Risk Management Report

as of December 31st, 2022

4Q22

GRUPO FINANCIERO BANORTE

Index

Risk Management

Risk management at Grupo Financiero Banorte is a key element in determining and implementing the Group's strategic planning. The Group's risk management and policies comply with regulations and market's best practices.

1. OBJECTIVES, SCOPE AND RISK MANAGEMENT FUNCTIONS

GFNorte's Risk Management main objectives are:

- To provide clear rules to different business areas, that contribute to minimizing risk and ensuring compliance with the parameters established and approved by the Board of Directors and the Risk Policies Committee (CPR by its acronym in Spanish).
- To establish mechanisms to monitor risk-taking across GFNorte, through the use of robust systems and processes.
- To verify the observance of Risk Appetite.
- To estimate and control GFNorte's capital, under regular and stressed scenarios, aiming to provide coverage for unexpected losses from market movements, credit bankruptcies, and operational risks.
- To implement pricing models for different types of risks.
- To establish procedures for portfolio's optimization and credit portfolio management.
- To update and monitor Contingency Plan in order to restore capital and liquidity levels in case of adverse events.

Moreover, GFNorte owns sound methodologies to manage quantifiable risks such as Credit Risk, Market Risk, Liquidity Risk, Operational Risk, Concentration Risk and Counterparty Risk.

Credit Risk: revenue volatility due to constitution of provisions for impaired loans, and potential losses on borrower or counterparty defaults.

Market Risk: revenue volatility due to market changes, which affect the valuation of book positions for active, liabilities or contingent liabilities operations, such as: interest rates, spread over yields, exchange rates, price indices, etc.

Liquidity Risk: potential loss by the impossibility of renewing liabilities or securing resources in normal conditions, and by early or forced sale of assets at unusual discounts to meet their obligations.

Operational Risk: loss resulting from inadequate or failed internal processes, employees, internal systems or external events. This definition includes Technology Risk and Legal Risk. Technology Risk, groups all those potential losses from damage, interruption, disruption or failures resulting from use of or reliance on hardware, software, systems, applications, networks and any other information distribution channel, while the Legal Risk involves the potential loss by sanctions for noncompliance with laws and administrative or judicial decisions unfavorable related to GFNorte's operations.

Concentration Risk: potential loss by high and disproportional exposure to particular risk factors within a single category or among different risk categories.

Likewise, regarding unquantifiable risks, Risk Management's Manual in GFNorte establish specific objectives for:

Reputational Risk: potential loss in the performance of Institution's activities, due to an inappropriate or unethical perception of the different stakeholders, internal or external, on their solvency and viability.

1.1 Risk Management – Structure and Corporate Governance

Regarding the structure and organization for a comprehensive Risk Management, the Board of Directors is responsible for authorizing policies and overall strategies such as:
- GFNorte's Risk Appetite.
- Comprehensive Risk Management Framework.
- Risk exposure limits, risk tolerance levels and mechanisms for corrective actions.
- Contingency Plan and the Contingency Funding Plan.
- The outcome of the internal and regulatory capital adequacy scenarios.

The Board of Directors designates the CPR (Risk Policy Committee by its acronym in Spanish) as accountable for managing the risks that GFNorte is exposed to, in order to ensure that operations comply with objectives, policies and procedures established by Risk Management.

The CPR also monitors the overall limits of risk exposure approved by the Board of Directors, in addition to approving specific limits for exposure to different types of risk.

The CPR is integrated by members and deputies of the Board, the CEO, the Managing Directors of the Group's Entities, the Risk and Credit Managing Director and the Audit Managing Director, the latter participates with voice but no vote.

Moreover, the Assets and Liabilities Committee (ALCO) and the Capital and Liquidity Group, analyze, monitors, and decide regarding interest rate risks in the balance sheet, the financial margin, liquidity and net capital of the Institution.

The Unit for the Comprehensive Risk Management (UAIR by its acronym in Spanish) is in charge of the Risk Management and Credit Department (DGARC by its acronym in Spanish), and among its functions, is responsible to identify measure, monitor, limit, control, report and disclose the different types of risk to which the GFNorte is exposed to.

The DGARC reports to CPR, in compliance with the regulation related to its independence from the Business areas.

1.2 Scope and Nature of GFNorte's Risk Management

The Risk Management function extends to all subsidiaries that comprise GFNorte. Depending on the line of business of each of the Businesses, Credit, Concentration, Market, Liquidity and Operational Risks are measured, managed and controlled.

For this purpose, DGARC relies on different information and risk measurement systems, which comply with regulatory standards and align with the best international practices in Risk Management's matters. It's worth mentioning that information and reports contained and produced in the risk systems are constantly backed up following institutional procedures in IT security matters. Furthermore, risk systems enclose transactions susceptible to Credit, Market, Liquidity and Operational Risks, processed through revised models and methodologies, thus generating periodic reports for each one of these risks.

At GFNorte, there are policies and procedures for hedging, risk mitigation and compensation strategies for each type of risk in and off balance, all of them enclosed in models, methodologies and procedures for Risk Management. Within these policies, there are certain variables that must be considered for risk mitigation, such as: general features, loan to value, legal terms, instrumentation and hedging level. These policies and procedures also consider collateral execution as a risk compensation mechanism in the case of non-fulfillment by debtors. As part of the strategies and processes for monitoring the coverage or mitigation effectiveness for each type of risk, there are limits for each one of them (Credit, Market, Liquidity and Operational Risks), which are continuously monitored, as well as established procedures for the documentation of excesses and its causes, and the corrective actions implemented to return to acceptable risk levels.

2 CREDIT RISK

Credit risk is the risk of clients, issuers or counterparties not fulfilling their payment obligations. Therefore, proper management is essential to maintain loan quality of the portfolio.

The objectives of Credit Risk Management at GFNorte are:

- Comply with the Risk Appetite defined by the Board of Directors.
- Improve the quality, diversification and composition of the loan portfolio in order to optimize the risk- reward ratio.
- Provide Executive Management with reliable, timely information to assist decision making regarding funding.
- Provide Business Areas with clear and sufficient tools to support and monitor funding placement.
- Create economic value for shareholders through an efficient Credit Risk Management.
- Define and update the regulatory framework for the Credit Risk Management.
- Comply with the information requirements that the authorities establish regarding Credit Risk Management.
- Perform Risk Management in accordance with the best practices, implementing models, methodologies, procedures and systems based on best practices worldwide.
- Measure Institution's vulnerability to extreme conditions and consider those results for decisions making.

GFNorte's Credit Risk Management policies are:

- Grant and Manage Retail Credit Risk according to best market practices through Parametric Models aimed to identify risk, minimize losses and increase loan origination with quality.
- Grant and Manage Wholesale Loans to companies and other entities, according to best market practices through a credit strategy including Target Markets and Risk Acceptance Criteria, identifying and managing risk through Loan Rating and Early Warnings methodologies.
- Monitor and control asset quality through Loan Classification System which provides treatment and general actions for defined situations, as well as departments or officers responsible for carrying out such actions.
- Surveillance and Control through Global and Specific Limits, loan rating policies, and Portfolio Credit Risk models that identify expected and unexpected losses at specific confidence levels.
- Inform and disclose Credit Risks to risk taking areas, CPR, Board of Directors, Financial Authorities and Investors.
- Define faculties for Credit Risks taking at Institution.

In order to comply with objectives and policies, a series of strategies and procedures have been defined including origination, analysis, approval, management, monitoring, recovery and collections.

2.1 Credit Risk Scope and Methodology

2.1.1 Individual Credit Risk

GFNorte segments the loan portfolio into two large groups: retail loans and wholesale loans.

The individual Credit Risk for retail loans is identified, measured and controlled through a parametric system (scoring) that includes models for each of the SME (small and medium enterprises) and consumer products (mortgage, auto, payroll, personal loans and credit cards).

Individual risk for wholesale loans is identified, measured and controlled through Target Markets, Risk Acceptance Criteria, Early Warnings and GFNorte's Internal Risk Rating (CIR Banorte).

The Target Markets, Risk Acceptance Criteria and Early Warnings are tools that, together with the Internal Risk Rating, are part of GFNorte's Loan Strategy and support the estimated level of Credit Risk.

The Target Markets are categories of economic activity by region, backed by economic research and loan behavior analysis as well as by expert opinions, where GFNorte is interested in granting loans.

The Risk Acceptance Criteria are parameters that describe different types of risks by industry, in order to estimate the risk taking when granting loans to customers based on their economic activity. The types of risk observed in the Risk Acceptance Criteria are: Financial, Operation, Market, and Enterprise's life cycle, Legal and Regulatory Risks, besides credit experience and management quality.

Early Warnings are a set of criteria based on borrower's information and indicators, as well as their environment, as a mechanism for timely prevention and identification of a probable deterioration in the loan portfolio, thereby enabling the Institution to take prompt preventive actions to mitigate Credit Risk.

Banorte's CIR is a borrower's rating methodology which assesses quantitative and qualitative criteria in order to determine credit quality. CIR applies to commercial loans equal to or greater than the equivalent of four million investment units (UDIs) in Mexican pesos on the rating date, or borrowers whose annual sales or income are greater or equal to 14 million UDIs (in case of being enterprises).

2.1.2 Portfolio Credit Risk

GFNorte developed a portfolio Credit Risk methodology that, besides including international standards for identifying, measuring, controlling and monitoring, has been adapted to function within the context of the Mexican Financial System.

This Credit Risk methodology provides current value of the entire loan's portfolio at GFNorte, that is, the loan exposure, in order to monitor risk concentration levels through risk ratings, geographical regions, economic activities, currency and type of product in order to observe the portfolio's profile and act to improve diversification, which will maximize profitability with the lowest risk.

The model considers the loan portfolio exposure directly to the balance of each loan, whereas for the financial instruments' portfolio, considers the present value of the instruments and their future cash flows. This exposure is sensible to changes in the market, thereby facilitating estimations under different economic scenarios.

The methodology, besides loan exposure, takes into consideration the probability of default, recovery level associated to each client and the classification of the debtor based on the Merton model. The probability of default is the probability that the debtor will not fulfill his/her debt obligation with the institution according to the originally agreed terms and conditions. The probability of default is based on transition matrixes estimated by GFNorte based on the migration of the debtors through different risk rating levels. The recovery rate is the percentage of total exposure that is expected to be recovered if the debtor defaults. The classification of the debtor, based on the Merton model, associates the debtor's future behavior to credit and market factors on which his "credit health" depends, as determined by statistical techniques.

The results of this methodology are risk measures such as the expected and unexpected loss at a one-year horizon. The expected loss is the mean of the credit portfolio's loss distribution, which is used to measure the following year's expected loss due to default or variations in debtors' credit quality. The unexpected loss is an indicator of the loss in extreme scenarios and is measured as the difference between the maximum loss given the loss distribution, at a specific confidence level which for GFNorte's as of June 2021 is 99.85%, based on Expected Shortfall (previously it was 99.95% based on VaR), and expected loss.

These results are used as a tool for better decision-making in granting loans and in the diversification of the portfolio, according to GFNorte's strategy. The individual risk identification tools and the portfolio Credit Risk methodology are periodically reviewed and updated in order to include the application of new techniques that may support or strengthen them.

2.1.3 Credit Risk of Financial Instruments

Credit Risk Management of financial instruments is managed through a series of key pillars with a robust framework of policies for origination, analysis, authorization and management.

