

RISK MANAGEMENT IMPLEMENTATION REPORT  
FOR INTEREST RATE RISK IN THE BANKING BOOK

Bank Name : PT Bank QNB Indonesia Tbk (individual)

Reporting Period : December 2021

<b>Qualitative Analysis</b>	
1.	<p><b>Explanation of how Bank defines IRRBB for risk measurement and control</b></p> <p>IRRBB refers to the risk to the bank's capital and earnings arising from adverse movements in interest rates in the market. Bank QNB Indonesia (QNBI) categorizes IRRBB into three sub risk types:</p> <p>a) Gap Risk Risk arising from the difference (gap) in contractual maturity and/or repricing maturity between assets and liabilities (including off-balance sheet items) in the banking book.</p> <p>b) Basis Risk Risk arising the difference between interest rate basis used to price assets and liabilities.</p> <p>c) Option Risk Risk arising from optional elements embedded in assets, liabilities and/or off-balance sheet items, where customers can alter the level and timing of the cash flows.</p>
2.	<p><b>Explanation of risk management and risk mitigation strategies for IRRBB</b></p> <p>In carrying out risk management and risk mitigation for IRRBB, QNBI takes the following approaches:</p> <p>a) Gap Risk Management QNBI actively maintains the maturity gap and composition of interest rates charged on assets and liabilities in the banking book. If interest rates are projected to rise, QNBI increases the composition of assets with floating interest rates and funding with fixed interest rates, <i>vice versa</i>. If interest rates are projected to fall, QNBI increases the composition of assets with</p>

	<p>fixed interest rates and funding with floating interest rates.</p> <p>b) Basis Risk Management</p> <p>QNBI mostly uses benchmark interest rates such as JIBOR and LIBOR to price large-scale corporate loans. However, funding for such loans are not priced based on the benchmarks, and therefore exposed to basis risk. To mitigate the basis risk, QNBI regularly evaluates funding interest rates to keep it in line with recent market developments.</p> <p>c) Option Risk Management</p> <p>QNBI mitigates option risk by applying penalty for early redemption of fixed-rate time deposits. An early withdrawal results in a significant penalty that deducts certain portion of the principal amount.</p>
3.	<p><b>Periodization of Bank IRRBB calculation and explanation of specific methods used by the bank to measure the sensitivity to IRRBB</b></p> <p>QNBI performs monthly IRRBB calculations as a part of internal monitoring. In addition, QNBI also performs quarterly IRRBB calculations in accordance with OJK Circular Letter No.12/SEOJK.03/2018 regarding Guidelines on the Standardized Approach for Measuring Interest Rate Risk in Banking Book for Commercial Banks.</p>
4.	<p><b>Explanation of the interest rate shock and stress scenarios used by the Bank for IRRBB calculation using EVE and NII methods</b></p> <p>QNB uses 6 (six) standardized interest rate shock scenarios EVE calculation and 2 (two) parallel shock scenarios for NII calculation in accordance with OJK Circular Letter No. 12/SEOJK.03/2018.</p>
5.	<p><b>Explanation of modelling assumptions used in the Bank's Internal Measurement System (IMS) that are different from modelling assumptions used in IRRBB calculation with a standardized approach</b></p> <p>QNBI uses standardized modelling assumptions according to OJK Circular Letter No. 12/SEOJK.03/2018. QNBI does not have any assumptions other than those stated in the regulation.</p>

6.	<p><b>Explanation of how Bank hedges IRRBB, including its accounting treatment</b></p> <p>QNBI performs natural hedging by maintaining the maturity gap of assets, liabilities, and off-balance sheet items in the banking book; interest rate levels; and types of interest rates charged on assets and liabilities in the banking book.</p>
7.	<p><b>Comprehensive explanation of primary modelling and parametric assumptions used in calculating <math>\Delta</math>EVE and <math>\Delta</math>NII</b></p> <p>a) In calculating <math>\Delta</math>EVE, the commercial margins and other spread components have already been included in the calculation of principal and interest of assets and liabilities. Because they are already being part of the cash flow, commercial margins and spread components are no longer added to the discount rate.</p> <p>b) QNBI performs behavioural analysis using normal distribution method to estimate the timing of withdrawal from non-maturity deposit (NMD) according to each product type (current accounts, savings accounts, etc.) Each type of NMD will be slotted into a time bucket according to the estimated withdrawal timing.</p> <p>c) QNBI does not estimate loan prepayment rate, time deposit early withdrawal rate, or automatic interest rate option embedded in corporate customers. Early repayments or withdrawals made by customers with fixed interest rates are charged with significant penalty and therefore can be classified as assets or liabilities Amenable to Standardization.</p> <p>d) At the moment, QNBI does not have methodology to aggregate and measure correlation between interest rates of significant currencies.</p>
8.	<p><b>Other information</b></p> <p>The <math>\Delta</math>EVE calculation as of December 2021 is 1.13% of Tier I capital, which is below QNBI's internal limit of 10%. According to market risk assessment result, the QNBI's <math>\Delta</math>EVE exposure is categorized as low risk. The <math>\Delta</math>EVE to Tier I capital ratio decreased by 0.12% from previous period's position at 1.25%. The largest exposure comes from "steepener" shock scenario which shows the value of IDR -37,474 million, lower compared to the same scenario in the previous period of IDR -33,584 million. This is mainly due to increase in outstanding placement</p>

	with Bank Indonesia (including reverse repo) by IDR 1 trillion. Although the exposure is higher, the $\Delta$ EVE ratio is lower compared to previous period's position. This is due to increase in Tier I capital by IDR 629.29 billion as a result of capital injection in mid-December 2021.
<b>Quantitative Analysis</b>	
1.	<p><b>Average repricing maturity period for NMDs</b></p> <p>The average repricing maturity period for NMDs as of December 2021 is 23.80 days for IDR and 40.26 days for USD.</p>
2.	<p><b>The longest repricing maturity period for NMDs</b></p> <p>The longest repricing maturity period for NMDs as of December 2021 is 2 years.</p>

## IRRBB CALCULATION REPORT

Bank Name : PT Bank QNB Indonesia Tbk (individual)  
 Reporting Period : December 2021  
 Currencies : Rupiah (IDR), United States Dollar (USD)

In IDR Millions	$\Delta$ EVE		$\Delta$ NII	
Period	T	T-1	T	T-1
Parallel up	-19,413	-20,706	2,839	-5,005
Parallel down	15,250	20,803	-92,411	-51,492
Steeper	-37,474	-33,584		
Flattener	-82	3,965		
Short rate up	-9,313	-10,730		
Short rate down	-6,971	-8,467		
Maximum Negative Value (Absolute)	37,474	33,584	92,411	51,492
Tier I Capital (for $\Delta$ EVE) or Projected Income (for $\Delta$ NII)	3,317,626	2,687,934	741,913	699,111
Maximum Value divided by Tier I Capital (for $\Delta$ EVE) or Projected Income (for $\Delta$ NII)	<b>1.13%</b>	<b>1.25%</b>	<b>12.46%</b>	<b>7.37%</b>