



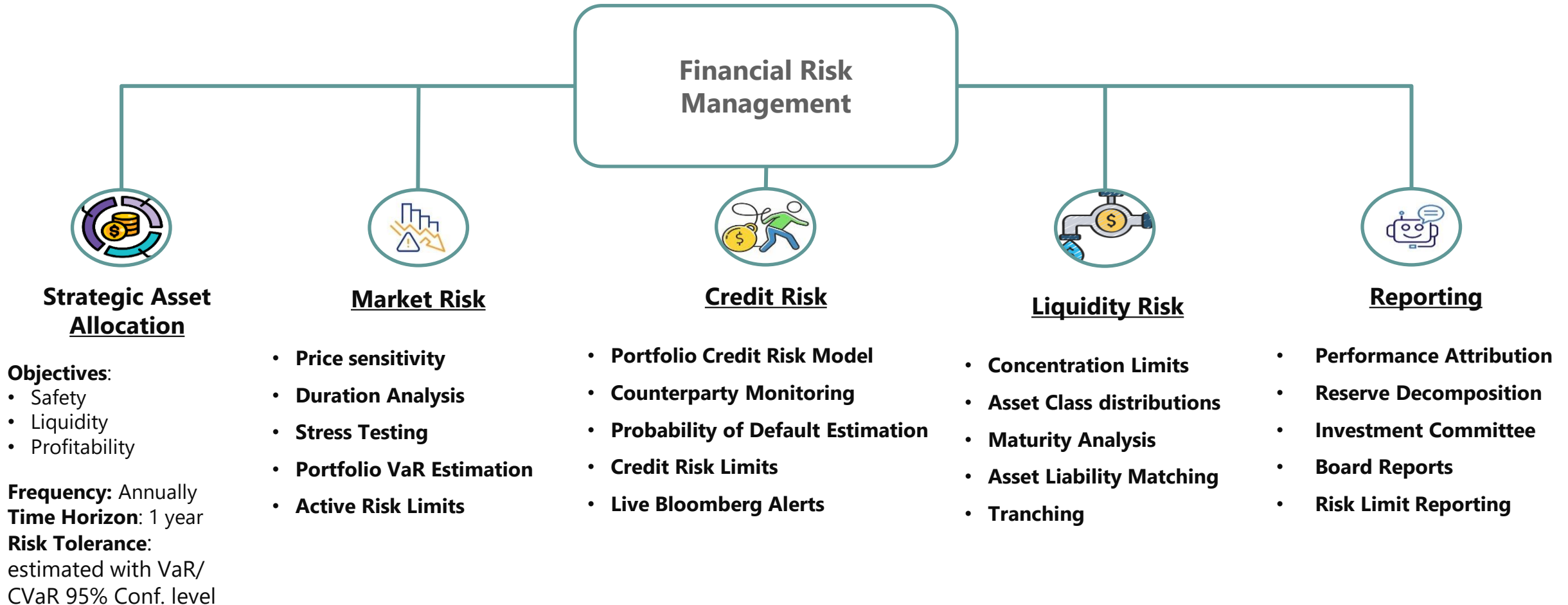
# Financial Risk Management

## **Session 4: Risk Management