Origination policies define the types of eligible negotiable financial instruments, as well as the methodology for assessing credit quality of different types of issuers and counterparties. Credit quality is allocated through a rating obtained with an internal methodology, evaluations of external rating agencies or a combination of both. Maximum parameters of operation are also defined based on the type of issuer or counterparty, rating and type of operation.

The Loan Committee authorizes operation lines with financial instruments for clients and counterparties in accordance with authorization policies. The authorization request is submitted by the business area and other areas involved in the operation, with all the relevant information for analysis by the Committee who, if considered appropriate, issues its authorization. Nevertheless, counterparty credit lines (mainly to financial entities) that comply with certain criteria may be approved through a parametric methodology approved by the CPR.

In the specific case of derivatives contracts, and in line with best practices, a methodology for estimating potential exposure to lines is used, which are analyzed and approved within the Credit Committee and are monitored on daily basis and reported monthly in the CPR, where guarantee analysis for derivative transaction is held both for clients and financial counterparties.

The correspondent Credit Committee holds the minimum faculty to approve derivative lines for clients (when applicable, a fast-track process has been approved by the CPR). For these transactions, the use of derivatives lines with margin calls shall be privileged in order to mitigate the risk of potential exposure to these transactions.

To determine adversely correlated lines (Wrong Way Risk "WWR") a potential exposure adjustment is considered.

On an individual level, the risk concentration on financial instruments is managed on a continuous basis, establishing and monitoring maximum parameters of operation for each counterparty or issuer depending on the rating and type of operation. There are defined risk diversification policies for portfolios, for economic groups and internal groups. Additionally, the concentration of counterparty type or issuer, size of financial institutions and the region in which it operates, are monitored so that an appropriate diversification is obtained, and undesired concentrations are avoided.

Credit Risk is measured through a rating associated with the issuer, security or counterparty which has a previously assigned risk level based on two fundamentals:

1) The probability of default of the issuer, security or counterparty, which is expressed as a percentage between 0% and 100% where the better the rating or lower rate differential vs. the instrument of an equivalent government bond, the lower the probability of default and vice versa.

2) The loss given default that could be experienced with respect of the total of the operation in the event of non-fulfillment, is expressed as a percentage between 0% and 100% where the better the guarantees or credit structures, the smaller the loss given default and vice versa. To mitigate Credit Risk and to reduce the loss given default in the event of non-fulfillment, the counterparties have signed ISDA contracts and agreements to net out, in which credit lines and the use of collateral to mitigate loss in the event of non-fulfillment are implemented.

2.2 Credit Risk Exposure

As of December 31st, 2022 the total amount of the exposure subject to the Standard Method and the Internal Models (Advanced Approach Internal Model for Credit Cards and Auto Loans, and Foundation Approach Internal Model for Business Enterprises) to estimate the Capital Ratio is the following:

Gross Exposures subject to the Standard Method and Internal Models** *(Million pesos)*	Banorte	Arrendadora y Factor*	Total Portfolio
Commercial	**75,211**	**828**	**76,039**
YoY Revenues or Sales < 14 MM UDIS	75,211	828	76,039
States or Municipalities	103,832	316	104,148
Decentralized Federal Government Agencies and State Companies	47,923	5,482	53,406
Projects with own source of payment	100,456	0	100,456
Financial Institutions	29,690	964	30,654
Mortgage	228,797	0	228,797
Consumer Non-Revolving	69,309	3	69,312
Total Loans subject to the Standard Method	**655,217**	**7,593**	**662,811**
Commercial	157,944	28,735	186,679
YoY Revenues or Sales >= 14 MM UDIS	157,944	28,735	186,679
Federal, State and Municipal Government Decentralized Agencies, with annual income or Sales >= 14 MM UDIS	14,185	0	14,185
Total Loans subject to the Foundation Approach Internal Model	**172,128**	**28,735**	**200,863**
Consumer Non-Revolving (Auto)	32,333	0	32,333
Credit Card	46,234	0	46,234
Total Loans subject to Advanced Approach Internal Model	**78,568**	**0**	**78,568**
Eliminations and Accounting Records			(12,387)
Deferred Items	2,058	(16)	2,042
BAP Portfolio	3,188	0	3,188
Not Rated			0
Total Loans with BAP and DI			**935,084**

* Excludes Pure Leasing

** The exposure does not consider Letters of Credit and it has accounting adjustments.

For transactions subject to Credit Risk, the Institution uses external ratings issued by the rating agencies S&P, Moody's, Fitch, HR Ratings, Verum, DBRS Ratings México and A.M. Best America Latina. Only ratings issues by rating agencies are considered and are not assigned based on comparable assets.

2.2.1 Loan Portfolio

GFNorte's Credit Risk loan portfolio as of 4Q22 presents a total exposure of Ps 929.85 billion, Ps 44.56 million higher vs. the previous quarter or (5.0%) higher, and Ps 100.52 billion higher or a (12.1%) increase versus the previous year.

Variations per product of GFNorte's total portfolio are:

Product / Segment *(Million pesos)*	Total Loan			Var. vs. 3Q22		Var. vs. 4Q21	
	4Q21	3Q22	4Q22	Ps	%	Ps	%
Government	154,476	163,792	171,724	7,932	4.8%	17,248	11.2%
Commercial	206,508	215,809	233,304	17,495	8.1%	26,796	13.0%
Mortgage	202,536	219,943	228,797	8,854	4.0%	26,261	13.0%
Corporate	140,926	144,551	148,150	3,599	2.5%	7,224	5.1%
Payroll	56,422	66,838	69,275	2,436	3.6%	12,853	22.8%
Credit Card	40,451	44,131	46,234	2,103	4.8%	5,783	14.3%
Auto Loans	28,020	30,233	32,371	2,137	7.1%	4,351	15.5%
Total Loans	**829,338**	**885,299**	**929,854**	**44,556**	**5.0%**	**100,516**	**12.1%**
Deferred Items	1,704	1,560	2,042				
BAP Portfolio	2,827	3,123	3,188				
Total Loans with BAP and DI	**833,870**	**889,982**	**935,084**				

Performing Loans now broken down in Stage 1 and 2 represents Ps 919.88 billion, while Past-due loans, also known as Stage 3 Loans, represents Ps 9.97 billion.

| Subsidiary (Million pesos) | Loans | | Total | Total Reserves |
	Performing	Past-due		
Banorte*	884,383	9,143	893,526	16,247
Arrendadora y Factoraje	35,498	830	36,328	726
Accounting Records	0	0	0	926
Total Loans	**919,881**	**9,973**	**929,854**	**17,899**
Deferred Items			2,042	
BAP Portfolio			3,188	
Total Loans with BAP and DI			**935,084**	

* Banorte' s total loans include eliminations for (Ps 12.39) billion.

Total reserves of Ps 17.90 billion include rating reserves of Ps 16.97 billion and accounting records (Covid-19 reserves, valuation, negative debts in the Credit Bureau, and BAP reserves) of Ps 926 million.

GFNorte's Performing and Past-due portfolios in 4Q22 grouped by sector and subsidiary are detailed in the following two tables:

| Sector (Million pesos) | Loans | | Total Loans | Reserves | | 4Q22 Charge offs | Days Past-Due** |
	Performing	Past-due		4Q22	Var vs. 3Q22		
Government	171,720	4	171,724	848	60	0	0
Services*	115,882	852	116,733	1,108	95	53	312
Commerce	59,139	1,030	60,169	917	97	79	254
Manufacturing	52,750	1,225	53,975	943	(27)	24	399
Transportation	43,524	54	43,579	302	(11)	11	74
Top 5 Sectors	**443,015**	**3,166**	**446,180**	**4,119**	**214**	**168**	
Other Sectors	105,583	1,414	106,998	1,382	(137)	275	
Mortgage	226,932	1,865	228,797	1,035	(69)	523	
Consumer	144,351	3,528	147,880	10,438	766	2,625	
Accounting Records				926			
Total Loans	**919,881**	**9,973**	**929,854**	**17,899**	**774**	**3,590**	
Deferred Items			2,042				
BAP Portfolio			3,188				
Total Loans with BAP and DI			**935,084**				

* Includes Financial, Real Estate and Other Services

** Days past due from Past-Due Loans.

Sector/Subsidiary (Million pesos)	Banorte*	AyF	Total Loans
Government	165,940	5,784	171,724
Services**	109,722	7,011	116,733
Commerce	54,079	6,090	60,169
Manufacturing	44,659	9,316	53,975
Transportation	39,082	4,497	43,579
Top 5 Sectors	**413,481**	**32,699**	**446,180**
Remaining	480,045	3,629	483,674
Total Loans	**893,526**	**36,328**	**929,854**
Deferred Items			2,042
BAP Portfolio			3,188
Total Loans with BAP and DI			**935,084**

* Banorte' s total loans include eliminations for (Ps 12.39) billion.

** Includes Financial and Real Estate services

As of 4Q22, GFNorte's Performing and Past-due loans grouped by federal entity and subsidiary are detailed in the following table:

	Federal Entities (Million pesos)	Loans		Total Loans	Total Reserves
		Performing	Past-due		
1	Ciudad de México	269,697	2,219	271,916	3,705
2	Nuevo León	141,624	1,069	142,693	2,149
3	Estado de México	69,943	1,086	71,029	1,682
4	Jalisco	60,994	287	61,281	801
5	Sinaloa	33,036	226	33,262	425
6	Tamaulipas	27,640	332	27,972	656
7	Baja California Norte	26,729	167	26,896	468
8	Baja California Sur	25,314	93	25,407	215
9	Coahuila	24,660	273	24,933	561
10	Chihuahua	22,865	295	23,160	561
	Top 10	**702,504**	**6,046**	**708,550**	**11,223**
	Other Federal Entities	217,378	3,927	221,305	5,750
	Accounting Records			0	926
	Total Loans	**919,881**	**9,973**	**929,854**	**17,899**
	Deferred Items			2,042	
	BAP Portfolio			3,188	
	Total Loans with BAP and DI			**935,084**	

* Banorte's total loans include eliminations for (Ps 12.39) billion.

As of 4Q22, GFNorte's Performing and Past-due loans grouped by term are detailed below:

Remaining Term (Million pesos)	Portfolio		Total Loans	Total Reserves
	Performing	Past-due		
0 - 1 years	158,987	3,333	162,320	6,681
1 - 5 years	252,692	3,403	256,095	7,123
5 - 10 years	101,325	687	102,012	698
> 10 years	371,378	1,720	373,099	1,745
Banorte*	**884,383**	**9,143**	**893,526**	**16,247**
Arrendadora y Factor	35,498	830	36,328	726
Accounting Records				926
Total Loans	**919,881**	**9,973**	**929,854**	**17,899**
Deferred Items			2,042	
BAP Portfolio			3,188	
Total Loans with BAP and DI			**935,084**	

* Banorte's total loans include eliminations for (Ps 12.39) billion.

2.2.2 Exposure to Financial Instruments

As of December 31st, 2022, exposure to Credit Risk for Securities Investments of Banco Mercantil del Norte was Ps 326.89 billion, of which 97.0% is rated higher or equal to AA-(mex) on a local scale, placing them in investment grade, and the 3 main counterparties other than the Federal Government, State Governments and National Financial Institutions represent 7% of the Tier 1 Capital as of September 2022. Additionally, there is no exposure of investments with the same counterparty other than the Federal Government that represents a higher or equal concentration to 5% of the Net Capital as of September 2022.

