protection products with no surrender value.
- The frictional cost of capital represents the costs associated with maintaining the level of capital which the company considers as required in continuing the life insurance business (see Sections 4.(10) and 4.(11)).
- The allowance for non-hedgeable risk is an estimate of the impact of non-hedgeable risks which are not adequately allowed for directly in the certainty equivalent present value of future profit (see Section 4.(12)).



### (3) Value of new business

Value of new business is the value at the valuation date of the new business written during fiscal year 2019, calculated applying the same assumptions used to calculate the embedded value as of that date. New business means the life insurance policies commencing within this accounting period (fiscal year 2019) and does not include values anticipated from future new business. The figure for adjusted net worth represents the loss arising between the point of sale and March 31, 2020 on business sold in the period. The table below shows the results.

The primary reason for the increase in the value of new business, compared to the same period of the previous year, is an increase in the volume of new business acquired (see Section 3).

(Millions of yen)			
	March 31, 2019	March 31, 2020	Increase (Decrease)
Value of new business	2,443	2,977	533
Adjusted Net Worth	(3,881)	(4,357)	(475)
Present value of future profit	6,325	7,334	1,008
Certainty equivalent present value of future profit	8,843	10,955	2,111
Time value of financial options and guarantees	—	—	—
Frictional cost of capital	(15)	(12)	2
Allowance for non-hedgeable risk	(2,502)	(3,607)	(1,105)

The table below shows the new business margin, calculated as the ratio of the value of new business to the present value of new business premiums.

(Millions of yen)			
	March 31, 2019	March 31, 2020	Increase (Decrease)
(a) Present value of new business premiums	39,629	54,201	14,571
(b) Value of new business	2,443	2,977	533
Value of new business / Present value of new business premiums ((b)/(a))	6.2%	5.5%	(0.7)pts

The table below shows the value of new business on a per-policy basis.

(Thousands of yen)			
	March 31, 2019	March 31, 2020	Increase (Decrease)
Value of new business per policy	37	36	(1)

### 3. Movement Analysis

The table below shows the analysis of the increase (decrease) in the EEV during fiscal year 2019. The increase in the value of in-force business was primarily due to updates made to mortality and morbidity assumptions and the acquisition of new business.

(Millions of yen)

		EEV			
			Adjusted net worth (Required capital)	Adjusted net worth (Free surplus)	Value of in-force business
EEV as of March 31, 2019		63,378	2,204	12,655	48,518
	New business value	2,977	94	(4,451)	7,334
	Expected existing business contribution (Risk free rate)	889	—	(1)	890
	Expected existing business contribution (In excess of risk free rate)	44	—	36	7
	Expected transfer from Value of in-force business to Adjusted net worth	—	(245)	2,528	(2,283)
	Operating experience variances	84	21	(423)	486
	Assumption changes	6,707	—	—	6,707
Operating EEV earnings		10,702	(129)	(2,311)	13,143
Economic variances and assumption changes		(776)	8	(0)	(783)
Change in EEV		9,926	(120)	(2,312)	12,359
Closing adjustments		126	—	126	—
EEV as of March 31, 2020		73,431	2,083	10,469	60,878

➤ **New business value**

This is the change in EEV due to the value of new business issued during fiscal year 2019. For details of the approach, see Section 2.(3).

➤ **Expected existing business contribution (Risk-free rate)**

In calculating the value of in-force business, future expected profits are discounted back using risk-free rates. Thus, the discounted value is assumed to earn the risk-free rate over time. Moreover, this item includes the expected return on the free surplus assets using the risk-free rates, and the release for fiscal year 2019 of time value of financial options and guarantees, cost of holding required capital and allowance for non-hedgeable risk.

➤ **Expected existing business contribution (In excess of risk-free rate)**

Rates of future expected returns are assumed to be the risk-free rates when calculating EEV. However, Lifenet expects higher rates of return on the assets than the risk-free rates. In calculating the expected existing business contribution in excess of the risk-free rate, Lifenet used an expected rate of return of 0.14% which consists of the risk-free rate of the 1 year swap yield plus a risk premium of 0.16%, based on the asset position at the beginning of the period.

