

## UNIQA Insurance Group AG Economic Capital and Embedded Value 2017

12 April 2018 Kurt Svoboda, CFRO



- Economic Capital position remains extraordinary strong
  - Economic Capital Ratio (ECR-ratio) stable at 210% (2016: 215%)
  - ECR allows for significant sovereign risk capital charge
- Regulatory Capital Position significantly increased as at year-end 2017
  - Approval of Partial Internal Model Non-Life included in regulatory SCR-ratio
  - Regulatory Capital Ratio increased to 250% (2016: 202%)
- Group Embedded Value (GEV) and New Business Value (NBV) further improved
  - GEV increased to EUR 5,140mn (+3%) driven by economic variance and strong operating earnings, including an increased NBV to EUR 99mn

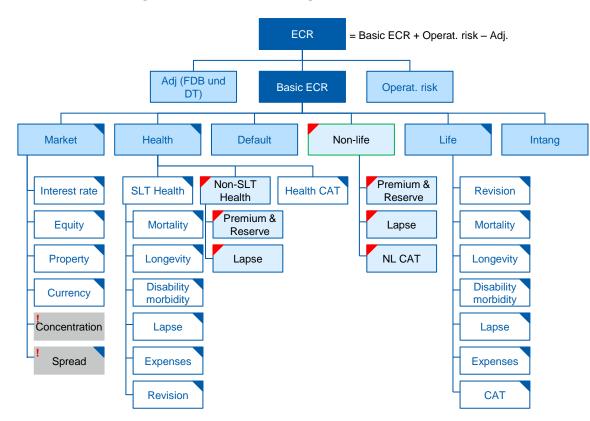


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- Disclosure of Economic Capital Model (ECM) results:
  - UNIQA discloses ECM results 2017 on the basis of the underlying and published methodology of the Group Economic Capital Model
  - Economic capital is a key figure for steering the UNIQA Group
  - UNIQA discloses the own funds and Economic Capital Requirement (ECR) details by risk classes
  - All figures are disclosed after the risk absorbing effects of future discretionary benefits
- Independent review of methodology, assumptions and calculations for economic capital calculation by B&W Deloitte GmbH
- Important valuation principles for the available own funds
  - Valuation of assets and liabilities based on EC Delegated Acts
  - Goodwill is set to zero according to EC specifications (EUR 296mn)
  - Market value of properties and loans replace the IFRS values
  - Participations are valued at market price as of 31.12.2017
  - Technical provisions and reinsurance recoverables are valued on a discounted best estimate basis





### UNIQA Group's economic capital model

Calculated according to UNIQA internal economic methodology

- Allowance for the risk absorbing effect of Future Discretionary Benefits (FDB)
- Calculated with partial internal model

### **Model details**

- Based on SII standard approach
- Spread risk and concentration risk are valued on the basis of an internal approach
- The underwriting risk of nonlife is valued on the basis of UNIQA's partial internal model
- Correlation assumptions equal to standard formula – this does not apply to the partial internal model where internal coefficients are used
- Underlying risk measure: 99.5% VaR (Value at Risk) over a 1-year time horizon

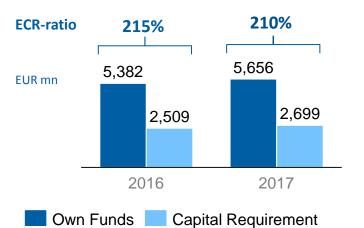


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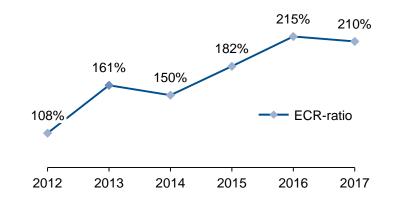
## **Group Capital Requirements**