For Derivatives operations, the exposure of the 3 main counterparties other than the Federal Government, State Governments and National Financial Institutions represent 6% of the Tier 1 Capital as of September 2022.

Exposure to Credit Risk for Securities Investments of Casa de Bolsa Banorte was Ps 209.53 billion, of which 100% is rated higher or equal to AA-(mex) on a local scale, placing them in investment grade and the 3 main counterparties other than the Federal Government, State Governments and National Financial Institutions represent 59% of the Equity as of September 2022. Additionally, the exposure of investments with the same counterparty other than the Federal Government that represents a higher or equal concentration to 5% of the Equity as of September 2022 has a higher or equal rating to AA-(mex) and are comprised of (*weighted average term, amounts in pesos and weighted average return to annualized maturity*): certificates of deposit and market certificates of Scotiabank Inverlat for 3 months totaling Ps 2.65 billion at 10.8%; market certificates of BBVA Mexico for 1 year and 4 months totaling Ps 2.64 billion at 10.8%; market certificates of Mexico City Government for 24 years and 9 months totaling Ps 2.42 billion at 11.0%; market certificates of FEFA for 1 year and 3 months totaling Ps 1.71 billion at 11.0%; certificates of deposit of Banco del Bajío for 5 months totaling Ps 1.00 billion at 10.9%; market certificates of Banco Compartamos for 1 year and 9 months totaling Ps 993 million at 11.2%; Deutsche Bank bonds for 5 months totaling Ps 839 million at 11.5%; market certificates of Banco Actinver for 4 years and 2 months totaling Ps 803 million at 11.5%; market certificates of Banco Inbursa for 5 months totaling Ps 802 million at 10.6%; certificates of deposit and market certificates of Banobras for 2 years and 8 months totaling Ps 798 million at 10.7%; market certificates of Banco Santander México for 3 years and 5 months totaling 752 million at 10.7%; market certificates of FONACOT for 1 year and 9 months totaling Ps 702 million at 10.9%; market certificates of BANCOMEXT for 3 years and 3 months totaling 604 million at 10.7%; market certificates of Pemex for 2 years and 3 months totaling Ps 541 million at 9.8%; certificates of deposit of Banca Mifel for 1 month totaling Ps 494 million at 11.2%; market certificates of Grupo Aeroportuario del Pacífico for 2 years and 1 month totaling Ps 486 million at 11.0%; certificates of deposit of Banco Invex for 11 months totaling 401 million at 11.0%.

For Derivatives operations, the exposure of the 3 main counterparties other than the Federal Government, State Governments and National Financial Institutions represent 1% of the Equity as of September 2022.

Arrendadora y Factor Banorte had no exposure to Securities Investments or to Derivatives.

Banorte's exposure to counterparty risk from transactions with derivatives is presented below, as well as the netting effect and risk mitigation based on the aggregate guarantees related to settled transactions (includes operations with Banxico. Excludes settled transactions through central counterparties).

Position Banorte (Million Pesos)	4Q22	4Q22 Average
Forwards	109	116
FX Swaps	(172)	(105)
FX	(11)	(2)
Options	(70)	(90)
Swaps with Interest Rates IRS	(2,799)	(3,546)
Cross Currency Swap (CCIRS)	(1,480)	(1,141)
Credit Default Swaps (CDS)	134	153
Total	**(4,290)**	**(4,614)**
Positive Fair Value (Positive Market Value)	12,361	12,702
Netting Effect*	16,651	17,316
Delivered Guarantees (-) /Received (+)		
Cash	3,655	4,064
Securities	0	0
Total	**3,655**	**4,064**

* Difference between the positive market value (not considering the net positions) and the portfolio market value.
Transactions performed at the Clearing House are not included, as they are not subject to counter party risk.

The following table represents the current and potential levels of exposure at the end and the average of the quarter, respectively, for Banorte.

Banorte (Million Pesos)	Potential Risk		Current Risk	
Financial Counterparties	4Q22	4Q22 Average	4Q22	4Q22 Average
FWD FX SWAP	4,856	3,380	(100)	(29)
FX OPTIONS	5,092	4,754	837	819
INTEREST RATE SWAP	2,778	2,647	3,722	3,927
CCS	5,545	5,955	(1,476)	(1,137)
CDS	472	630	134	153
Total	**4,542**	**4,534**	**3,117**	**3,733**
Clients (Non-Financial)	4Q22	4Q22 Average	4Q22	4Q22 Average
FWD	49	43	26	39
OPTIONS	87	69	(907)	(910)
INTEREST RATE SWAP	2,515	2,354	(6,521)	(7,472)
CCS	26	24	(4)	(4)
Total	**2,678**	**2,491**	**(7,407)**	**(8,347)**

Based on conditions established in derivative agreements, tolerance levels of exposure are considered according to the rating of involved entities. The following table presents the number of guarantees to be delivered, in case of a rating downgrade. It's worth noting that with most counterparties we've migrated to cero threshold, thus, guarantees to be delivered do not depend on credit rating but to market movements:

Banorte Net Cash Outflows (Million pesos)	4Q22	4Q22 Average
Cash Outflow with 1-notch Downgrade	0	0
Cash Outflow with 2-notch Downgrade	0	0
Cash Outflow with 3-notch Downgrade	0	0

In the following table, the derivatives' market value is detailed according to the counterparties' ratings:

Banorte Rating (Million Pesos)	MoM 4Q22	4Q22 Average
AAA/AA-	0	0
A+/A-	2,017	2,717
BBB+/BBB-	(109)	(287)
BB+/BB-	(586)	(902)
B+/B-	(1,197)	(1,440)
CCC/C	0	0
SC	(4,415)	(4,701)
Total	**(4,290)**	**(4,614)**

Casa de Bolsa's exposure to counterparty risk from transactions with derivatives is presented below, as well as the netting effect and risk mitigation based on the aggregate guarantees related to settled transactions (includes operations with Banxico. Excludes settled transactions through central counterparties).

Position Casa de Bolsa (Million Pesos)	4Q22	4Q22 Average
Forwards	0	0
FX Swaps	0	0
FX	0	0
Options	0	0
Swaps with Interest Rates IRS	144	125
Cross Currency Swap (CCIRS)	0	0
Credit Default Swaps (CDS)	0	0
Total	**144**	**125**
Positive Fair Value (Positive Market Value)	597	626
Netting Effect*	453	501
Delivered Guarantees (-) /Received (+)		
Cash	0	0
Securities	0	0
Total	0	0

* Difference between the positive market value (not considering the net positions) and the portfolio market value.
Transactions performed at the Clearing House are not included, as they are not subject to counter party risk.

The following table represents the current and potential levels of exposure at the end and the average of the quarter, respectively, for Casa de Bolsa.

Casa de Bolsa (Million Pesos)	Potential Risk		Current Risk	
Financial Counterparties	4Q22	4Q22 Average	4Q22	4Q22 Average
FWD				
FX SWAP	0	0	0	0
FX				
OPTIONS	0	0	(29)	(10)
INTEREST RATE SWAP	563	592	562	591
CCS	0	0	0	0
CDS	0	0	0	0
Total	**563**	**592**	**533**	**581**

Non-Financial Counterparties	4Q22	4Q22 Average	4Q22	4Q22 Average
FWD	0	0	0	0
OPCIONES	19	6	29	10
INTEREST RATE SWAP	251	209	(417)	(466)
CCS	0	0	0	0
Total	**270**	**215**	**(389)**	**(457)**

Based on conditions established in derivative agreements, tolerance levels of exposure are considered according to the rating of involved entities. The following table presents the number of guarantees to be delivered, in case of a rating downgrade. It's worth noting that with most counterparties we've migrated to cero threshold, thus, guarantees to be delivered do not depend on credit rating but to market movements:

Casa de Bolsa Net Cash Outflows (Million pesos)	4Q22	4Q22Average
Cash Outflow with 1-notch Downgrade	0	0
Cash Outflow with 2-notch Downgrade	0	0
Cash Outflow with 3-notch Downgrade	0	0

In the following table, the derivatives' market value is detailed according to the counterparties' ratings:

Casa de Bolsa Rating (Million Pesos)	MoM 4Q22	4Q22Average
AAA/AA-	0	0
A+/A-	0	0
BBB+/BBB-	533	581
BB+/BB-	0	0
B+/B-	0	0
CCC/C	0	0
SC	(389)	(457)
Total	144	125

2.3 Credit Collaterals

Collaterals represent the second credit recovery source when its coverage, through the predominant activity of the applicant, is compromised. Collaterals may be real or personal.

The main types of real collaterals are the following:

- Civil Mortgage
- Industrial Mortgage
- Regular Pledge
- Pledge w/o possession transfers
- Pledge / Pledge Bond
- Pledge Bond
- Caution Securities
- Securities Pledge
- Management and Payments Trust
- Development Funds

For assets granted in guarantee, the Institution has policies and procedures to monitor and make periodic inspection visits to ensure the existence, legitimacy, value and quality of the guarantees accepted as an alternative credit support. Furthermore, when guarantees are securities, there are policies and procedures to monitor its market's valuation and require additional guarantees if needed.

The covered loan portfolio by type of collateral is as follows:

Collateral Type (Million Pesos)	4Q22			
	Banorte	Banorte Ahorro y Previsión	Arrendadora y Factor**	GFNorte*
Total Loan Portfolio	**907,972**	**3,188**	**36,312**	**935,084**
Covered Loan Portfolio by type of collateral				
Real Financial Guarantees	21,568	0	0	21,568
Real Non-Financial Guarantees	512,427	0	7,538	519,965
Pari Passu	38,782	0	0	38,782
First Losses	17,901	0	0	17,901
Personal Guarantees	39,794	0	4,351	44,145
Total Loan Portfolio Covered	**630,472**	**0**	**11,889**	**642,361**

* Total Loans includes eliminations and accounting records for (Ps 12.39 billion).

** Excludes Pure Leasing

2.4 Expected Loss

As of December 31st, 2022, Banco Mercantil del Norte's total portfolio was Ps 907.97 billion. The expected loss represents 1.9% and the unexpected loss is 4.0% of the total portfolio. The average expected loss is 1.9% for the period October - December 2022.

Regarding Casa de Bolsa Banorte, the credit exposure of investments is Ps 210.15 billion and the expected loss represents 0.01% of the exposure. The average expected loss is 0.01% between October - December 2022.

The total portfolio of Arrendadora y Factor Banorte, including pure leasing is Ps 38.72 billion. The expected loss represents 1.8% and the unexpected loss is 5.9% of the total portfolio. The average expected loss is 1.8% for the period October - December 2022.

2.5 Internal Models

In October 2016, the Board of Directors approved the implementation plan for the Internal Models for estimating reserves and capital requirements, on all applicable portfolios, which was dispatched to CNBV in the same year. In accordance with this implementation plan, the models for the Credit Card, Commercial Loans and Auto Loans portfolios were certified.

At the end of 2018, the CNBV released the project to migrate Standard and Internal Methodologies under the IFRS9 approach, but it was until March 2020 that the definitive rule for Internal Methodologies of reserves based on NIF C-16 (IFRS9), effective as of January 2021, was published in the Federation Official Journal (DOF by its acronym in Spanish). However, due to the COVID-19 pandemic, the CNBV issued a communique in April 2020 indicating that the rule would be effective as of January 2022.

Therefore, GF Banorte complied the new regulation and adopted the Internal Reserve Methodologies based on NIF C-16, for which the Risk Policies Committee (CPR by its acronym in Spanish) and the Board of Directors were requested in April 2021 to approve the new Implementation Plan (Capital and Reserves), which was authorized by the CNBV in January 2022 through Document 111-2/852/2022.

