RISK MANAGEMENT REPORT

As of 31 December 2020

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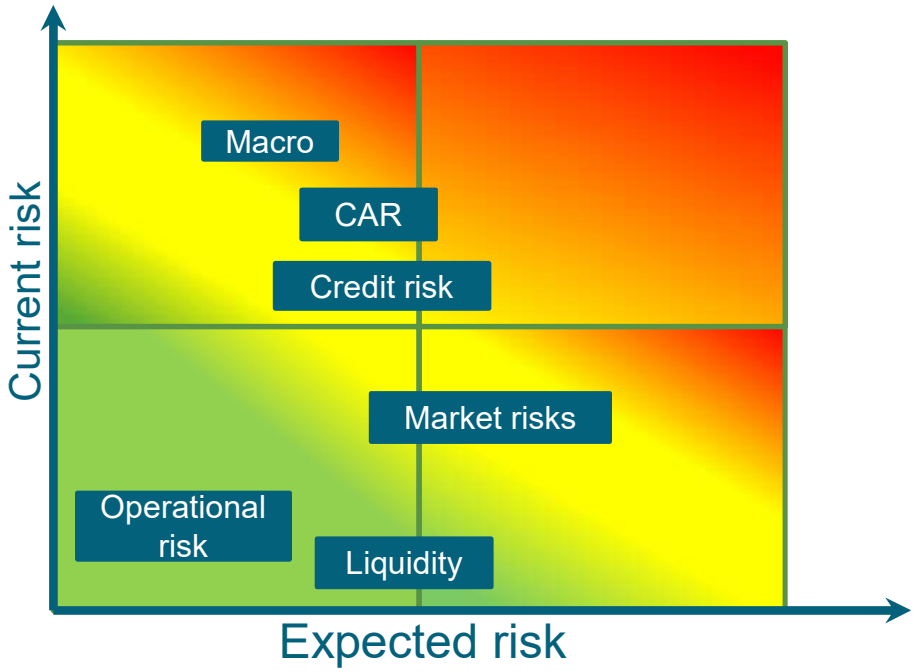
KEY HIGHLIGHTS

Key Risks' Map



Actions to be taken

CAR	CAR managed above the limits, even under extra provisioning regime. BP 2021 is composed considering single digit growth, conservative provisioning and USD 10m sub debt attraction. Additional capital is needed to maintain extra growth and risk coverage.
Credit Risk	Limitation of lending with deviated parameters, risky loans control, internal rating model development, provisioning model update
Market Risk	Interest rate sensitive gap control, IRRBB reporting line improvement. Manage the process of shift from LIBOR to other floating rate benchmarks.
Liquidity Risk	Liquidity position is firm and managed properly in times of high volatility. Total deposit base increased by 4.2% y-o-y. No need in special actions.
Operational Risk	Cyber risk assessment and mitigation actions
Stress Testing	For the 2021 AMD 8b additional Capital required to maintain the regulatory limit (12%) under medium risk scenario in Q42021. USD 10m sub debt attraction is planned in H1 2021. CBA plans to ease the limits by 2p.p. in 2021.

Key risk sources

Economic and social environment disrupted in unprecedented manner: two big sources of problems hit the economy at the same time.

COVID negative effects on:

Ho-Re-Ca sector, Real incomes, International transfers, Domestic consumption .

Post conflict political uncertainty:

Fitch downgraded country CR to 'B+' from 'BB-'.
GDP slowdown, FX rate volatility, Gov't debt growth, migration and uncertainty about the future.

Key Actions Performed

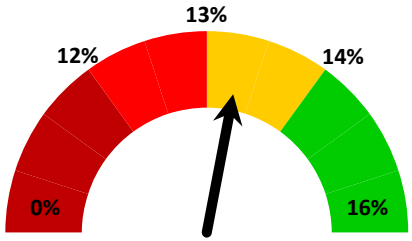
Jun **Jul** **Aug** **Sep** **Oct** **Nov** **Dec**

Pandemic related short term **credit holydays** ended /a part of clients used this opportunity/, **lending parameters** eased, currency **rate spreads** enlarged, Business **plan targets** reviewed and revised. $15m **sub debt** attraction, **special BCP actions** re critical staff & **interchangeability**.

Short term credit holydays for mobilized and other **conflict-affected persons. Lending parameters** tightened**.** Additional **provisioning** was made for potential risky borrowers, **FX rate** spreads kept large, open currency **positions** managed in conservative regime, investment **portfolio optimized**. Risk of **cyber attacks** were managed, no losses were registered.

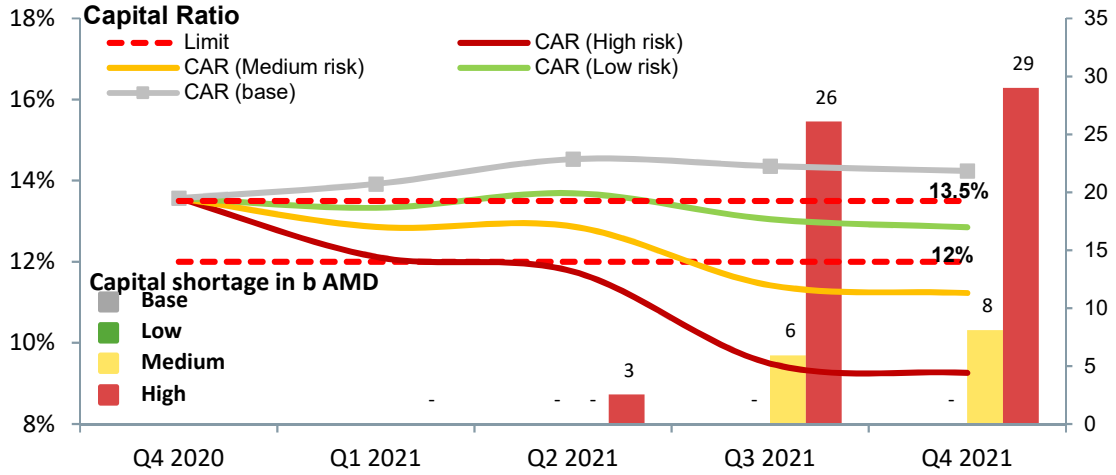
EXECUTIVE SUMMARY

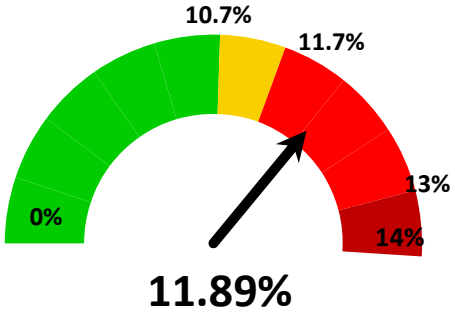
CAPITAL & LOSSES



13.57%

Capital Adequacy Ratio

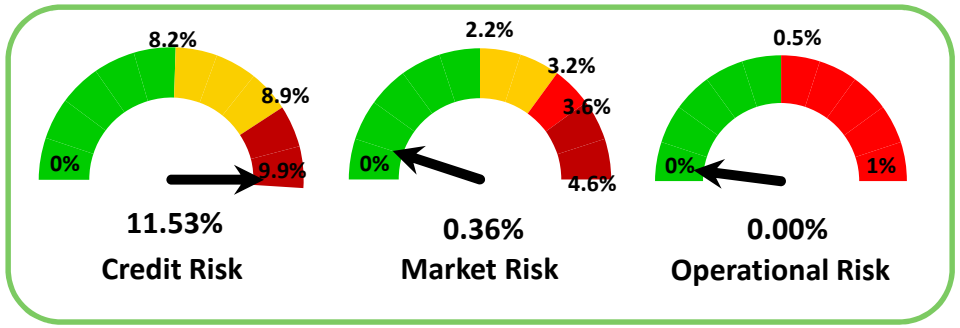




11.89%

Risk Appetite (Loss, % Equity)

Risk Appetite, losses % Equity*



11.53%
Credit Risk

0.36%
Market Risk

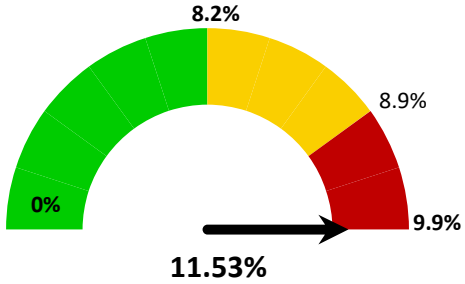
0.00%
Operational Risk

- Due to expected shocks amid COVID-19 outbreak, CBA has postponed Basel III related new threshold requirements for CAR till Jan 2021. As a result, the Bank now has 1.57% buffer for additional risk absorption. Capital buffers will increase by 0.5pp. from Jan 2021, and for Q1-2021, minimum CAR requirement will be 13.5%.
- Actual utilized risk appetite is adequate to the crisis state of economy and still within the limits of Strategic Risk Appetite as at Q4 2020, with a value of 11.89% of Equity.
- Net provisions for Stage 3 loans are above Strategic Risk Appetite limits with the value of 11.5%. The main part is due to few large Corporate borrowers.

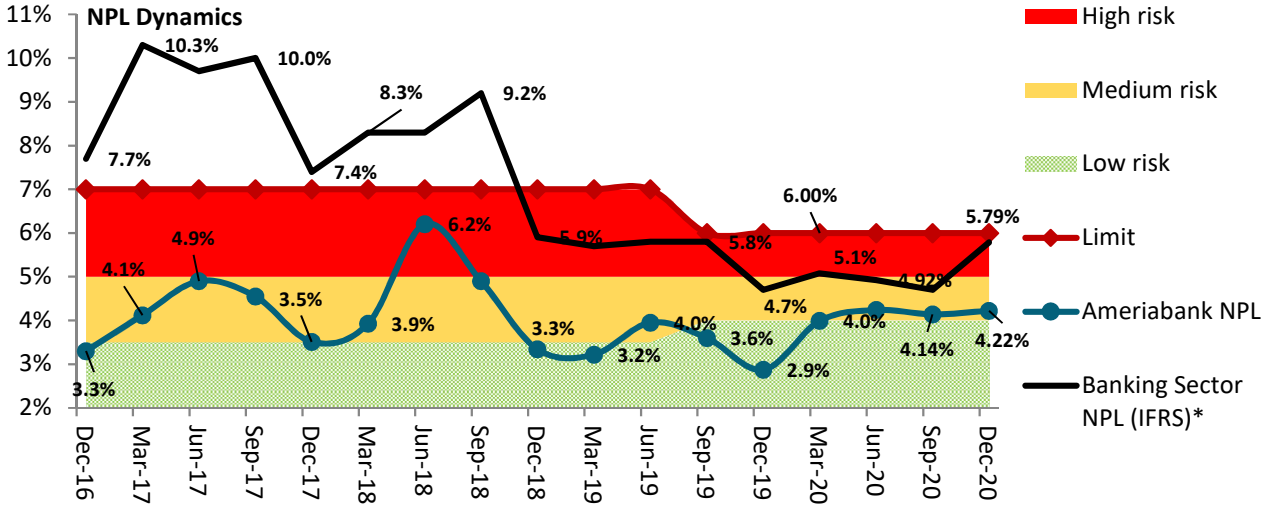
** Please refer to the slide N14 for details on the tolerance limits of Risk Appetite*

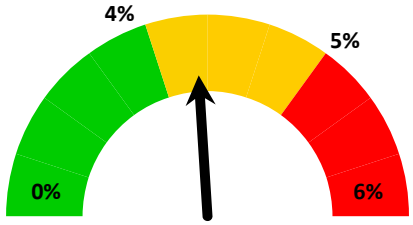
EXECUTIVE SUMMARY

CREDIT RISK



Credit Risk Appetite (% of Equity)

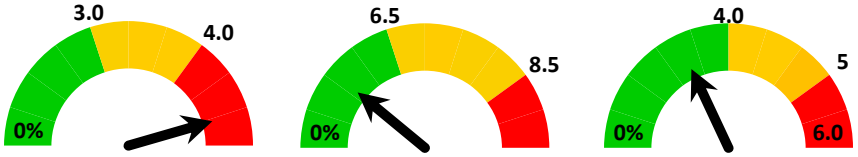




4.22%

NPL (Stage 3), % Portfolio

NPL (Stage 3) and Risky Loans (Stage 2) % in Portfolio



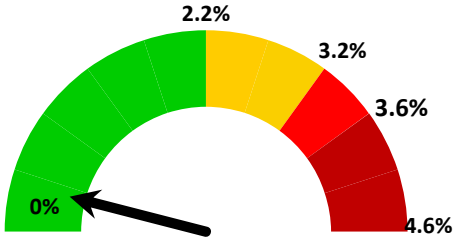
4.64%	3.34%	3.19%
NPL, Corporate	NPL, Retail	Risky Loans, Total

- Credit risk net provisions for Stage 3 loans exceeded the relevant risk appetite limit by less than 1 p.p.
- NPL ratio increased by 0.08 p.p. to 4.22%. Risky loans ratio increased by 2.39p.p Q-o-Q ,but is still in the low risk zone.
- NPL ratio of local banking industry is 5.79% while NPL ratio of the Bank is 4.22%.
- Bank performed conservative risk provisioning in advance aiming to overcome COVID and military conflict risks under future negative developments but still the current outlook is better than before.

**Estimated amount of Stage 3 loans in banking system.*

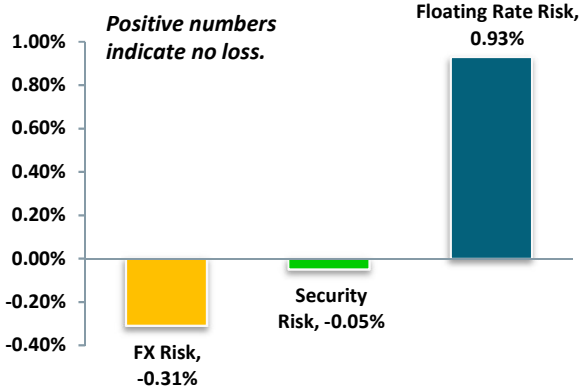
EXECUTIVE SUMMARY

MARKET RISK



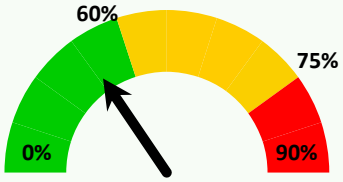
0.36%

Market Losses %, Equity



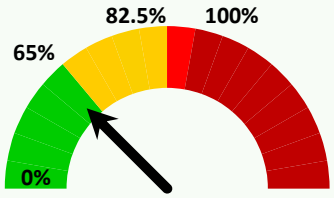
- Utilized Market risk is close to 0, all parameters are in "low risk" zone.
- During the 4th quarter FX currency positions were within acceptable limits for both single currency and all currencies positions. The losses (AMD 350m) were compensated by large bid & ask spreads with corresponding high incomes (AMD 6.12b, +51% comparing with 2019) from currency conversions.

IRR RISK



50.0%

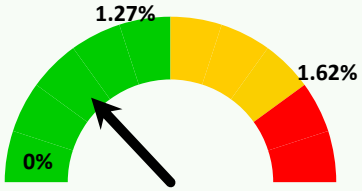
Floating rate GAP, %Equity



64.2%

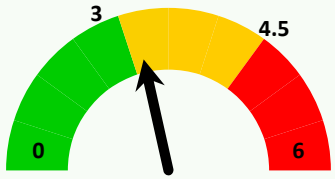
Short term IRR GAP, %Equity

SECURITY RISK



0.37%

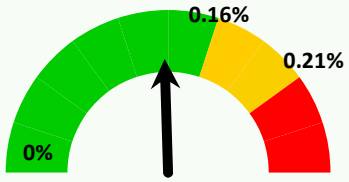
Portfolio 99% VaR, %Equity



3.27

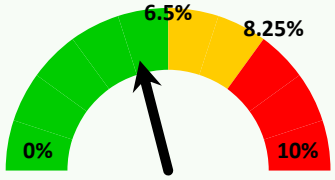
M-t-M Portfolio Duration

FX RISK



0.14%

FX 99% VaR, %Equity

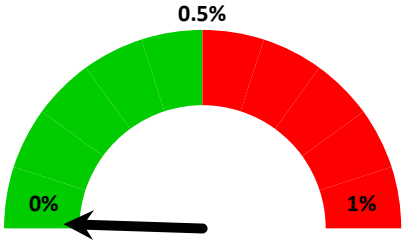


4.92%

Open currency position, % Equity

EXECUTIVE SUMMARY

OPERATIONAL RISK

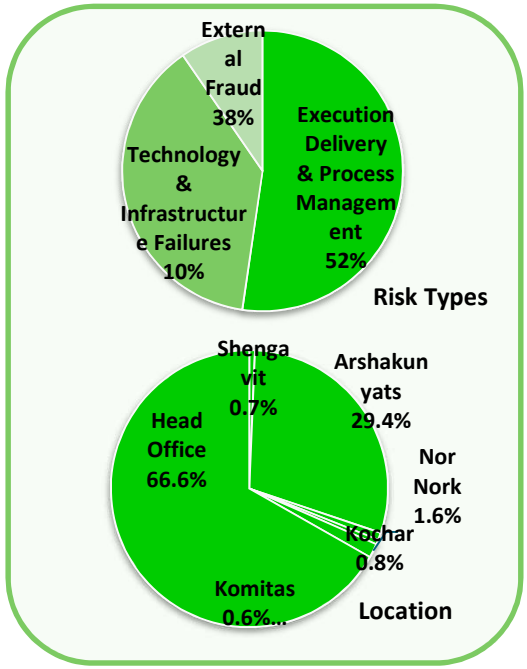


0.00%

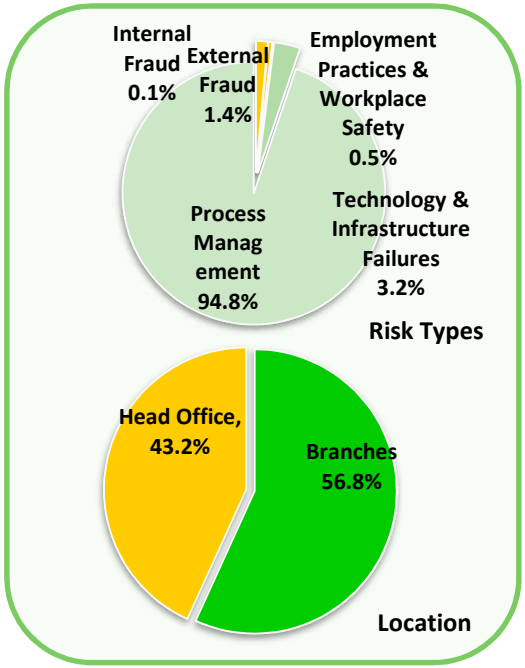
Operational Losses, % Equity

- Operational risk (loss) is in low risk zone (**AMD 3.5m** or **0.003%** of Equity, limit is 0,5%),
- Risk of continuous cyber attacks were managed effectively amid increased activity, no losses were registered.