Economic and Regulatory SII Capital Ratio

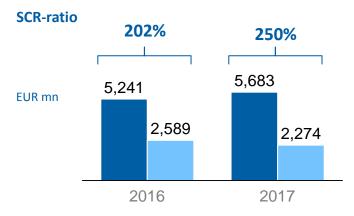


### **Economic capital position**

### **Development of ECR-ratio**



# Preliminary Regulatory SII capital position<sup>1</sup>



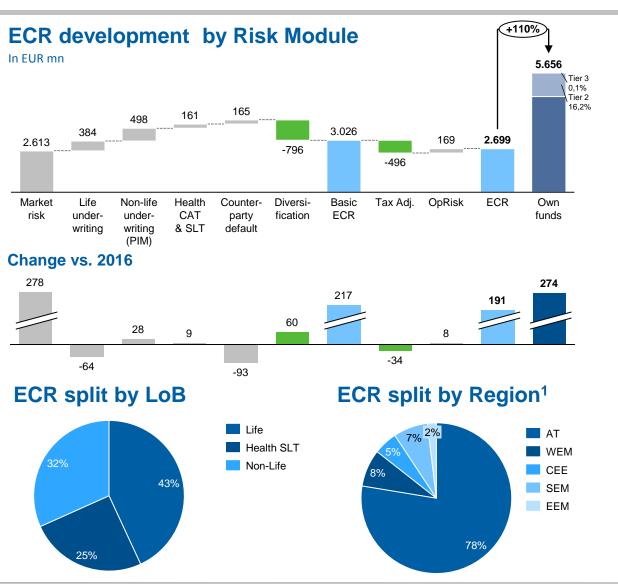
### **Measures used**

	ECR	SCR
Internal Model (Non-Life)	Yes	Yes <sup>2</sup>
Sovereign Risk Charge	Yes (full loading)	No
Volatility Adjustments	Yes (static)	Yes (static)
Transitionals <sup>3</sup>	No	No
Matching Adjustment	No	No



## **Group ECR Results**

### Details on Economic Capital Ratio



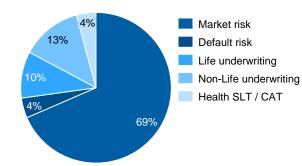
#### Moderate increase in ECR

- Increase in market risk coming from interest rate, spread and equity risk (details slide 9)
- Increase partially compensated by reduction in counterparty risk (less exposure, improved average rating) and life underwriting risk (reduced lapse risk)

#### Eligible own funds further increased

 Strong operating earnings in Life and Health alongside a positive economic variance from increased interest rates

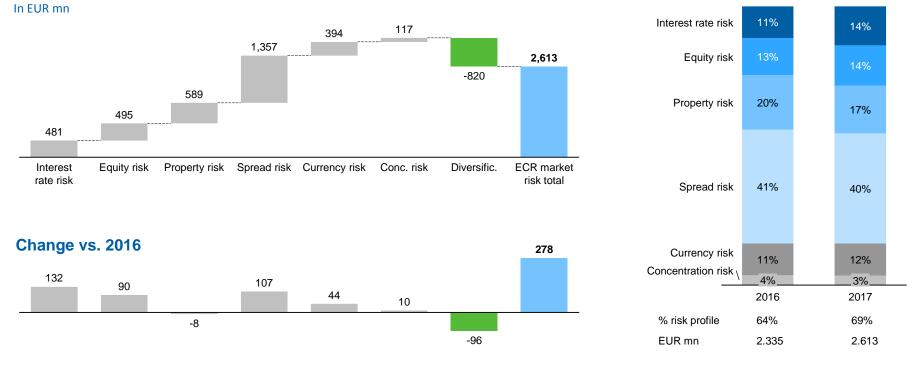
ECR split by Risk Module



<sup>1</sup> Region WEM includes internal risk transfer to UNIQA Re and business in Liechtenstein