Framework**

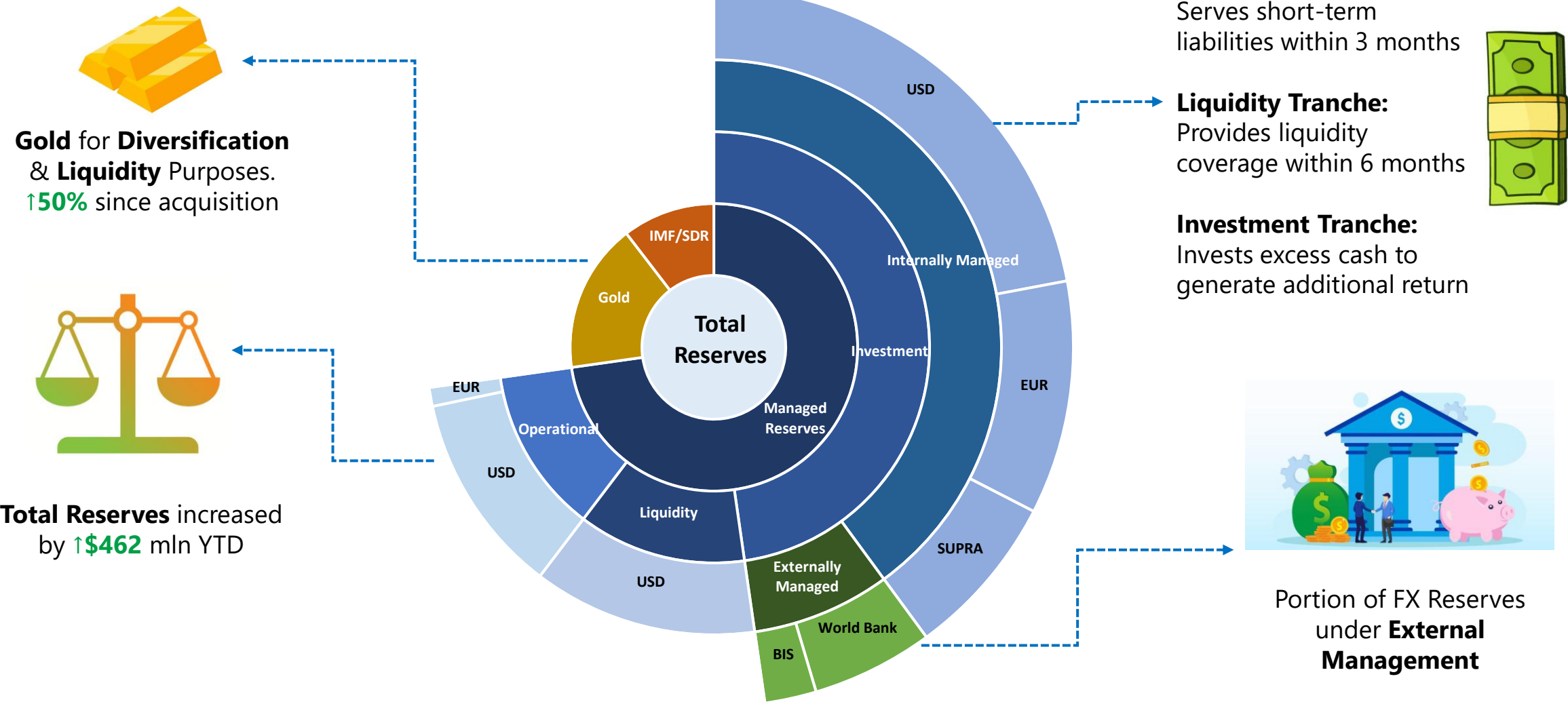
Speaker: Giorgi Chinchaladze, National Bank of Georgia