As of January 2022, the NIF C16 (IFRS9[1]) rule is effective for the calculation of preventive reserves for credit risks, both in the Standard Approach and Internal Models. As a consequence, for Internal Models, estimates for risk parameters will consider two approaches: IRB to compute capital requirements and IFRS9 to compute reserves:

- The capital approach will maintain long-term estimates ("Through the Cycle", TTC), under Annex 15 of the CUB[2].
- The reserves approach will consider current behaviors ("Point in Time", PIT) and with a prospective approach (future macroeconomic environment), under Annex 15 Bis of the CUB. In addition, the new methodology indicates that the portfolio must be classified into 3 risk stages, being necessary for stage 2 a reserve calculation for the remaining term (LifeTime).

Given the new guidelines of the CUB on Internal Models, the regulator (CNBV) will only issue a Document of approval for the use of methodology for Capital Estimation, for a maximum period of 18 months. The use of Internal Model for Reserve methodology is authorized by Banorte's Board of Directors and by the Board of Arrendadora y Factor Banorte, accordingly, with the support of the Technical Evaluation made by the Independent Evaluator which guarantees compliance with the Model under the standards established in Annex 15 Bis. It should be noted that the Technical Evaluation Report is sent to the CNBV for review, the validity of this model is also for a maximum period of 18 months.

2.5.1 Advanced Approach Internal Model for Credit Card

On November 15, 2017, GFNorte received approval from the banking regulator (Comisión Nacional Bancaria y de Valores) to use Internal Models (IM) for credit card rating for reserves and regulatory capital generation by credit risk with an Advanced Approach (Document 111-3/706/2017). Periodically (as indicated by the regulation), Internal Models are recalibrated, on December 17, 2021, the CNBV granted authorization for the use of IM only for the calculation of Capital Requirements for a maximum period of 18 months[3] (Document 111-2/272/2021) and the Board of Directors authorized the use of the Reserve methodology based on NIF C16 in its session on October 21, 2021. The maximum period of use for Reserve model is also for a maximum of 18 months.

These internal models improve overall credit risk management by estimating risk parameters from the bank's own experience. The aforementioned parameters are:

- Probability of Default (PD). Indicates the probability that a credit card customer defaults on its contractual obligations within the next twelve months after the month being rated. For each loan, there is a score, which is mapped to a Master rating scale.
- Loss Given Default (LGD). Measures the intensity of the loss upon default expressed as a percentage of the Exposure at Default (EAD).
- Exposure at Default (EAD). The amount of the debt at the time of default, considering a time horizon of twelve months after the month being rated.

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[1] IFRS9 = International Financial Reporting Standards 9, IRB = Internal Rate Based Models

[2] Circular Única de Bancos

[3] Banorte will request approval of the use of the Internal Model from the CNBV for a period of 12 months, considering that 18 months is the maximum period according to the CUB.

The next table shows the Credit Card portfolio subject to the Advanced Approach Internal Model, classified by degrees of Internal Model risk:

Consumer Revolving Credit Card Portfolio under Advanced Approach Internal Model												*Million Pesos*
Risk Level*	Account. Balance	Exposure at Default (EAD)**			Loss Given Default			PD factored by EAD			Unused Credit Lines	EAD factored by Exposure
		Stage 1	Stage 2	Stage 3	Stage 1	Stage 2	Stage 3	Stage 1	Stage 2	Stage 3		
1	3,510	5,047	0	0	75.6%			0.5%			22,798	30%
2	6,152	8,789	0	0	75.8%			0.9%			30,896	30%
3	4,818	6,412	0	0	76.2%			1.5%			12,368	25%
4	6,862	8,739	0	0	77.2%			2.5%			10,659	21%
5	5,813	7,328	0	0	78.4%	75.6%		4.1%	4.1%		5,076	21%
6	5,659	7,004	0	0	80.2%	75.6%		6.3%	6.3%		3,016	19%
7	3,990	5,030	1	0	81.2%	75.8%		9.2%	9.2%		1,822	21%
8	3,606	4,522	2	0	82.7%	76.0%		13.7%	13.7%		1,309	20%
9	2,589	3,318	18	0	84.4%	76.9%		21.9%	21.9%		691	22%
10	2,128	2,054	502	0	86.1%	85.8%		55.3%	55.3%		67	17%
11	1,108	0	0	1,108			86.9%			100.0%	38	0%
Cartera Total	46,234	58,243	524	1,108	79.0%	85.0%	86.9%	7.0%	53.9%	100.0%	88,742	23%

* Scale of Risk Level for the Advanced Approach Internal Model.
** The balances under Exposure at Default include Potential Risk as well as used credit line balance.

The next table shows the difference between expected loss and observed loss resulting from the Advance Approach Internal Model for Credit Cards from 4Q21.

Backtesting				
Portfolio	Expected Loss Internal Model*	Observed Loss*	Difference Ps (Observed Loss – Expected Loss)	% NCL Coverage
Credit Card	3,601	3,034	(567)	119%
Total Portfolio	3,601	3,034	(567)	119%

* Expected and Observed Loss is equal to the last twelve months' average.

2.5.2 Advanced Approach Internal Model for Auto Loans

On November 25, 2019, GF Banorte received approval from the banking regulator (Comisión Nacional Bancaria y de Valores) to use Internal Models (IM) for Auto Loans rating for reserves and regulatory capital generation by credit risk with an Advanced Approach (Document 111/678/2019). Periodically (as indicated by the regulation), Internal Models are recalibrated, on September 29, 2022, the CNBV (Document 111-2/272/2021) granted authorization for the use of IM only for the calculation of Capital Requirements for a maximum period of 18 months, and the Board of Directors authorized, in its meeting on July 2022, the use of reserve methodology based on NIF-C16. The maximum period of use of the reserve model is also for a maximum of 18 months.

These internal models improve overall credit risk management by estimating risk parameters from the bank's own experience. The aforementioned parameters are:

- Probability of Default (PD). Indicates the probability that an auto customer defaults on its contractual obligations within the next twelve months after the month being rated. For each loan, there is a score, which is mapped to a Master rating scale.
- Loss Given Default (LGD). Measures the intensity of the loss upon default expressed as a percentage of the Exposure at Default (EAD).

- Exposure at Default (EAD). The amount of the debt at the time of default, considering a time horizon of twelve months after the month being rated.

The next table shows the Auto portfolio subject to the Advanced Approach Internal Model, classified by degrees of Internal Model risk:

Consumer Revolving Auto Portfolio under Advanced Approach Internal Model									Million Pesos
Risk Level*	Accounting Balance			Exposure at Default (EAD)			Loss Given Default			PD factored by EAD
	Stage 1	Stage 2	Stage 3	Stage 1	Stage 2	Stage 3	Stage 1	Stage 2	Stage 3	
1	2,484	0	0	2,484	0	0	49.64%			0.17%
2	8,234	0	0	8,234	0	0	57.11%			0.42%
3	7,469	0	0	7,469	0	0	61.34%	46.49%		0.80%
4	4,325	1	0	4,325	1	0	61.71%	57.91%		1.28%
5	4,949	2	0	4,949	2	0	63.36%	56.69%		1.91%
6	2,348	4	0	2,348	4	0	60.67%	64.33%		3.32%
7	1,605	54	0	1,605	54	0	57.68%	62.98%		8.96%
8	438	229	0	438	229	0	56.18%	57.04%		34.06%
9	0	0	193	0	0	193			63.53%	100.00%
Cartera Total	31,850	290	193	31,850	290	193	58.81%	57.85%	63.53%	2.77%

* Scale of Risk Level for the Advanced Approach Internal Model.

The next table shows the difference between expected loss and observed loss resulting from the Advance Approach Internal Model for Auto Loans from 4Q21.

Backtesting				
Portfolio	Expected Loss Internal Model*	Observed Loss	Difference Ps (Observed Loss – Expected Loss)	% NCL Coverage
Auto Loans	627	445	(182)	141%
Total Portfolio	627	445	(182)	141%

* Data as of December 2021.

2.5.3 Foundation Approach Internal Model for Commercial Loans

On November 30th, 2018, GFNorte obtained authorization from the banking regulator CNBV (Comisión Nacional Bancaria y de Valores) to use the Internal Model (IM) for Commercial Loans for reserves generation and regulatory capital requirements by credit risk with a Foundation Approach, as per (Document 111-3/1472/2018) in Banco Mercantil del Norte, and on March 1st, 2019 for Arrendadora y Factor Banorte as per Documents (111-1/160/2019 and 111-1/161/2019). Periodically (as indicated by the regulation), Internal Models are recalibrated, on December 17, 2021, the CNBV granted authorization for the use of IM only for the calculation of Capital Requirements for a maximum period of 18 months for Banco Mercantil del Norte (Document 111-2/269/2021) and Arrendadora y Factor (Document 111-2/267/2021). Likewise, the Board of Directors authorized the use of the Reserve methodology based on NIF C16 in its session on October 21, 2021 for Banco Mercantil del Norte and on October20,2021 for Arrendadora y Factor Banorte. The maximum period of use for Reserve model is also for a maximum of 18 months.

Exposures subject to this rating are those pertaining to corporations (other than states, municipalities and financial entities), and individuals (sole proprietorships), both with annual sales higher or equal to 14 million UDIs.

The Internal Model (IM) enhances the overall credit risk management practice by estimating risk parameters through the institution's own experience with such customers. These models have been applied since February 2019 (January figures) at Banco Mercantil del Norte, and starting in March 2019 (with February figures) at Arrendadora y Factor Banorte. The parameter authorized under the Foundation Approach Internal Model for Corporations is:

- Probability of Default (PD). Shows the likelihood that a borrower defaults on its contractual obligations within twelve months after the month being rated. There is a score assigned to each borrower, which is in turn mapped against a master rating scale.

The following tables show the portfolio which is subject to the Foundation Approach Internal Model for Commercial Loans, classified by stage and risk level:

Commercial Loans subject to the Foundation Approach Internal Model Grupo Financiero Banorte Stage 1 Loans			*Million Pesos*
Risk Level	**Accounting Balance**	**Exposure at Default (EAD)***	**PD weighted by EAD**
1	79,050	79,100	0.05%
2	44,745	45,168	0.45%
3	67,943	68,161	0.95%
4	12,862	13,000	1.38%
5	3,049	3,051	2.91%
6	4,199	4,199	2.19%
7	594	594	13.69%
8	428	428	13.87%
9	0	0	0.00%
Total	**212,870**	**213,702**	**0.65%**

* EAD balances include both potential risk as well as used balance risk.

Commercial Loans subject to the Foundation Approach Internal Model Grupo Financiero Banorte Stage 2 Loans			*Million Pesos*
Risk Level	**Accounting Balance**	**Exposure at Default (EAD)***	**PD weighted by EAD**
1	24	24	0.03%
2	0	0	0.00%
3	18	18	0.82%
4	0	0	0.00%
5	1	1	2.96%
6	0	0	5.59%
7	159	159	17.46%
8	182	182	41.21%
9	0	0	0.00%
Total	**501**	**501**	**24.82%**

* EAD balances include both potential risk as well as used balance risk.

Commercial Loans subject to the Foundation Approach Internal Model Grupo Financiero Banorte Stage 3 Loans			*Million Pesos*
Risk Level	**Accounting Balance**	**Exposure at Default (EAD)***	**PD weighted by EAD**
Stage 3	2,305	2,305	96.21%
Total	**2,305**	**2,305**	**96.21%**

* EAD balances include both potential risk as well as used balance risk.