### ECR market risk profile and development

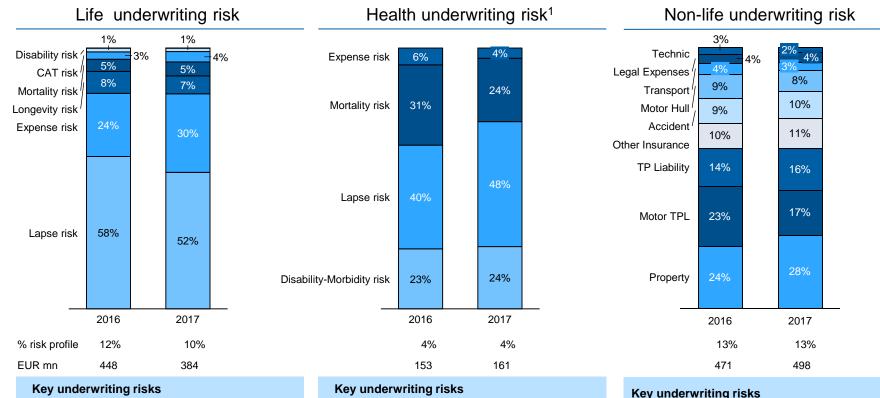


- ECR market risk increase was primarily driven by interest rate, spread and equity risk.
- The rise in interest rate risk was caused by the increased (relative) interest rate shock as a consequence of higher EUR interest rates. Additionally the use of a more advanced calibration of the volatility surface for changes in interest rates on the liability side (trad. life), which was implemented in preparation for the PIM Market Risk.
- The change in spread risk was a consequence of an increase of the spread sensitivity (increase of the modified duration).
- Equity risk increased as a result of new investments in the UNIQA World Selection fund and an increase of the symmetric adjustment for equity risk (counter-cyclical risk adjustment).



## **Group ECR Results**

## UNIQA Group underwriting risk profile



- Biometric risks still have minor relevance
- Lapse risk remains a key issue for life underwriting risk (mass lapse risk of losing expected profits as relevant risk in contrast to 2016 with lapse decrease as relevant risk)

#### Measures

- Ongoing In force management initiative
- Further expense monitoring and cost optimization

- Mass lapse scenario: lapses of highly profitable business (higher expected profits due to change to stochastic model and refinement of profit sharing modelling)
- Mortality: positive impact due to changed management rules (premium adjustment)

#### Measures

- Premium adjustments in case of negative performance
- Strict profitability monitoring of portfolio

#### Key underwriting risks

- Property share increased because of • growing NatCat exposure
- No relevant changes in other lines of business

#### Measures

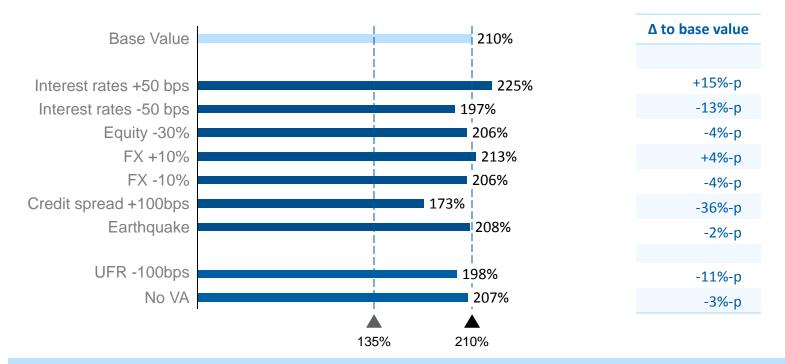
- Optimization of pricing processes
- Orientation on profitable lines of business



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**Change in ECR-ratio** 



### Impact of sensitivities on ECR-ratio

- Interest rate sensitivities: stress applied to non negative, liquid part of the curve only, extrapolation to UFR 4.2%
- Equity sensitivity: a general decrease of 30% in the value of all equities.
- Currency sensitivities: a rise/fall of exchange rates by 10% uniformly across all currencies.
- Credit spread sensitivity: a widening of credit spreads by 100bps, no dynamic increase of volatility adjustment assumed.
- Nat-CAT sensitivity: assumed earthquake with epicentre in Austria and return period of 250 years.
- UFR sensitivity: UFR set to 3.2%. Estimated impact on ECR quota with UFR set to 4.05%: -2%-p and with UFR set to 3.9%: -3%-p.
- No VA sensitivity: yield curve without volatility adjustment.



## **Group ECR Results**

## IFRS reconciliation and economic value creation

### IFRS reconciliation (EUR mn)

Posi	Position 2017						
IFRS	IFRS total equity 3.193						
-	Goodwill	-296	-295				
-	Intangible assets and VBI	-101	-62				
-	Deferred acquisition costs (DAC)	-1.133	-1.135				
+	Revaluation (after deferred taxes)	3.272	2.919				
	Revaluation of assets	1.095	1.266				
	Revaluation of technical provisions	2.177	1.653				
+	Subordinated liabilities	915	929				
-	Foreseeable dividends	-159	-151				
-	Capping of minority interests	-36	-36				
Ecor	nomic own funds to cover ECR	5.656	5.382				

#### **IFRS** reconciliation

- Goodwill, value of business in force, deferred acquisition costs and intangible assets are valued at zero according to Solven cy II.
- Other revalued assets include property (appraisal value instead of amortized cost), participations (market value instead of IFRS book value) and loans.
- Gross technical provisions and the reinsurer's share of the technical provisions are revalued to discounted best estimate reserves.
- Subordinated liabilities are subject to eligibility restrictions, depending on their quality ("Tiering"). All of UNIQA's subordinated liabilities are included in eligible own funds.
- Foreseeable dividends have to be subtracted from eligible own funds according to Solvency II.