**2025 ASIAN REGIONAL FORUM**  
ON INVESTMENT MANAGEMENT  
OF FOREIGN EXCHANGE RESERVES

# Risk Management and Control Division



# NBG Portfolio Structure



# Strategic Asset Allocation

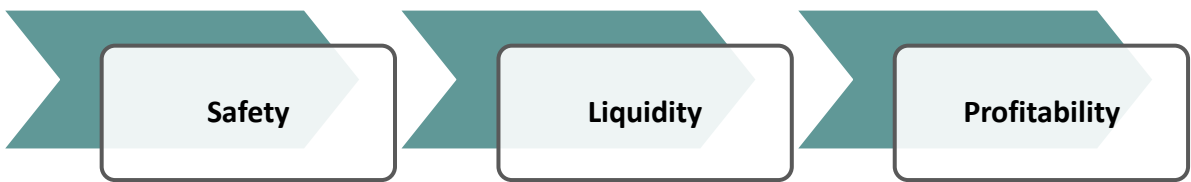
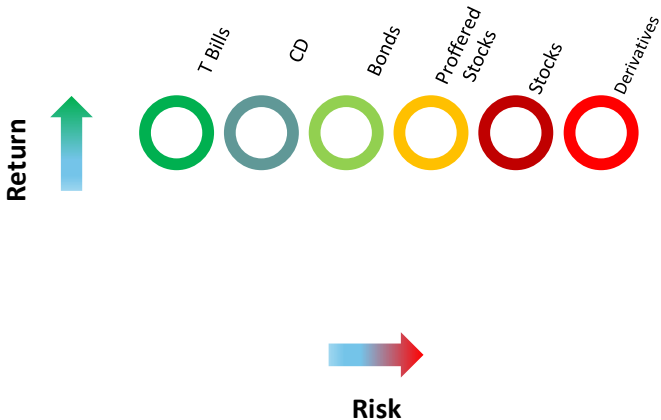
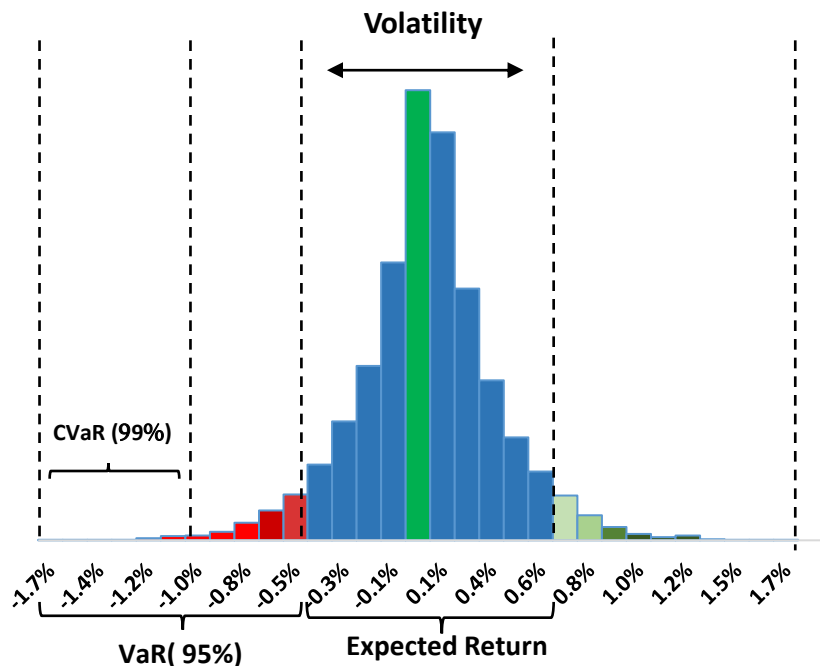
**Risk tolerance** is the level of risk acceptable/permissible for achieving the strategic and investment objectives set out in the Investment Policy Document.

Risk tolerance is measured by the **CVaR** indicator for a given confidence level.

