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# FY'16 Embedded Value

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**Feb 22, 2017**



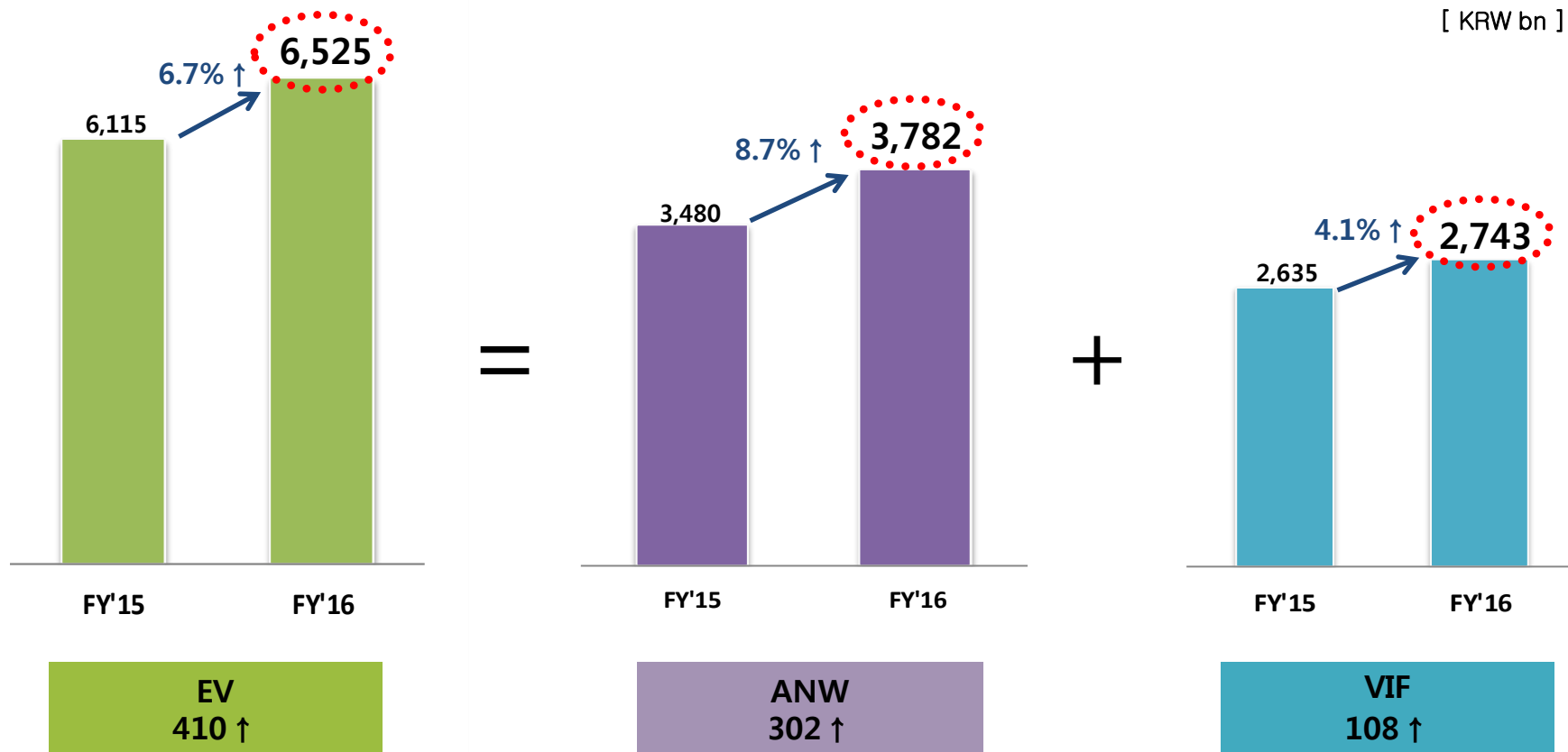
**Dongbu Insurance**

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# I. FY2016 Embedded Value

- FY'16 EV : 6,525 billion (comparison to 2015 results 6.7% ↑)  
→ Return on Embedded Value(RoEV) : 8.4%, EV Per Share : KRW 103,086



## II. Adjusted Net Worth

□ FY'16 ANW : KRW 3,782bn (YoY 8.7% ↑)

[ KRW bn ]