Commercial Loans subject to the Foundation Approach Internal Model Grupo Financiero Banorte Total Loans			Million Pesos
Risk Level	**Accounting Balance**	**Exposure at Default (EAD)***	**PD weighted by EAD**
1	79,074	79,124	0.05%
2	44,824	45,247	0.45%
3	67,961	68,180	0.95%
4	12,862	13,000	1.38%
5	3,049	3,052	2.91%
6	4,199	4,199	2.19%
7	753	753	14.48%
8	610	610	22.02%
9	38	38	55.11%
Stage 3	2,305	2,305	96.21%
Total	**215,676**	**216,508**	**1.72%**

* EAD balances include both potential risk as well as used balance risk.

A breakdown of risk exposure and expected loss by subsidiary is shown below:

Commercial Loans Portfolio subject to the Foundation Approach Internal Model			Million Pesos
Subsidiary	**Accounting Balance**	**Exposure at Default (EAD)****	**Expected Loss**
Banco Mercantil del Norte	186,810	187,641	1,135
Arrendadora y Factor Banorte	28,867	28,867	568
Total Loans*	**215,676**	**216,508**	**1,703**

* The balance includes Letters of Credit of Ps 14.7 billion and excludes accounting adjustments of Ps 1 million in Banorte and Ps 132 million in Arrendadora y Factor Banorte.
** EAD balances include both potential risk as well as used balance risk.

The following table shows the difference between expected loss estimated by the Foundation Approach Internal Model for Commercial Loans, and the real loss observed in the following 12 months. Because the model was just recently authorized, the table shows estimations obtained during the parallel model runs period.

Backtesting			Million Pesos
Period	**Expected Loss with Internal Model**	**Observed Loss**	**% Coverage (Expected Loss / Observed Loss)**
4Q21	1,378	120	1,150%

2.6 Risk Diversification

In December 2005, the CNBV issued "General Provisions Applicable to Credit Institutions related to Risk Diversification". These guidelines state that institutions must perform an analysis of their borrowers and/or loans to determine the amount of "Common Risk"; also, institutions must have the necessary information and documentation to prove that the person or group of people represent a common risk in accordance with the assumptions established in those rules.

In compliance with risk diversification regulation on active and passive operations, **Banco Mercantil del Norte** presents the following information (million pesos):

Tier 1 Capital as of September 30, 2022	185,190
I. Loans with individual balance greater than 10% of Tier 1 Capital:	
Loan Operations	
Number of loans	0
Total amount of loans	0
% in relation to Tier 1	0%
Money Market Operations	
Number of loans	0
Total amount of loans	0
% in relation to Tier 1	0%
Overnight Operations	
Number of loans	0
Total amount of loans	0
% in relation to Tier 1	0%
II. Maximum amount of credit with the 3 largest debtors and common risk groups:	**43,180**

In compliance with risk diversification regulation on active and passive operations, **Arrendadora y Factor Banorte** presents the following information (million pesos):

Equity as of September 30, 2022	10,125
I. Loans with individual balance greater than 10% of Equity:	
Loan Operations	
Number of loans	4
Total amount of loans	7,894
% in relation to Equity	78%
Money Market Operations	
Number of loans	0
Total amount of loans	0
% in relation to Equity	0%
Overnight Operations	
Number of loans	0
Total amount of loans	0
% in relation to Equity	0%
II. Maximum amount of credit with the 3 largest debtors and common risk groups:	**5,344**

3 MARKET RISK (Bank and Brokerage House)

GFNorte's objectives regarding Market Risk are:

- Comply with the Desired Profile Risk defined by the Group's Board of Directors.
- Maintain an adequate monitoring on Market Risk.
- Maintain the Senior Management adequately informed in time and form.
- Quantify exposure to Market Risk through the use of various methodologies.
- Define maximum risk levels the Institution is willing to maintain.
- Measure the Institution's vulnerability to extreme market conditions and consider such results when making decisions.

GFNorte's Market Risk Policies are:

- New products subject to market risk must be evaluated and approved though the new products' guidelines approved by the CPR.
- The Board of Directors is the entitled body to approve global limits and market risk's appetite metrics, as well as their amendments.
- The CPR is the entitled body to approve models, methodologies and specific limits, as well as their amendments.
- Market risk models will be valid by and independent area, which is different from the one that develop and manage them.
- Market risk inputs and models will be valid as per a properly approved policy by the CPR.

3.1 Market Risk Methodology

Market Risk Management is controlled through a series of fundamental pillars, highlighting the use of models and methodologies such as potential loss commonly known as "*expected shortfall*", Backtesting and Stress Testing, which are used to measure the risk of traded products and portfolios in the financial markets. Banorte implemented during January 2019 the calculation of expected shortfall, thus substituting the calculation of VaR. In addition, it was implemented the valuation of derivatives by OIS curves and curves adjusted for collateral following international standards.

Risk management is supported by a framework of policies and manuals through which the implementation and monitoring on market risk limits, the disclosure of the aforementioned risk metrics and its tracking regarding the established limits, are set.

Key risk ratios are disclosed in monthly reports to the Risk Policy Committee and through a daily report to top executives at the Institution, related to the Market Risk risk-taking.

3.2 Market Risk Exposure

Exposure of the Institution's financial portfolios to Market Risk is quantified using the methodology denominated Expected Shortfall which is the average of losses once VaR is surpassed.

The expected shortfall model considers a one-day horizon base, and considers a non-parametric historical simulation with a 97.5% confidence level and 500 historical observations on risk factors, and an additional stress scenario. Furthermore, it considers all the positions (money market, treasury, equities, FX and derivatives) classified for accounting purposes as trading assets, both on and off the balance sheet.

The average expected shortfall of the Bank´s portfolio for 4Q22 was Ps 94.0 million (Ps 20.8 million lower than the average expected shortfall from last quarter).

The result shows that the Bank's expected shortfall, using a 97.5% confidence level, is on average Ps 94.0 million.

Expected Shortfall Million Pesos	Average 4Q22
Total Expected Shortfall	94.0
Net Capital	194,923
Expected Shortfall/Net Capital	**0.048%**

Expected shortfall by risk factor behavior during the fourth quarter of the year:

Risk Factor Million Pesos	4Q22	Average 4Q22
Domestic Rates	56.0	50.4
Foreign Rates	77.9	61.6
Surcharges	48.0	49.7
FX	29.8	33.4
Equity	71.6	36.4
Diversification Effect	(211.4)	(137.5)
Bank's Expected Shortfall	**71.9**	**94.0**

Expected shortfall for 4Q22 was Ps 71.9 million. The contribution to the Bank´s Expected shortfall for each risk factor is:

Risk Factor Million Pesos	4Q22	Average 4Q22
Domestic Rates	35.0	34.7
Foreign Rates	(1.1)	11.2
Surcharges	0.3	13.4
FX	3.9	5.0
Equity	33.8	29.7
Bank's Expected Shortfall	**71.9**	**94.0**

Expected shortfall by risk factor is determined by simulating 500 historical scenarios and an additional stress scenario to each risk factor and assessing instruments by their main risk factor. It is important to note that all positions classified as trading were considered, positions classified as held to maturity and available for sale were excluded.

The average proportion by market risk factor excluding the diversification effect is:

Risk Factor	4Q22
Rates	49%
Surcharges	14%
FX	5%
Equity	32%

3.2.1 Sensitivity Analysis and Stress Testing under extreme conditions

With the purpose of complementing and strengthening risk analysis, Banorte tests under extreme conditions known as Stress Testing. This is presented to the Risk Policy Committee on monthly basis with the main objective of assessing the impact on the Institution's positions of extreme movements in risk factors.

3.2.2 Backtesting

In order to validate the effectiveness and accuracy of the expected shortfall, a monthly Backtesting analysis is presented to the Risk Policy Committee. Through this analysis, it is possible to compare losses and gains observed with respect to the estimated expected shortfall and if necessarily make the required adjustments to the parameter.

3.2.3 Expected Shortfall of Casa de Bolsa

The expected shortfall average in 4Q22 was Ps 94.7 million, Ps 31.4 million lower vs. 3Q22.

The result shows that potential loss for Casa de Bolsa, using a 97.5% confidence level, is on average Ps 94.7 million:

Expected Shortfall Million Pesos	Average 4Q22
Total Expected Shortfall	94.7
Net Capital	4,916
Expected Shortfall/Net Capital	**1.93%**

The expected shortfall by risk factor for Casa de Bolsa Banorte portfolio behavior during the fourth quarter of the year was:

Risk Factor (Million Pesos)	4Q22	Average 4Q22
Domestic Rates	24.5	37.5
Foreign Rates	0.4	0.3
Surcharges	52.5	61.4
FX	0.0	0.0
Equity	34.2	11.6
Diversification effect	(19.9)	(16.1)
Casa de Bolsa Expected Shortfall	**91.7**	**94.7**

Expected shortfall at the end of 4Q22 was Ps 91.7 million.

The expected shortfall by risk factor is determined by simulating 500 historical scenarios and an additional stress scenario, performing a grouping of instruments by their main risk factor. It is important to note that all positions classified as trading were considered, excluding the held-to-maturity position and available for sale.

Concentration by Market Risk factor is mainly in interest rates

3.2.4 Sensitivity Analysis and Stress Testing under extreme conditions

Complementing the potential losses methodology with the purpose of enhancing risk analysis, Casa de Bolsa Banorte complements its risk analysis enforcing tests under extreme conditions known as Stress Testing. This is presented to the Risk Policy Committee on a monthly basis with the main objective of assessing the impact on the Institution's positions of extreme movements in risk factors

3.2.5 Backtesting

In order to validate the effectiveness and accuracy of the expected shortfall, a monthly Backtesting analysis is presented to the Risk Policy Committee. Through this analysis it is possible to compare losses and gains observed with respect to the estimated expected shortfall and if necessarily make the required adjustments to the parameter.

4 BALANCE AND LIQUIDITY RISK

GFNorte's Balance and Liquidity Risk objectives are:

- Comply with the Risk Appetite defined by the Group's Board of Directors.
- Give proper monitoring of Balance and Liquidity Risk.
- Assessing through the use of different methodologies, Balance and Liquidity Risk exposure.
- Measure Institution's vulnerability to extreme market conditions and consider such results for decision making.
- Maintain Senior Management properly informed in a timely manner on Balance and Liquidity Risk exposure and on any limits' and risk profile's deviation.
- Follow-up on the institution's coverage policy and review it at least annually.
- Maintain a sufficient level of liquid assets eligible to guarantee the institution's liquidity even under stress conditions.

GFNorte's Liquidity Risk Policies are:

- Establishment of specific global limits of Balance and Liquidity Risk Management.
- Measurement and monitoring of Balance and Liquidity Risk.
- Information and disclosure of Liquidity Risk to risk-taking areas, CPR, Board of Directors, Financial Authorities and to public investors.

4.1 Liquidity Risk Methodology and Exposure

Balance and Liquidity risk is managed through a series of fundamental pillars that include the use of key indicators such as the Liquidity Coverage Ratio (LCR), re-price gaps and liquidity, as well as stress testing. The latter, based on a framework of policies and manuals, including a funding contingency plan, and a contingency plan to preserve solvency and liquidity. Similarly, is enhanced with monitoring limits and Risk Appetite metrics of Balance and Liquidity Risk. The disclosure of metrics and indicators and their compliance with established limits and desired established risk profile is performed through monthly reports to the CPR, weekly reports to the capital and liquidity management group, and quarterly reports to the Board of Directors.