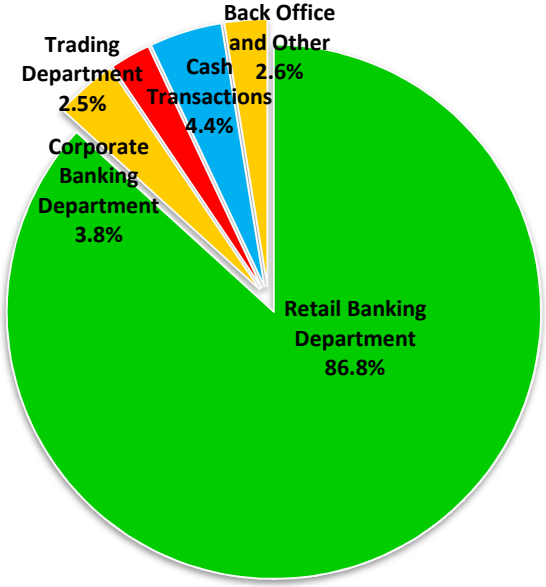
LOSSES



EVENTS



LOSS DISTRIBUTION BY BUSINESS LINES



EXECUTIVE SUMMARY

Liquidity

LIQUIDITY INDICATORS	HLA*	Outflow Capacity
As % of total deposit base	37%	15%
As % of total demand deposits plus time deposits of individuals	43%	17%

- Liquidity position of the Bank is strong enough to cover immediate parallel outflow of deposits according to the following scenarios:
  - 37% of total deposit base or ~89% of individual deposits.
  - 15% of total deposits and 32% of total individual deposits w/o breach of regulatory requirements.
- Both of the above scenarios are very unlikely to happen based on historical evidence, where maximum outflows didn't exceed 5% during tough times.
- Total deposit base increased by 4.2% during the year 2020 (3.2% growth during Q4/2020).

LIQUIDITY RATIOS	CURRENT VALUES	LIQUIDITY CAPACITY		
Regulatory:		*In p.p.*	*In b AMD*	*Individual Deposits instant outflow*
Total Liquidity Ratio (HLA/Total Assets)*	22.5%	7.5	87	32%
Instant Liquidity Ratio (HLA/Demand liabilities)	85.3%	25.3	94	35%

**High liquid assets*

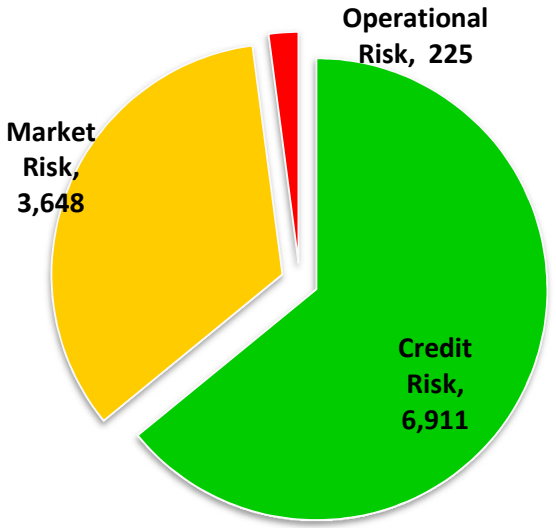
EXECUTIVE SUMMARY

General Stress Tests

Stress Testing for the year 2020	Low risk scenario	Medium risk scenario (most expected)	High risk scenario
Total stress loss (mln AMD)	**7,717**	**10,783**	**16,802**
Market Risk	**2,612**	**3,648**	**5,718**
LIBOR	*5*	*7*	*12*
IRR GAP	*1,047*	*1,465*	*2,296*
FX	*268*	*375*	*591*
Investment portfolio	*1,293*	*1,800*	*2,819*
Credit Risk (without big borrowers stress)	**4,993**	**6,911**	**10,747**
Operational Risk	**112**	**225**	**337**
CAR after stress (12% is the limit)	**12.09%**	**11.70%**	**10.96%**

- Bank will meet the regulatory limits for CAR under expected (medium) stress scenario, with a minor deviation from minimum threshold.
- As at reporting date, Bank's Capital is able to absorb more than AMD 8b immediate loss without regulatory limit violation.

Key critical stress scenario's impact	CAR after stress	Probability during 2020
CR: 5 big borrowers shift to non-standard	**11.7% (previous quarter 11.8%)**	**Low**
CR: 20% portfolio shift to non-standard	**10.9% (previous quarter 10.9%)**	**Low**



Stressed loss distribution by types
(in m AMD)

EXECUTIVE SUMMARY

COVID-19 Pandemic & Conflict* impact on Credit Risks

LLP cost by business lines — 000 AMD

	2020	2019
Total LLP cost	**17,570**	**7,390**
Corporate	7,500	3,899
Retail	10,070	3,490
CCR	**2.76%**	**1.30%**
Corporate	1.8%	0.9%
Retail	5.2%	2.5%

LLP cost reconciliation

Components	Cost	Share, %
Estimated Covid Impact (staging)	**3,880**	**22.1%**
Estimated Conflict impact (staging)	**1,223**	**7.0%**
ECL change incl:	**3,298**	**18.8%**
LGD change	2,172	12.4%
PD change	1,126	6.4%
Individual DCF > 100m	**5,124**	29.2%
Portfolio increase	**685**	3.9%
Other effect (Net write off and other DCF <100m)	**3,360**	19.1%
Total LLP cost	**17,570**	**100.0%**

Restructured since June 2020, 000 AMD	COVID restructured since June 2020		Conflict related restructured	Total restructured since June
	All rest.-ed	of which, Double restructured		
CORP	578	388	582	1,160
RET (ind.)	5,569	5,309	8,732	14,197
RET (leg.)	4,762	3,993	1,732	6,455
Total	**10,909**	**9,690**	**11,046**	**21,813**
Share in total portfolio	**1.5%**	**1.3%**	**1.5%**	**3.0%**

Total restructured loans 2020, 000 AMD	Restructured till June	Restructured since June	Total restructured	Portfolio dec.	%
CORP	84,225	**1,160**	84,971	487,509	17.4%
RET (ind.)	61,367	**14,197**	66,731	196,623	33.9%
RET (leg.)	12,873	**6,455**	14,943	35,956	41.6%
Total	**158,465**	**21,813**	**166,645**	**720,088**	**23.1%**
Share in total portfolio	**22.0%**	**3.0%**	**23.1%**	**100.0%**	

HIGHLIGHTS

- Cost of credit risk for 2020 increased twofold for both retail and corporate loans.
- About the 36% of CCR was due to COVID & military conflict in neighboring Artsakh and the 12.4% is the result of IFRS 9 model adjustment. The rest is close to regular CCR of previous years.
- Only 3% of portfolio has been restructured since June 2020 as a consequence of COVID & conflict approximately in equal contributions.
- Majority of COVID restructured loans are supposed to be recovered with the pandemic situation improvement.
- Risky loans, which are due to military conflict in neighboring Artsakh, should be recovered by Government programs.
- Short term credit holydays granted to individual clients during COVID-19 lockdown but only a part used this opportunity. Cession opportunity of conflict-affected loans was provided by the government.

**Military conflict in neighboring Artsakh, Sep 27- Nov 9*

EXECUTIVE SUMMARY

Actions performed to mitigate COVID-19 pandemic risks

- Bank developed a system of future scenarios based on relevant triggers and actions to be adopted in case of occurrence.
- The actions listed in the table below are subject to Scenario 2 and should remain in force until the values of proper triggers will not correspond to another scenario with respective actions.

Risk types	Risk source	Actions taken by the Bank
Credit risk	- HoReCa sector businesses shutdown. - Downshift in Transportation and tourism related sectors. - Individual clients' solvency problems.	✓ Loan restructurings have been performed for all businesses with problems. ✓ Active involvement in Government supporting program ✓ Provisioning rate increase considering updated macro forecasts and individual forecasts for business risks ✓ Case by case work with all problematic clients ✓ Full credit holydays for individual borrowers ✓ Retail lending limitations. ✓ Tightening of creditworthiness parameters for borrowers
Market and Liquidity risks	- AMD rate decline amid RUR rate depreciation, tourism sector shutdown and commodity prices decline.	✓ Bank fully satisfied its clients' demand for USD in order to overcome possible panic and provide liquidity. ✓ Currency rate public spreads widened as much as twice to cover the volatility. ✓ Speculative trades were limited both for Bank clients and other customers. ✓ PR actions were performed to spread confidence among customers and avoid deposit outflows.
Operational and anti pandemic actions	- Likelihood of virus spread among Bank staff - Compliance with commandant's orders and emergency regulation	✓ A specifically tailored plan for combating COVID19 was prepared and sent to Management Board by Operational Risk Service ✓ Management Board decided to form "anti-covid" working group and tasked to prepare scenarios and relevant actions ✓ Cross-functional groups for decision making and specialized works were formed . ✓ Anti-covid working group together with relevant teams and management has drafted scenarios and actions to be followed by decision making and special groups ✓ Decisions are grouped in 6 pillars: Management; People; Lending & business generation; Liquidity & FX; Communication; Ongoing projects and processes ✓ Within BCP (Business Continuity Plan), ongoing monitoring of triggers is being conducted, and teams discuss relevant actions based on triggers and their impact.

EXECUTIVE SUMMARY

External Environment

World economy	**GDP:** *During Q4 economies continued recovery from recession earlier in the year .China GDP increased by 6.5% in Q4 or 2.3% Y-o-Y. US GDP is expected to grow by 4.0% in Q4 or -3.5% Y-o-Y .*	**Commodities:** *Gold price was volatile during Q4 amid political uncertainties in US.* *Oil and Copper prices had increasing trend.*	**Interest rates:** *LIBOR 6m ≈ 0.25%.* *UST 10y ↑ 1.11%* *UST Curve up-sloped.*	**FX market:** *High uncertainty. Emerging currencies are under high inflation risks. US Dollar was easing amid expanding monetary policy.*
Armenian Economy	**Economy Activity Index:** *Declined 7.8 p.p. y-o-y* *GDP decline -7.5% (est, 2020)* *Forecasts for growth in 2021:* *EBRD +4%,* *IMF +3.5%,* *World Bank +3.1%.*	**Inflation:** *Low(~2%) below CBA target of 4.5%*	**Local currency:** *AMD rate was mainly stable after devaluation during Q4. It was stabilized via CBA market innervations and refinance rate increases.*	**Remittances:** *14% Y-o-Y increase of net remittances in 2020 due to decrease of outflows. Remittances expectations are uncertain taking into account current situation.*
Financial markets	**Local interest rates:** *Armenian sovereign yield corrected after growth in Sep-Oct.*	**LIBOR:** *6m rate was almost flat during Q4-2020 at the level of 0.25%*	**AMD Bond yield curve:** *Flattening after steepening during October. Maturity premium is decreasing.*	**Real estate:** *The outlook is in line with GDP forecasts. Number of contracts decreased by 15% Y-o-Y in real estate market and by 33% in Q4-2020.*
Banking sector	**CAR, ROE** *Strong CAR by the end of Q4. Demand for credit recovered partially .*	**Liquidity:** *Strong in Banking sector.*	**NPL, impairements:** *Increased during 2020 by 1.3 p.p.. Outlook is stable.*	**Competition, demand:** *Drop in credit demand amid decreased economic activity.*
CBA policy	**FX market:** *Volatile amid Government spendings' structural change and sovereign bonds yields volatility.*	**Banking rate:** *Refinance rate: ↑ 5.25%* *Lombard repo rate: ↑ 6.75%* *+1 p.p. during Q4* *+0.25 p.p. in Jan 2021*	**Obligatory provisions:** *Reservation regime unchanged from September.*	**CAR** *New CAR buffers introduction will be due from January 2021. Easing expected from March-April.*

EXECUTIVE SUMMARY

Macro Indicators

Global Economy, Markets	▪ **Positive indicators:** - Stock and commodity markets started to recover from the collapse. Global interest rates were almost flat, UST yield curve flattened with up-slope with a maturity premium increase in January. Government stimulus plan via Fiscal policies and Market innervations by US and China were driving markets. ▪ **Negative indicators:** - Equity markets are highly sensitive to economic recovery expectations.
Armenian Economy	▪ **Positive indicators:** - Sovereign Yield Curve was corrected after yield and maturity premium increases in October. - Forecasts for economic growth are positive : *EBRD +4.0%, IMF +3.5%* - Economic downturn in Armenia was at the same level as in neighboring comparable states. - Pandemic related restrictions removed for businesses in all sectors of economy. - Successful allocation of Gov't Eurobonds with no increase in credit spread ▪ **Negative indicators:** - Credit ratings downgrade by Fitch. - Decline in Agriculture, International trade and Services.
RA Banking Sector	▪ **Positive indicators:** - Capital and liquidity ratios are adequate to risk. Measures taken by CBA kept volatility low in financial market. ▪ **Negative indicators:** - Still low credit demand. Macroeconomic pressure on loan portfolio quality.
CBA policy	▪ **Positive indicators:** - CBA successfully stabilizes foreign currency market using monetary policy tools. - CAR normative easing planned in 2021 ▪ **Negative indicators:** - In order to prevent further devaluation of AMD, CB raised the policy rates by 1% pp.
Operational environment	▪ **Positive indicators:** - Lockdown will have its positive impulse for digital banking products growth and development. ▪ **Negative indicators:** - External fraud and cyber crime risk growth is the key source of risk especially amid large number of remotely working employees.

EXECUTIVE SUMMARY

Bank's Key Risk Indicators

Risk Map						
Risk Zones	**Capital and Losses**	**Credit Risk**	Credit Risk: Corporate	Credit Risk: Retail	**Market Risk, Liquidity**	**Operational Risk**
LIMIT BREACH		Risk Appetite (11.53%)	Risk Appetite (7.31%) *LTV Deviation* (20.2%)*	Risky Loans Retail (5.19%)		
HIGH	Risk Appetite (11.89%)		NPL (4.6%) *DSCR Deviation* (15.1%)*	Risk Appetite (4.22%)		
MEDIUM	CAR (13.6%)	Total NPL (4.22%)			MtM Bond Portfolio Duration (3.27 years)	
LOW				NPL (3.3%) *OSM Deviation** (0.8%) *LTV Deviation* (2.5%)*	Floating Rate A/L GAP (64.2%) Risk appetite (0.35%) FX Position (all currencies) (4.92%)	Risk appetite External Fraud

Indicators under the risk

- ✓ Stage 3 loans provision growth, NPL/risky loans rates growth is adequate to the current state of economy and within the limits of strategic risk appetite, estimated before.
- ✓ Outlook for recovery is positive, but still loan loss additional reserves are formed for the possible further negative developments.
- ✓ Provisioning for a few large Stage 3 loans in Corporate portfolio had essential impact on utilized risk appetite.
- ✓ LTV deviation parameter is manageable and in the correction process.