	FY'16	FY'15	YoY	
			Amount	G/R
① Statutory Equity	<b>3,965</b>	<b>3,683</b>	282	7.7%
<i>Capital Stock</i>	35	35	0	-
<i>Capital Surplus</i>	38	38	0	-
<i>Retained Earnings</i>	3,404	3,031	373	12.3%
<i>Capital Adjustment</i>	△29	△29	0	-
<i>Capital Adjustment on Unrealized Gains</i>	517	608	△91	△14.9%
② Adjustment Items	<b>183</b>	<b>203</b>	△20	△10.0%
<i>Intangible Asset</i>	101	136	△35	△25.8%
<i>Prepaid Expenses</i>	3	3	0	-
<i>Cash Dividend Reserved for Shareholders</i>	104	98	6	6.4%
<i>Corporate Taxes</i>	△25	△34	9	△25.6%
<b>Adjusted Net Worth (① - ②)</b>	<b>3,782</b>	<b>3,480</b>	302	8.7%

### III. Value of in-force Business (VIF)

#### 1. Key Assumptions

##### Loss Ratio

- Using last 5-year empirical stats

##### Lapse Rate

- Using last 5-year empirical stats

##### Expense Ratio

- Using last year empirical stats

##### Required Capital

- 150% capital retention proportional to required by RBC regulation

##### Investment Yield

- 3.2% (comparison to 2015, 0.2%p ↓)

##### Discount Rate

- 8.5% (comparison to 2015, 0.5%p ↓)

#### 2. Value Margin

[ KRW bn ]

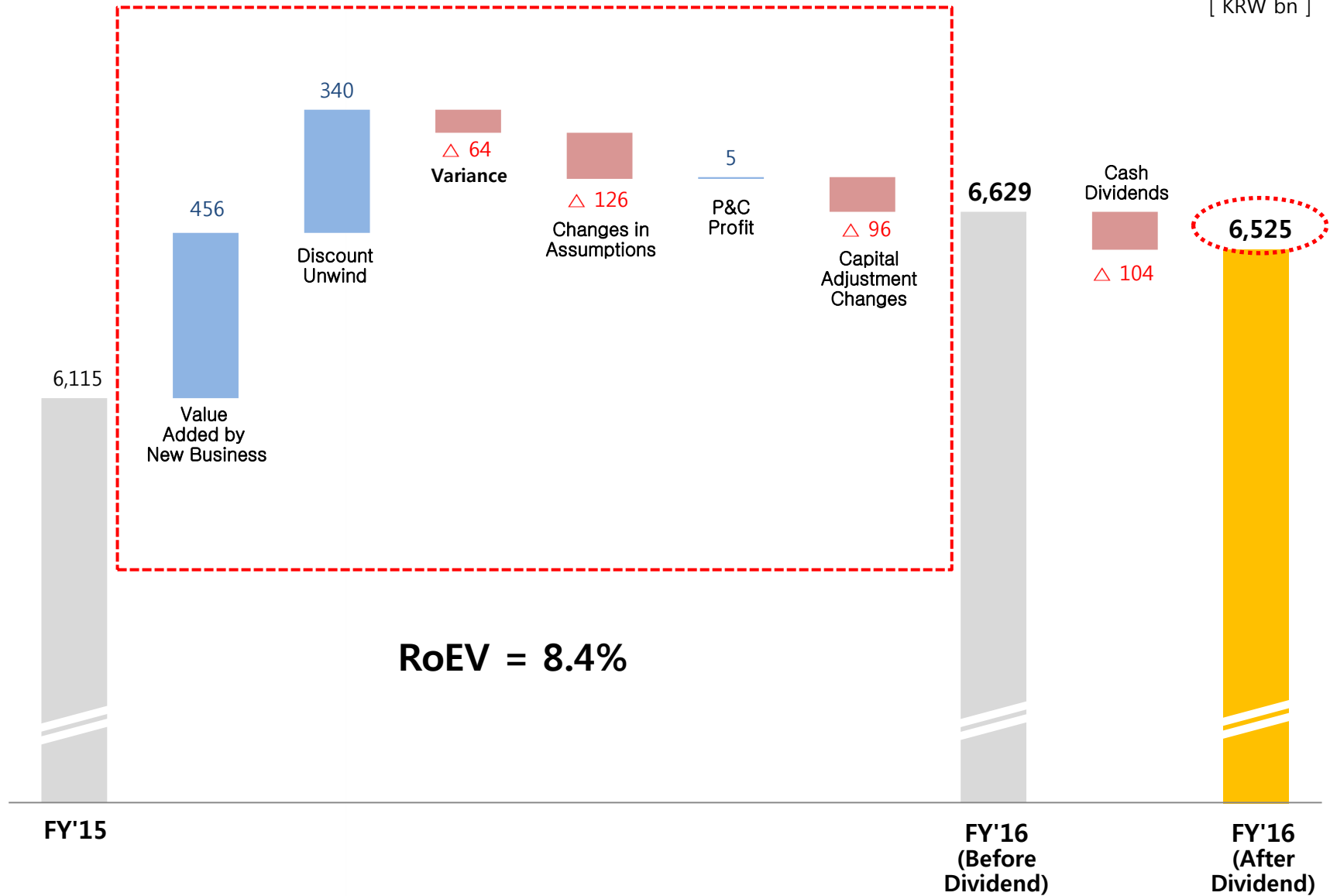
	FY'16	FY'15	YoY	
			Amount	G/R
① PV of Premium Income	37,790	35,086	2,703	7.7%
② VIF(a-b)	2,743	2,635	108	4.1%
<i>PV of distributable earnings (a)</i>	4,170	3,780	390	10.3%
<i>Cost of Capital (b)</i>	1,427	1,145	282	24.7%
<b>Value Margin (②/①)</b>	<b>7.3%</b>	<b>7.5%</b>		