**Liquidity Portfolio: CVaR (99%),**

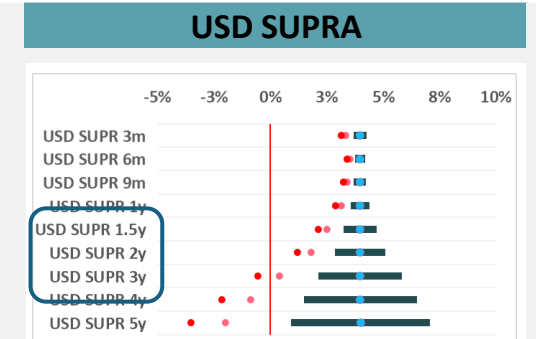
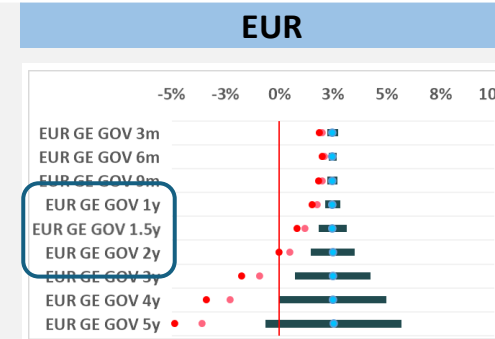
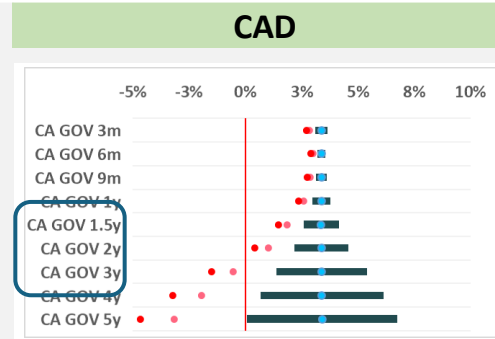
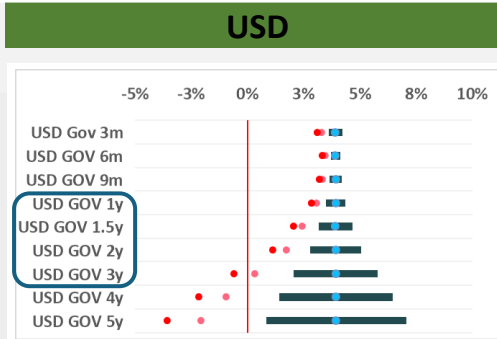
**Investment Portfolio: CVaR (95%)**

**Working Capital** Portfolios are not managed actively relative to benchmark.

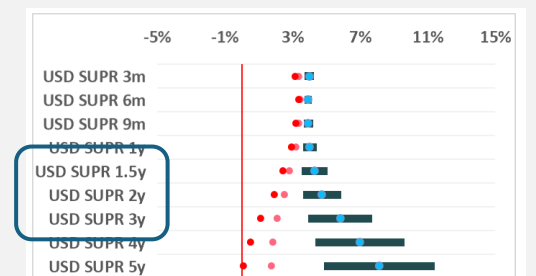
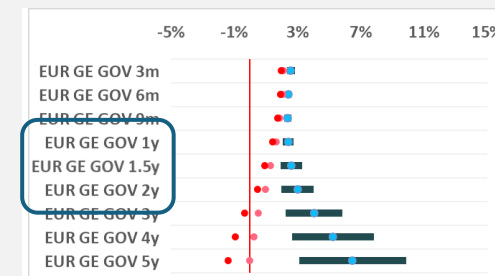
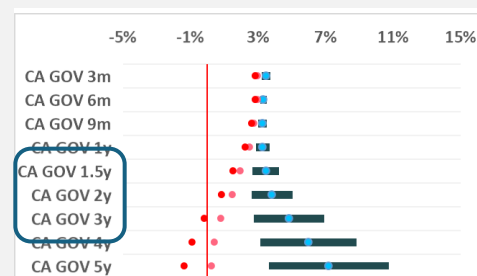
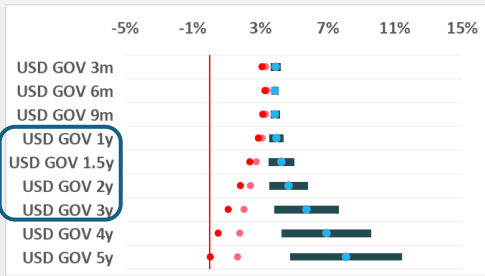


