

**SCB Life Assurance  
Public Company Limited**

Embedded value as at  
31 December 2013  
and Independent Auditor's Report

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## **Independent Auditor's Report**

### **To the Board of Directors of SCB Life Assurance Public Company Limited**

We have been engaged by SCB Life Assurance Public Company Limited to review the accompanying Embedded Value Report of the Company for the year ended 31 December 2013. Management is responsible for the preparation and presentation of the report in accordance with the basis set out in the accompanying Embedded Value Report. Our responsibility is to express a conclusion on the Embedded Value Report based on our review.

This report is made solely to the Company in accordance with the terms of our engagement to provide a review conclusion to the Directors on the Embedded Value Report. Our review of the Embedded Value Report has been undertaken so that we might state to the Company those matters we have been engaged to state in this report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the Company for our review work, for this report, or for the conclusions we have reached.

### **Scope of Review**

We conducted our review in accordance with the Thai Standard on Review Engagements 2410, "Review of Interim Financial Information Performed by the Independent Auditor of the Entity". A review consists of making enquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with Thai Standard on auditing and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

### **Conclusion**

Based on our review, nothing has come to our attention that causes us to believe that the Embedded Value Report for the years ended 31 December 2013 has not been prepared, in all material respects, in accordance with the basis of preparation of the accompanying report, using the methodology and assumptions set out in sections 3 and 4 of the Embedded Value Report.

For and on behalf of KPMG Phoomchai Audit Ltd

*KPMG Phoomchai Audit Ltd*

Bangkok  
4 April 2014



## Independent Actuarial Certification

Based on the scope of review and the work we have performed, I confirm that:

- (a) the methodology used to determine the embedded value and value of new business is reasonable and consistent with generally accepted traditional embedded value principles;
- (b) the assumptions adopted to determine the value of in-force business and value of one year's new business are reasonable; and
- (c) the valuation results of applying the methodology and assumptions, as set out in the Basis of preparation and Assumptions sections of this report, appear overall reasonable.

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**John Tan, FSA**  
Director

4 April 2014

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**Date**

## **Cautionary statement concerning embedded value**

The embedded value results contain forward-looking statements based on management's current view and assumptions. As such, future actual results may differ materially from those in these statements.

Forward-looking statements involve inherent risks and uncertainties, and it might not be possible to achieve the predictions, forecasts, projections and other outcomes described or implied in these statements.

A number of important factors could cause results to differ materially from forward-looking statements including, but not limited to, changes in the operating and economic environments and natural variations in experience.

## Summary of results

The embedded value is a measure of the value of shareholder's interest in earnings distributable from assets allocated to the in-force business after allowance for the aggregate risks.

SCB Life Assurance Public Company Limited ("Company") has determined its embedded value and value of new business on a traditional basis using deterministic discounted expected cash flows and allowing for the aggregate risks through a risk adjusted discount rate.

The Embedded Value Report was approved by the Management and submitted to the Board of Directors for approval on 17 March 2014.

### Embedded value as at 31 December 2013 and 2012

Risk discount rate at 10% (Baht million)	2013	2012	Difference	Growth
Adjusted net asset value	12,945	14,687	(1,742)	(12%)
Value of in-force business (before cost of capital)	23,319	20,369	2,950	14%
Cost of solvency capital	(5,845)	(8,051)	2,206	(27%)
Value of in-force business (after cost of capital)	<u>17,474</u>	<u>12,318</u>	<u>5,156</u>	<u>42%</u>
<b>Embedded value</b>	<b><u>30,419</u></b>	<b><u>27,005</u></b>	<b><u>3,414</u></b>	<b><u>13%</u></b>

### Value of one year's new business as at 31 December 2013 and 2012

Risk discount rate at 10% (Baht million)	2013	2012	Difference	Growth
Value of one year's new business (before cost of capital)	5,087	4,073	1,014	25%
Cost of solvency capital	(682)	(996)	314	(32%)
<b>Value of one year's new business (after cost of capital)</b>	<b><u>4,405</u></b>	<b><u>3,078</u></b>	<b><u>1,327</u></b>	<b><u>43%</u></b>

Traditional embedded value is a common methodology adopted by life insurance companies in Asia. Recently, alternative approaches such as "market consistent embedded value" have been developed where risks are explicitly valued. SCB Life has not examined the value which could be obtained using these alternative approaches.

