

**Bangkok Life Assurance
Public Company Limited**

Embedded value as at
31 December 2014
and Independent Auditor's Report



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Independent Auditor's Report

To the Board of Directors of Bangkok Life Assurance Public Company Limited

We have been engaged by Bangkok Life Assurance Public Company Limited to review the accompanying Embedded Value Report of the Company for the year ended 31 December 2014. 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 year ended 31 December 2014 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 on pages 3 to 4 of the attached Embedded Value Report.

For and on behalf of KPMG Phoomchai Audit Ltd

Bangkok
3 April 2015

EMBEDDED VALUE REPORT OF BANGKOK LIFE ASSURANCE PUBLIC COMPANY LIMITED

In order to provide investors with additional information to understand our economic value and business performance results, Bangkok Life Assurance Public Company Limited (the “Company”) has provided the following information regarding its embedded value. The embedded value represents the shareholders’ adjusted net asset value plus the value of the Company’s in-force life insurance business adjusted for the cost of maintaining the regulatory solvency margin deployed to support this business. The embedded value excludes the value of future new business sales.

The calculation of embedded value necessarily makes a number of assumptions with respect to future experience of the in-force portfolio of business. As a result, future experience may vary from that assumed in the calculation, and these variations may be material. The market value of the Company is measured by the value of the Company’s shares on any particular day. In valuing the Company’s shares, investors take into account a variety of information available to them and their own investment criteria. Therefore, these calculated values should not be construed as a direct reflection of the actual market value.

The embedded value report was approved by the Board of Directors on 16th March 2015.

Components of embedded value

(in Baht million)	31 December 2014	31 December 2013
Risk discount rate	10%	10%
Adjusted net asset value	36,580	22,449
Value of in-force business after tax	17,236	15,383
Cost of holding the required solvency margin	(6,031)	(5,191)
Value of in-force insurance business after cost of solvency	11,205	10,192
Embedded value	47,785	32,641

(in Baht million)	31 December 2014	31 December 2013
Risk discount rate	10%	10%
Value of one year’s new business	1,757	2,373
Cost of holding the required solvency margin	(614)	(511)
Value of one years new business after cost of solvency	1,143	1,862

Methodology

Embedded value methodology

Embedded value (“EV”) is the actuarially estimated economic value of a life insurance company. The methodology we have adopted for the EV calculation is commonly known as the Traditional Embedded Value (“TEV”) method. Under TEV, risk discount rate and investment income are set based on real-world expectations and may not be market-consistent.

There are two main components that make up the EV as follows:

- Adjusted net asset value

The adjusted net asset value of the Company is defined as the value of assets less policy liabilities, with asset value marketed to market, all measured on the Thailand statutory basis. Adjustments are made to this to derive the adjusted net asset value, mainly to reflect the market value of any assets that are not reported at market value under the Office of Insurance Commission regulations and the taxation of any unrealized gains.

- Value of in-force business

The value of in-force business has been calculated as the present value of expected future after tax distributable earnings for existing business discounted back to the valuation date using a traditional deterministic cash flow discount methodology. Distributable earnings are those profits arising after allowance for policy reserves.

New Business Value Methodology

The new business value is expressed by discounting the distributable earnings of one year’s new business back to the issue date.

An overriding principle in reporting the new business value is that the value accurately reflects expectations as of the valuation date. This implies that the value of new business assumptions should be best estimates at the valuation date and that there should not be an assumption change component to the movement analysis for new business.

As stated in the definitions, the new business value is the value that is added to the company by the business written during the current period, assuming that the company is a mature going concern in normal conditions.

The assumptions are the same as best estimate assumptions at the valuation date.

The projection of cash flow after the end of year 2014 is the same as that for embedded value calculation except the amount is discounted by half of a year based on the assumption that all the new business is evenly acquired during 2014.

Key assumptions

The assumptions used in the embedded value calculation in 2014 have been made on a “going concern” basis, assuming continuation of the economic and legal environment currently prevailing in Thailand. The current statutory reserving basis and solvency margin requirement were assumed in the calculation.

Certain portfolio assumptions were based on the Company’s own recent experience as well as considering the more general Thailand market and other life insurance market’s experience. The principal bases and assumptions used in the calculation are described below:

1. Risk discount rate

A discount rate of 10% (2013: 10%) has been assumed in each future year as the discount rate for the in-force life insurance business.

2. Investment returns

Future investment returns have been assumed to be 4.75% (2013: 5%).

3. Taxation

An income tax rate of 20% has been assumed to continue to be effective in the future (2013: 20%).

4. Solvency capital

The Company calculates the embedded value and cost of capital associated with it assuming the regulatory capital level of 140% (2013: 140%).

5. Mortality

The experience mortality rates have been based on percentages of the 2008 Thai Mortality Table for both male and female lives.

6. Morbidity

Morbidity assumptions have been based on the Company’s own new premium pricing table at the date of the product sale.