# Scenarios Analysis for Benchmarks

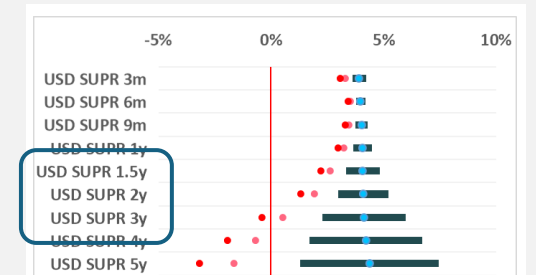
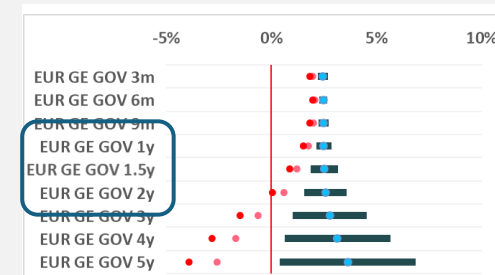
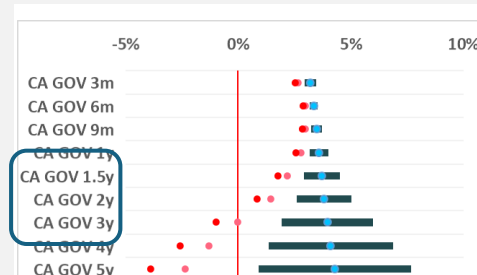
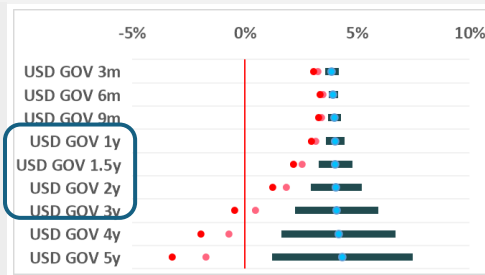
## Forward Looking