\* Inflation Rate : 2.0%

\* Tax rate : 24.2%

# IV. Movement Analysis

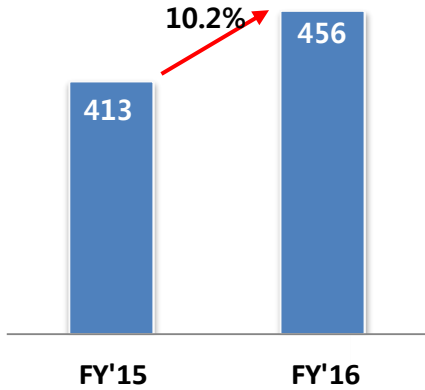
[ KRW bn ]



# V. Value of New Business

## Value of New Business

[KRW bn]



## Monthly Premium\*

[KRW bn, %]

구분	FY'15	FY'16	YoY
Driver	14.7	21.2	44.5
Protection**	89.3	80.6	△ 9.7
Savings	38.7	13.2	△ 65.9
<b>Total</b>	<b>142.7</b>	<b>115.0</b>	<b>△ 19.4</b>
<b>Ratio***</b>	<b>72.9%</b>	<b>88.5%</b>	<b>15.6%p</b>

\* Monthly Premium : Excluded single premium

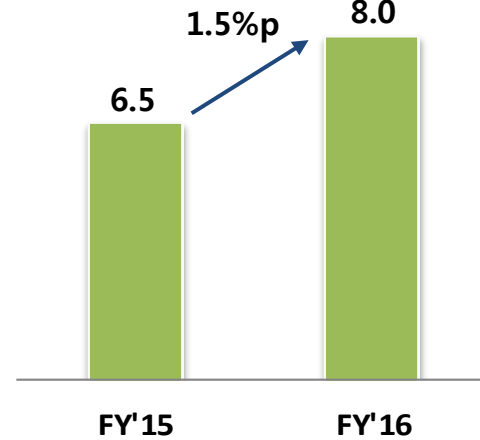
\*\* Protection : Included long-term property insurance

\*\*\* Ratio : (Driver + Protection) ratio

## New Business Margin

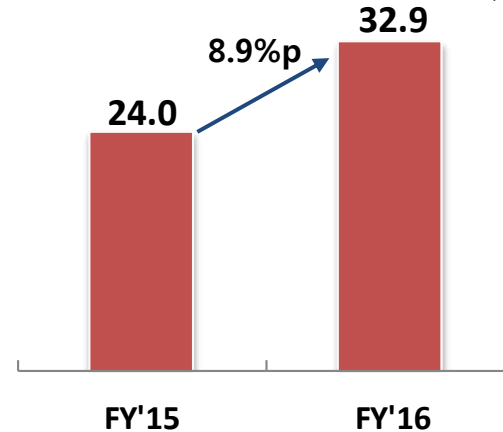
[ Profit Margin on PV of Premium]

(%)