7. Lapse rate

Policy discontinuance rates have been based on the Company’s recent experience studies.

8. Expenses

Expenses assumptions have been based on the Company’s most recent expenses investigation.

Sensitivity analysis

The company has investigated the effect, on the value of in-force and new business of certain independently varying assumptions regarding future experience. Specifically, the following changes in assumptions have been considered:

(in Baht million)	Value of in-force business	% Change	Value of new business	% Change
Central case	11,205		1,143	
Increase investment income by 25 bps	14,005	25	1,459	28
Decrease investment income by 25 bps	8,399	(25)	826	(28)
Increase maintenance expense by 10%	10,921	(3)	1,098	(4)
Decrease maintenance expense by 10%	11,490	3	1,188	4
Increase risk discount rate by 100 bps	9,909	(12)	967	(15)
Decrease risk discount rate by 100 bps	12,624	13	1,337	17
Increase cost of capital by 25%	9,697	(13)	989	(13)
Decrease cost of capital by 25%	12,713	13	1,296	13
Increase lapse rate by 10% of base assumptions	11,041	(2)	1,100	(4)
Decrease lapse rate by 10% of base assumptions	11,380	2	1,189	4
Increase morbidity rate by 10% of base assumptions	10,769	(4)	1,101	(4)
Decrease morbidity rate by 10% of base assumptions	11,641	4	1,185	4
Increase mortality rate by 10% of base assumptions	11,061	(1)	1,069	(6)
Decrease mortality rate by 10% of base assumptions	11,352	1	1,217	7



บริษัท กรุงเทพประกันชีวิต จำกัด (มหาชน)
BANGKOK LIFE ASSURANCE PUBLIC COMPANY LIMITED

EV and VNB 2014

April 3, 2015

EV Valuation Methodology & Assumptions

Methodology

- BLA has adopted a traditional discounted cash flow methodology to determine the components of Embedded Value (EV)
- It is a common methodology used by life insurance companies in Asia at the current time

Component of EV

ANW
(Adjusted Net Worth)

Excess of market value of assets over statutory liabilities



VIF
(Value of In-force Business)

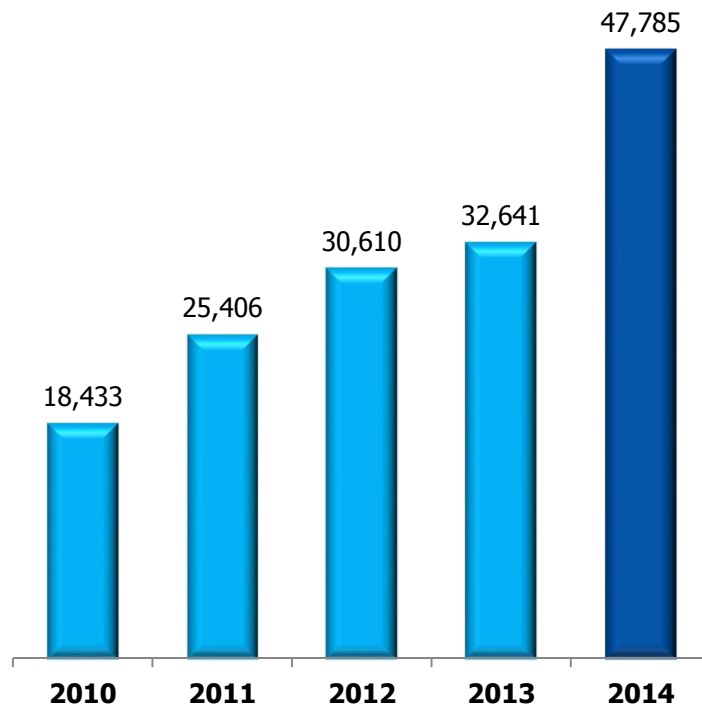
Discounted value of distributable earnings from In-Force business

Assumptions

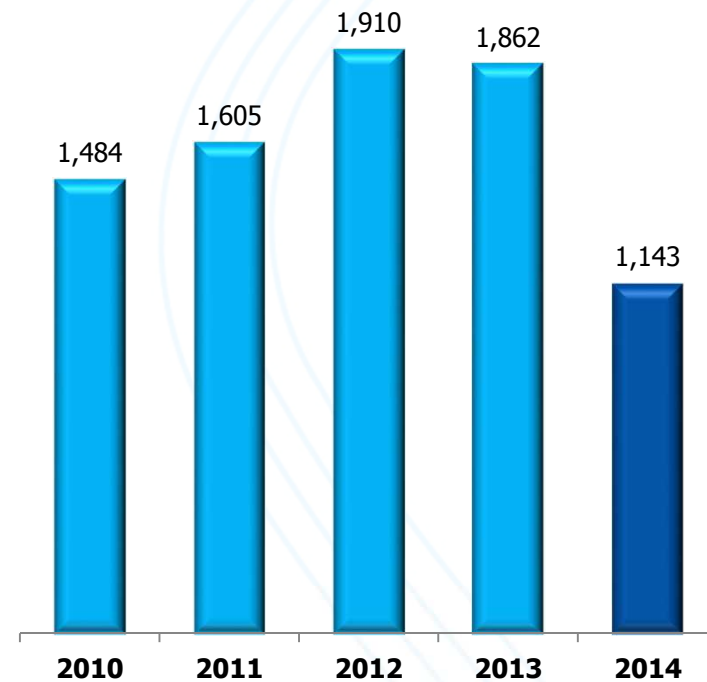
- Risk Discount Rate 10% (2013: 10%)
- Investment Return 4.75% (2013: 5%)
- Capital Adequacy Ratio 140% (2013 : 140%)
- Tax Rate 20% from 2014 onwards (2013 : 20%)
- Lapse, mortality, morbidity, expense and loss ratio assumption are prudent best estimate of BLA's future experience based on recent experience studies and business environment in Thailand.