## **Basis of preparation**

### **Overview**

The components of embedded value of the Company as at 31 December 2013 and 2012 presented in this report include:

- adjusted net asset value (“NAV”) which is the total assets net of total statutory liabilities after taxation; and
- value of in-force business (“VIF”) which is the discounted present value of future distributable earnings (after cost of capital) arising from the business in-force at the valuation date using a traditional deterministic approach.

We have also presented the value of one year’s new business (“VONB”) as the discounted present value of future distributable earnings (after cost of capital) arising from business issued in the 12 months to 31 December 2013 and 2012.

In calculating the various components of value we have assumed a continuation of the current regulatory environment as at 31 December 2013.

### **Adjusted net asset value**

Net asset value is defined as the value of assets less liabilities and measured on the Thailand Statutory basis as reported in the Financial Statements prepared under Thai Financial Reporting Standards.

In order to derive the adjusted net asset value, adjustments are made to the net assets to reflect the market value of certain assets which are recorded at book value in the Financial Statements. The adjustments are made net of tax.

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

The following sets out the treatment of various items in the calculation of the value of in-force business (“VIF”):

- distributable earnings are those profits arising from projected revenues net of tax after allowance for statutory reserves and risk based required capital at a capital adequacy ratio of 140%;
- projected items include expected future premiums, insurance claims payments, expenses and commission and interest earned on assets backing the policyholder liabilities and required capital;
- the assumptions adopted to calculate the value of in-force business are prudent best estimates of expected future experience determined by management as at 31 December 2013 and 2012; and
- all required capital and cash flows used are after tax, and discounted using a single risk discount rate of 10%.

### **Value of one year’s new business**

In placing a value on one year’s new business, the new business volumes and mix were based on the actual business written by the Company in the 12 months to 31 December 2013 and 2012,

respectively. The value of new business is determined at point of sale and uses the point of sale assumptions.

## **Assumptions**

### **Risk discount rates**

The risk discount rate ("RDR") adopted for the calculation of EV as at 31 December is 10%. This assumption is unchanged from the 2012 EV calculation.

### **Methodology**

The RDR represents the market and/or shareholders' expected rate of return commensurate with the risks associated with the realisation of future distributable earnings. The discount rates appropriate to a shareholder will depend on objective and subjective considerations including their own requirements, tax position and perception of risks associated with the realisation of future profits.

The RDR is computed based on the expected rate of return, expected risk-free rate and sensitivity of the rate of return to overall market returns. The expected risk-free return is based on 10-year government bond yield at year-end 2013. The sensitivity (Beta) of the Company's shares within the Stock Exchange of Thailand is also derived from Bloomberg.

Using this approach, the historical 5-year RDR is approximately 10%. An RDR of 10% is comparable to the rate used by other life insurance companies in the Thai market.

### **Investment returns**

The investment return assumption adopted for calculating embedded value as at 31 December 2013 is 5% (2012: 5%). This is consistent with the asset strategies and long-term expected returns of the company's portfolio, net of investment expenses.

### **Inflation**

The long-term best estimate inflation assumption adopted for the calculation of EV as at 31 December 2013 is 3% (2012: 3%).

### **Mortality**

The Company's mortality assumptions are updated each year to reflect the latest experience and management's expectations of future expected mortality experience.

The mortality rates are set as a percentage of the publicly available mortality statistics (TSO08 Table) and vary by age, gender, distribution channel, product and policy duration in-force.

### **Persistency**

The Company's persistency assumptions are updated annually to reflect its latest experience and management's expectations of future persistency experience.

Persistency assumptions are set by channel, major product type, premium paying frequency and policy year.