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## Group Embedded Value Methodology

- Disclosure of Group Embedded Value (GEV) results:
  - UNIQA discloses GEV results 2017 on the basis of the Market Consistent Embedded Value (MCEV) principles
  - Includes MCEV using bottom-up, market consistent methodology for main Life and Health businesses
  - Split by the regions Austria and CEE\*
  - Includes the further harmonization of methodologies under MCEV and Solvency II in 2017
- Adjusted Net Asset Value (ANAV) for Property and Casualty, Life and Health businesses excluded from scope of MCEV on the basis of adjusted IFRS equity
- GEV allows for consolidation adjustments and minority interests and is defined as:
  - Adjusted net asset value for Property and Casualty, Life and Health businesses excluded from scope of MCEV calculations
  - Plus MCEV
- Independent review of methodology, assumptions and calculations for MCEV and calculations for GEV by B&W Deloitte GmbH

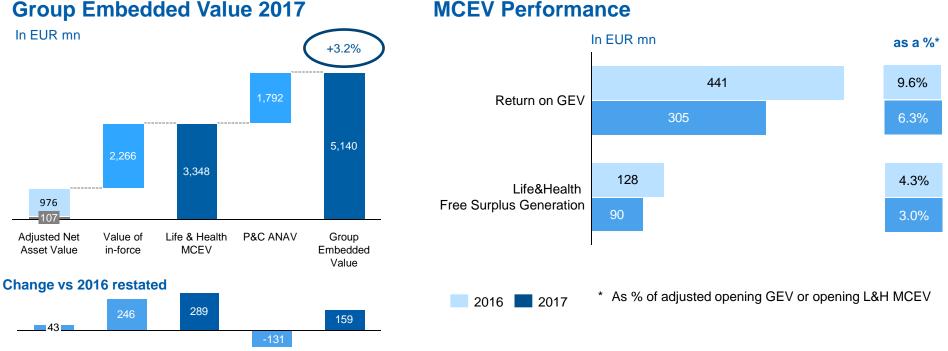
\* Defined as the following countries for MCEV purposes: Slovakia, Czech Republic, Hungary, Poland, Russia and Croatia



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## **Group Embedded Value** Results



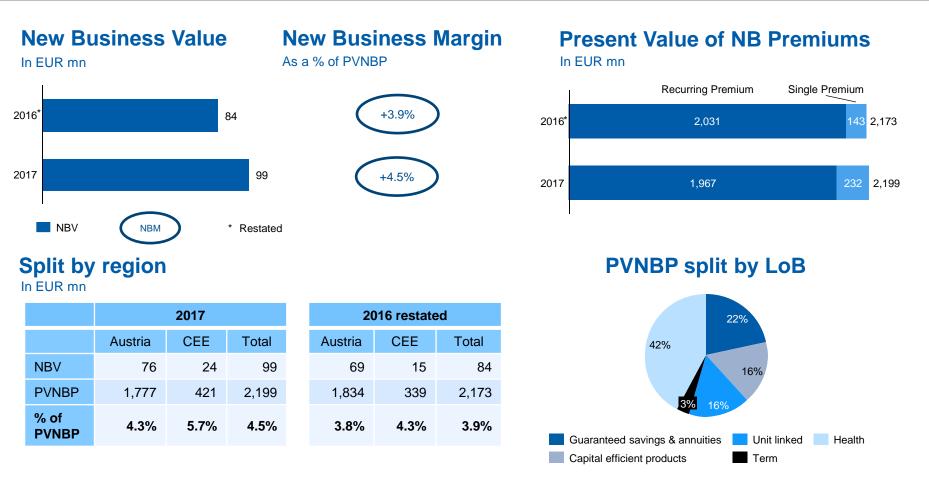
**MCEV** Performance

- GEV increased by +3.2% to EUR 5,140mn
- 2016 results are restated to reflect the inclusion of the Croatian Life operations in the covered business, the adoption of the Solvency II risk margin, and a change to the minimum level of required capital
- The increase in VIF is primarily due to a strong New Business Value, higher interest rates in the Eurozone and modelling changes
- Return on GEV amounts to EUR 305mn or 6.3%