Summary of results

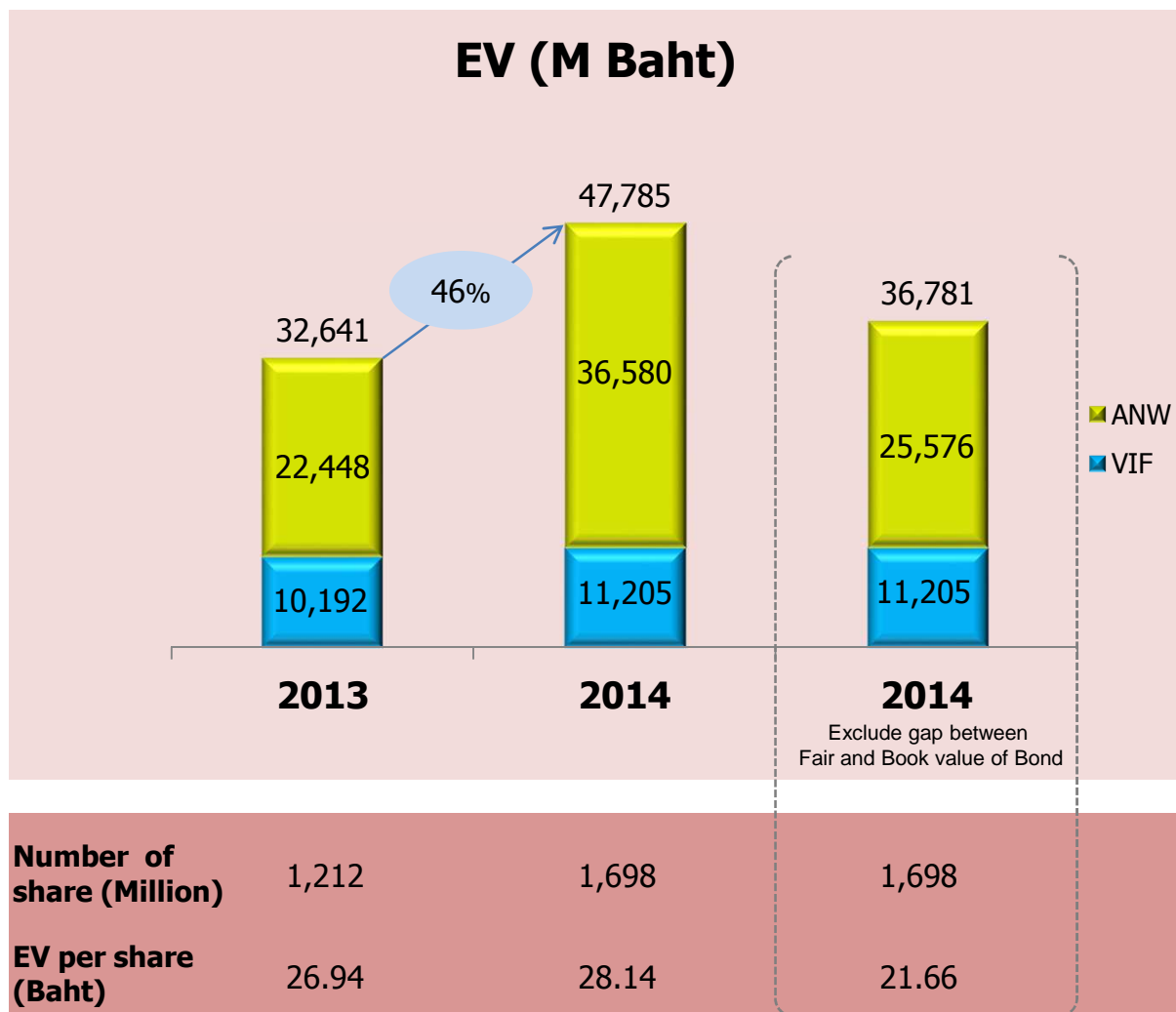
EV (M Baht)