## -100 BP Down

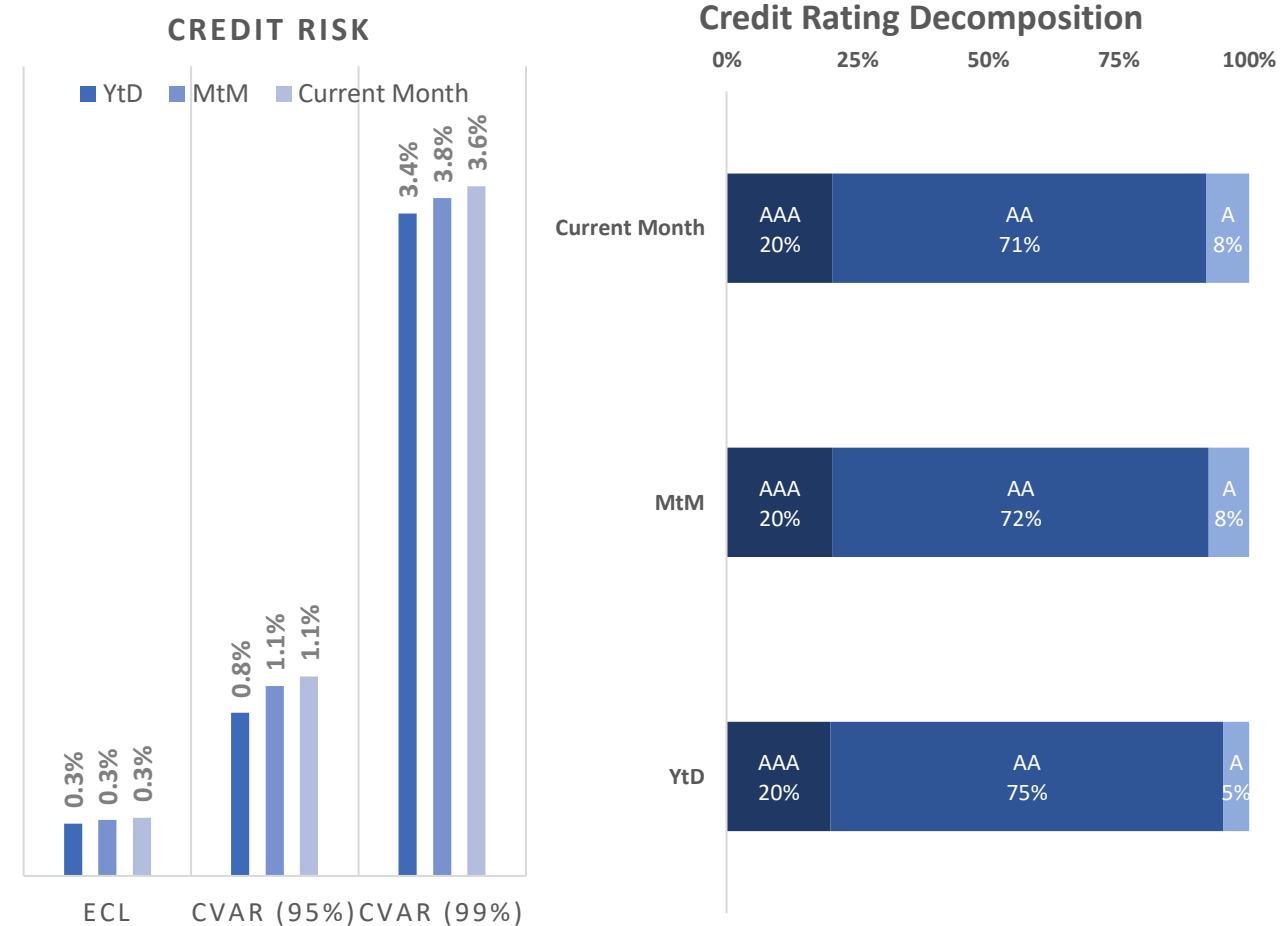


## Flattener



# Credit Risk Monitoring and Management

- **Credit VaR (CreditMetrics methodology):** Identifies the main sources of credit risk and potential losses arising from the deterioration of counterparties' credit quality.
- **Issuer & Counterparty Control:** Involves the review, approval, and ongoing monitoring of issuers and counterparties.
- **Limits:**
  - Minimum investment rating requirements
  - Exposure limits based on credit ratings
  - Spread Duration and Tracking Error (TE) limits relative to the benchmark
- **Ongoing Monitoring:** Continuous monitoring of credit ratings and market data, with live alerts on rating changes, stock prices, spreads, CDS, DRSK, and SRKS indicators.
- **In-house Credit Assessment:** Incorporates both financial and qualitative metrics, supplemented by expert judgment, particularly for unrated counterparties.



\*ECL – estimated loss due to the risk of default

\*CVaR (95% / 99%) - is the average loss expected in the worst 5% / 1% of cases for portfolio, providing a measure of tail risk beyond the standard Value at Risk (VaR) threshold.