4.2 Profile and Funding Strategy

The composition and evolution of the Bank's funding during the quarter is shown in the following table:

Funding Source (Million Pesos)	3Q22	4Q22	Change vs. 3Q22
Demand Deposits			
Local Currency [1]	530,649	549,822	3.6%
Foreign Currency [1]	70,641	72,367	2.4%
Demand Deposits	**601,291**	**622,190**	**3.5%**
Time Deposits – Core			
Local Currency [2]	214,441	213,651	(0.4%)
Foreign Currency	3,328	3,137	(5.8%)
Core Deposits	**819,060**	**838,977**	**2.4%**
Money Market			
Local Currency [3]	38,877	62,368	60.4%
Foreign Currency [3]	18,798	14,013	(25.5%)
Banking Sector Deposits	**876,736**	**915,358**	**4.4%**

1. Includes balance of the Global Deposits without Movement.
2. Includes eliminations among subsidiaries.
3. Money Market & Time Deposits.

4.3 Liquidity Coverage Ratio (LCR)

The LCR measures Liquidity Risk through the relationship between Liquid Assets and Net Cash Outflows in the next 30 days, under a regulatory stress scenario.

The LCR is an indicator designed to ensure that the institution has sufficient liquidity to meet its short-term obligations, under an extreme scenario using exclusively high-quality liquid assets as source of funding.

The following tables presents the average evolution of LCR components in 4Q22.

LCR Components	Consolidated Entity	
(Million Pesos)	Unweighted amount (Average)	Weighted amount (Average)
COMPUTABLE LIQUID ASSETS		
1 Total Computable Liquid Assets	**NA**	**144,406**
CASH DISBURSEMENTS		
2 **Unsecured retail financing**	482,592	30,871
3 Stable financing	347,761	17,388
4 Less stable financing	134,832	13,483
5 **Unsecured wholesale financing**	328,400	97,169
6 Operational Deposits	260,450	58,797
7 Non-Operational Deposits	65,982	36,403
8 Unsecured debt	1,969	1,969
9 **Secured wholesale financing**	273,587	10,092
10 **Additional Requirements:**	353,524	27,413
11 Disbursements related to derivatives and other guarantee requirements	16,465	8,416
12 Disbursements related to losses from debt financing	0	0
13 Lines of credit and liquidity	337,059	18,996
14 Other contractual financing obligations	2,583	267
15 Other contingent financing liabilities	0	0
16 **TOTAL CASH DISBURSEMENTS**	**NA**	**165,811**
CASH INFLOWS		
17 Cash Inflows for secured operations	105,679	5,999
18 Cash Inflows for unsecured operations	87,775	63,270
19 Other Cash Inflows	2,671	2,671
20 **TOTAL CASH INFLOWS**	**196,125**	**71,939**
		Adjusted amount
21 **TOTAL COMPUTABLE LIQUID ASSETS**	**NA**	**144,406**
22 **TOTAL NET CASH DISBURSEMENTS**	**NA**	**93,872**
23 **LIQUID COVERAGE RATIO**	**NA**	**154.61%**

LCR Components	Bank Stand Alone	
(Million Pesos)	Unweighted amount (Average)	Weighted amount (Average)
COMPUTABLE LIQUID ASSETS		
1 Total Computable Liquid Assets	**NA**	**144,406**
CASH DISBURSEMENTS		
2 **Unsecured retail financing**	482,592	30,871
3 Stable financing	347,761	17,388
4 Less stable financing	134,832	13,483
5 **Unsecured wholesale financing**	316,820	86,292
6 Operational Deposits	260,450	58,797
7 Non-Operational Deposits	54,401	25,527
8 Unsecured debt	1,969	1,969
9 **Secured wholesale financing**	273,587	10,092
10 **Additional Requirements:**	310,927	25,184
11 Disbursements related to derivatives and other guarantee requirements	16,465	8,416
12 Disbursements related to losses from debt financing	0	0
13 Lines of credit and liquidity	294,462	16,768
14 Other contractual financing obligations	2,583	267
15 Other contingent financing liabilities	0	0
16 **TOTAL CASH DISBURSEMENTS**	**NA**	**152,706**
CASH INFLOWS		
17 Cash Inflows for secured operations	105,679	5,999
18 Cash Inflows for unsecured operations	83,841	62,792
19 Other Cash Inflows	2,671	2,671
20 **TOTAL CASH INFLOWS**	**192,190**	**71,461**
		Adjusted amount
21 **TOTAL COMPUTABLE LIQUID ASSETS**	**NA**	**144,406**
22 **TOTAL NET CASH DISBURSEMENTS**	**NA**	**81,245**
23 **LIQUID COVERAGE RATIO**	**NA**	**178.98%**

During 4Q22, the 92-day average LCR for the Consolidated Entity was 154.61% with a 92-day average Bank's Stand-Alone LCR of 178.98%, and at the end of 4Q22 the LCR for the Consolidated Entity was 136.93%, while the bank's Stand-Alone LCR for que 3Q22 was 149.58%; the aforementioned levels are above the Risk Appetite and the regulatory minimum standards. These results show that Banorte can meet all of its short-term obligations in a crisis scenario[4].

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[4] The Liquidity Coverage Ratio information is preliminary and is subject to Banco de Mexico's affirmation.

4.4 Evolution of LCR Components

The evolution of the LCR components comparing 3Q22 and 4Q22is presented in the following table:

LCR Component (Million Pesos)	3Q22	4Q22	Var. vs. 3Q22
Liquid Assets	156,261	145,332	(7.0%)
Cash Inflows	55,751	62,480	12.1%
Cash Outflows	165,637	168,620	1.8%

The Liquid Assets that compute in the LCRs for the Bank and Sofomes between 3Q22 and 4Q22are distributed as follows:

Type of Asset (Million Pesos)	3Q22	4Q22	Var. vs. 3Q22
Total	**156,261**	**145,332**	**(7.0%)**
Level I	150,480	139,098	(7.6%)
Level II	5,781	6,234	7.8%
Level II A	2,645	2,848	7.7%
Level II B	3,136	3,386	8.0%

4.5 Main Causes of LCR Results

Liquidity Coverage Ratio variations between 3Q22 and 4Q22, are consequence of the quarterly decrease in liquid assets as a consequence of the maturity of assets classified as Liquid Assets Level I, as well as the effects in available liquidity derived from portfolio allocation.

It is worth noting that Banorte has not used the Ordinary Facilities or the Extraordinary Facilities of Banco de México during 4Q22.

4.6 Exposure to Derivatives and possible Margin calls

Banorte applies the regulatory methodology to determine potential cash outflows for derivatives. At the end of 4Q22, estimated outflows for derivatives were as follows:

Derivatives Cash Outflows (Million Pesos)	3Q22	4Q22	Var. vs. 3Q22
Net cash outflows at market value and for potential future exposure	6,832	6,832	0.0%
Cash outflows for a 3-notch credit rating downgrade.	0	0	0.0%

The measurement shows that potential outflows for derivatives may represent a liquidity requirement up to Ps 6.83 billion, stable vs. 3Q22.

4.7 Net Stable Funding Ratio (NSFR)

The CFEN is an indicator that should be interpreted as the proportion between the Available Stable Financing, constituted from own and external resources that are considered reliable over a time horizon; and the Required Stable Financing, constituted from liquidity, asset maturities and off-balance sheet positions.

The following tables present the average evolution of CFEN components in 4Q22:

NSFR	Consolidated Entity				
	Unweighted value by residual maturity				Weighted Value
(Million Pesos)	No Maturity	< 6 months	6 months to < 1 year	> 1 year	
Available Stable Funding Items					
1 Capital:	201,301	0	0	0	201,301
2 *Regulatory Capital*	201,301	0	0	0	201,301
3 *Other capital instruments*	0	0	0	0	0
4 Retail deposits and deposits from small business customers:	0	556,978	1,398	140	522,359
5 *Stable deposits.*	0	392,709	904	79	374,012
6 *Less Stable deposits*	0	164,269	494	60	148,347
7 Wholesale funding:	0	598,278	14,419	64,158	336,172
8 *Operational deposits*	0	34,096	0	0	17,048
9 *Other wholesale funding*	0	564,182	14,419	64,158	319,124
10 Liabilities with matching interdependent assets	0	1,214	934	9,226	0
11 Other liabilities	11,615		37,712		15,136
12 *NSFR derivative liabilities*	NA		0		NA
13 *All other liabilities and equity not included in the above categories*	11,615	9,168	26,815	1,728	15,136
14 Total Available Stable Funding	NA	NA	NA	NA	**1,074,968**
Required Stable Funding Items					
15 Total NSFR high-quality liquid assets (HQLA)	NA	NA	NA	NA	63,965
16 Deposits held at other financial institutions for operational purposes	0	963	0	0	482
17 Performing loans and securities:	0	252,907	68,246	640,090	631,613
18 *Performing loans to financial institutions secured by Level 1 HQLA*	0	84,442	615	1,318	10,069
19 *Performing loans to financial institutions secured by non-Level 1 HQLA and unsecured performing loans to financial institutions*	0	15,874	6,760	6,656	12,417
20 *Performing loans to non- financial corporate clients, loans to retail and small business customers, and loans to sovereigns, central banks and PSEs, of which:*	0	135,389	53,979	407,415	420,132
21 *With a risk weight of less than or equal to 35% under the Basel II Standardized Approach for credit risk*	0	50,496	8,160	104,272	97,105
22 *Performing residential mortgages, of which:*	0	6,097	4,278	212,314	170,672
23 *With a risk weight of less than or equal to 35% under the Basel II Standardized Approach for credit risk.*	0	1,687	1,102	74,916	50,090
24 *Securities that are not in default and do not qualify as HQLA, including exchange-traded equities*	0	11,105	2,614	12,387	18,322
25 *Assets with matching interdependent liabilities*	0	1,214	934	9,226	0
26 Other assets:	60,269		578,021		107,030

27	*Physical traded commodities, including gold*	17	NA	NA	NA	14
28	*Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs*	NA		1		1
29	*NSFR derivative assets*	NA		34,378		4,267
30	*NSFR derivative liabilities before deduction of variation margin posted*	NA		441,936		2,076
31	*All other assets not included in the above categories*	60,252	91,683	27	9,996	100,672
32	Off-balance sheet items	NA		375,736		18,787
33	**Total Required Stable Funding**	NA	NA	NA	NA	821,876
34	**Net Stable Funding Ratio (%)**	NA	NA	NA	NA	**130.79%**