➤ **Expected transfer from value of in-force business to adjusted net worth**

This item represents the after-tax surplus expected to emerge during the period from the business that was in force at the beginning of the period.

The effect is a movement of value from the value of in-force business to the adjusted net worth. This does not affect the total embedded value.

➤ **Operating experience variances**

This is the impact on the embedded value of differences between the actual experience and the operating assumptions during the period. The primary reason for the differences was actual experience in benefit payments being lower than expected.

➤ **Assumption changes**

This is the impact of changes in the operating assumptions relative to those utilized at the beginning of the period. The increase in the value of in-force business was primarily due to updates in mortality and expense assumptions. Long term mortality assumptions were lowered based on Lifenet's own experience as well as mortality improvement trends observed in the industry. The updated expense assumptions reflect a reduction in per-policy maintenance expenses owing to an increase in the volume of in-force policies. See Section 5.(2) for the explanation of how operating

assumptions are set.

➤ **Economic variances and assumption changes**

This is the impact of differences between the actual investment returns in the period and the expected investment returns, including the impact on the value of future profits from the change to the end of period future economic assumptions. The ultimate forward rate has been updated from the beginning of the period and this had an impact of 79 million yen on the value of in-force business. See Section 5.(1) for details of the economic assumptions

➤ **Closing adjustments**

This represents that the effect of an increase in net assets of JPY 126 million due to the issuance of shares as a restricted stock remuneration and the exercise of stock acquisition rights in fiscal year 2019.

## 4. EEV Methodology

### **(1) Basis of preparation**

The methodology and assumptions adopted by the company to calculate the EEV as of March 31, 2020 are in accordance with the EEV Principles and Guidance issued by the European CFO Forum in May 2004 (amended in May 2016).

### **(2) Covered business**

The covered business represents all of the business of the company, which is all life insurance business.

### **(3) Embedded value (EV)**

The embedded value comprises the sum of the adjusted net worth and present value of future after-tax profits from in-force business, which provides an estimate of the value of the shareholders' interest in the covered business. The adjusted net worth is the net assets attributable to shareholders, and is represented by the sum of required capital and free surplus as discussed further below. The value of in-force business is the present value of the projected stream of future after-tax distributable profits available to shareholders from the existing business at the valuation date, allowing for risk on a product-by-product basis, and with adjustment for the cost of holding required capital. The future profit includes renewal of in-force business but excludes any value that may be generated from future new business. Assumptions used in the calculation are made on a best estimate basis.

### **(4) Allowance for risk**

According to the EEV Principles all risks related to the covered business must be reflected. This is accomplished, for example, by allowances for the cost of financial options and guarantees, for the cost of holding policy reserves and any additional required capital, and by adoption of a risk discount rate. The company has used a market-consistent approach based on the principles of finance theory to allow for risk, as follows.

- Assets and liabilities other than policy reserves are valued at market value.
- Investment return assumptions and risk discount rates are set consistently with the risk profile of each cash flow.
- The time value of financial options and guarantees associated with the life insurance business is valued explicitly and consistently with market prices of equivalent traded options. (The products of Lifenet are non-participating death and medical coverage protection products with no surrender value and so in practice no time value of financial options and guarantees needs to be allowed for.)

A market-consistent value assigns a value to cash flows in line with the prices of similar cash flows traded on the open market.

Further details of the methodology are described in the sub-sections below.

#### **(5) Adjusted net worth**

Adjusted net worth represents the net assets attributed to shareholders and represents the market value of assets in excess of policyholder liabilities, represented by statutory 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 certain liabilities and unrealized gains/losses in assets/liabilities not accounted for under the mark-to-market methodology.

#### **(6) Value of in-force business**

The value of in-force business is calculated as follows:

	Certainty equivalent present value of future profit
less	Time value of financial options and guarantees
less	Frictional cost of capital
less	Allowance for non-hedgeable risk

A description of each item in the above formula is provided below.

#### **(7) Value of new business**

The value of new business is the value of new policies issued during fiscal year 2019. Future renewals of those new business policies are included in the value of new business, while the values that may be generated from future new business are not.