VNB (M Baht)



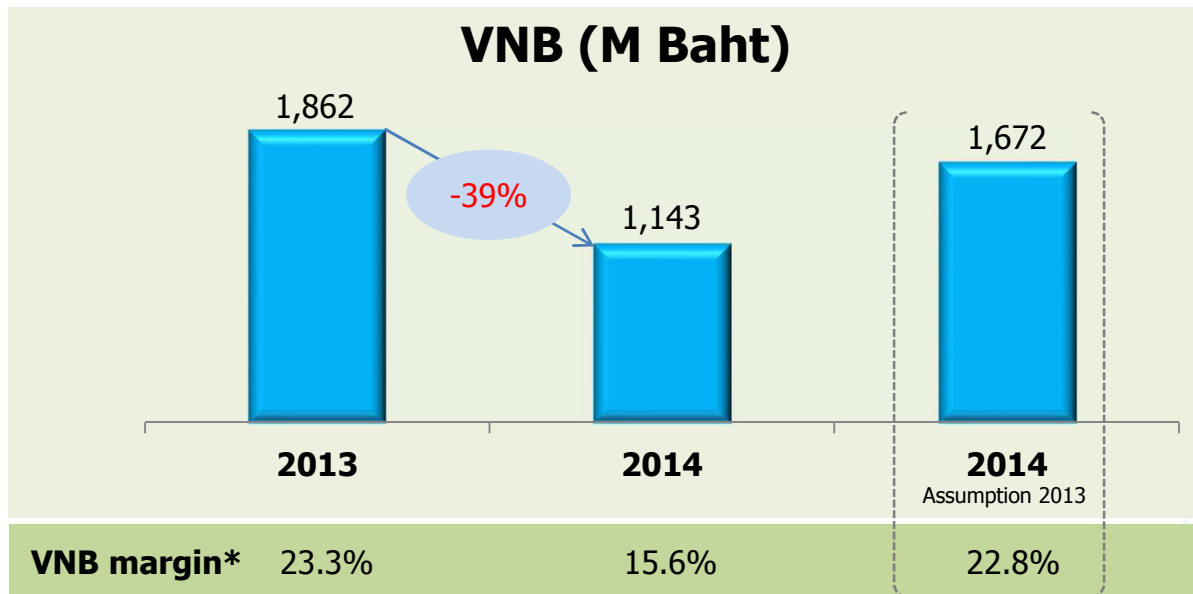
Significantly increasing of EV



- EV 2014 increase significantly from 2013 (+46%).
- The main reason comes from the increase in the fair market value of bond due to the drop in the market interest rate (+33%).

Excluding the impact from an increasing in Fair value of Bond ,The EV 2014 becomes 36,781 (+13%).

Decreasing of VNB



There are 3 main reasons that VNB decrease 39% from 2013.

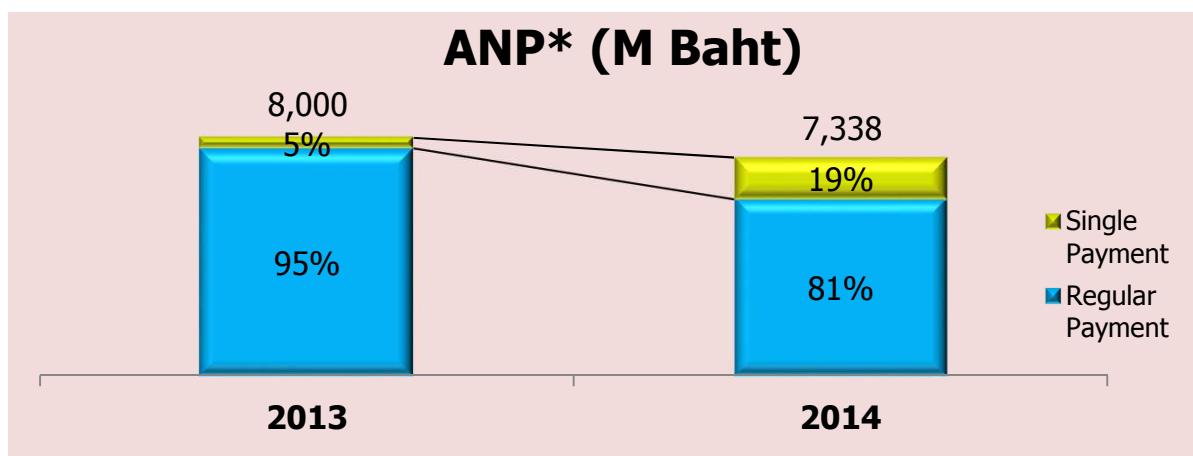
- The assumptions are changed from 2013 (Main impact comes from ROI change from 5% to 4.75%).

Excluding the impact from assumptions changed, The 2014 VNB becomes 1,672 Million Baht (-10%).