		Stand-Alone				
		Unweighted value by residual maturity				Weighted Value
	(Million Pesos)	No Maturity	No Maturity	No Maturity	No Maturity	
Available Stable Funding Items						
1	Capital:	201,301	0	0	0	201,301
2	*Regulatory Capital*	201,301	0	0	0	201,301
3	*Other capital instruments*	0	0	0	0	0
4	Retail deposits and deposits from small business customers:	0	556,978	1,398	140	522,359
5	*Stable deposits.*	0	392,709	904	79	374,012
6	*Less Stable deposits*	0	164,269	494	60	148,347
7	Wholesale funding:	0	590,302	6,123	52,945	319,308
8	*Operational deposits*	0	34,096	0	0	17,048
9	*Other wholesale funding*	0	556,206	6,123	52,945	302,260
10	Liabilities with matching interdependent assets	0	1,214	934	9,226	0
11	Other liabilities	11,615		37,712		15,136
12	*NSFR derivative liabilities*	NA		0		NA
13	*All other liabilities and equity not included in the above categories*	11,615	9,168	26,815	1,728	15,136
14	**Total Available Stable Funding**	NA	NA	NA	NA	1,058,104
Required Stable Funding Items						
15	Total NSFR high-quality liquid assets (HQLA)	NA	NA	NA	NA	63,965
16	Deposits held at other financial institutions for operational purposes	0	963	0	0	482
17	Performing loans and securities:	0	242,411	65,990	631,034	615,461
18	*Performing loans to financial institutions secured by Level 1 HQLA*	0	84,442	615	1,318	10,069
19	*Performing loans to financial institutions secured by non-Level 1 HQLA and unsecured performing loans to financial institutions*	0	23,242	7,200	9,993	17,079
20	*Performing loans to non- financial corporate clients, loans to retail and small business customers, and loans to sovereigns, central banks and PSEs, of which:*	0	117,525	51,283	395,022	399,319
21	*With a risk weight of less than or equal to 35% under the Basel II Standardized Approach for credit risk*	0	50,496	8,160	104,272	97,105
22	*Performing residential mortgages, of which:*	0	6,097	4,278	212,314	170,672

23	*With a risk weight of less than or equal to 35% under the Basel II Standardized Approach for credit risk.*	0	1,687	1,102	74,916	50,090
24	*Securities that are not in default and do not qualify as HQLA, including exchange-traded equities*	0	11,105	2,614	12,387	18,322
25	*Assets with matching interdependent liabilities*	0	1,214	934	9,226	0
26	Other assets:	60,269		638,273		107,030
27	*Physical traded commodities, including gold*	17	NA	NA	NA	14
28	*Assets posted as initial margin for derivative contracts and contributions to default funds of CCPs*	NA		1		1
29	*NSFR derivative assets*	NA		34,378		4,267
30	*NSFR derivative liabilities before deduction of variation margin posted*	NA		441,936		2,076
31	*All other assets not included in the above categories*	60,252	91,683	27	9,996	100,672
32	Off-balance sheet items	NA		332,111		16,606
33	**Total Required Stable Funding**	NA	NA	NA	NA	803,543
34	**Net Stable Funding Ratio (%)**	NA	NA	NA	NA	**131.68%**

During the 4Q22, it the NSFR for the Consolidated Entity had a 92-days quarter average of 130.79%, while the quarters average bank's stand-alone NSFR was 131.68%, with an end of quarter consolidated entity NSFR of 130.42%, forementioned levels are above the Risk Appetite and the regulatory minimum standards. Such levels show that Banorte has the stable founding required for its assets and off-balance sheet items.

4.8 Evolution of NSFR Components

The evolution of the components of the Net Stable Funding Ratio from 3Q22 to 4Q22 are shown in the following figure.

	3Q22			4Q22			Change		
	Available Stable Funding	Required Stable Funding	NSFR	Available Stable Funding	Required Stable Funding	NSFR	Available Stable Funding	Required Stable Funding	NSFR
< 6 months	962,612	212,849		992,555	218,076		3.1%	2.5%	
From 6 months to < 1 year	24,664	28,778		22,064	34,960		(10.5%)	21.5%	
>1 year	58,598	550,440	**132.0%**	61,787	572,292	**130.4%**	5.4%	4.0%	**(1.2%)**

4.9 Main Causes of NSFR Results

The solid levels of the Net Stable Funding Ratio are supported by not only the strength of Banorte's Tier 1 capital, but also, by a balanced mix between short term and long-term core liabilities.

4.10 Liquidity Risk in foreign currency

For Liquidity Risk quantification and monitoring, in the specific case of the foreign currency denominated portfolio, Banorte uses the criteria established by Banco de México for the assessment of the foreign currency Liquidity Coefficient.

The Liquidity Coefficient in foreign currencies should be interpreted as the ability of the institution to meet its liquidity mismatches with liquid assets, both in foreign currency.

4.11 Liquidity Gaps

As part of the liquidity analysis for the Bank, 30-day liquidity gaps for the Institution's assets and liabilities (obligations) are analyzed. Results for the Bank at the end of 4Q22 are presented in the following table.

Concept (Million Pesos)	3Q22	4Q22	Var. vs. 3Q22
Cumulative 30-day Gap	(107,329)	(110,110)	2.6%
Liquid Assets	120,613	105,082	(12.9%)

Mismatch among inflows and outflows (gaps) for the next 30 days are covered with liquid assets. In addition, a more granular breakdown of the liquidity gaps is presented, remaining as follows for 4Q22:

Concept (Million pesos)	1 day	7 days	1 month	3 months	6 months	12 months
Natural Gap	(114,677)	23,388	(18,821)	45,321	49,816	50,178
Accumulated Gap	(114,677)	(91,289)	(110,110)	(64,789)	(14,973)	35,205

4.12 Stress Testing under liquidity extreme conditions

As part of its Liquidity Risk management, Banorte performs tests under extreme liquidity circumstances with internal scenarios, to assess the Bank's liquidity adequacy under adverse conditions from the environment as well as by the bank's intrinsic conditions. A total of 9 scenarios, based on 3 sources of risk (systemic, idiosyncratic and combined) with 3 levels of severity (moderate, medium and severe) are used.

4.13 Contingency Funding Plan

In order to comply with comprehensive liquidity management practices, and to ensure its operation in adverse situations in terms of Liquidity, Banorte has implemented a contingency funding plan, which incorporates elements to identify possible liquidity problems and defines alternate funding sources available to deal with contingencies.

4.14 Balance Risk

Interest rate risk entails estimating its impact on the financial margin. Financial margin is the difference between interest income and costs associated to interest bearing liabilities (interest expense). Depending on the balance's structure, variations in interest rates may have either a positive or negative impact in the rate scenarios.

Given that financial margin follows the flow structure of assets and liabilities in the balance sheet, the model used is a re-pricing model by brackets in which all assets and liabilities are distributed in different bands depending on their re-pricing characteristics and/or tenure. Once categorized by re-pricing structure, the impact that each of these bands have on these metrics can be estimated.

4.14.1 Financial Margin Sensitivity

Financial Margin sensitivity is a static metric that takes into consideration a twelve-month period. Only the bands with duration lower than 1 year are impacted by interest rate simulated fluctuations. Relevant considerations behind margin sensitivity calculations are:
- Considers repricing outcomes for all financial assets and liabilities in the balance sheet.
- Separated trading book surveillance.
- Considers the behavior for all balance sheet models, such as mortgage prepayments and deposit survival.
- The balance sheet is considered static and constant through time. Neither organic growth nor interest rate structure or changes or strategies in product's mixture are considered.

The following table shows Financial Margin Sensitivity for Banorte Bank:

Margin Sensitivity (Million Pesos)	3Q22	4Q22	Change vs. 3Q22
Local Currency Balance	1,205	1,222	1.4%
Foreign Currency Balance	896	1,076	20.1%

At the end of 4Q22, local currency balance sensitivity for a 100bps shift in reference rates, changed from Ps 1,205 million in 3Q22 to Ps 1,222 million. Foreign currency balance sensitivity for a 100bps shift in reference rates changed from Ps 896 million to Ps 1,076 million. It is important to highlight that the Financial Markets positions immunize, via intermediation results, the impact of lower rates on the Balance. The Available for Sale portfolio had a balance of Ps 114.77 billion at the end of 4Q22, with an average of Ps 113.02 billion balance.

4.15 Subsidiaries

Balance and Liquidity Risk Management processes for the Bank and its Sofomes are centralized in GFNorte's Credit and Risk Management and Credit Managing Direction. To monitor Sofomes' liquidity, an analysis of the balance sheet structural behavior is conducted, as well as funding diversification. Furthermore, a liquidity gap analysis is performed. Specifically, for the Brokerage House, regulatory liquidity requirements are monitored.

The following table shows the composition of the gap indicators for the Bank's subsidiaries and Sofomes at the end of 4Q22.

Liquidity Ratio (Million Pesos)	Casa de Bolsa Banorte	Arrendadora y Factor
Cumulative 30 days Gap	4,878	(5,431)
Liquid assets	5,036	372

5   OPERATIONAL RISK

GFNorte has a formal Operational Risk department reporting directly to the Chief Risk Officer.

Operational Risk is defined as the potential loss due to failures or deficiencies in internal controls, errors in operation processing and storing or in data transmitting, as well as to adverse administrative and judicial rulings, fraud or theft (this definition includes Technological and Legal Risk).

The objectives of Operational Risk Management are: a) Enable and support the organization to reach its institutional objectives through prevention and management of operational risks; b) To ensure that the existing operational risks and the required controls are properly identified, assessed, and in line with the risk strategy established by the organization; and c) To ensure that operational risks are properly quantified in order to adequately allocate capital by Operational Risk.

5.10 Policies, Objectives and Guidelines

As part of the Institutional regulations, there are documented policies, objectives, guidelines, methodologies and responsible areas in Operating Risk management.

The Operational Risk Management Directors maintains close communication and coordination with the Regulatory Comptrollership in order to facilitate effective Internal Control in which proper procedures and controls are established for mitigating Operating Risk among the processes and provide monitoring through the Internal Audit Department.

The Regulatory Comptrollership, as part of the Internal Control System, carries out the following activities to mitigate risk: a) Internal control validations; b) Institutional regulations management and control; c) Monitoring of operating processes' internal control by means of control indicators reports, that are reported by the process comptrollers in the various areas; d) Money Laundering Prevention process management; e) Control and monitoring of the regulatory provisions; and f) Analysis and assessment of the operating processes and projects with the participation of the responsible Directors of each process in order to ensure adequate internal control.

5.2 Quantitative and Qualitative Measuring Tools

5.2.1 Operational Losses Database

In order to record operating loss events, the Institution owns a system that enables, the central information supplier areas, to directly record such events online, which are classified by Type of Event in accordance with the following categories:

Internal Fraud: Losses derived from a type of action intended to defraud; unlawfully assets appropriation; or sidestep regulations, laws or company policies (excluding diversity/discrimination events) in which at least one company party is involved.

External Fraud: Losses derived from a type of action intended to defraud; unlawfully assets appropriation; or sidestep the laws, caused by a third party.

Labor Relations and Safety in the Workplace: Losses caused by acts incompatible with the legislation or labor agreements regarding hygiene or safety, the payment of personal damage claims, or cases associated with diversity/discrimination.

Customers, Products & Business Practices: Losses caused by involuntary noncompliance or negligence of a professional obligation to specific customers (including fiduciary and adjustment requirements), or due to the nature or design of a product.

Natural Disasters and Other Events: Losses caused by damage or harm to material assets as a consequence of natural disasters or other events.

Incidences in the Business and Systems Failures: Losses caused by incidences in the business and systems failures.

Process Execution, Delivery and Management: Losses caused by errors in operations processing or management, as well as relations with commercial counterparties and suppliers.

This historical Database provides the statistics of the operational events in which the institution has incurred to determine their trends, frequency, impact and distribution.

5.2.2 Legal and Fiscal Contingencies Database

For recording and monitoring legal, administrative and tax issues that may arise from adverse ruling, an internal system called "Legal Risk Issues Monitoring System" (SMARL by its acronym in Spanish) was developed. This system enables the central data supplying areas to record such events directly and on-line, which are then classified by company, sector and legal issue, among others.