## **Loss ratios**

The Company's loss ratio assumptions are updated annually to reflect their latest experience and management's expectations of future loss ratios.

Loss ratios are set by product type.

## **Operating expenses**

Expense assumptions are updated annually to reflect the latest actual expenses experience and management's forecasted future expenses.

## **Commission and other variable costs**

Commission assumptions are updated annually to reflect actual experience and management's expected future commission expenses and other variable costs.

## **Taxation**

In determining EV as at 31 December 2013, the tax calculation is consistent with the current regulatory requirement in Thailand. Income tax rate of 20% for year 2013 onwards are used. The company believes that the current legislated tax rate of 20% will be extended following the expiry in 2015 of the current legislation as the current tax rate was designed to make Thailand competitive regionally.

## **Required capital**

The Company continues to set the risk based capital adequacy ratio at 140% in the projection of VIF.

The Company's cost of capital is determined as the initial required capital plus the present value discounted at the risk discount rate of; the increase or release in required capital minus after tax investment income on the required capital.

## **Others**

Currently, reinsurance is considered immaterial to the embedded value and is therefore not included in the embedded value computation.

Statutory reserves are modeled using the Net Premium Valuation ("NPV") basis but in practice are regularly checked for adequacy by comparison against the current best estimated gross premium valuation reserves ("GPV") as per the risk based capital calculation.

## Sensitivity

The tables below provide sensitivity analysis for value of in force and value of new business. Key parameters have been changed individually as described in the tables below. The ranges given should not be interpreted to imply an upper or lower bound.

### Sensitivity results of value of in-force business as at 31 December 2013

Base Case (Baht Million)	17,474	Change	% Change
Sensitivity 1: 25 bps increase in investment return	19,714	2,240	13%
Sensitivity 2: 25 bps reduction in investment return	15,237	(2,237)	(13%)
Sensitivity 3: 10% increase in lapse rate	17,348	(126)	(1%)
Sensitivity 4: 10% reduction in lapse rate	17,593	119	1%
Sensitivity 5: 10% increase in mortality, morbidity and loss ratio	16,862	(612)	(4%)
Sensitivity 6: 10% reduction in mortality, morbidity and loss ratio	18,088	614	4%
Sensitivity 7: 10% increase in expenses	16,902	(572)	(3%)
Sensitivity 8: 10% reduction in expenses	18,047	573	3%
Sensitivity 9: 100 bps increase in risk discount rate	16,246	(1,228)	(7%)
Sensitivity 10: 100 bps reduction in risk discount rate	18,864	1,390	8%
Sensitivity 11: 30% Tax rate for 2015 onwards	14,833	(2,641)	(15%)
Sensitivity 12: At CAR of 165% (or 25% points above 140%)	16,076	(1,398)	(8%)

### Sensitivity results of value of one year's new business as at 31 December 2013

Base Case (Baht Million)	4,405	Change	% Change
Sensitivity 1: 25 bps increase in investment return	4,752	347	8%
Sensitivity 2: 25 bps reduction in investment return	4,058	(347)	(8%)
Sensitivity 3: 10% increase in lapse rate	4,262	(143)	(3%)
Sensitivity 4: 10% reduction in lapse rate	4,555	150	3%
Sensitivity 5: 10% increase in mortality, morbidity and loss ratio	4,257	(148)	(3%)
Sensitivity 6: 10% reduction in mortality, morbidity and loss ratio	4,553	148	3%
Sensitivity 7: 10% increase in expense	4,206	(199)	(5%)
Sensitivity 8: 10% reduction in expense	4,603	198	4%
Sensitivity 9: 100 bps increase in risk discount rate	4,094	(311)	(7%)
Sensitivity 10: 100 bps reduction in risk discount rate	4,755	350	8%
Sensitivity 11: 30% Tax rate for 2015 onwards	3,566	(839)	(19%)
Sensitivity 12: At CAR of 165% (or 25% points above 140%)	3,992	(413)	(9%)