**non obligatory risk parameters (early warning indicators)*

EXECUTIVE SUMMARY

Bank's Key Risk Indicators: Actions

KRIs under risk	Reasons	Actions to be taken
Capital adequacy ratio	According to recent amendments initiated by regulator, certain easing should be applied to capital ratio requirements, and total ratio threshold will become 11.5% including additional buffers. In Q1 2021 the cushion above the limit is quite thin and could absorb the risks under "low" risk scenario only.	✓ Keep conservative lending regime in Q1 2021 to maintain increased regulatory limit (13.5%) until limits easing planned in March-April.
Interest Rate Repricing GAP & Net Interest Margin	Low interest rates amid negative GAP (64% of Equity) could still put essential pressure on the Bank's net interest margin and total capital generation strength under rate increase scenario.	✓ Elongate the liability side and put effort in disbursement of loans with floating rates, to continue midterm bonds allocation on liability side.
Non Performing and Risky Loans, Deviations in lending parameters	Almost 80% of NPL are loans which became problematic during the year 2020, the major part of new NPLs came from Retail portfolio. NPL ratio increased by 1.3 p.p. in 2020. Risky loans growth in retail was registered due to restructurings amid COVID and the military conflict in neighboring Artsakh. Written-off loans amount is around 1% of total loan portfolio. The portion of loans with deviated parameters is close to the limits, some negative tendencies (real estate prices, etc.) are still in the agenda.	✓ Activate NPL recovery process in the scope of special NPL Committee ✓ To continue the lending process within the acting temporary limitations ✓ To limit/manage Corporate loans disbursement with LTV deviation until the parameter's limit breach will be resolved.
Digital lending portfolios' quality	A common problem with model based digital lending products is input database "deformation" amid creditworthiness profile change which was driven by lockdown, conflict in neighboring Artsakh and further geopolitical turmoil.	✓ Macroeconomic crisis impact embedded in decision making statistical models. ✓ All main ML lending models should be rebuilt ✓ Additional risk appetite for new digital lending products should be allocated.
Operational Losses	New digital projects/products and lack of appropriate 3-rd party vendors management framework lead to potential risks for the bank.	✓ Digital projects, 3-rd parties/vendors management framework should be implemented. ✓ Additional risk appetite for new digital projects should be allocated.

MACRO RISKS

Macro risk Indicators

Macroeconomic pressure/world, Russia

Fig. 1. Real GDP growth rates

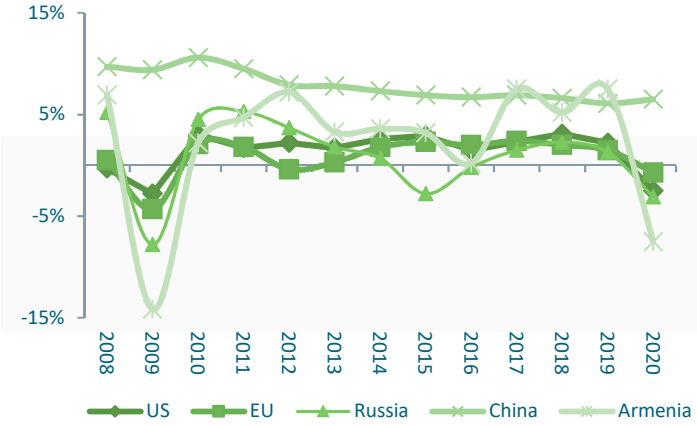


Fig. 2. CPI

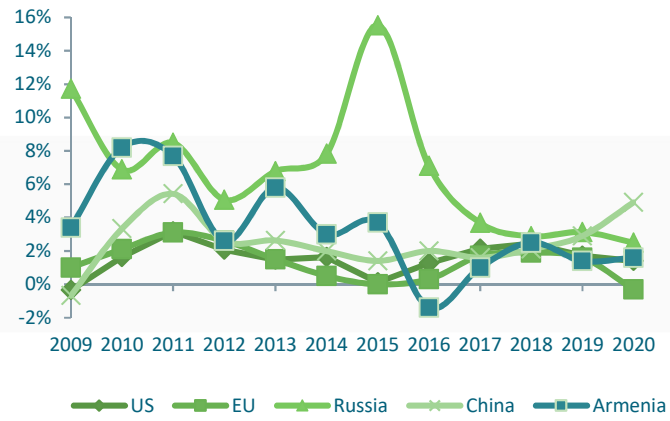


Fig. 3. Oil prices (US$) vs RF GDP growth (YoY)

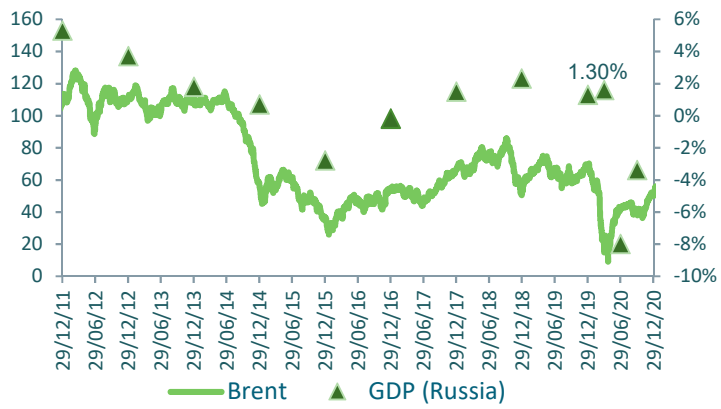
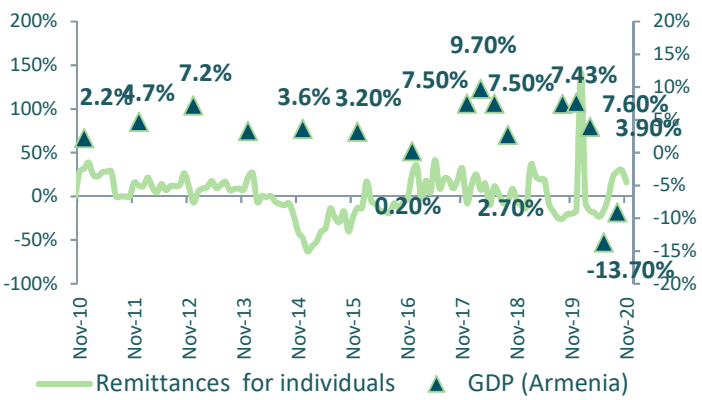


Fig. 4. Foreign remittances vs GDP growth in RA (YoY)



Tab. 1. Main foreign partner state

Indicator (share of Russia)	2020	2019
Export	26%	28%
Import	36%	27%
Foreign remittances, net	63%	125%

HIGHLIGHTS

- Global economic growth was suffering from uncertainaties related to pandemics. Equity indices dropped during March.
- Consumer prices index grew up in Armenia amid AMD devaluation. CPI decreased in US and Russia but was still positive. For China growth rate increased. EU's CPI was negative at -0.3%.
- Oil prices were highly volatile in 2020 as demand dropped sharply. During April, Oil WTI futures were even negative. During December Brent oil price was stabilized at around 54$, but it is still highly sensitive to economic expectations.
- Remittances to Armenia decreased during 2020 by 6%.

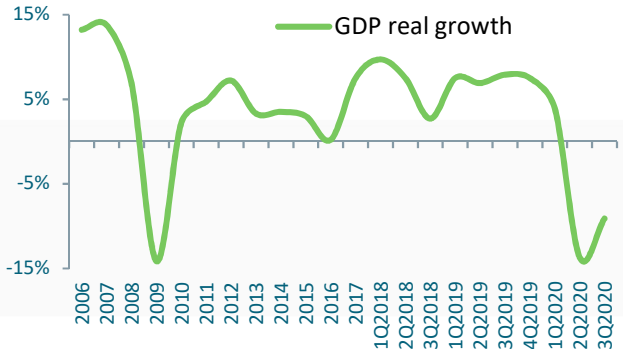
Macro risk Indicators

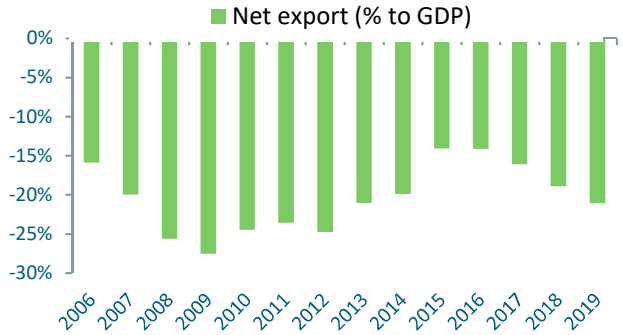
Key risk indicators of RA

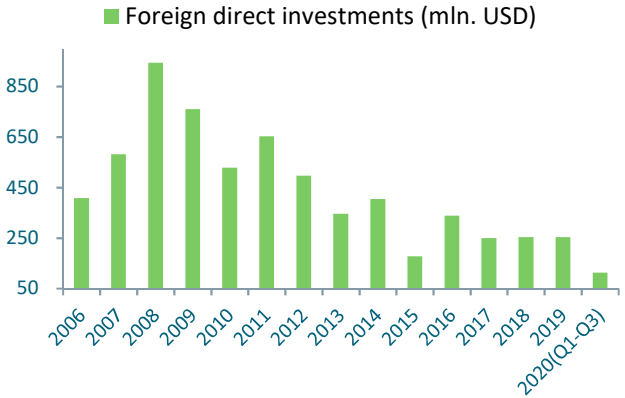
Tab 2. Key macroeconomic indicators in Armenia

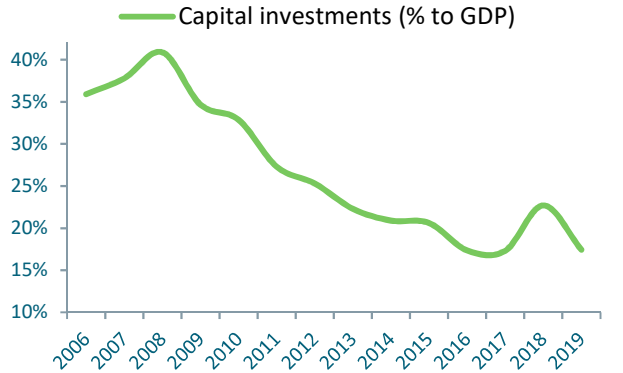
	2020/2019%	2019/2018%
Economic activity index	-7.5%	+7.8%
GDP	-7.5% (est)	+7.6%
Industry	-0.9%	+6.4%
Agro	+1.4%	-4.2%
Construction	-9.5%	+4.9%
Trade	-14.0%	+6.4%
Services	-14.7%	+16.6%
CPI	+1.2%	+0.7%
Real estate trades	-15%	+15%
External trade	-13.2%	+10.4%
export	-3.9%	+9.4%
import	-17.7%	+10.8%

Fig. 5. Key risky macroeconomic indicators in Armenia.







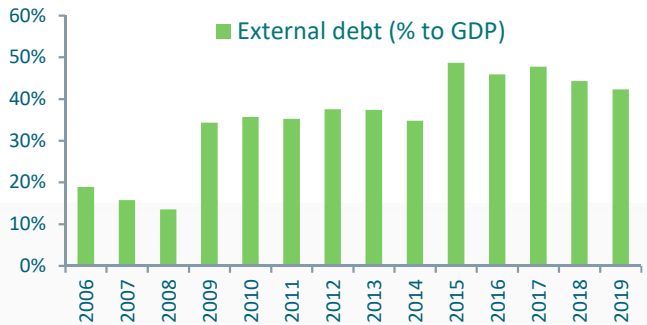


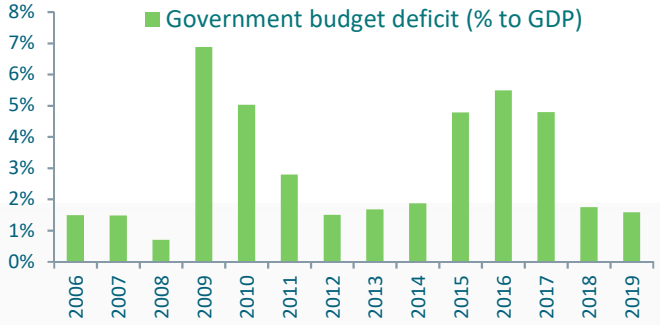
HIGHLIGHTS

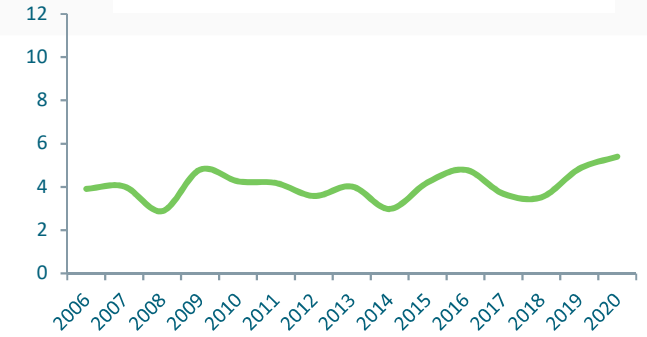
- During 2020, Armenia's economy suffered from pandemics, lockdowns, and geopolitical pressures. As a result, the 9 month GDP decreased by 6.6% as compared to Q3-2019. Economic activity index decreased by 10.3p.p Y-o-Y.
- Capital investments decreased from 2018 to 2019 by 5.25%. Net remittances increased by 16% in 2020 Jan-Nov compared to 2019 same period.
- Armenian economic growth outlook for 2019 according to international and local researches are: World Bank 3.1%, EBRD 4.0%, IMF 3.5%.
- Industrial production, Construction, services and external trade decreased during 2020 as a result of economic activity decline. The volume of gross agricultural output increased by 0.5%.
- Real estate registered deals number in Armenia decreased for 2020/2019 by 15%.

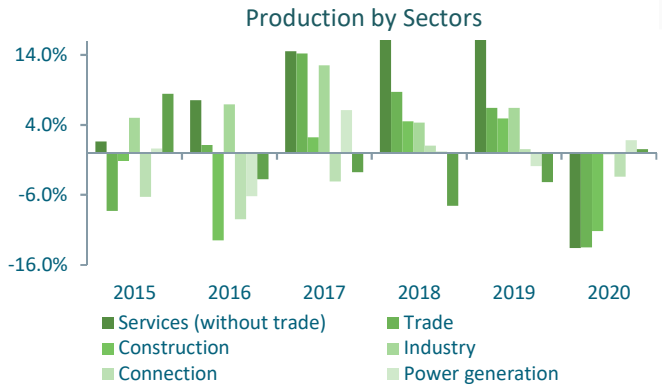
Macro risk Indicators

Key risk indicators of RA







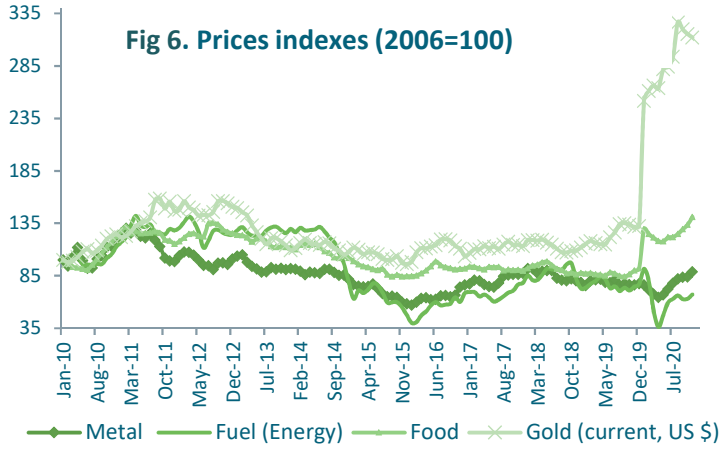


HIGHLIGHTS

- Metal price index increased by 17% for 2020/2019 due to Steel price increase during November .
- Metals export increased by USD 118m and the share in total export reached 42.5%.
- Gold price was volatile during 2020 as it was a safe heaven for investors during uncertainties in stocks and commodities markets.

Tab. 3. Metals export amount and share in total export, *mil. USD*

	2020	share	2019	share
Copper	618	24.29%	627	24.65%
Aluminum	104	4.09%	95	3.73%
Molybdenum	104	4.09%	18	0.71%
Gold	256	10.06%	224	8.81%
Total	**1082**	**42.53%**	**964**	**36.40%**



Macro risk Indicators

Interest rates

Fig. 7. RA banking system lending and deposit rates margin.

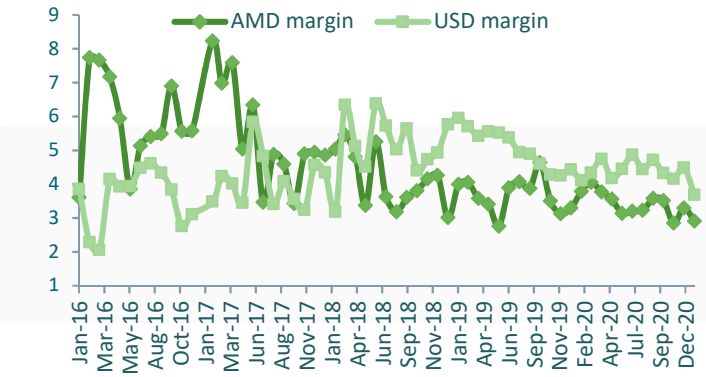


Fig. 8. RA government bonds yield series.