- The amount of Annualized New Premium (ANP) decrease slightly from 8,000 in 2013 to 7,338 in 2014 (-662 MB).

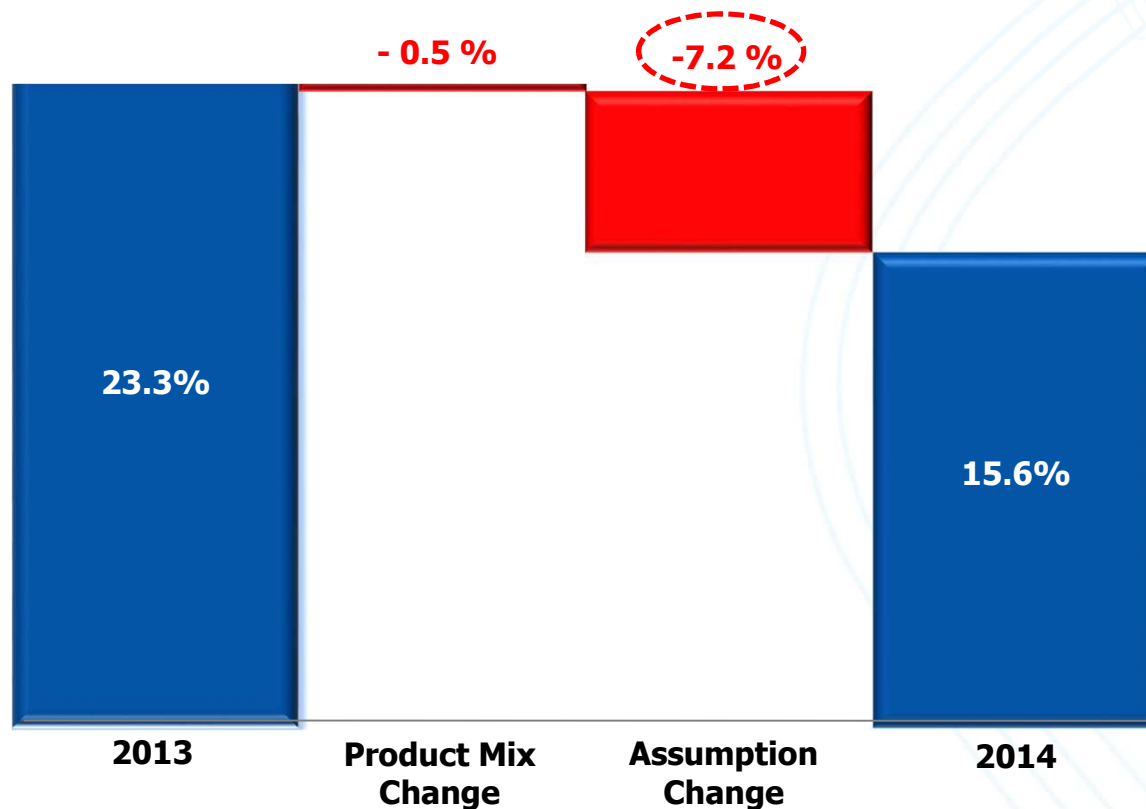
- Proportion of Single Payment products which normally have lower profit than Regular Payment increase significantly from 2013 (+14%).

*Remark: VNB Margin = VNB/ANP.
Annualized New Premium (ANP) include 100% of regular premium and 10% of single premium