# **Group Embedded Value**

New Business Value



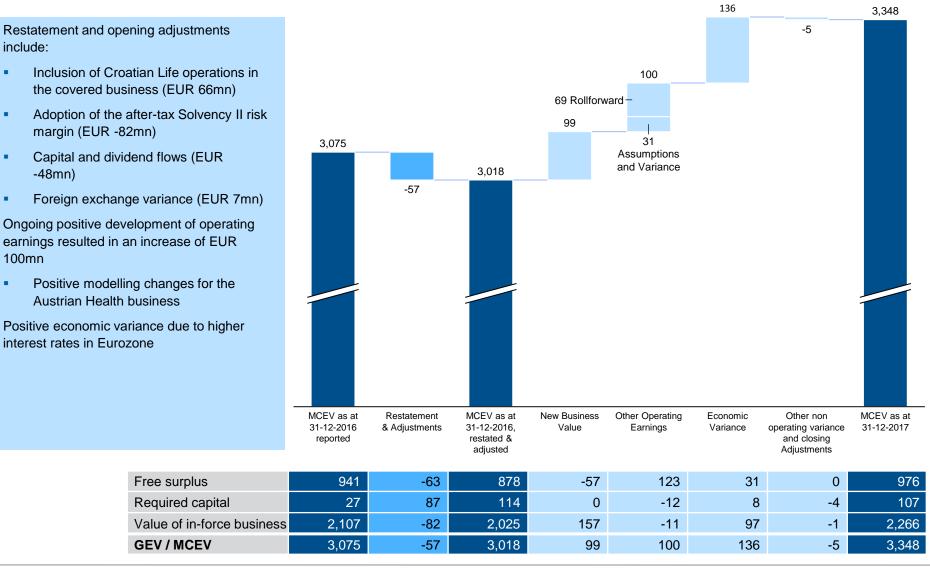
Positive development in CEE due to high sales for Russian personal loan product with strong margins

 Improved profitability at Austria Life due to the sale of more profitable products and a lower commission strain for the traditional business



## **Group Embedded Value**

### Life & Health Analysis of Change





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## Group Embedded Value Life & Health Sensitivities

- Higher interest rate sensitivity: more advanced calibration of volatility surface for changes in interest rates, in preparation for the PIM Market Risk
- Estimated impact on EV from UFR down to 4.05%: -32mn
- Non-economic sensitivities remain at less material level compared to changes in economic factors

in EUR mn	Cha	nge in Ei	mbedded V	alue	Change in New Business Value				
	201	2017 2016			2017	7	2016		
Base value	3,348	100%	3,075	100%	99	100%	93	100%	
EV change by economic factors									
Risk free yield curve -50bp	-180	-5%	-89	-3%	-6	-6%	n/a	n/a	
Risk free yield curve +50bp	133	4%	32	1%	2	2%	n/a	n/a	
Equity and property market values -10%	-126	-4%	-124	-4%	0	0%	0	0%	
Equity and property implied volatilities +25%	-28	-1%	-11	0%	-1	-1%	-1	-1%	
Swaption implied volatilities +25%	-77	-2%	-33	-1%	-6	-6%	-4	-4%	
EV change by non-economic factors									
Maintenance expenses -10%	70	2%	58	2%	5	5%	6	7%	
Lapse rates -10%	97	3%	67	2%	12	12%	13	14%	
Mortality for assurances -5%	54	2%	40	1%	3	3%	3	4%	
Mortality for annuities -5%	-6	0%	-10	0%	0	0%	0	0%	
Additional sensitivity									
Removal of liquidity premium	-33	-1%	-84	-3%	n/a	n/a	n/a	n/a	
UFR = 3.2%	-211	-6%	-175	-6%	-6	-6%	-10	-11%	



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## Economic Assumptions MCEV and ECR

- Consistent assumptions for MCEV and ECR valuation
- Reference rates based on swap rates as at 31 December 2017 including a liquidity premium (volatility adjustment). The liquidity premium is derived from observable market data and based on the approach used for internal risk capital calculations
- The 2017 calibration of the economic scenarios is based on (normal) implied volatilities