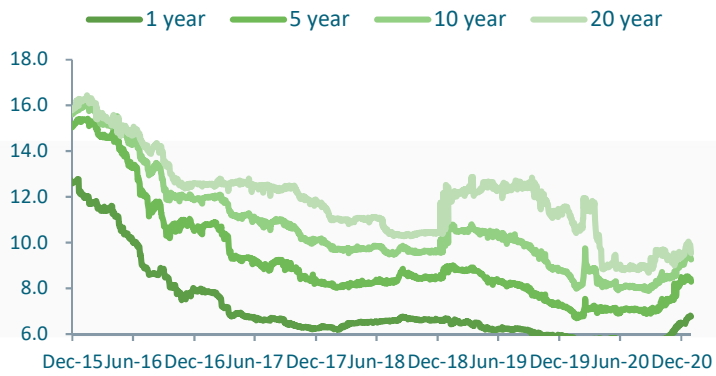


Fig. 9. Fed Fund, 6 M Libor rates vs monetary base US (m USD)

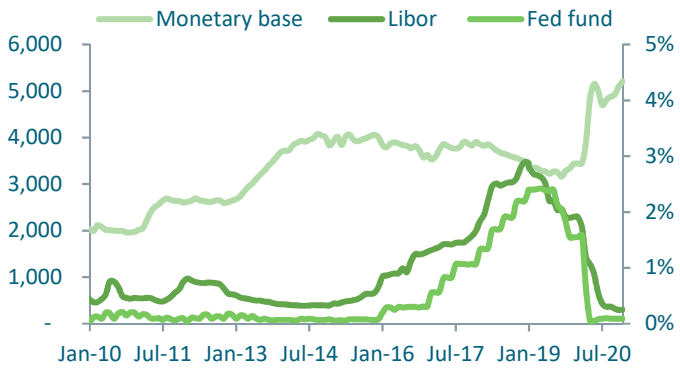
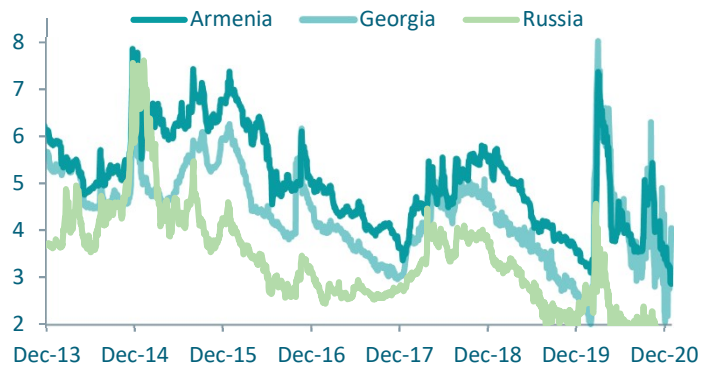


Fig. 10. US dollar denominated bonds yield curves



Tab. 4. Leading Central Bank's interest rates.

	2015	2016	2017	2018	2019	2020	Outlook	Last change
Federal reserve system	0.50%	0.75%	1.50%	2.50%	1.75%	0.25%	UP	Mar 2020(-100bp)
European Central Bank	-0.30%	-0.40%	-0.40%	-0.40%	-0.50%	-0.50%	Down	Mar 2016(-5bp)
Bank of England	0.50%	0.25%	0.50%	0.75%	0.75%	0.10%	Down	Mar2020(-15bp)
Bank of Japan	0.10	0.00	-0.10%	-0.10%	-0.10%	-0.10%	Hold	Jan 2016 (-10bp)
People's bank of China	4.35%	4.35%	4.35%	4.35%	4.15%	4.05%	Hold	Feb 2020 (-10bp)
Central bank of RF	11.0%	10.0%	7.75%	7.75%	6.00%	4.25%	Down	July 2020 (-25bp)

HIGHLIGHTS

- USD Interest rate margins are significantly higher than AMD margins during 2020.
- Armenian government bonds yield curve was highly volatile during Sep-November amid the conflict in neighboring Artsakh and credit rating downgrade. It started to stabilize during December.
- Libor rate decreased significantly during the 2020 as a result of FF rate decreases and Monetary policies aimed for economic recovery.
- Federal reserve system decreased the rate to 0.25% in March 2020 in order to ease economic recession.

Macro risk Indicators

Foreign exchange and prices

Fig. 11. USD, EUR FX rates (left axis) and consumer price index, RUR (right axis) in Armenia.

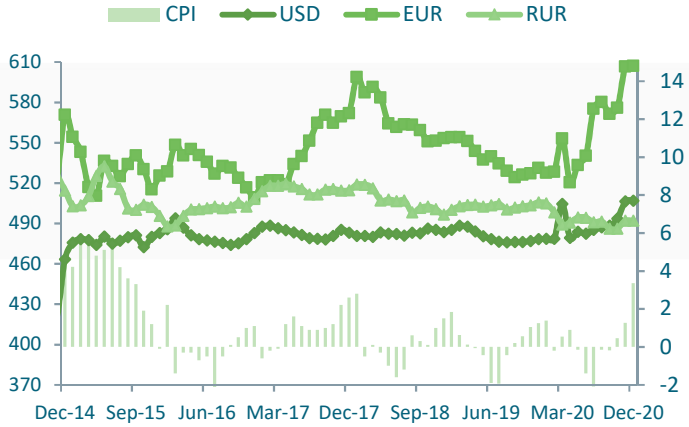


Fig. 12. Developing and transition economies currency rate to US dollar; 2013=0%.

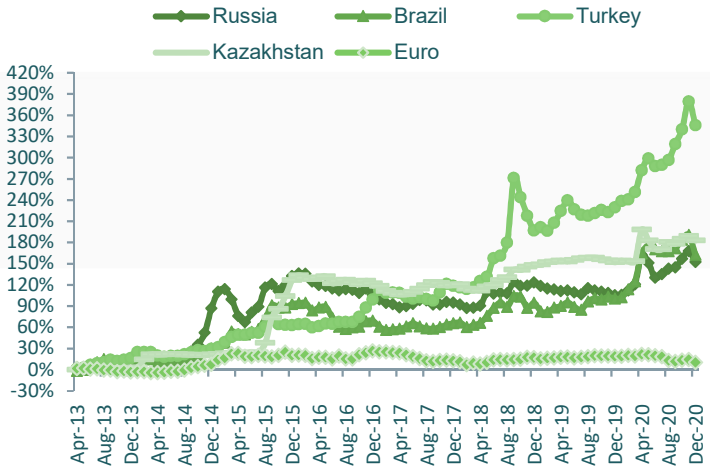
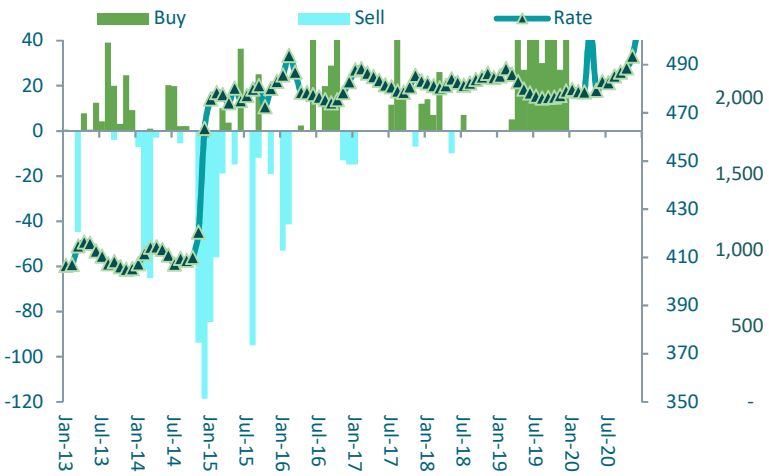
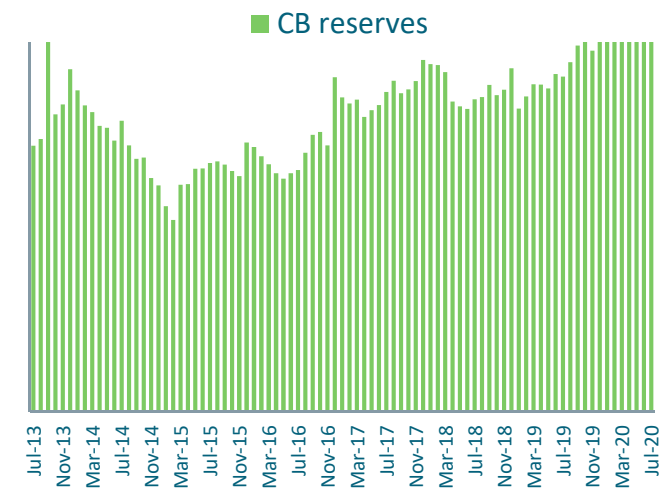


Fig. 13. CBA FX interventions, reserves (mln. USD) and USD rate





HIGHLIGHTS

- USD/AMD exchange rate was volatile during 2020.The first major increase was in March after strict lockdowns measures were applied. During Sep-Nov rate increased to the level of 520 and now is stabilized at that level.
- Russian ruble was volatile amid Oil price sharp decreases, Covid related ristrictions and slower economic growth.
- International reserves of Central Bank of Armenia increased continuously since 2014. Compared to upshift in Dec2017, reserves increased by 13% as at July.

Macro risk Indicators

Foreign exchange and CB rates

Tab. 5. CB and financial market operations rates

Period	Refinance	Deposit	Lombard	FX rate
Dec 14 - Dec 14	6.8	5.3	21	463.5
Dec 14 - Jan 15	8.5	7	20	475.7
Jan 15 - Feb 15	9.5	8	17	478.4
Feb 15 - Mar 15	10.5	9	14.5	478.1
Mar 15 - Mar 15	10.5	9	13.5	477.7
Mar 15 - Aug 15	10.5	9	12	472.1
Aug 15-Nov 15	10.25	8.75	11.75	478.57
Nov 15 - Dec 15	9.75	8.25	11.25	478.97
Dec 15- Feb 16	8.75	7.25	10.25	487.53
Feb 16- Mar 16	8.5	7	10	493.64
Mar 16 – May 16	8.25	6.75	9.75	486.3
May 16- June 16	7.75	6.25	9.25	477.7
June 16- Aug 16	7.5	6	9	476
Aug 16 - Sep 16	7.25	5.75	8.75	474
Sep 16 - Nov 16	6.75	5.25	8.25	475.6
Nov 16 - Dec 16	6.5	5	8	481
Dec 16 – Feb 17	6.25	4.75	7.75	483.9
Feb 17- Jan 19	6	4.5	7.5	487
Jan 19-Sep 19	5.75	4.25	7.25	482.0
Sep 19-Mar 20	5.5	4	7	477.6
Mar 20 – Apr 20	5.25	3.75	6.75	490.8
Apr 20-Jun 20	5	3.5	6.5	479.6
Jun 20 –Sep 20	4.5	3	6	481.3
Sep-20 – Dec 20	4.25	2.75	5.75	485.3
Dec 20-Jan 20	5.25	3.75	6.75	525.1
Jan 20-	5.5	4	7	519.2
		Reservation rates		
	USD		AMD	
Aug-20	8%		10%	

Macro risk Indicators

Banking sector KRI's

Tab 6. Banking sector vs Ameriabank: KRI's (bln. AMD)

Indicator	RA Banking sector					Ameriabank		
	Dec 20	Sep 20	Dec 19	Dec20/Dec19		Dec 20	Sep 20	Dec 19
CAR	17.5%	18.1%	18.4%	-0.90%	-1.10%	13.6%	13.4%	14.7%
Liquidity (N21)	25.5%	27.1%	27.1%	-1.60%	-5.40%	22.5%	26.7%	27.9%
Liquidity (N22)	130.4%	143.8%	128.8%	+1.60%	-9.20%	85.3%	97.5%	94.5%
NPL	5.79%	4.71%	4.67%	+1.12%	+1.35%	4.22%	4.14%	2.87%
Net provision, % loan	3.74%	3.20%	3.20%	+0.54%	+0.86%	3.17%	2.48%	2.31%
ROAE	7.4%	9.1%	10.0%	-2.60%	-4.30%	8.5%	8.7%	12.8%
ROAA	1.00%	1.31%	1.49%	-0.49%	-0.60%	0.9%	1.0%	1.5%
Asset	6,643	6,285	5,770	+15.13%	+12.71%	1,091	909	968
Loan	4,100	3,967	3,572	+14.78%	+18.77%	696	635	586
Deposits and Bonds	3,996	3,878	3,668	+8.94%	+7.71%	852	710	791
Equity	895	907	845	+5.92%	+8.40%	109.7	108.1	101.2

HIGHLIGHTS

- General picture of Armenian banking system in 2020 is: decreasing profitability rations, lower loan portfolio quality, increasing provisionings and slower lending.
- Liquidity ratios are sufficient both in case with Ameriabank and the banking system.
- Total lending volume change from Dec 2019 was positive for Ameriabank (AMD 110b) and for the whole banking system (AMD 528b).
- Profitability ratios decreased for both banking sector and Ameriabank compared with 2019.
- The key parameters by which Ameriabank over performs the industry are: equity, assets, loan portfolio and loan quality.

RISK PARAMETERS & STRESS TESTING

RISK PARAMETERS

Risk appetite, ICAAP

Risk appetite

RA items	Q4 2020	Q3 2020	OpRA Limit	Current, % of Equity	StRA, % Equity	Max Tolerance Zone
Total Losses *(% of Equity)*, **incl.**	**(13,543)**	**(10,872)**	**11.70%**	**11.89%**	**13.01%**	**14.01%**
Corporate Banking Losses	(8,326)	(7,122)	5.00%	7.31%	5.00%	6.00%
Retail Banking Losses	(4,807)	(3,220)	3.19%	4.22%	3.86%	4.86%
Trading Losses, incl.	(407)	(529)	1.44%	0.36%	2.21%	3.21%
Losses from FX	*(350)*	*(529)*	0.25%	0.31%	0.25%	
Losses from Security portfolio	*(56)*	*0*	1.13%	0.05%	1.96%	
Interest Rate GAP repricing	*0*	*0*	0.72%	0.00%	1.43%	2.43%
Operational Loss	(4)	(2)	0.50%	0.00%	0.50%	0.50%
Capital Adequacy Ratio *(CBA)*	**13.6%**	13.4%	**>14%**		**14%**	**13%**
Top 20 borrowers *(% of Equity)*	**184%**	173%	**231%**		**200%**	**250%**

Fig. 14 CAR by stress scenarios

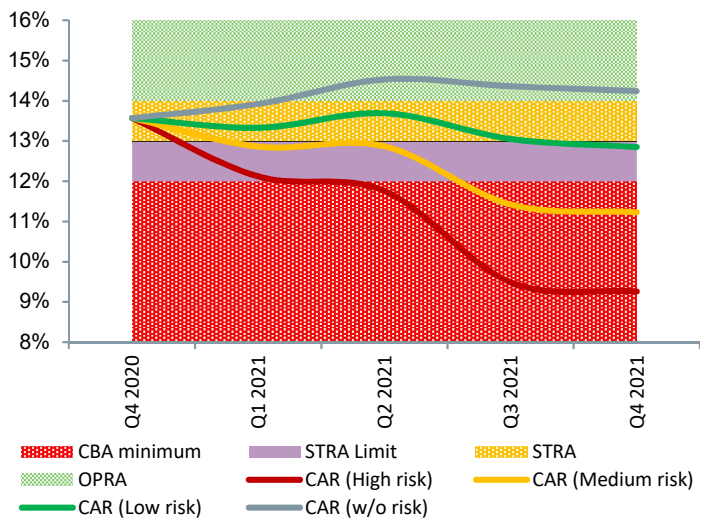
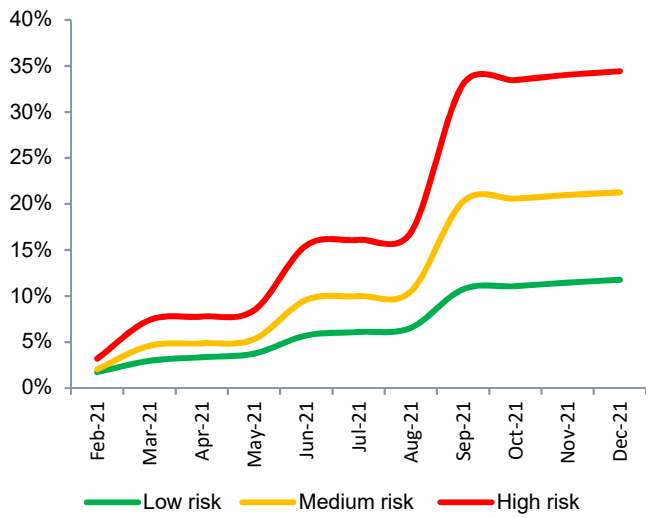


Fig. 15. Stressed losses, % Equity



HIGHLIGHTS

- The amount of utilized Risk appetite as at Q4 2020 was **11.89%** of Equity or AMD **13,543 m.** Main losses arose from credit risk and net losses from loans, which comprise **11.53%** of total risk appetite.
- Bank's Capital is able to absorb around 8bn AMD immediate loss without prudential normative violation taking into account new CAR requirements.
- Risk appetite limits coincides with estimated losses connected with pandemics and Artsakh war.