The value of new business has been calculated as of March 31, 2020, and consists, like the EEV, of the adjusted net worth and the present value of future profit. The adjusted net worth represents the impact of all cash flows arising from the point of sale to March 31, 2020. The present value of future profit in respect of new business is calculated in the same manner as the value of in-force business shown in (6), and using the same assumptions. A modified coinsurance arrangement was established on April 1, 2019, for a portion of the new business and this has been reflected in the value of new business.

#### **(8) Certainty equivalent present value of future profit**

The certainty equivalent value is the present value of future after-tax profits, calculated on a deterministic basis, assuming all assets earn the risk-free rate and all cash flows are discounted at the risk-free rate. The certainty equivalent approach ensures that future investment risk premiums are not capitalized in the embedded value.

#### **(9) Time value of financial options and guarantees**

There are no options and guarantees, and therefore the time value of financial options and guarantees is zero.

#### **(10) Required capital**

Required capital is a part of adjusted net worth required to back the covered business and therefore cannot be immediately paid out to shareholders. The EEV Principles and Guidance define the minimum level for required capital to be equal to the statutory minimum capital requirement, and also allow companies to reflect other levels of required capital, such as their own required risk assessment, as long as the minimum requirement is satisfied.

Reflecting the operation of Lifenet as a going concern, a level of required capital corresponding to a 500% Japanese statutory solvency margin ratio was assumed. This satisfies the EEV Principles and Guidance (note the statutory minimum in Japan is a 200% solvency margin ratio). Japanese solvency regulations allow for the excess of the reserve over the full-Zillmer reserve to be counted as part of the solvency margin. The calculation of the amount of required capital reflects this benefit.

The adjusted net worth can be broken down into required capital and free surplus as follows.

(Millions of yen)			
	March 31, 2019	March 31, 2020	Increase (Decrease)
Adjusted net worth	14,860	12,553	(2,307)
Required capital	2,204	2,083	(120)
Free surplus	12,655	10,469	(2,186)

**(11) Frictional cost of capital**

This item is the cost of having to retain the level of required capital, and within the EEV bottom-up approach, it is referred to as “frictional cost”.

Within this item, tax on investment returns on required capital has been allowed for. Investment expenses incurred in respect of the assets backing the required capital (another frictional cost) are reflected in the unit cost assumptions.

**(12) Non-hedgeable risk**

EEV Principles define the EV to be calculated taking all the risks of the covered business into account. There are some non-hedgeable risks where the existing best estimate experience assumptions do not allow for the impact on embedded value of the full range of potential outcomes. These risks should be allowed for in the EEV through the allowance for non-hedgeable risk.

Lifenet estimated these costs for operational risks, counterparty risks, persistency risks, mortality and morbidity risks, expense risks, catastrophe risks and uncertainty in the realization of the ultimate forward rate using a simple model, and has made allowance for these risks in the EEV calculation.



## 5. Principal EEV Assumptions

### (1) Economic assumptions

In the certainty equivalent calculation, the discount rates and investment yields are the risk-free rates at the valuation date (March 31, 2020). These risk-free rates have been determined based on swap rates. The table below shows, for selected terms, the swap rates (one-year forward rates) used.

	1 year	2 year	3 year	4 year	5 year	10 year
Swap rates as of March 31, 2020	(0.02)%	(0.06)%	(0.08)%	(0.05)%	(0.05)%	0.30%
Swap rates as of March 31, 2019	(0.02)%	(0.07)%	(0.08)%	(0.06)%	(0.00)%	0.43%

	15 year	20 year	30 year	40 year	50 year	60 year
Swap rates as of March 31, 2020	0.24%	0.30%	0.35%	0.96%	3.62%	3.79%
Swap rates as of March 31, 2019	0.73%	0.88%	0.83%	1.25%	3.34%	3.49%

Interest rates beyond the last liquid data point are extrapolated based on a method using a predetermined ultimate forward rate.

Specifically, the ultimate forward rate is set at 3.8%, which has been updated from the 3.5% used at March 31, 2019, and the last liquid data point is set at the 40th year. Beyond the 40th year, we extrapolated the yield curve to the ultimate forward rate over a convergence period of 20 years by using the Smith-Wilson method. This methodology is based on the discussions for the Insurance Capital Standard being developed by the International Association of Insurance Supervisors.