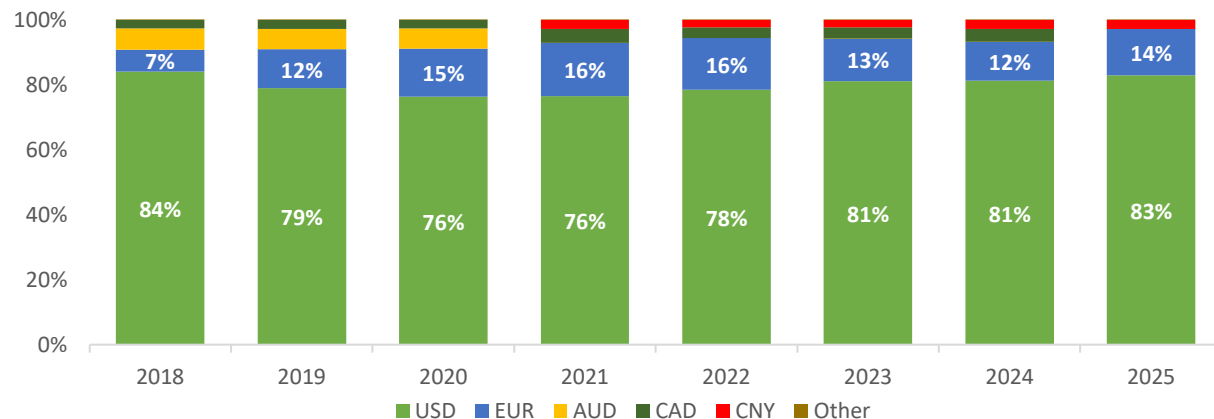
# Currency Composition

## FX risk is primarily managed through the Strategic Asset Allocation process -

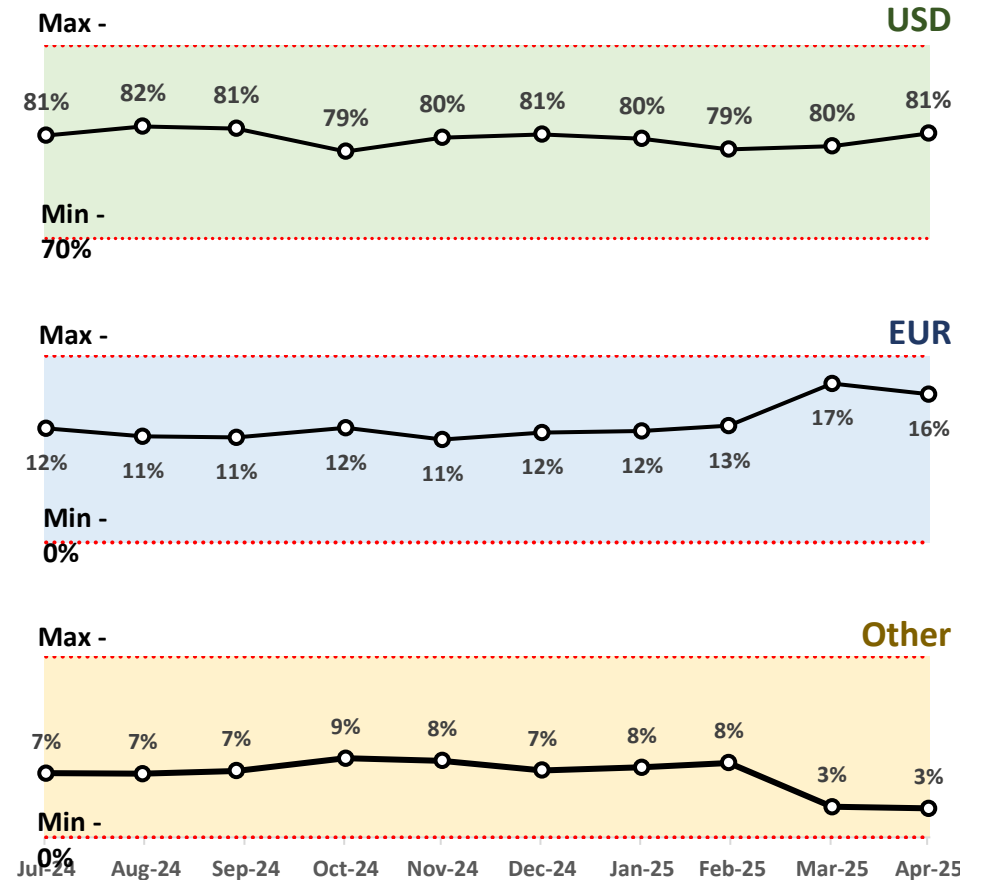
Defines the neutral FX currency composition with broad passive deviation limits, approved by the Reserve Management Committee and the Board.

- ☐ Deposits Maximum Maturity - 1 month
- ☐ Limits for Short Term Deposits:
  - Low Risk - 25%
  - Medium Risk - 15%
  - High Risk - 10%
- ☐ Maximum Duration of the Bonds - 5.5y
- ☐ Minimum Rating of the Bonds - A
- ☐ Minimum Amount Outstanding of Bonds – 500 mln