RISK PARAMETERS

Capital Adequacy Ratio Stress Tests

Tab.8. Stress factor	Impact on CAR			
	Overall Impact	Expected	Acute tension	Crisis
FX stress	●	0.03%	0.04%	0.06%
Fixed rate shift	●	0.06%	0.09%	0.14%
LIBOR shift	●	0.00%	0.00%	0.00%
Yield curve shift	●	0.09%	0.19%	0.30%
NPL growth in Loan Portfolio	●	0.46%	0.63%	0.99%
Corporate NPL	●	0.31%	0.43%	0.67%
Retail NPL	●	0.14%	0.20%	0.31%
Biggest borrower loss	●	1.99%	5.79%	9.07%
Operational Loss	●	0.01%	0.02%	0.04%
Total additional CAR	●	2.70%	6.85%	10.74%
FX effect on RWA	●	0.59%	0.78%	1.15%

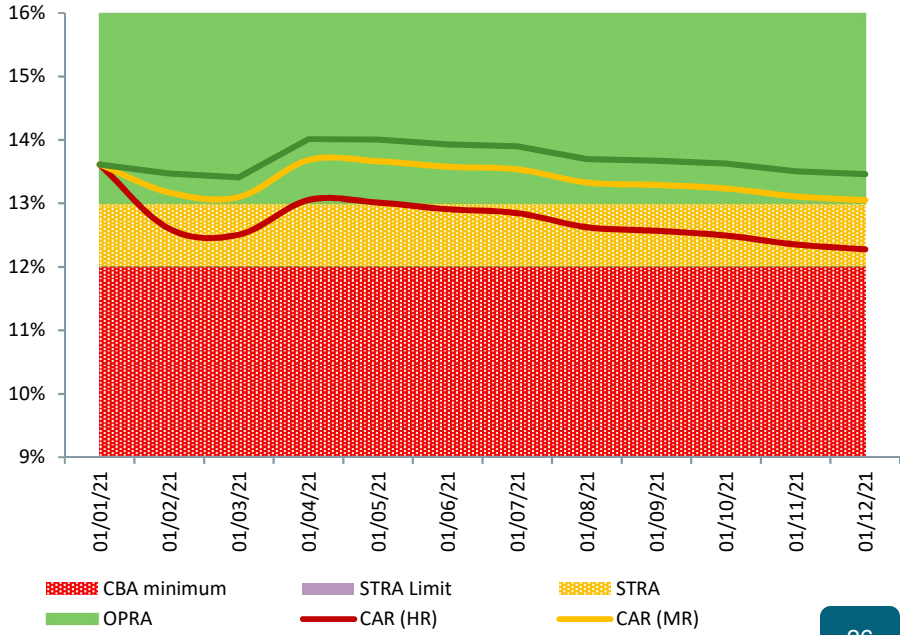
Macroeconomic State

Optimistic	
Stable	✓
Pessimistic	
Critical	

HIGHLIGHTS

- ✓ Capital ratio is sensitive to FX rate fluctuations due to high dollarization in risk weighted assets.
- ✓ Biggest borrower default can have the most significant impact on Capital ratio.

Fig. 2 CAR by stress scenarios without biggest borrowers' risk/stress



Tab. 9. Stress Tests

	Impact on CAR	Dec-20	Nov-20	Oct-20	Sep-20	Aug-20	Jul-20	Dec-19	Dec-18
CREDIT RISK	**CR: big borrowers shift to non-standard**								
	3 big borrowers	12.40%	11.84%	12.74%	12.36%	11.99%	12.13%	13.60%	12.50%
	5 big borrowers	11.73%	11.17%	12.10%	11.78%	11.40%	11.55%	12.93%	11.77%
	CR: portfolio shift to next risk class								
	5% of portfolio	13.20%	12.80%	13.60%	13.03%	12.67%	12.78%	14.38%	13.33%
	10% of portfolio	12.84%	12.44%	13.24%	12.68%	12.32%	12.43%	14.02%	12.97%
	15% of portfolio	12.47%	12.08%	12.89%	12.33%	11.97%	12.07%	13.65%	12.60%
	CR: portfolio shift to non-standard								
	5% of portfolio	12.93%	12.53%	13.33%	12.76%	12.41%	12.51%	14.09%	12.99%
	10% of portfolio	12.28%	11.88%	12.70%	12.14%	11.80%	11.90%	13.43%	12.27%
	20% of portfolio	10.94%	10.56%	11.42%	10.88%	10.55%	10.65%	12.08%	10.79%
FX RISK	**FX: currency rate devaluation impact**								
	5% devaluation	13.51%	13.14%	13.91%	13.32%	12.97%	13.07%	14.69%	13.64%
	10% devaluation	13.45%	13.12%	13.88%	13.28%	12.92%	13.03%	14.64%	13.57%
	20% devaluation	13.33%	13.09%	13.81%	13.18%	12.83%	12.94%	14.54%	13.45%
IR RISK	**IR: interest rate change impact**								
	1% change	13.44%	12.99%	13.76%	13.19%	12.82%	12.94%	14.57%	13.47%
	2% change	13.32%	12.82%	13.57%	13.01%	12.62%	12.76%	14.41%	13.23%
	3% change	13.20%	12.65%	13.39%	12.82%	12.42%	12.58%	14.24%	13.00%
	YC: yield curve change impact								
	1% change	13.51%	13.10%	13.88%	13.31%	12.95%	13.06%	14.66%	13.61%
	2% change	13.45%	13.03%	13.81%	13.24%	12.88%	13.00%	14.57%	13.51%
	3% change	13.39%	12.97%	13.74%	13.18%	12.81%	12.94%	14.49%	13.00%

Stress Tests (Continued)		Dec-20	Nov-20	Oct-20	Sep-20	Aug-20	Jul-20	Dec-19	Dec-18
LIQUIDITY RISK	**Largest demand and time deposit outflow impact on liquidity (N21)**								
	1 depositor	21.99%	19.39%	22.05%	25.73%	26.04%	25.65%	26.05%	20.16%
	3 depositor	21.21%	18.06%	20.55%	24.38%	24.63%	24.51%	23.97%	17.37%
	5 depositor	20.48%	17.33%	19.75%	23.62%	23.73%	23.72%	22.93%	14.95%
	Largest demand and time deposit outflow impact on liquidity (N22)								
	1 depositor	84.25%	76.34%	85.81%	95.05%	99.09%	100.69%	91.47%	76.18%
	2 depositor	82.63%	73.55%	82.02%	91.94%	96.03%	97.60%	87.66%	71.06%
	5 depositor	81.09%	71.52%	79.98%	90.24%	94.32%	95.90%	85.51%	65.79%
SYSTEM RISK	**Repayment of interbank borrowings and postponement of interbank exposure (up to 30 days) impact on CAR**								
	50% of exposure	13.51%	13.11%	13.89%	13.32%	12.96%	13.06%	14.67%	13.63%
	75% of exposure	13.49%	13.08%	13.86%	13.29%	12.93%	13.03%	14.64%	13.59%
	100% of exposure	13.46%	13.05%	13.83%	13.26%	12.90%	13.00%	14.60%	13.55%

RISK PARAMETERS

Credit risk stress tests: IFRS9 credit risk model

Stress Scenarios	Export	Import	CPI	USD/AMD	RUB/AMD
Scenario 1	0.0%	0.0%	5.5%	5.0%	10.0%
Scenario 2	15.0%	15.0%	10.0%	10.0%	20.0%
Scenario 3	30.0%	30.0%	15.0%	20.0%	40.0%
Scenario 4	50.0%	50.0%	20.0%	30.0%	60.0%

Stress tests	Scenarios	Losses in "000" AMD			% of Equity
		Retail LP	Corporate LP	Total LP	
Total Portfolio IFRS 9 stress	Scenario 1	151,509	634,590	786,099	0.69%
	Scenario 2	408,430	1,771,541	2,179,970	1.91%
	Scenario 3	762,099	3,039,688	3,801,787	3.34%
	Scenario 4	1,393,119	5,044,489	6,437,608	5.65%
Total Overdue Portfolio IFRS 9 stress	Scenario 1	49,302	149,299	198,601	0.17%
	Scenario 2	127,002	343,775	470,778	0.41%
	Scenario 3	208,536	501,870	710,406	0.62%
	Scenario 4	523,478	777,577	1,301,055	1.14%
Total Risky loans IFRS 9 stress	Scenario 1	22,948	132,727	155,675	0.14%
	Scenario 2	56,930	298,550	355,480	0.31%
	Scenario 3	82,493	424,600	507,092	0.45%
	Scenario 4	333,084	665,129	998,213	0.88%

RISK PARAMETERS

Credit risk stress tests: CBA provisioning, Special Loans stress

Stress Tests	Scenarios	Additional Provision in "000" AMD	CAR decrease	Stressed CAR	% of Equity
CBA provisioning increase matched with IFRS PD macro stress	Scenario 1	1,833,122	0.17%	13.40%	1.61%
	Scenario 2	1,942,550	0.18%	13.39%	1.71%
	Scenario 3	2,065,163	0.19%	13.38%	1.81%
	Scenario 4	2,168,783	0.20%	13.37%	1.90%
Movement of loans through CBA classes until write off	optimistic period	5,340,329	0.49%	13.08%	4.69%
	stable period	6,700,096	0.61%	12.96%	5.88%
	pessimistic period	12,300,721	1.13%	12.44%	10.80%
Movement of loans through CBA classes until write off, Only Overdue	optimistic period	4,563,638	0.42%	13.15%	4.01%
	stable period	4,825,002	0.44%	13.13%	4.24%
	pessimistic period	9,907,786	0.91%	12.66%	8.70%

Special Stress Tests	Scenarios	Additional Provision in "000" AMD	CAR decrease	Stressed CAR	% of Equity
20% CBA migration by Top sectors	Top 1 Sector	2,745,738	0.25%	13.32%	2.41%
	Top 2 Sectors	5,063,774	0.46%	13.11%	4.45%
	Top 3 Sectors	6,194,740	0.57%	13.00%	5.44%

RISK PARAMETERS

Internal Parameters and Limits

Tab. 10. Risk Parameters	Dec-20	Nov-20	Oct-20	Low	High	Limit
CREDIT RISK INTERNAL NORMATIVES						
NPL Ratio	4.22%	4.03%	4.01%	<4.0%	>5%	6%
Sector Concentration	15.9%	16.1%	16.5%	<20%	>25%	30%
One Country Risk	14.4%	14.3%	14.9%	<26%	>33%	40%
Industry	4.4%	4.6%	4.5%	<40%	>50%	60%
One Industry Max	2.3%	2.4%	2.3%	<20%	>25%	50%
Biggest borrower concentration	14.63%	18.16%	16.33%	<16%	>18%	20%
All biggest borrowers concentration	227%	247%	210%	<400%	>440%	500%
Bank related party	1.15%	1.15%	1.08%	<4%	>4.5%	5%
Bank related parties	7.33%	7.14%	5.81%	<16%	>18%	20%
Product risk						
Project finance	0.9%	0.4%	0.4%	<5%	>10%	15%
Factoring	1.63%	1.57%	1.54%	<5%	>10%	15%
Leasing	1.87%	1.73%	1.62%	<5%	>10%	15%
State loans	0.08%	0.09%	0.09%	<5%	>10%	15%
Non-resident	9.6%	9.5%	9.1%	<15%	>20%	25%
Credit portfolio share in assets	66.0%	72.6%	72.8%	<60%	>80%	
Collateral risk						
Biggest collateral evaluator share	27.1%	27.0%	28%	-	>33%	50%
Biggest collateral insurer share*	36.5%	36.7%	37%	-	>33%	50%
Real estate*	46.3%	46.2%	44.7%	>70%	<60%	
Movable asset	2.9%	2.9%	2.8%	<30%	>40%	
Other (*including guarantees and cash flows*)*	32.3%	32.1%	42.1%	<10%	>15%	
Confiscated pledge	1.41%	1.50%	1.42%	<3%	>4%	5%

*parameters are under review

RISK PARAMETERS

Internal Parameters and Limits

	Dec-20	Oct-20	Sep-20	Low	High	Limit
CREDIT RISK EWIs						
Corporate NPL ratio	4.64%	4.61%	4.71%	<3.0%	>4%	5%
Retail NPL ratio	3.34%	2.81%	2.77%	<6.5%	>8.5%	10%
NPL growth	0.84%	0.71%	0.64%	<2%	>2.5%	-
NPL growth Corporate	0.24%	0.27%	0.28%	<1.3%	>1.6%	-
NPL growth Retail	2.09%	1.63%	1.39%	<2.7%	>3.5%	-
Risky Loans	3.19%	2.29%	2.34%	<4%	>5%	6%
Risky Loans Corporate	2.25%	2.28%	2.32%	<2.5%	>3%	4%
Risky Loans Retail	5.16%	2.30%	2.38%	<4%	>4.5%	5%
Portfolio quality risk						
DSCR deviation	15.1%	15.2%	13.5%	<10%	>15%	20%
LTV deviation (corporate)	20.2%	19.7%	18.5%	<10%	>15%	20%
OSM deviation	0.8%	0.8%	0.8%	<7%	>10%	15%
LTV deviation (retail ind.)	2.5%	2.5%	2.6%	<7%	>10%	15%
Credit history deviation (retail)	N/A	N/A	N/A	<7%	>10%	15%
CREDIT EXPOSURE OUT OF STATE (mil AMD)						
Total	10,587	9,780	9,176	-	-	10,944
Government	634	619	610	-	-	6,000
Private sector	9,953	9,161	8,566	-	-	7,920

*parameters are under review

RISK PARAMETERS

Internal Parameters and Limits

Sector risk	Dec-20	Oct-20	Sep-20	Low	High	Limit
Industry	4.4%	4.6%	4.5%	<40%	>50%	60%
One Industry Max	2.3%	2.4%	2.3%	<20%	>25%	50%
Agro	3.7%	3.3%	3.2%	<15%	>20%	30%
Mining	4.8%	5.0%	4.7%	<15%	>20%	30%
Retail trade	5.4%	5.4%	5.6%	<15%	>20%	30%
Wholesale trade	15.3%	15.5%	15.5%	<15%	>20%	30%
Catering&Hotel Services	7.5%	7.6%	7.6%	<15%	>20%	30%
ITC	3.8%	4.2%	4.0%	<15%	>20%	30%
Energy	7.9%	8.0%	7.3%	<15%	>20%	30%
Water services	0.0%	0.0%	0.0%	<15%	>20%	30%
Financial&Insurance	0.6%	0.6%	0.6%	<15%	>20%	30%
Professional services	0.1%	0.1%	0.1%	<15%	>20%	30%
Education	0.1%	0.1%	0.1%	<15%	>20%	30%
Health Care	0.9%	0.9%	0.9%	<15%	>20%	30%
Leisure & Arts	0.2%	0.2%	0.2%	<15%	>20%	30%
Construction	5.2%	5.1%	5.3%	<15%	>20%	30%
Real estate	3.6%	3.5%	3.5%	<15%	>20%	30%
Transportation & Warehousing	7.0%	6.7%	6.8%	<15%	>20%	30%
Mortgage	16.2%	16.1%	16.5%	<15%	>20%	30%
Consumer	10.9%	10.9%	11.2%	<15%	>20%	30%
Other Sectors	0.9%	0.9%	0.9%	<15%	>20%	30%
One country risk	14.4%	14.3%	14.9%	<26%	>33%	40%

RISK PARAMETERS

Internal Parameters and Limits

MARKET RISK RATIOS						
	Dec-20	Oct-20	Sep-20	Low	High	Limit
Net unhedged floating rate position	50.0%	70.4%	62.8%	<60%	>75%	90%
FX position (total)	4.92%	5.13%	4.42%	<6.5%	>8.25%	10%
FX position(single currency)	3.73%	4.01%	3.15%	< 4.5%	>6%	7%
Yearly IRR GAP	64%	102%	114%	< 65%	>82.5%	100%
Derivatives volume, % Capital*	22.7%	59.5%	61%	<65%	>85%	-
Value-at-risk	0.09%	0.06%	0.06%	< 0.1%	>0.15%	
Simulated 30 day VaR for FX risk	0.09%	0.04%	0.07%	<0.16%	>0.21%	
Simulated 30 day Expected shortfall for FX risk	0.12%	0.05%	0.10%	<0.2%	>0.25%	-
Simulated VaR for Security portfolio	0.37%	0.29%	0.35%	<1.27%	>1.62%	-
Simulated Expected shortfall for Security portfolio	0.40%	0.32%	0.41%	<1.54%	>1.96%	-
GENERAL RISK RATIOS						
Liquidity ratio (N 2.1)	22.53%	20.36%	23.02%	>18%	<17%	15%
Liquidity ratio (N 2.2)	85.32%	78.07%	88.60%	>70%	<65%	60%
Liquidity N2.1 for I type currencies	17.87%	16.17%	15.94%	>6%	<5%	4%
Liquidity N2.2 for I type of currencies	80.73%	77.01%	76.40%	>12%	<11%	10%
Biggest time depositor share, % time deposits	1.63%	5.12%	3.23%	<15%	>25%	-
Biggest demand depositor share, % demand deposits	0.79%	0.78%	2.21%	<15%	>25%	-
Excess liquidity / (BD1×30%+BD2×70%)**	215.81%	112.5%	387%	>100%		
Direct investments, % Capital	0.05%	0.06%	0.06%	<34%	>36%	40%
High rating counteragent exposure (incl corr. accounts)	97.3 %	93.4%	94.7%	>95%	<92%	90%
Concentration of interbank deposits	0.00%	0.00%	0.00%	<39%	>42%	50%
Concentration of interbank loans	0.33%	0.33%	0.27%	<39%	>42%	50%

**Hedging derivatives excluded.*

***BD1=Amount of deposits greater than 3% of total deposit base*

BD2=Assets (18%-15%)

RISK PARAMETERS

Investment Portfolio Parameters

Non resident issuers (portfolio volume, % Equity)