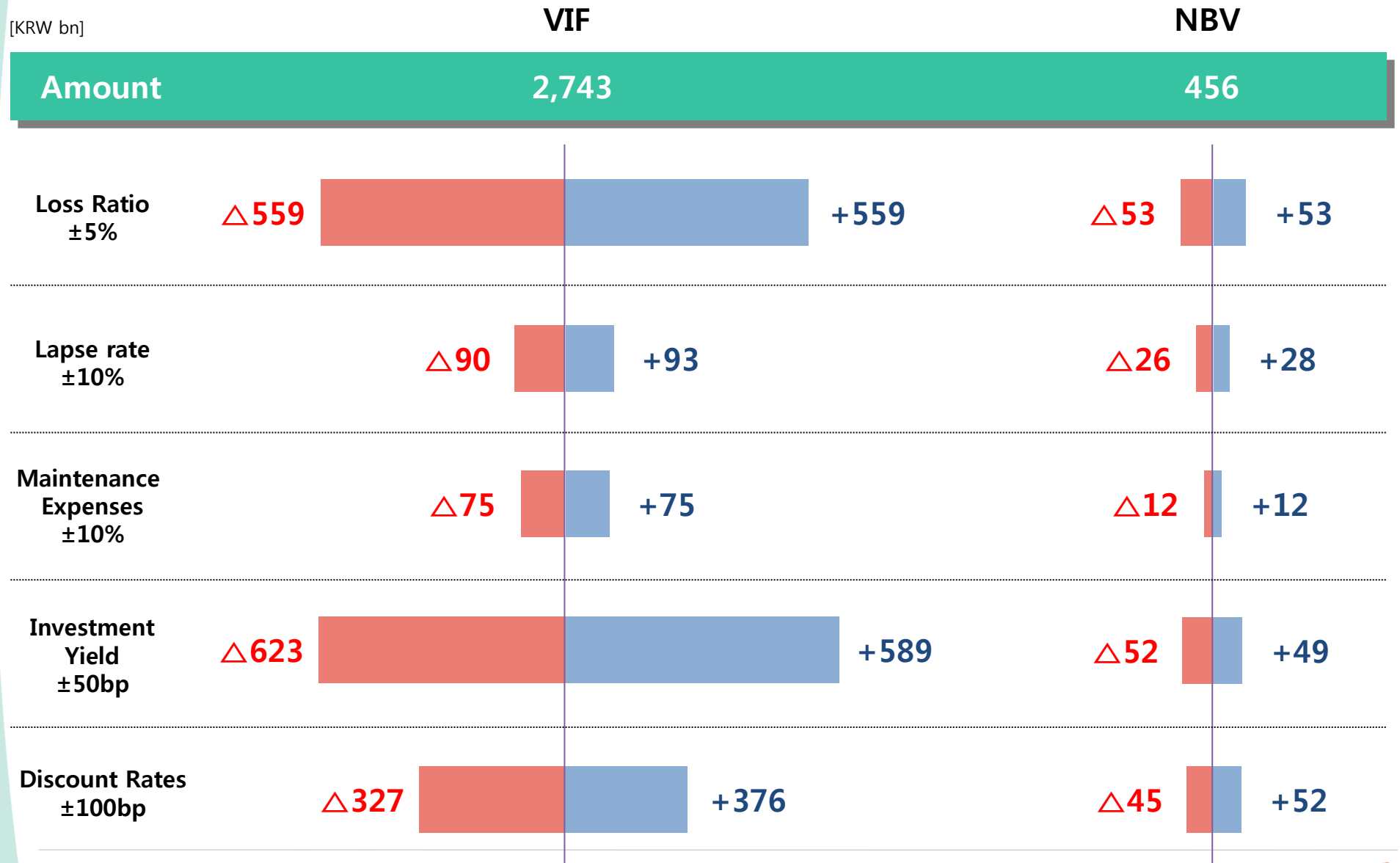
[ Profit Margin on APE]

(%)



# Appendix. Sensitivity Test

[KRW bn]





# Review Opinion

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- **Deloitte has reviewed methodology and assumptions used in calculation of VNB and VIF as of December 31, 2016, which covers long term insurance business. Deloitte has confirmed that Dongbu F&M has disclosed its EV in line with global standard for TEV calculation.**
- **The scope of review conducted by Deloitte include the followings**
  - Review of the reasonableness of the assumptions based on experience data(both economic and actuarial)
  - Review of Cash flow item followed by regulation change
  - Review of model fit(Static, Dynamic Validation)
  - EV calculation methodology and the result of calculation (ANW, VNB, VIF, Sensitivity, Movement analysis)
- **Due to the limitation of work scope, Deloitte did not conduct detailed review but has taken into account as aggregate basis. Deloitte also did not review Dongbu F&M's P&C business segment.**
- **A review is limited primarily to Dongbu F&M and therefore Deloitte is not liable for any responsibility or duty of care else than Dongbu F&M**

**Deloitte.**



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**상호소통 !**

**자율경영 !**