For “Sensitivity 1e: Interest rates based on JGB yields” in Section 6, Japanese government bond (“JGB”) yields are used to derive the risk-free rates. The table below shows, for selected terms, the JGB yields (one-year forward rates) used. As with the swap rates above, the ultimate forward rate is set at 3.8% and the last liquid data point is set at the 40th year. Beyond the 40th year, we extrapolated the yield curve to the ultimate forward rate over a convergence period of 20 years by using the Smith-Wilson method.

	1 year	2 year	3 year	4 year	5 year	10 year
JGB yields as of March 31, 2020	(0.15)%	(0.11)%	(0.18)%	(0.03)%	(0.10)%	0.66%

	15 year	20 year	30 year	40 year	50 year	60 year
JGB yields as of March 31, 2020	0.66%	0.50%	0.26%	1.69%	3.65%	3.79%

## **(2) Other assumptions**

All cash flows (premium, commission, non-commission expense, death benefit, tax, etc.) were projected by applying best estimate assumptions. Expense assumptions have been set based on recent experience and the company's business plan, and other non-financial assumptions have been set based on past experience and industry experience.

### ***Expenses***

Expense assumptions have been set as best estimate assumptions, based on recent experience and the latest business plan.

Some expenses were eliminated as one-off expenses which are not expected to occur regularly in the future. The amount of one-off expenses incurred during fiscal year 2019 and eliminated in the derivation of the assumptions was 150 million yen.

In setting unit costs, Lifenet allows for consumption taxes (including local consumption tax), of 10%. The inflation rate is set to 0% for the first 40 years from the valuation date. Beyond the 40th year, inflation rates are increased based on the increase in forward rates to an ultimate inflation rate of 2%.

For the purpose of calculating the value of new business, the actual acquisition expenses incurred in the reporting period have been allowed for together with the same maintenance expense assumptions used to calculate the EV.

### ***Claim Payment, Lapse***

The best estimate assumptions for claim payments and lapses have been set based on Lifenet's own experience.

While the spread of the COVID-19 pandemic may impact future mortality and morbidity rates, given lack of experience data and the uncertainty surrounding future developments, its potential effect has not been considered in setting the assumptions for claim payments.

***Premium***

The policy contract for term life and term medical allows the premium rate to be recalculated on renewal. In projecting renewal premiums, current premium rates have been used, taking the renewal age of the policyholder into account.

***Policy reserve***

For policies issued by the end of March 2018, the premium reserve which is a part of policy reserve is calculated in line with the 5 year zillmerized reserving method in accordance with Insurance Business Regulation (“IBR”) 69.4.4. For policies issued after the end of March 2018 and for term life and term medical care policies after the renewal of the policy contract, the premium reserves are calculated in line with the standard valuation reserving method.

Lifenet adopted this method for the calculation of the future projected profits.

***Corporate tax***

In the future corporate tax calculation, the expected corporate tax offsets associated with losses carried forward were calculated and included in the value of in-force business. The effective corporate tax rates assumption (including local tax) has been set to 28.00%.

## 6. Sensitivities

The impacts of changes in assumptions (sensitivities) on the EEV results are summarized below. For each sensitivity, only one specific assumption is changed and other assumptions remain unchanged. It should be noted that the effect of the change of more than one assumption at a time is likely to be different from the sum of sensitivities carried out separately. As Japanese policy reserves are calculated in accordance with the IBR, the sensitivities carried out do not affect the reserves at the valuation date. A sensitivity using Japanese government bond yields has also been included.

(Millions of yen)

	Change in EEV as of March 31, 2020	Percentage change	Change in Value of New Business	Percentage change
EEV and New Business Value as of March 31, 2020	73,431	—	2,977	—
<b>Sensitivity 1a:</b> 1.0% increase in interest rates	(2,585)	(3.5)%	161	5.4%
<b>Sensitivity 1b:</b> 1.0% decrease in interest rates	1,983	2.7%	(451)	(15.2)%
<b>Sensitivity 1c:</b> 0.5% increase in interest rates	(1,243)	(1.7)%	109	3.7%
<b>Sensitivity 1d:</b> 0.5% decrease in interest rates	1,096	1.5%	(180)	(6.1)%
<b>Sensitivity 1e:</b> Interest rates based on JGB yields	683	0.9%	186	6.3%
<b>Sensitivity 2:</b> 10% decrease in value of equity, real estate and investment trusts	(411)	(0.6)%	—	—
<b>Sensitivity 3:</b> 10% decrease in operating expenses	3,140	4.3%	658	22.1%
<b>Sensitivity 4:</b> 10% decrease in lapse rate	112	0.2%	(40)	(1.4)%
<b>Sensitivity 5:</b> 5% decrease in claim incidence rates for life business	3,847	5.2%	485	16.3%
<b>Sensitivity 6:</b> Change the required capital to the statutory minimum	44	0.1%	8	0.3%