Issuer rating buckets (S&P scale)	Bond duration buckets	Portfolio available for sale					
		Dec-20	Oct-20	Sep-20	Low "<"	High ">"	Limit
From AAA to B-	*> 0 duration*	0.89%	2.38%	2.50%	55%	70%	85%
	> 2.5 duration	0.89%	2.38%	2.50%	23%	29%	36%
	> 5 Duration	0.00%	0.00%	0.00%	12%	16%	19%
From BBB to B-	*> 0 duration*	0.89%	2.38%	2.50%	29%	36%	44%
	> 2.5 duration	0.89%	2.38%	2.50%	16%	20%	24%
	> 5 Duration	0.00%	0.00%	0.00%	9%	12%	14%
From BB- to B-	*> 0 duration*	0.89%	2.38%	2.50%	12%	15%	18%
	> 2.5 duration	0.89%	2.38%	2.50%	12%	15%	18%
	> 5 Duration	0.00%	0.00%	0.00%	7%	9%	12%
Non rated	*> 0 duration*	0.00%	0.00%	0.00%	4%	5%	6%
	> 2.5 duration	0.00%	0.00%	0.00%	4%	5%	6%
	> 5 Duration	0.00%	0.00%	0.00%	4%	5%	6%
		Total portfolio					
From AAA to B-	*> 0 duration*	0.89%	2.38%	2.50%	238%	302%	365%
	> 2.5 duration	0.89%	2.38%	2.50%	238%	302%	365%
	> 5 Duration	0.00%	0.00%	0.00%	238%	302%	365%
From BBB to B-	*> 0 duration*	0.89%	2.38%	2.50%	38%	49%	59%
	> 2.5 duration	0.89%	2.38%	2.50%	38%	49%	59%
	> 5 Duration	0.00%	0.00%	0.00%	38%	49%	59%
From BB- to B-	*> 0 duration*	0.89%	2.38%	2.50%	12%	15%	18%
	> 2.5 duration	0.89%	2.38%	2.50%	12%	15%	18%
	> 5 Duration	0.00%	0.00%	0.00%	12%	15%	18%
Non rated	*> 0 duration*	0.00%	0.00%	0.00%	4%	5%	6%
	> 2.5 duration	0.00%	0.00%	0.00%	4%	5%	6%
	> 5 Duration	0.00%	0.00%	0.00%	4%	5%	6%

RISK PARAMETERS

Investment Portfolio Parameters

Resident issuers (portfolio volume, % Equity)

Issuer rating buckets (S&P scale)	Bond duration buckets	Portfolio available for sale					
		Dec-20	Oct-20	Sep-20	Low "<"	High ">"	Limit
Armenian Gov. Bonds	*> 0 duration*	12.27%	12.12%	12.59%	52%	66%	80%
	> 2.5 duration	9.51%	9.29%	9.74%	20%	25%	31%
	> 5 Duration	4.01%	4.43%	4.58%	9%	12%	14%
From AAA to Non rated, Armenian banks with score <= 10	*> 0 duration*	4.51%	4.33%	4.10%	30%	38%	46%
	> 2.5 duration	0.64%	0.58%	0.55%	14%	18%	21%
	> 5 Duration	0.00%	0.00%	0.00%	7%	9%	12%
From BBB to Non rated, Armenian banks with score <=7	*> 0 duration*	3.48%	3.35%	3.16%	14%	18%	21%
	> 2.5 duration	0.00%	0.00%	0.00%	11%	14%	17%
	> 5 Duration	0.00%	0.00%	0.00%	6%	8%	10%
From BB to Non rated, Armenian banks with score <= 6	*> 0 duration*	3.14%	3.01%	2.82%	4%	5%	6%
	> 2.5 duration	0.00%	0.00%	0.00%	4%	5%	6%
	> 5 Duration	0.00%	0.00%	0.00%	4%	5%	6%
		Total portfolio					
Armenian Gov. Bonds	*> 0 duration*	59.19%	60.06%	60.38%	133%	169%	205%
	> 2.5 duration	32.78%	33.78%	34.13%	133%	169%	205%
	> 5 Duration	19.43%	20.70%	20.88%	133%	169%	205%
From AAA to Non rated, Armenian banks with score <= 10	*> 0 duration*	4.74%	4.55%	4.32%	34%	43%	52%
	> 2.5 duration	0.64%	0.58%	0.55%	34%	43%	52%
	> 5 Duration	0.00%	0.00%	0.00%	34%	43%	52%
From BBB to Non rated, Armenian banks with score <=7	*> 0 duration*	3.70%	3.57%	3.38%	14%	18%	21%
	> 2.5 duration	0.00%	0.00%	0.00%	14%	18%	21%
	> 5 Duration	0.00%	0.00%	0.00%	14%	18%	21%
From BB to Non rated, Armenian banks with score <= 6	*> 0 duration*	3.14%	3.01%	2.82%	4%	5%	6%
	> 2.5 duration	0.00%	0.00%	0.00%	4%	5%	6%
	> 5 Duration	0.00%	0.00%	0.00%	4%	5%	6%

RISK PARAMETERS

Investment Portfolio Parameters

Portfolio Parameters (%, Equity)*	Dec-20	Oct-20	Sep-20	Low "<"	High ">"	Limit
One issuer risk	1.51%	2.38%	2.50%	6%	8%	10%
One country risk	0.89%	2.38%	2.50%	15%	20%	25%
One sector risk	2.24%	3.62%	3.59%	18%	24%	30%
Maximum repricing loss of AFS	0.00%	0.00%	0.00%	0.68%	0.79%	0.96%
Duration: Total Portfolio	3.10	3.12	3.22	4	5	7
Duration: Total AFS portfolio	3.27	3.32	3.46	3	4.5	6
Duration: resident AFS portfolio	3.28	3.36	3.51	3	4.5	6
Duration: non resident AFS portfolio	2.97	3.03	3.11	3	4.5	6

Available for sale portfolio	Dec-20	Oct-20	Sep-20	Low "<"	High ">"	Limit
> 0 duration	17.67%	18.82%	19.19%	75%	95%	115%
> 2.5 duration	11.04%	12.25%	12.80%	30%	38%	47%
> 5 Duration	4.01%	4.43%	4.58%	15%	19%	23%
Total portfolio	**Dec-20**	**Oct-20**	**Sep-20**	**Low "<"**	**High ">"**	**Limit**
> 0 duration	64.82%	66.99%	67.20%	260%	330%	399%
> 2.5 duration	34.31%	36.74%	37.19%	260%	330%	399%
> 5 Duration	19.43%	20.70%	20.88%	260%	330%	399%

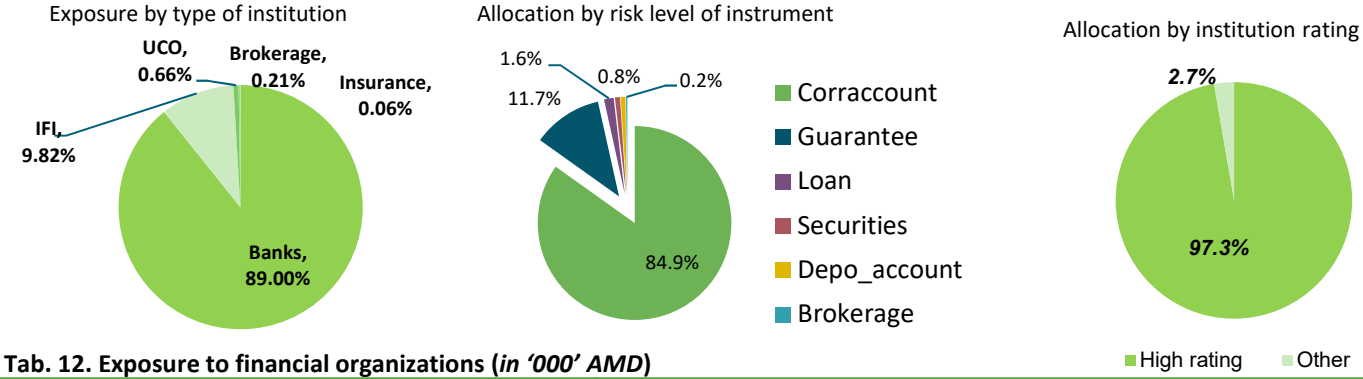
Simulated VaR for Security portfolio (mil AMD)				
Confidence level	**Value**	**%, AFS Portfolio**	**%, Equity**	**Risk Zone**
95%	**300**	1.51%	0.27%	Low
97.5%	**353**	1.77%	0.32%	Low
99%	**402**	2.02%	0.37%	Low

*The bonds issued by Armenian government, AAA rated companies (S&P equivalent) and Central banks are not included in calculation of concentration parameters.

COUNTERPARTY CREDIT RISK

COUNTERPARTY CREDIT RISK

Fig. 16 Credit exposure to financial organizations: risk indicators



Tab. 12. Exposure to financial organizations (*in '000' AMD*)

Counterparty Rating (Moody's/S&P/Fitch)	Actual Exposure	Approved Limits				
		Intraday 0 days	Settlement 0-2 days	2-30 days	30-90 days (base limit)	90-180 days
CENTRAL BANK OF ARMENIA	**231,223,391**	-	-	-	-	-
A3 / A- / NR	**5,923,334**	14,500,000	14,500,000	14,500,000	14,500,000	7,000,000
Aa3 / A+ / AA-	**5,277,728**	33,500,000	33,500,000	14,500,000	14,500,000	7,000,000
A1 / BBB+ / BBB	**4,703,310**	16,500,000	16,500,000	14,500,000	14,500,000	7,000,000
Baa3 / NR / BBB	**2,030,129**	18,800,000	18,800,000	18,800,000	-	-
NR / NR / NR	**1,836,523**	9,000,000	4,500,000	3,600,000	1,800,000	900,000
Ba1 / BB+ / BB+	**1,313,750**	12,500,000	12,500,000	12,500,000	12,500,000	6,500,000
NR / BBB+ / NR	**604,420**	24,000,000	24,000,000	-	-	-
Ba3 / NR / B+	**528,866**	6,000,000	3,000,000	2,400,000	1,200,000	600,000
Ba2 / NR / BB-	**340,422**	14,500,000	14,500,000	14,500,000	9,500,000	4,750,000
Baa3 / BBB- / BBB	**256,086**	14,500,000	14,500,000	12,500,000	12,500,000	6,500,000
Baa1 / BBB / BBB-	**192,405**	16,500,000	16,500,000	14,500,000	14,500,000	7,000,000
Baa1 / NR / A-	**124,372**	12,500,000	12,500,000	12,500,000	12,500,000	6,500,000
NR / NR / NR	**80,718**	100,000	100,000	-	-	-
NR / BBB- / BBB-	**27,205**	12,500,000	12,500,000	12,500,000	12,500,000	6,500,000
NR / NR / NR	**16,217**	25,000	25,000	-	-	-

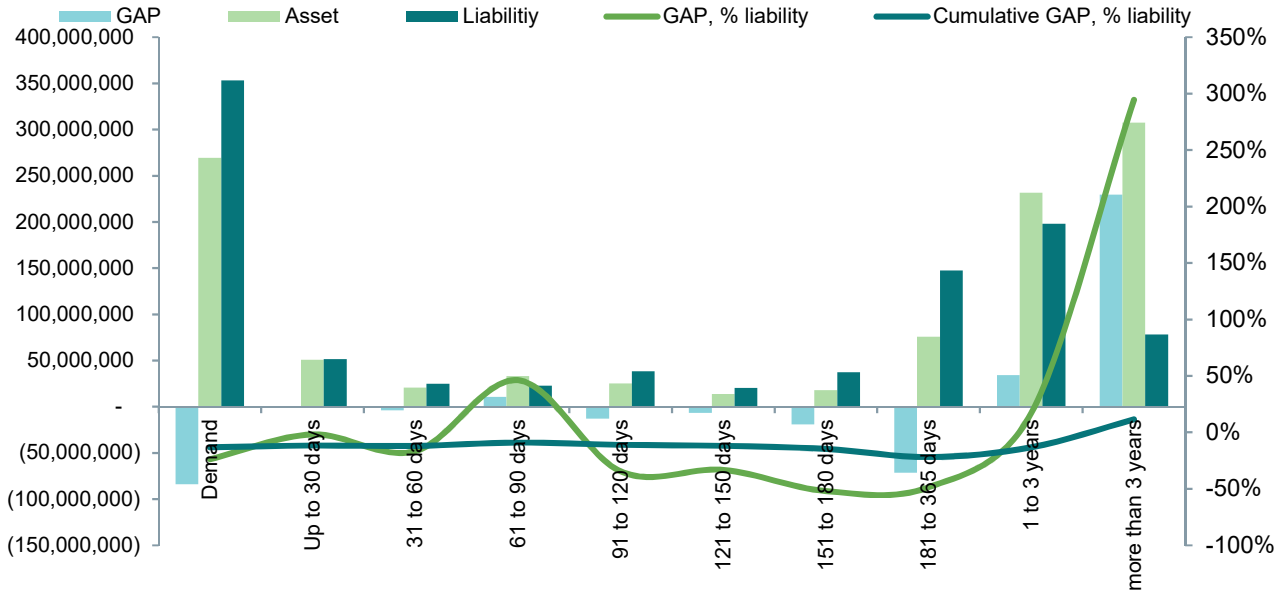
HIGHLIGHTS

- Almost 89% of exposure to financial institutions is concentrated in banks and 96% are short term and non risky instruments.
- Bank allocations are mostly concentrated in banks with high rating: over BBB or large systemic banks.
- Russian banks' limits are under special control amid vulnerable and volatile economy plus US sanction's risks. Only large systemic banks or banks with extra strong financials have credit limits.

LIQUIDITY RISK

LIQUIDITY RISK

Fig. 17. Liquidity GAP (in '000' AMD).



HIGHLIGHTS

- As at the end of the year there was a large cushion above the regulatory limits for liquidity: AMD 87b of immediate outflow.
- The gap is negative for short term assets and liabilities. Total interest rate risk (annualized) in Banking book is estimated at the level of 2.6% of Equity.

Tab. 13. Liquidity ratios

Big depositor concentration normative	Q4-20	Q3-20	Q4-19	Q3-19	Limit
Excess liquidity / (BD1×30%+BD2×70%)*	216%	416%	263%	212%	>100%

Regulatory liquidity ratios	**CURRENT VALUES**	**LIQUIDITY CAPACITY**		
		In p.p.	*In b AMD*	*Individual Deposits instant outflow*
Total Liquidity Ratio (HLA/Total Assets)	22.5%	7.5	87	32%
Instant Liquidity Ratio (HLA/Demand liabilities)	85.3%	25.3	94	35%

Other liquidity indicators	**HLA***	**Excess liquidity**
As % of total deposit base	37%	15%
As % of total demand deposits plus time deposits of individuals	43%	17%

*BD1=Amount of deposits greater than 3% of total deposit base; BD2=Assets (18%-15%)

CREDIT RISK

As of 31 December 2020

CREDIT RISK

Credit portfolio general structure, quality

Tab. 14. Credit risk appetite (mln. AMD).

	Actual losses		% to capital, Q4 2020	Risk level
	YTD	Q4 2020		
Total credit risk appetite	13,133	2,792	11.5%	Limit (7.57%)
Corporate	8,326	1,204	7.3%	Limit (5.02%)
Retail	4,807	1,588	4.2%	Limit (2.55%)

Tab. 15. Portfolio general structure.

Item	Portfolio		LLR / Portfolio	NPL		NPL Risk Level	Risky loans	Banking sector NPL *30.11.20
	Amount	Quantity		NPL, %	Quantity			
Total	720,087	124,559	1.8%	4.2%	8,710	Medium 3.5%-5%	3.2%	5.4%
Corporate	487,508	622	1.7%	4.6%	18	Medium 3.5%-5.5%	2.3%	3.9%
Retail	218,790	123,103	2.2%	3.3%	8,691	Low <4.5%	5.2%	8.0%

*The banking sector figures received from CBA and the last update is as of Nov 2020.

HIGHLIGHTS

- Total risk appetite (11.5%), Corporate risk appetite (7.3%) and Retail risk appetite (4.2%) have exceeded the acceptable risk level.
- Total NPL ratio (4.2%) is in Medium risk zone, and Corporate NPL ratio (4.6%) is in Medium risk zone.
- The Retail NPL (3.3%) is in low risk zone and significantly low than Banking sector's NPL ratio.

CREDIT RISK

Stage 3 Restructured loans

Tab. 15.1 Restructured loans

Client's Sector	Share in portfolio	Rating		Loan to Capital	DSCR	LTV
RETAIL TRADE	0.04%	B	1.6	0.26%	3.43	59%
WHOLSALE TRADE	0.02%	BB	1.9	0.13%	1.53	120%
CULTURE, SOCIAL WORK ACTIVITIES	0.01%	B	1.8	0.05%	5.17	115%
TRANSPORTATION	0.01%	BBB	2.1	0.04%	1.67	57%
RETAIL TRADE	0.01%	BBB	2.1	0.04%	1.62	65%
PUBLIC FOOD	0.00%	BB	1.8	0.03%	4.13	37%
RETAIL TRADE	0.00%	-	-	0.01%	1.68	96%
INDUSTRY	0.00%	BBB	2.2	0.01%	1.77	80%
ACCOMMODATION AND FOOD SERVICE ACTIVIES	0.00%	-	-	0.00%	-	-
OTHER SERVICES	0.00%	-	-	0.00%	-	-
LOAN TO INDIVIDUAL	0.06%			0.42%		
Total / Weighted average	**0.15%**	**B**	**1.7**	**0.99%**		

HIGHLIGHTS

- The Stage 3 restructured loans in the total portfolio are nearly 0.15% which comprises 0.99% of the capital.
- The weighted average rating is B (Moderate risk).