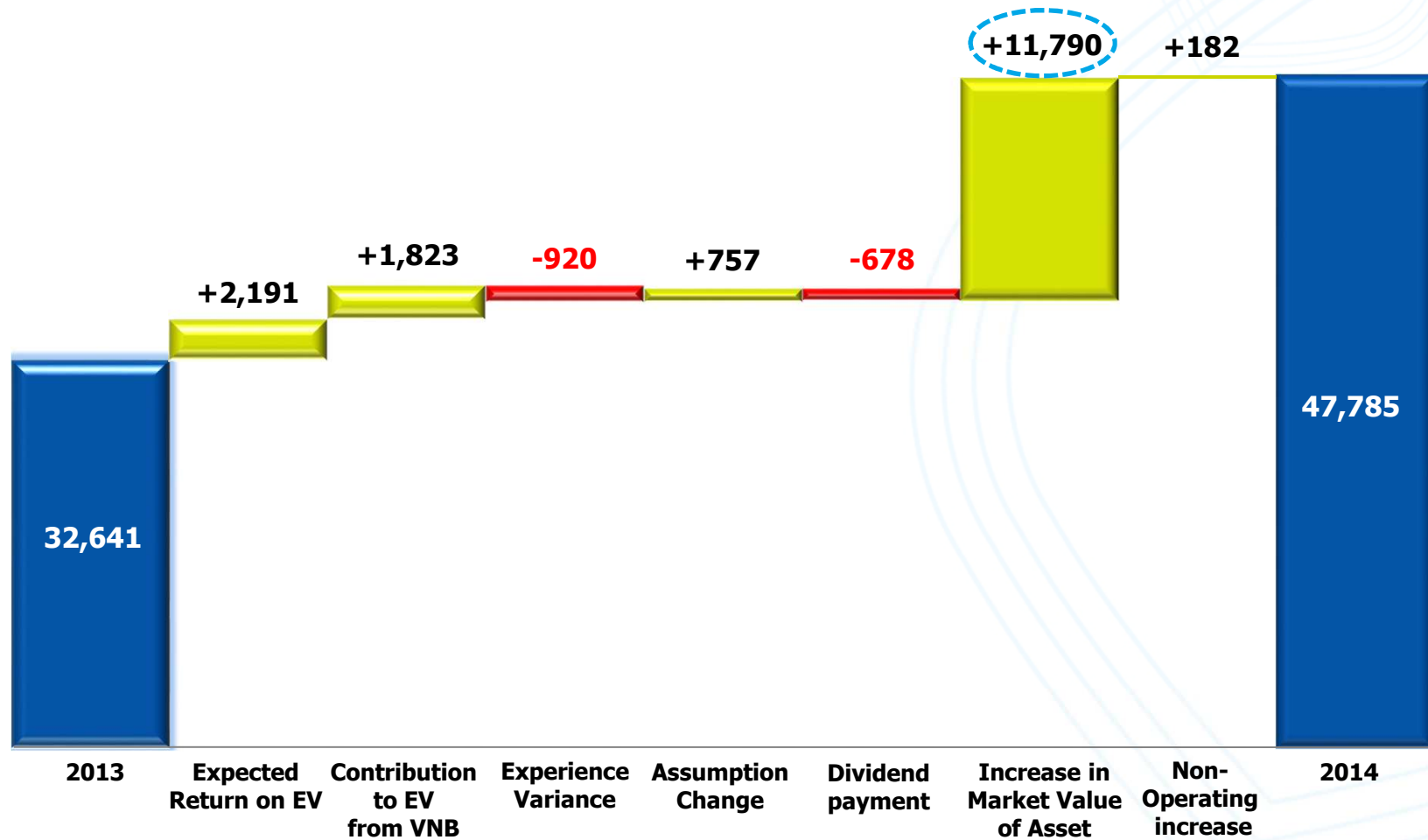
The decreasing in VNB Margin mostly comes from change in assumption (mostly comes from ROI change)

VNB Margin Movement



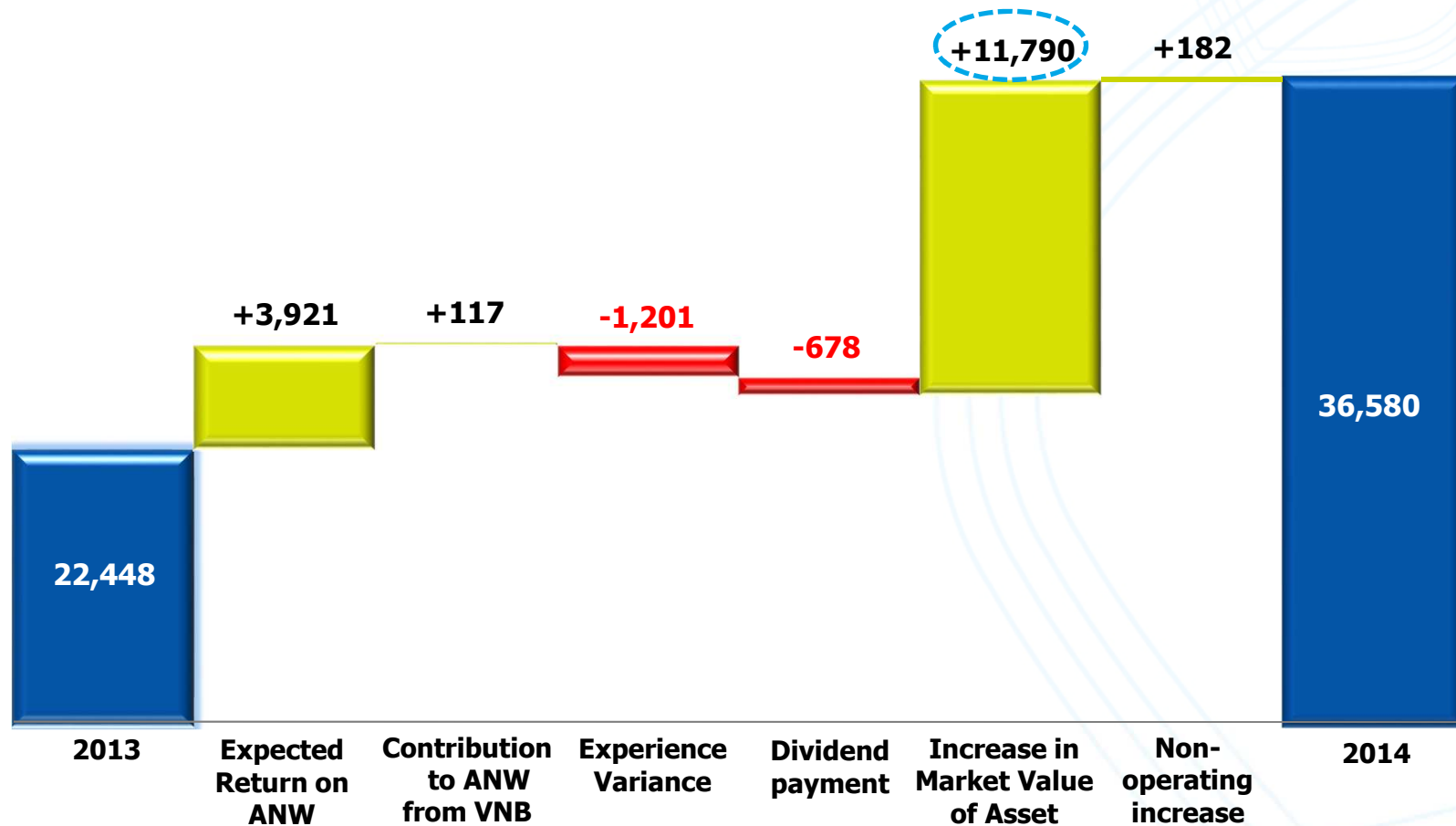
Increase in EV mostly comes from increase in Market value of Asset