NBG Currency Composition



## Limits: Internal Reserves



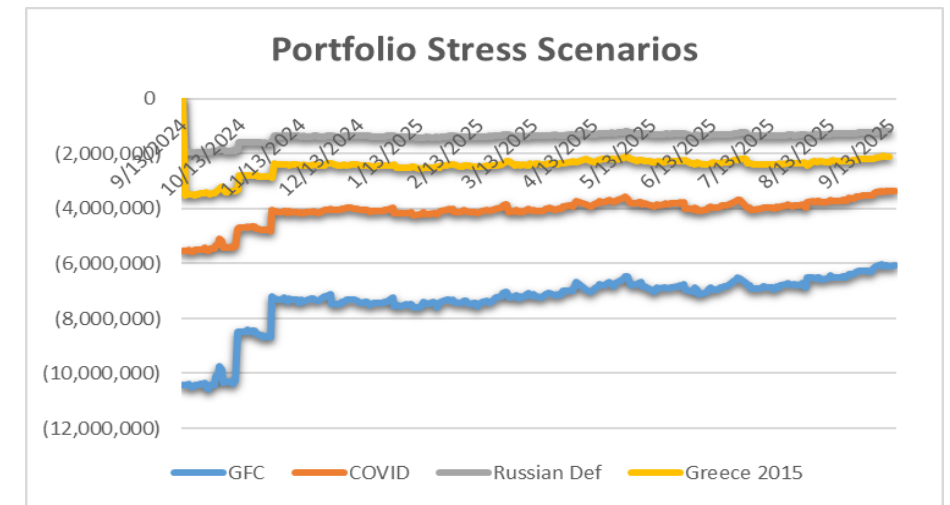
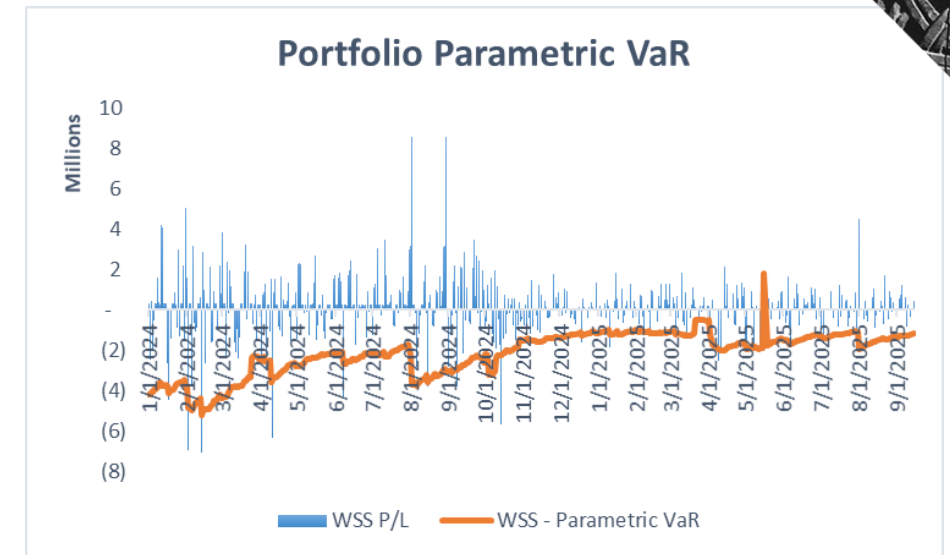


# Daily Risk Limit Monitoring

Daily **Risk Limits Monitoring** and **Stress-Scenario Analysis**: Identifying, measuring and managing potential losses across all investment portfolios.

- Daily monitoring and reporting of every limit specified in Investment Policy Document
- Live update on limits in WSS covering all types of risks
- Design and maintenance of in-house tools to improve oversight of market dynamics and emerging threats (*Bank & Issuer Monitoring File, Credit Risk Report Tool, Price & Liquidity Analysis File, etc.*)

Limit Name	Currency Risk	Market Risk	Credit Risk	Liquidity Risk	Settlement Risk	Concentration Risk
<u>Transche Size</u>				✓		
<u>Active Limits</u>		✓	✓			
<u>Treasury Concentration Limits by Portfolios</u>						✓
<u>External Manager Concentration</u>						✓
<u>Gold Concentration</u>						✓
<u>Forward Operations Limit by Portfolios</u>						✓
<u>Currency Composition</u>	✓					
<u>Daily Trading Limits</u>					✓	
<u>Credit Rating</u>			✓			
<u>Security Lending</u>			✓			
<u>Minimum Investment Issue Amount</u>				✓		
<u>Maximum Investment % in Financial Instrument</u>				✓		
<u>Limit Amounts by Issuers</u>						✓
<u>Limit Amounts by Financial Instrument Types/Asset Classes</u>						✓
<u>Short Selling</u>		✓				
<u>Eligible Financial Instruments/Maturity</u>				✓		







**Thank you**

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