CORPORATE CREDIT RISK

Key metrics

NPL, Restructures and Key risk indicators

- ✓ *The NPL ratio of corporate loans has decreased Q-o-Q (4.6%, Dec-2020 / 5.0%, Sep-2020) and is in the Medium risk zone.*
- ✓ *The Stage 3 restructured loans volume of corporate loans in total portfolio is nearly 0.15% which comprises 0.99% of capital.*
- ✓ *The risky loans volume of corporate loans in corporate portfolio are nearly 2.3% which comprises 10.0% of capital.*

Sector risk

- ✓ *The overdue loans volume is high (overdue loans amount 4.5%) compared to the banking system (overdue loans amount 3.9%).*
- ✓ *The Trade, Agriculture, Mining, Culture activity and Professional activity sectors' overdue loans level are in the high risk zone (>5.5%) and the result of 1-2 borrower group.*

Politically exposed borrowers risk

- ✓ *The share of politically exposed borrower's loan in corporate portfolio is nearly 13.4% and 59.6% in Equity respectively.*
- ✓ *The extremely risky politically exposed borrowers exposure with non-sustainable businesses is about 2.0% of portfolio and the estimated loss given termination scenario is low (about 0.3% of Equity).*

Risk map of portfolio and Rating migration

- ✓ *The Business loans weighted average rating continue the positive migration dynamics in Moderate risk zone B.*
- ✓ *The rated portfolio in "Low risk" and "Moderate" risk zone by amount is (89%) and quantity (94%).*

20 Largest borrowers

- ✓ *20 Largest Single Party Exposures to Capital ratio is 178% (EBRD covenant is <200%) without deviation from covenant.*
- ✓ *There is 1 Borrower with negative outlook in Top 20 portfolio.*
- ✓ *There are 2 Unhedged borrowers in Top 20 borrowers with DSCR value less than one, which could be a subject for provisioning.*

Product risk

- ✓ *Overdraft and LE lending are in High Risk zone with Overdue loans.*

Environmental and Social risk

- ✓ *Nearly 70% of corporate loan portfolio is concentrated in Low and Medium risk zone, the volume of the exclusion list clients in the total loan portfolio is nearly 1% (<8%).*

Monitoring coverage

- ✓ *The monitoring coverage as of Q4 2020 is 45%, the average monitoring coverage for 2020 is 54% (without deviation of the minimum benchmark 50%).*

Collateral Insurance coverage distribution

- ✓ *Portfolio collateral base insurance is concentrated in one insurance company. Nearly 66% of collaterals are insured.*

Lending risk parameters

- ✓ *The risk on Corporate unsecured portfolio estimated at the level of 15% of Equity (the Risk appetite limit is 5%). The risk on Retail SME unsecured portfolio is very low.*

CORPORATE CREDIT RISK

Key metrics

Tab. 16. Key risk indicators as of 31.12.2020

IFRS result indicators, %		Dec-20	Sep-20	Dec-19
Result KRI's	NPL	5.8%	5.9%	7.2%
	LLR	2.4%	2.5%	2.9%
	Overdue 90+	2.3%	2.5%	0.0%
Internal result indicators, %				
Result KRI's	Overdue loans	3.4%	3.2%	0.4%
	LLR by CB	5.1%	5.1%	2.5%
	Write off loans	5.3%	5.4%	5.4%
Quality KRI's	FPD (3+)	0.0%	0.1%	0.0%
	FPD, SPD,TPD (3+)	0.3%	0.4%	0.5%
Early warning KRI's	Overdue one off 10+	2.8%	3.0%	1.3%
	Overdue one off 45+	0.4%	0.5%	0.0%
	Overdue during a month	3.9%	4.6%	3.3%
	Loans classified 2 times during 1 year	0.6%	0.5%	0.0%

HIGHLIGHTS

- 4 of 10 KRI's are in High risk zone. High risk level of "Write off" loans still was due to one large borrower.

Fig. 18. Bank portfolio sectors' NPL dynamics

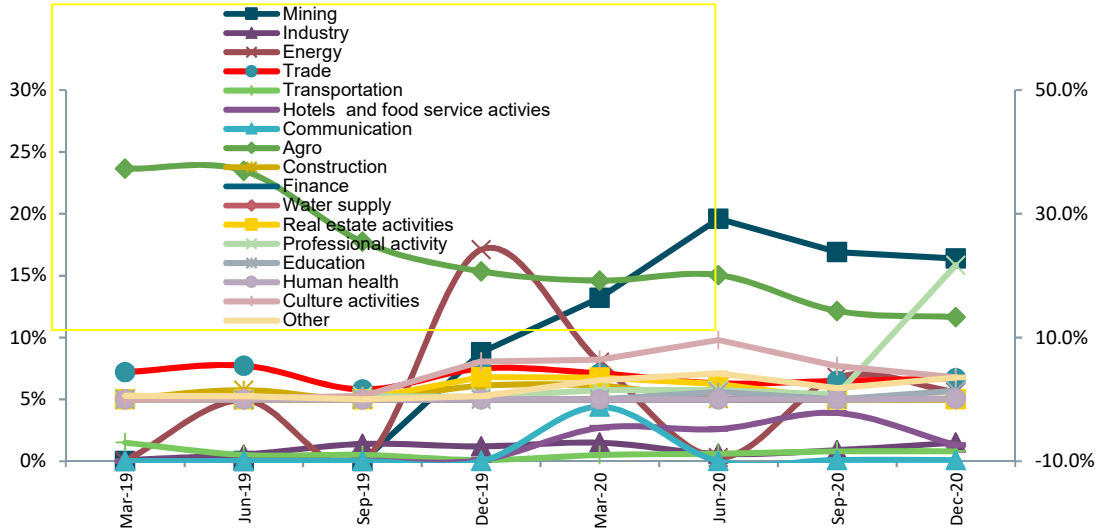
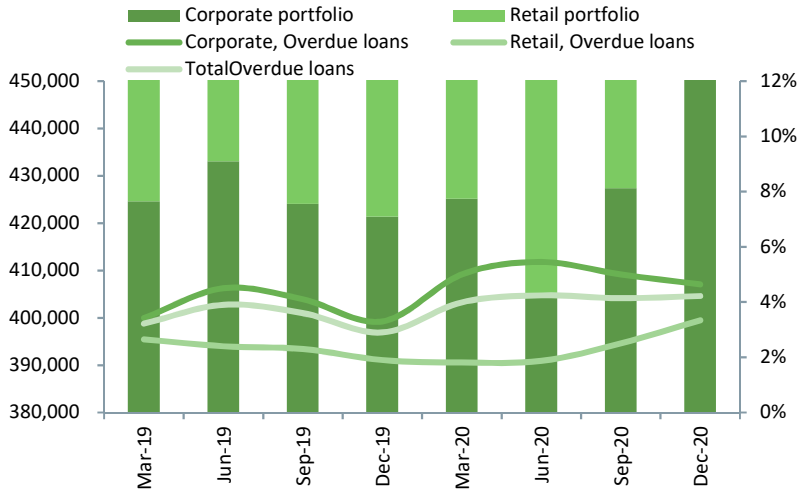


Fig. 19. Bank loan portfolio amount and NPL dynamics



CORPORATE CREDIT RISK

Sector risk

Tab. 17. Portfolio risk distribution by sectors (mil. AMD)

Sector	Dec-20		Sep-20		Nov-20 Banking system	
	Portfolio	Classified loans %*	Portfolio	Classified loans %*	Portfolio	Classified loans %*
Trade	115,335	6.7%	111,882	6.5%	538,591	4.3%
Real estate activities	25,801	0.0%	24,150	0.0%	48,316	0.0%
Power	44,796	5.6%	29,734	6.8%	204,257	5.8%
Hospitality and catering	51,957	1.3%	50,509	3.9%	185,091	9.6%
Industry	31,900	1.5%	27,645	0.9%	319,006	7.4%
Agriculture	26,585	13.3%	21,141	14.3%	188,081	6.3%
Construction	37,297	0.1%	37,552	0.1%	259,086	1.2%
Communication	27,011	0.1%	8,824	0.1%	61,558	7.0%
Other	6,170	3.5%	6,121	1.8%	198,780	2.0%
Transportation	39,319	0.8%	35,221	0.8%	73,538	0.0%
Mining	34,472	16.4%	35,090	16.9%	112,357	0.0%
Professional activity	863	21.7%	787	0.8%	37,013	0.0%
Human health	6,205	0.1%	5,826	0.0%	15,227	0.0%
Culture activities	1,582	3.6%	1,488	5.4%	24,780	0.0%
Education	475	1.4%	466	0.0%	9,841	0.0%
Finance	21,814	0.0%	19725	0.0%	268,004	0.0%
Water supply	9	0.0%	10	0.0%	757	0.0%
Total	**471,592**	**4.5%**	**416,171**	**5.1%**	**2,544,283**	**3.9%**

HIGHLIGHTS

- The Trade, Power, Agriculture, Mining, Professional activity sectors' overdue loans are the high risk zone (>5.5%) and almost all of them are over the figure of Banking system.

*Loans classified as non performing by CBA classification

CORPORATE CREDIT RISK

TOP 10 impaired loans

TOP 10 impaired loans (mil AMD)				
Client's sector	Exposure	% Corp. portfolio	Provision	Stages by IFRS9
TELECOMMUNICATION	8,228	1.7%	987	2
MINING	5,692	1.2%	2,150	3
RETAIL TRADE	5,119	1.1%	2,394	3
WHOLESALE TRADE	5,039	1.0%	81	3
ENERGY	2,112	0.4%	910	2
AGRICULTURE	1,208	0.2%	482	3
Industry	848	0.2%	361	3
Industry	670	0.1%	144	3
HOTEL AND CATERING	662	0.1%	19	3
WHOLESALE TRADE	636	0.1%	220	3
TOTAL	30,214		7,747	

HIGHLIGHTS

- TOP 10 impaired corporate loans net amount is 20.5% of Equity.
- The total provisions formed for this loans is 7.1% of Equity.

CORPORATE CREDIT RISK

PEPs' Post Revolution Stress Test Results

Loan portfolio structure

	In AMD	In USD
Corporate loans	487.5 B	$ 928.6.3 M
of which LE	*353.8 B*	*$ 673.9 M*
Capital	109.7 B	$ 209.0 M

PEPs related loans risk

PEPs' loans	Portfolio	% in Corporate portfolio	Probable loss based on termination scenario		
			Amount	% in Equity	% in Corporate portfolio
Extremely risky, non sustainable business loans	*$18,846,693*	*2.0%*	*$517,148*	*0.25%*	*0.06%*
Sustainable businesses loans	*$105,657,736*	*11.4%*	*$0.0*	*0.00%*	*0.00%*
TOTAL	**$124,504,429**	**13.4%**	**$517,148**	**0.25%**	**0.06%**

HIGHLIGHTS

- The share of politically exposed borrower's loans in corporate portfolio is nearly 13.4% and 59.6% in Equity respectively.
- The total PEPs' borrowers (with non-sustainable businesses) estimated loss given termination scenario is low (about 0.25% of Equity) due to strong pledge coverage.
- The extremely risky politically exposed borrowers exposure with non-sustainable businesses is about 2.0% of portfolio and the estimated loss given termination scenario is low (about 0.25% of Equity).
- The politically exposed borrowers exposure with sustainable business is about 11.4% of portfolio and the estimated loss given termination scenario is low (0.0% of Equity).

Fig. 19.1. Environmental risk distribution

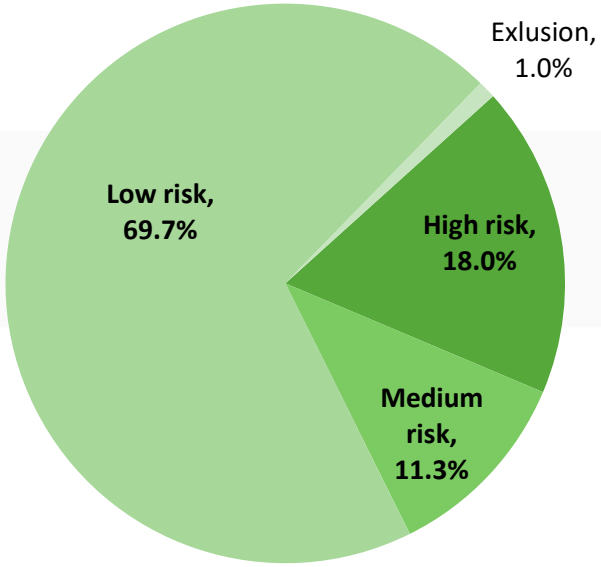
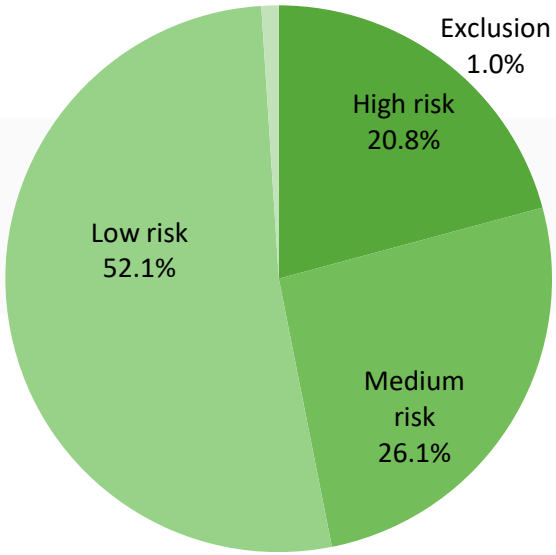


Fig. 19.2. Social risk distribution



HIGHLIGHTS

- **Environmental risk:** Nearly 69.7% of Low risk, 11.3% of Medium risk, 18% of High risk, 1% of excluded activities.
- **Social risk**: Nearly 52.1.% of Low risk, 26.1.% of Medium risk, 20.8% of High risk, 1% of excluded activities.
- There are no loans with High "A" environmental and social risk level.
- **Exclusion:** The limit is 8% only for alcohol and tobacco.

Tab. 18. E&S risks distribution in portfolio by risk classification and E&S components (mln. AMD) as of 2020 Q4

E&S risk components	High risk		Medium risk		Low risk		exclusion		TOTAL	
%	Vol.	Num.	Vol.	Num.	Vol.	Num.	Vol.	Num.	Vol.	Num.
Environmental	94,255	161	59,085	125	364,212	5,493	5,350	26	522,902	5,805
%	18.0%	2.8%	11.3%	2.2%	69.7%	94.6%	1.0%	0.4%	100%	100%
Social	108,775	170	136,394	239	272,383	5,370	5,350	26	522,902	5,805
%	20.8%	2.9%	26.1%	4.1%	52.1%	92.5%	1.0%	0.4%	100%	100%

CORPORATE CREDIT RISK

Concentration risk, big borrowers

Tab. 19. Top 20 borrowers risk assessment

Client's Sector	Share in portfolio	Rating		Loan to Capital	Classified	Risky	RMC negative outlook
MINING	2.6%	B	1.6	13.7%	1	-	Stable
AGRICULTURE	2.5%	BBB	2.1	13.1%	1	-	Stable
ENERGY	2.5%	B	1.7	13.1%	1	-	Stable
TELECOMMUNICATION	2.5%	BB	1.9	13.0%	1	-	Stable
WHOLESALE TRADE	1.9%	BB	1.9	9.7%	1	-	Stable
WHOLESALE TRADE	1.8%	B	1.7	9.3%	1	-	Stable
ENERGY	1.7%	B	1.7	9.1%	1	-	Stable
MINING	1.7%	BB	1.9	9.0%	1	-	Stable
TRANSPORTATION	1.6%	B	1.6	8.3%	1	-	Negative
TRANSPORTATION	1.6%	CCC	1.5	8.3%	1	-	Stable
AIR TRANSPORTATION	1.5%	BB	1.9	8.0%	1	-	Stable
MINING	1.5%	BBB	2.0	8.0%	1	-	Stable
HOTEL AND CATERING	1.5%	BB	2.0	7.7%	1	-	Stable
ENERGY	1.5%	B	1.5	7.7%	1	-	Stable
TELECOMMUNICATION	1.4%	B	1.6	7.5%	1	-	Stable
TRANSPORTATION	1.4%	A	2.3	7.1%	1	-	Stable
CONSTRUCTION	1.2%	BB	1.9	6.5%	1	-	Stable
CONSTRUCTION	1.2%	BB	1.9	6.3%	1	-	Stable
WHOLESALE TRADE	1.2%	B	1.6	6.3%	1	-	Stable
WHOLESALE TRADE	1.2%	BB	1.8	6.3%	1	-	Stable
Total / Weighted average	**34.1%**	**BB**	**1.8**	**177.9%**			

HIGHLIGHTS

- There are some borrowers with negative outlook in Top 20 portfolio.
- The weighted average rating is BB (Acceptable risk).