EV Movement (M Baht)



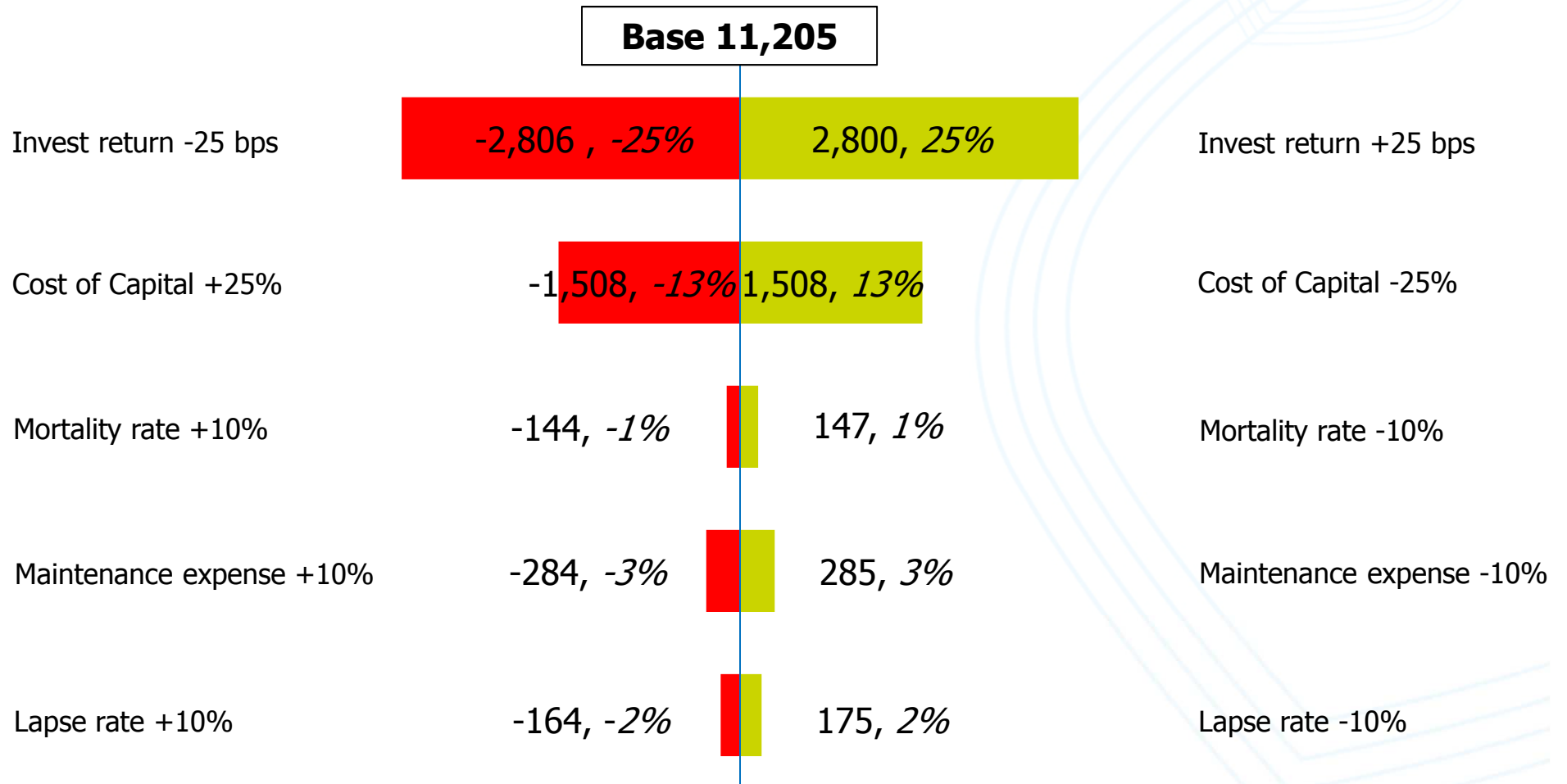
Increase in ANW mostly comes from increase in Market value of Asset