- ◆ **Sensitivity 1a:** 1.0% increase in interest rates (risk-free rate) (for all future years)
- ◆ **Sensitivity 1b:** 1.0% decrease in interest rates (risk-free rate) (for all future years)
- ◆ **Sensitivity 1c:** 0.5% increase interest rates (risk-free rate) (for all future years)
- ◆ **Sensitivity 1d:** 0.5% decrease interest rates (risk-free rate) (for all future years)

Fixed interest assets (bonds, etc.) are revalued according to the change in the interest rate. The value of in-force business and the adjusted net worth are re-calculated according to the change of investment yield and discount rate. Even if the interest rate becomes negative after the deduction of 1.0% or 0.5%, no flooring is applied.

For all risk-free rate sensitivities above, the ultimate forward rate is unchanged.

- ◆ ***Sensitivity 1e:*** Applying risk-free rates derived from Japanese government bond (“JGB”) yields *(for all future years)*

As with the risk-free rates derived from swap rates, the risk-free rates used in this sensitivity are extrapolated using the same method to the ultimate forward rate.

- ◆ ***Sensitivity 2: 10% decrease in value of equity, real estate and investment trust assets***

Market values of equities, real estate and investment trusts at the valuation date are reduced by 10%.

- ◆ ***Sensitivity 3: 10% decrease in operating expenses***

A factor of 0.9 is applied to expenses connected with the maintenance and continuation of contracts, leaving other expenses unchanged.

- ◆ ***Sensitivity 4: 10% decrease in lapse rate***

Base lapse rates are multiplied by 0.9.

- ◆ ***Sensitivity 5: 5% decrease in claim incidence rates for life business***

Base claim incidence rates (mortality and morbidity) are multiplied by 95%. The possibility of premium rate cuts and any other management actions associated with such changes in the claim level are not reflected.

- ◆ ***Sensitivity 6: Change the required capital to the statutory minimum (200% of solvency margin ratio)***

## 7. Notes on the Use of the Information

The calculation of EV results involves certain assumptions regarding future projections that are subject to risks and uncertainties. It should be noted that actual future results might differ materially from the assumptions used in the EV calculations, and users of this information are advised to be cautious.

## 8. Third Party Opinion

Lifenet engaged Willis Towers Watson to review its EEV results and obtained the following opinion.

Willis Towers Watson has reviewed the methodology and assumptions used to determine the embedded value results as of March 31, 2020 for Lifenet. The review covered the embedded value as of March 31, 2020, the value of new business issued in fiscal year 2019, the analysis of movement in the embedded value during fiscal year 2019 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 through Lifenet's market-consistent methodology as described in Section 4 of this document;
- The operating assumptions have been set with appropriate regard to past, current and expected future experience; and
- The economic assumptions used are internally consistent and consistent with observable market data.

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 this 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.

Sudden unforeseen events such as the COVID-19<sup>3</sup> pandemic can have significant impacts on the level of economic activity, investment markets and Lifenet's business and its experience. In forming our opinion on the future expected experience we have not directly considered the potential impact including volatility on Lifenet's business, the investment markets or the industry of such events, including COVID-19, unless and only to the extent that such potential impact is specifically described in the disclosure provided in this document.

In arriving at these conclusions, Willis Towers Watson has relied on data and information provided by Lifenet. This opinion is made solely to Lifenet 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 Lifenet for or in connection with its review work, the opinions it has formed, or for any statement set forth in this opinion.

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<sup>3</sup> the coronavirus outbreak named as COVID-19 by the World Health Organisation on 11 February 2020.