Reference	e El	JR	C	ZK	H	UF	P	LN	R	UB	HR	K	Liquidity premium in bp	EUR	CZ	HU	PI	RUB	HRK
rates <sup>(a)</sup>	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016		2010	02			NOD	
1 year	-0.36%	-0.30%	0.98%	0.06%	0.01%	0.26%	1.40%	1.48%	7.47%	10.12%	0.20%	0.74%	Base premium – 100%	6	6	3	17	0	6
5 years	0.21%	-0.02%	1.53%	0.41%	1.08%	1.69%	2.57%	2.84%	7.21%	8.74%	1.36%	2.37%							
10 years	0.80%	0.57%	1.76%	0.77%	2.06%	3.03%	3.21%	3.55%	7.19%	8.22%	2.38%	2.97%	Participating life business – 65%	4	4	2	11	0	4
15 years	1.18%	0.96%	1.95%	1.01%	2.97%	3.74%	3.27%	3.79%	6.93%	7.70%	2.75%	3.17%	Unit and index linked business – 65%	4	4	2	11		4
20 years	1.36%	1.12%	2.21%	1.33%	3.49%	4.09%	3.37%	3.90%	6.58%	7.19%	3.00%	3.33%							
25 years	1.65%	1.42%	2.47%	1.71%	3.74%	4.22%	3.48%	3.97%	6.26%	6.76%	3.18%	3.45%	Health business – 65%	4					

a) Excluding liquidity premium

Exchange rates and	Excha	nge rate	Tax rate				
tax rates	2017	2016	2017	2016			
Austria	-	-	25.00%	25.00%			
Czech Republic	25.54	27.02	19.00%	19.00%			
Hungary	310.33	309.83	9.00%	9.00%			
Slovakia	-	-	21.00%	22.00%			
Poland	4.18	4.41	19.00%	19.00%			
Russia	69.39	64.30	20.00%	20.00%			
Croatia	7.44	n/a	18.00%	n/a			

Other economic assumptions (EUR)	2017	2016
Interest rate volatility <sup>(a)</sup> - Black - Normal	n/a 65 bp	45% 73 bp
Equity volatility <sup>(b)</sup>	21.50%	23.07%
Expense/medical inflation	2%/2%	2%/2%
<ul><li>(a) 10 to 10 implied swaption volatility</li><li>(b) 10 years</li></ul>		



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ABS	Asset Backed Securities
ALM	Asset Liability Management
ANAV	Adjusted Net Asset Value
CAT	Catastrophe Risk
CDR	Counterparty Default Risk
EC	European Commission
ECM	Economic Capital Model: UNIQA's approach for calculating a SCR based on the standard approach with deviation of the technical specifications in respect of the treatment of EU government bonds and Asset Backed Securities and with inclusion of PIM
ECR	Economic Capital Requirement: risk capital requirement resulting from the Economic Capital Model
EV, GEV	Economic Capital Requirement. Isk capital requirement resulting from the Economic Capital Model Embedded Value, Group Embedded Value
FS	Free Surplus
Health SLT	Health Similar to Life Techniques (long term health business)
IFRS	International Financial Reporting Standards: set of accounting standards, developed and maintained by the International Financial Reporting Standards Board (IASB) with the intention of assuring standardisation of financial statements across the market
IRR	Internal Rate of Return
MAT	Marine, Aviation, Transport
MCEV	Market Consistent Embedded Value: measure of the consolidated value of shareholders' interests in the covered business
NB-RC	New Business Required Capital
РІМ	Partial Internal Model (UNIQA's internal model for the calculation of the non-life and health NSLT underwriting risk)
Regions	AT – Austrian Operating Companies,
	WEM - Western European Markets (Liechtenstein, Italy, Switzerland),
	CEE – Central Eastern Europe (Slovakia, Czech Republic, Hungary, Poland),
	SEE – Southern Eastern Europe (Croatia, Serbia, Bosnia, Bulgaria),
	EEM – Eastern Emerging Markets (Romania, Russia, Ukraine)
S&P	Standard & Poor's Financial Services LLC, a part of McGraw Hill Financial
VaR	Value at Risk: risk measure used within UNIQA's partial internal model for deriving the capital requirement for the non-life and health NSLT underwriting risk
VIF	Value of in-force business
VNB	New Business Value



- This presentation contains forward-looking 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 forward-looking statements
- A number of important factors could cause results to differ materially from the plans, objectives, expectations, estimates and intentions expressed in these forward-looking statements
- These forward-looking statements will not be updated except as required by applicable laws