ANW Movement (M Baht)



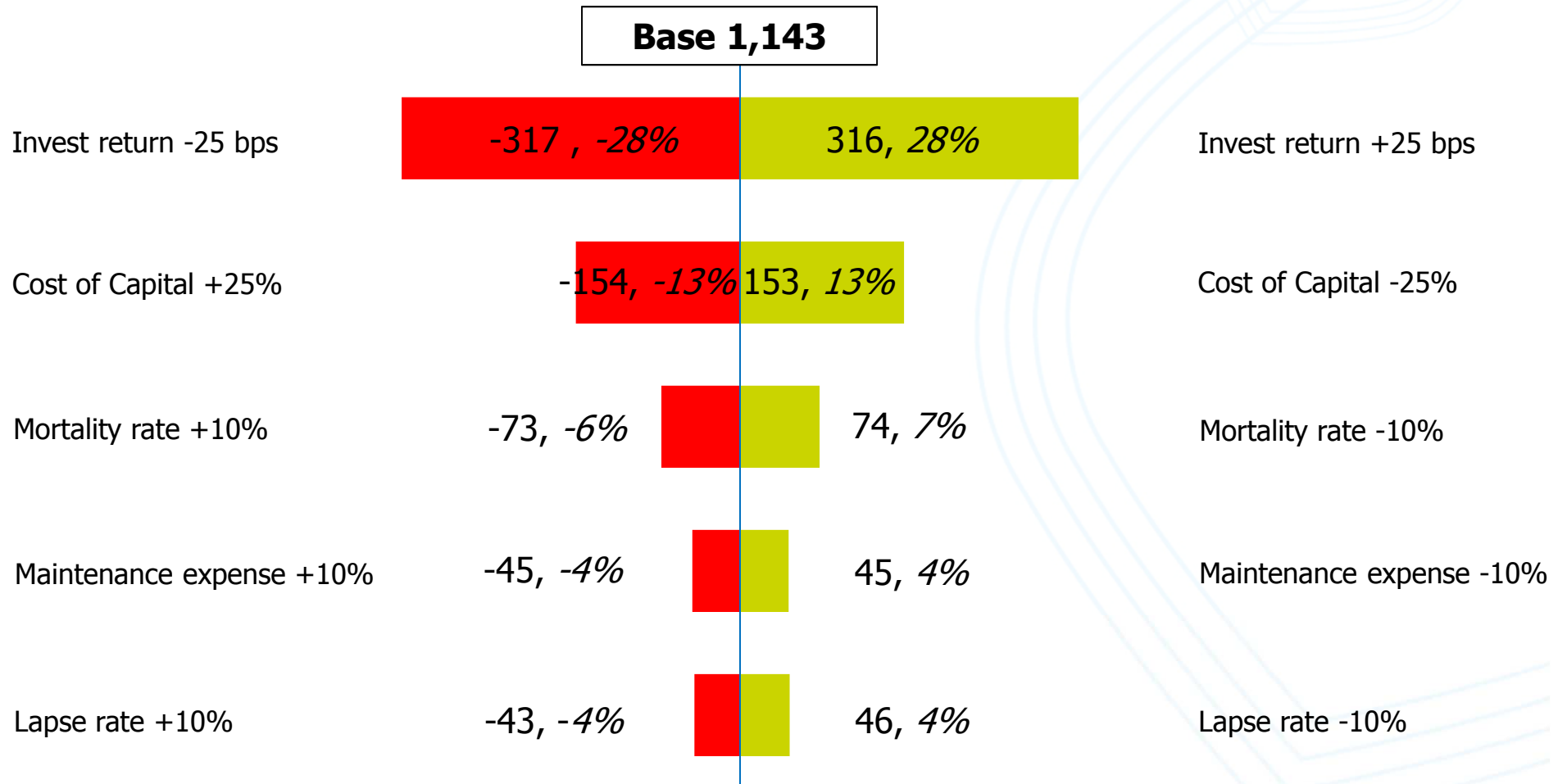
VIF is mostly sensitive to Investment Return

VIF Sensitivity (M Baht)



VNB is mostly sensitive to Investment Return

VNB Sensitivity (M Baht)





กรุงเทพมหานคร
ชีวิตที่มีความสุขมากกว่า