As part of GFNorte's Legal Risk Management, legal and fiscal contingencies are estimated by the attorneys that process the cases, determining its risk level based on an internal methodology. This allows to constitute necessary reserves in a determined term (according to lawsuit's term) to face such Contingencies.

5.3 Risk Management Model

GFNorte has defined objectives, which are achieved through different plans, programs and projects. Compliance with such objectives may be adversely affected due to operating risks, therefore it is imperative to provide a methodology for managing them within the organization. Consequently, Operating Risk Management is now an institutional policy defined and supported by senior management.

To perform Operating Risk Management, each of the operating risks involved in the processes must be identified in order to analyze them. In this regard, the risks identified by the Regulatory Comptrollership with the support of Process Comptrollership, are processed in order to eliminate or mitigate them (seeking to reduce their severity or frequency) and if applicable, define tolerance levels. Currently, work is being done on developing a new Institution Operating Risk Management Model and the technological tools needed to implement it.

5.4. Required Capital Calculation

In accordance with the current Capitalization for Operational Risk Regulations, for Banorte, the Institution has adopted the Alternative Standardized Approach (ASA) Model, which is estimated and reported periodically to the authorities.

5.5. Information and Reporting

The information generated by the Database and the Management Model is processes periodically to report to the Risk Policies Committee and the Board of Directors regarding the main operating events that were detected, the trends, identified risks and their mitigating strategies. Reporting is also done regarding the status of the main Operating Risk mitigation initiatives implemented by the various areas of the organization.

5.6 Technological Risk

Technological Risk is defined as all potential losses from damage, interruption, alteration or failures derived from the use of or dependence on hardware, software, systems, applications, networks and any other information distribution channel in the rendering of banking services to the customers. This risk forms an inherent part of Operating Risk, which is why its management is handled collectively throughout the entire organization.

To address the Operating Risk associated with information integrity, and "Integrity Committee" has been created. Its objectives are to align security and information control efforts under a prevention focus, to define new strategies, policies, processes or procedures and to provide solutions to information security issues that affect or may affect the Institutional patrimony.

The functions established by the CNBV for Technology Risk Management are performed by the Institution under regulatory and Integrity Committee guidelines.

To address the Operating Risk caused by high impact external events, GFNorte has a Business Continuity Plan (BCP) and Disaster Recovery Plan (DRP) based on a same-time data replication system at an alternate computer site. All the above, covers the backup and recovery of the Institution's critical applications in the event or any relevant operating contingency.

5.7 Legal risk

Legal Risk is defined as the potential loss from failure to comply with the applicable legal and administrative provisions, the issuance of indisputable unfavorable court rulings and the application of penalties regarding the operations that the institution performs.

The Legal Risk must be measured as an inherent part of Operating Risk in order to understand and estimate its impact. Therefore, those legal issues which result in actual operating losses of the SMARL system are later recorded in the database of operational events.

Based on the statistics of the current legal issues and real loss events, the Institution can identify specific legal or operating risks, which are analyzed in order to eliminate or mitigate them in an attempt to reduce or limit their future occurrence or impact.

6. SECURITIZATIONS PERFORMED BY GFNORTE

The main objective of the securitization operations carried out by the Group, is to transfer risks and benefits of certain financial assets to third parties.

GFNorte has carried out the following securitization:

- On October 11th, 2006, Fincasa Hipotecaria (Fincasa), now merged with Banorte, held the irrevocable trust for the issuance of market certificates No. 563, issuer code FCASACB, whose underlying assets are mortgages originated and transferred by Fincasa.

In accordance with criterion C-1 *Recognition and Disposal of Financial Assets,* these assets were written off from the Institution's balance sheet as a sale, given that conditions for the risk's and benefit's transfer inherent in the ownership of the financial assets were met. The Institution is not responsible for assumed or retained risks regarding the trust assets, its sole responsibility is the fulfillment of its obligations in the trust agreement and administration contract.

The Institution is responsible that each of the assigned loans meets the eligibility criteria, at the time of their respective assignment. If the trust, the common representative, the financial guarantor, identify any non-eligible loans, they may require Banorte to replace such loan or if replacement is not possible, to make payment for the "non-replaced ineligible loan" in question. If Banorte identifies any non-eligible loan, it must be notified and replace it or make the corresponding payment.

The Institution's Board of Directors has no pre-determined policies for the issuance of securitizations, authorization for any new issuance must be requested.

The Institution does not participate in securitizations of third-party positions.

There are several risk factors for securitizations that may affect trusts' assets. If these risks materialize, payment to market certificates' holders could be adversely affected. The main risks to which these financial instruments are exposed to are credit, market, liquidity and operational risk, which have been detailed in previous sections.

To monitor the quality of Credit Risk exposure of financial instruments arising from securitized assets, the Institution estimates expected loss within one-year time horizon. Likewise, in order to monitor exposure to market risk, the value at risk is calculated with a one-day time horizon and a 99% confidence level, for these instruments.

Banco Mercantil del Norte is the settlor and trustee of trusts for the securitizations carried out. At the same time, it acts as underwriter on each issue, offering bonds to investors. Additionally, the Institution also carries out the duties of administrator in each of the trusts.

As of December 31st, 2022 Grupo Financiero Banorte does not have securities of the FCASACB securitization in its own position:

Securitization (Million pesos)	Issued Securities	Banorte	Seguros Banorte	Total GFNorte	Total Clients
97_FCASACB_06U	1,351,386	0.0%	0.0%	0.0%	100.0%

Ratings assigned by each rating agency at the end of the quarter for each market certificate issued by the aforementioned trust is as follows:

Securitization	Standard & Poor's		Fitch Ratings		Moody's		HR Ratings		Verum		Best		DBRS	
	Local	Global	Local	Global	Local	Global	Local	Global	Local	Global	Local	Global	Local	Global
97_FCASACB_06U	mxCCC		CCC (mex)											

As of December 31st, 2022 the amounts of the underlying assets of the securitization were:

Securitization	Amount		
(Million pesos)	Performing	Past-Due	Total
97_FCASACB_06U	Ps 61	Ps 98	Ps 159

No securitization position is registered in memorandum accounts and no maintained securitization position is deducted from Tier 1 Capital.

Securitization from Trust 563 considers early amortization provisions. The institution has not made revolving securitizations or re-securitizations operations during the quarter.

6.1 Applied Accounting Policies

All securitization operations carried out by the Institution were recognized as sales in accordance with criterion C-1 *Recognition and Disposal of Financial Assets*. This is because, despite retaining the contractual rights to receive cash flows from financial assets, a contractual obligation is assumed to pay such cash flows to a third party. In addition, an analysis of the transfer of these assets concluded that the entity substantially transfers all the risks and benefits inherent with ownership of the financial assets. Registration of profits from sales conforms to the provisions in paragraph 31 of criterion C-1, which states:

a) Eliminate transferred financial assets at the last book value;
b) Recognition for the consideration received in the operation;
c) Recognition of profit or loss in the income statement, for the difference between the book value of eliminated financial assets, and the sum of (i) compensation received (recognized at fair value) and (ii) the effect (gain or loss) by cumulative valuation recognized in equity.

The MBS (Mortgage-Backed Securities) Trust issued certificates in favor of the institution, as holders of rights in last place under the trust agreement. These certificates provide the right to receive a percentage of the distributions and in general to the corresponding proportions of the remnant that may be in the trust after full payment of the bonds. Valuation of the certificates is based on the method of net present value of remaining cash flows expected over the lifespan of the securitization. Remaining cash flows for the MBS the sum of cash flows to be received from the securitized loan portfolio, minus cash flow to be paid to securitized portfolios, minus the monthly administration expenses, plus the income from sales of foreclosed properties, if applicable. At the end of the period, the certificate related to securitization FCASACB 06U shows a fair market value of zero, since no remaining cash flows are expected to be received.

Remaining flows are discounted with the B1 banking curve, which takes into consideration the trusts' Credit Risks. The most important assumptions in the valuation of the certificates are the following:

a) Non-compliance rate: cash flows to be received from loan portfolios are adjusted by a determined percentage of the outstanding portfolio amount that is estimated to fall into non-compliance. That percentage is estimated using historical performance information of this portfolio. This percentage is applied to flows greater than 12 months.
b) Prepayment rate: cash flows to be received from the loan portfolio are adjusted by a determined percentage of the outstanding portfolio amount estimated to be prepaid. That percentage is estimated using historical performance information of this portfolio.
c) Portfolio term: is estimated using WAM (*Weighted Average Maturity*) of the securitized portfolio.
d) Portfolio interest rate: is estimated using WAC (*Weighted Average Coupon*) of the securitized portfolio.
e) Portfolio payment dates: loan portfolio payment dates are considered to be the same as those of the stock certificates.

f) Reserve to be rated: the current value of the remaining flows is reduced by the amount of the reserve to be rated. This reserve corresponds to the non-compliance risk for cash flows in the first 12 months.

g) General account: the current value of the remaining flows is added to the amount of cash or cash equivalents deposited in the general account, collection account and if the case, in the expense reserve account, in case of total payment of the stock certificates, these assets would be distributed to the certificate holders.

h) General terms of stock certificates: estimated to be in accordance with prices published by PiP-Latam.

Regarding the policies for recognizing obligations in balance sheet of the agreements that may require financial support from the Institution in case of asset's securitization: all amounts due under the stock certificates of the different existing securitizations, will be charged to the trust estate. If, for any reason, the liquid assets of the trust net worth are not sufficient to ensure payment of the amounts due under the stock certificates, holders will not have the right to claim payment from the Institution, the Trust, the common representative, the placement agent, the guarantor or guarantors in the case, or anyone else. The stock certificates have not been guaranteed or endorsed by any of the persons involved in the issuance thereof, therefore none of them are obligated to make payments to the certificate holders, with the exception, in the case of a trust, where payments may be charged to the trust in accordance with the trust agreement.

7 POSITION IN SHARES

At the end of December 31st, 2022, Banco Mercantil del Norte held shares amounting to Ps 0.96 billion, with gains of Ps 483.4 million accumulated.

During the fourth quarter of the year, there were gains of Ps. 3.4 million from the purchase and sale of securities.

The capital requirement for Market Risk was Ps 258.9 million.

Institution	Type of Trading	Accounting Classification	Capitalization Treatment	Market Value 4Q22	Gains / Losses Cumm.	Profit / Loss Sales / Purchases
Banorte	Public Trading	Negotiation	Market Risk	102.4	(47.2)	0
Banorte	Public Trading	Negotiation	Capital Deduction	229.4	128.8	3.4
Banorte	w/o Public trading	Negotiation	Market Risk	626.9	401.8	0
Banorte	w/o Public trading	Negotiation	Market and Credit Risk	0.0	0.0	0
			Total	**958.9**	**483.4**	**3.4**

As of December 31st, 2022 a position of Ps 613.3 million is held in Casa de Bolsa Banorte with cumulative gains of Ps 287.6 million.

During the quarter, there were gains of Ps 1.47 million from purchases and sales of securities.

Regarding Market Risk Capital Requirement, the amount was Ps 183.8 million of the total position in shares of Banorte.

Institution	Type of Trading	Accounting Classification	Capitalization Treatment	Market Value 4Q22	Gains / Losses Cumm.	Profit / Loss Sales / Purchases
Casa de Bolsa Banorte	Public	Negotiation	Market Risk	613.3	287.6	1.47
			Total	**613.3**	**287.6**	**1.47**