*Moody's long term foreign currency rating

CORPORATE CREDIT RISK

Big borrowers under FX risk

Tab. 19.1 Top borrowers under FX risk

Client's Sector	Share in portfolio	Rating		Loan to Capital	Hedging	DCSR after stress
MINING	2.6%	B	1.6	13.7%	Hedged	1.3
AGRICULTURE	2.5%	BBB	2.1	13.1%	Hedged	2.4
ENERGY	2.5%	B	1.7	13.1%	Unhedged	3.5
TELECOMMUNICATION	2.5%	BB	1.9	13.0%	Unhedged	1.4
WHOLESALE TRADE	1.9%	BB	1.9	9.7%	Hedged	1.2
WHOLESALE TRADE	1.8%	B	1.5	9.3%	Hedged	1.2
MANUFACTURING	1.7%	B	1.7	9.1%	Unhedged	1.1
MINING	1.7%	BB	1.9	9.0%	Hedged	1.8
TRANSPORTATION	1.6%	CCC	1.3	8.3%	Unhedged	0.5
TRANSPORTATION	1.6%	BB	1.8	8.3%	Hedged	1.1
AIR TRANSPORTATION	1.5%	BB	1.9	8.0%	Hedged	1.3
MINING	1.5%	BBB	2.0	8.0%	Hedged	1.9
HOTEL AND CATERING	1.5%	BB	2.0	7.7%	Hedged	1.8
ENERGY	1.5%	B	1.5	7.7%	Unhedged	1.2
TELECOMMUNICATION	1.4%	B	1.6	7.5%	Unhedged	0.6
TRANSPORTATION	1.4%	A	2.3	7.1%	Hedged	2.9
CONSTRUCTION	1.2%	BB	1.9	6.5%	Hedged	1.3
CONSTRUCTION	1.2%	BB	2.0	6.3%	Unhedged	1.3
WHOLESALE TRADE	1.2%	B	1.5	6.3%	Hedged	1.8
WHOLESALE TRADE	1.2%	BBB	2.1	6.3%	Unhedged	2.2
Total / Weighted average	**34.1%**		**1.8**	**177.9%**		

HIGHLIGHTS

- There are 2 Unhedged borrower in Top 20 borrowers with DSCR value less than one.

CORPORATE CREDIT RISK

Product risk

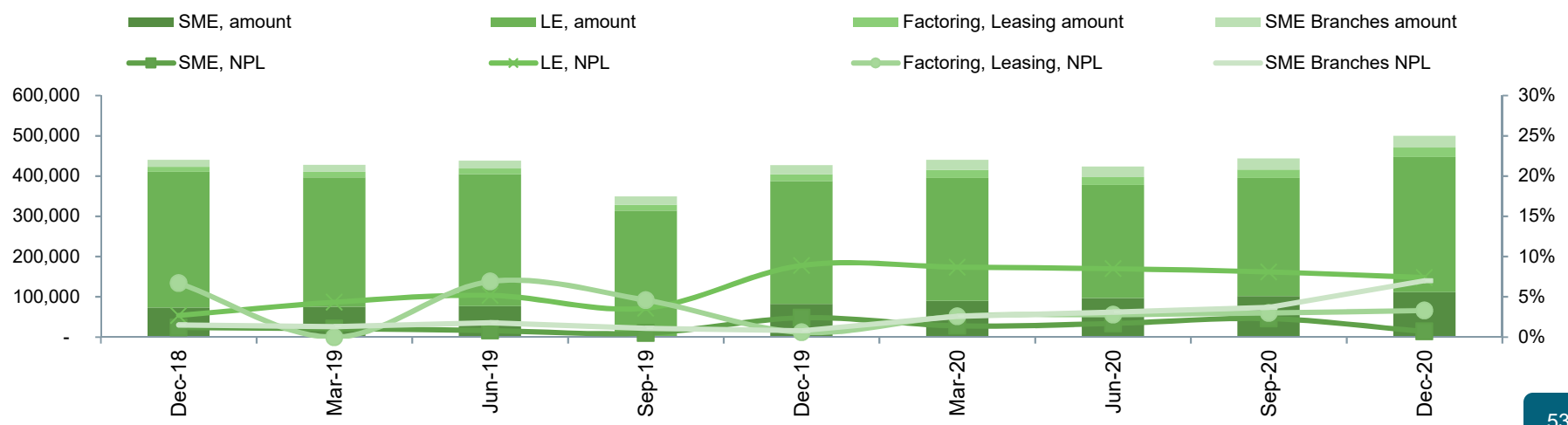
Tab. 20. Portfolio distribution by products (mil AMD)

	Dec. 2020				Sep. 2020			
Products	Amount	%, portfolio	Quantity	Overdue loans, %	Amount	%, portfolio	Quantity	Overdue loans, %
LE lending	335,976	66.6%	112	7.4%	293,667	65.3%	112	8.1%
SME Head office	111,187	22.0%	263	0.7%	101,679	22.6%	267	2.3%
SME branches	28,686	5.7%	1,103	7.0%	28,020	6.2%	1,106	3.7%
Overdraft	4,716	0.9%	61	8.8%	5,911	1.3%	56	6.5%
Leasing	12,314	2.4%	236	3.3%	10,089	2.2%	224	3.0%
Factoring	11,552	2.3%	18	0.0%	10,442	2.3%	15	0.0%
TOTAL	**504,431**	**100%**	**1,793**	**5.7%**	**449,809**	**100%**	**1,780**	**6.2%**

HIGHLIGHTS

- Overdraft and LE lending are in High Risk zone with Overdue loans.

Fig. 20. Corporate loans products amount and NPL



CORPORATE CREDIT RISK

Risk map of portfolio, Rating

Tab. 21. Portfolio distribution by quantity rating zones as of 31/12/2020 (mln. AMD)

Low risk				Moderate risk			High risk			Unacceptable risk
AAA	AA	A	BBB	BB	B	CCC	CC	C	D	D-
(2.75-3)	(2.5-2.75)	(2.25-2.5)	(2-2.25)	(1.75-2)	(1.5-1.75)	(1.25-1.5)	(1-1.25)	(0.75-1)	(0.5-0.75)	(0-0.5)
Exceptionally low risk	Very low risk	Low risk	No essential risk	Acceptable risk	Certain risk	Risky	Marginal risk	High risk	Unacceptable risk	Default
By amount	22,874or 4.66%		412,228or 84.04%			48,059or 9.80%			7,383or 1.51%	
By quantity	509or 30.76%		1048or 63.32%			96or 5.80%			2or 0.12%	
Total Rated portfolio by amount -	**500,643 (Nearly 100% of business loan portfolio)**									

HIGHLIGHTS

- "Low risk" and "Moderate risk" zones volume is nearly 89%.
- Business loans weighted average rating is in Certain risky zone B.

Tab. 22. Business loan portfolio weighted average rating

	Dec-20			Sep-20		
Portfolio rating	1.73	B	Certain risk	1.72	B	Certain risk
Portfolio rating without pledge	1.78	BB	Acceptable risk	1.77	BB	Acceptable risk
Portfolio rating: objective indicators	2.09	BBB	Non-significant risk	2.04	BBB	Non-significant risk

CORPORATE CREDIT RISK

Risk map of portfolio, rating

Tab. 23. Portfolio distribution by rating zones (mln. AMD) 31/12/2020

	LE, SME			Branches SME		
Risk component/Rating	Dec-20	Sep-20	Jun-20	Dec-20	Sep-20	Jun-20
* Sector risk	1.1	1.1	1.1	1.0	1.0	1.1
Competition	1.7	1.8	1.8	0.7	0.7	0.7
Diversification	1.3	1.3	1.5	1.4	1.4	1.4
*Technology/technical risk	2.2	2.2	2.2			
Seasonality risk	1.6	1.5	1.5	1.0	1.0	1.0
Startup company/business experience	2.5	2.5	2.5	2.3	2.3	2.4
* Political risk	1.1	1.0	1.0			
* Management level	1.8	1.9	1.9			
Accuracy and completeness of submitted information	2.0	2.0	1.9	1.4	1.4	1.5
Cooperation with the Bank	1.8	1.8	1.8	1.3	1.3	1.4
*Environmental and social risk	1.8	1.8	1.8			
*Currency risk	1.3	1.3	1.2			
*Country risk	1.5	1.5	1.5			
Days overdue	2.8	2.8	2.8	2.3	2.3	2.4
Previous borrowing experience (years)	2.4	2.4	2.3	2.0	2.0	2.1
Loan classification or restructuring	2.1	2.2	2.2	1.7	1.8	1.9
* Findings of most recent monitoring	1.6	1.5	1.6			
Debt coverage ratio	1.7	1.6	1.6	2.1	2.1	2.2
Current liquidity	1.5	1.5	1.7	1.8	1.9	2.0
Leverage	1.1	1.1	1.2	1.4	1.5	1.6
*Flows on bank accounts	2.0	2.0	2.0			
*Dynamics, growth of business/profitability	1.5	1.5	1.5			
Other income sources	1.5	1.5	1.5	1.3	1.3	1.3
LTV	2.1	2.0	1.9	2.3	2.3	2.4
Pledge quality and structure	0.9	0.9	0.9	1.3	1.3	1.4
Quality of guarantees	1.3	1.3	1.3	1.2	1.2	1.3
Credit history	1.7	1.8	1.8	1.4	1.4	1.5
*Cooperation with the Bank	1.6	1.7	1.7			
TOTAL	**1.7**	**1.7**	**1.7**	**1.7**	**1.8**	**1.8**

HIGHLIGHTS

- The basic risk components such as Sector risk, Diversification, Political risk, Currency risk, Leverage, Quality of guarantees are still in “High” risk zone, the Pledge quality and structure is in Unacceptable risk zone.

Risk category	Low risk			Moderate risk			High risk			Unacceptable risk	
Rating	AAA	AA	A	BBB	BB	B	CCC	CC	C	D	D-
Scoring domain	[2.75 ; 3.0]	[2.5 ; 2.75)	[2.25 ; 2.5)	[2.0 ; 2.25)	[1.75 ; 2.0)	[1.5 ; 1.75)	[1.25 ; 1.5)	[1.0 ; 1.25)	[0.75 ; 1.0)	[0.5 ; 0.75)	[0 ; 0.5)
Description	Negligible risk	Very low risk	Low risk	Non-significant risk	Acceptable risk	Certain risk	Risky	Borderline risk	High risk	Unacceptable risk	Default

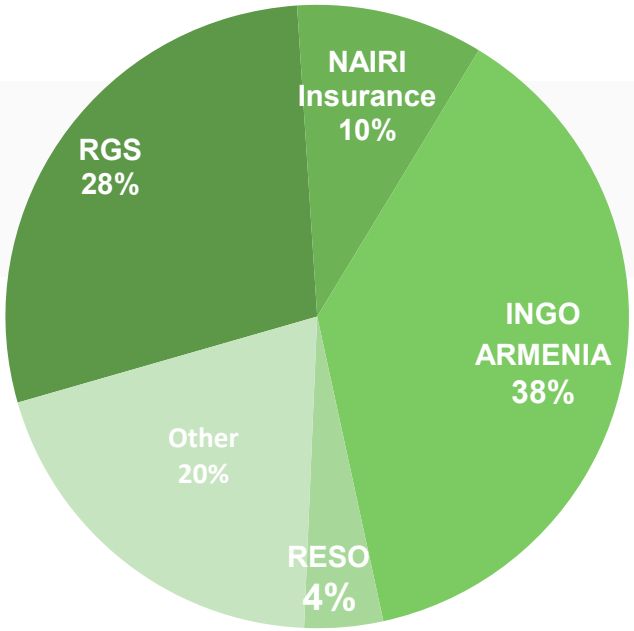
CORPORATE CREDIT RISK

Collateral Insurance coverage distribution

Tab. 25. Insurance coverage of collaterals by classes

Collateral Type	Insured	Insurance not required
Real Estate (excluding land)	68%	32%
Fixed assets	60%	40%
Inventory	51%	49%
Transport	78%	22%
Total	**66%**	**34%**

Fig. 23. Collateral Insurance coverage distribution by insurance companies



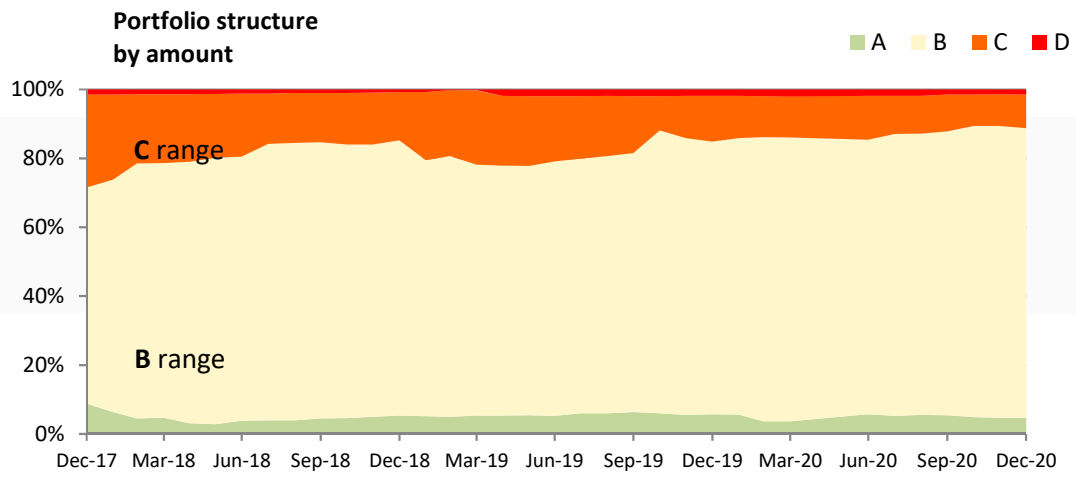
HIGHLIGHTS

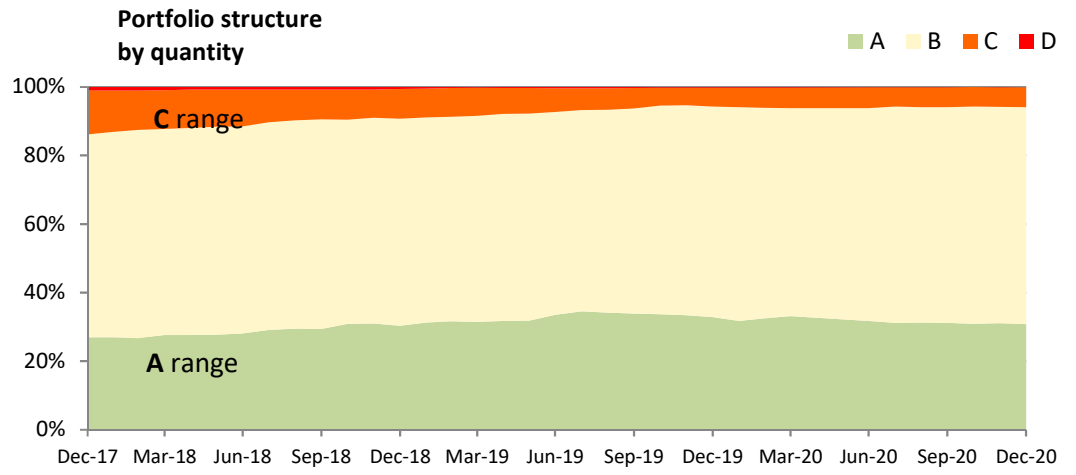
- Portfolio collateral base insurance is concentrated in Ingo Armenia insurance company.
- Nearly 66% of collaterals are insured.

CORPORATE CREDIT RISK

Rating migration

Fig. 20.1. Portfolio rating dynamics





HIGHLIGHTS

- The weighted average rating of corporate loan portfolio is stable.

CORPORATE CREDIT RISK

Portfolio monitoring and coverage

Fig. 21. Portfolio monitoring coverage by amount

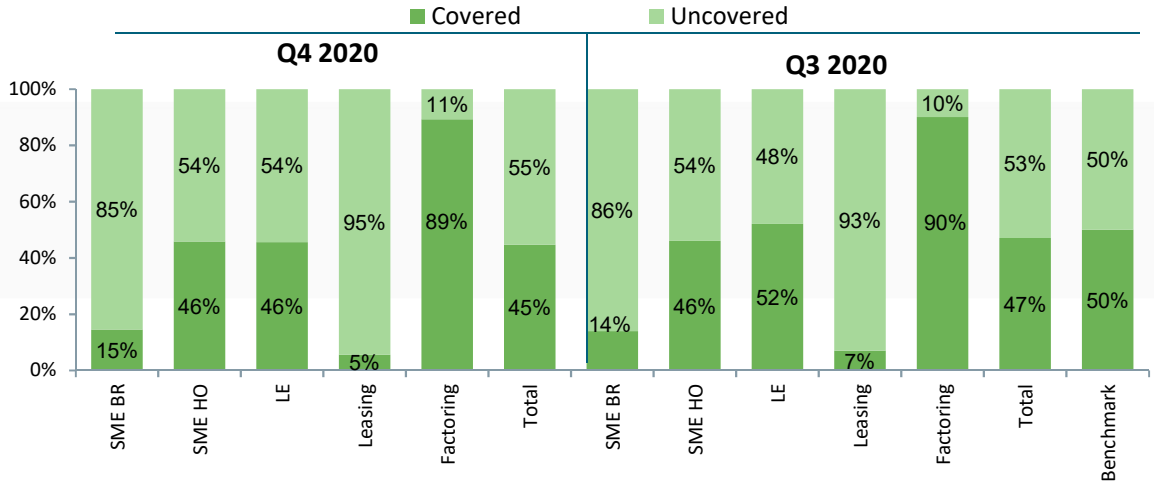
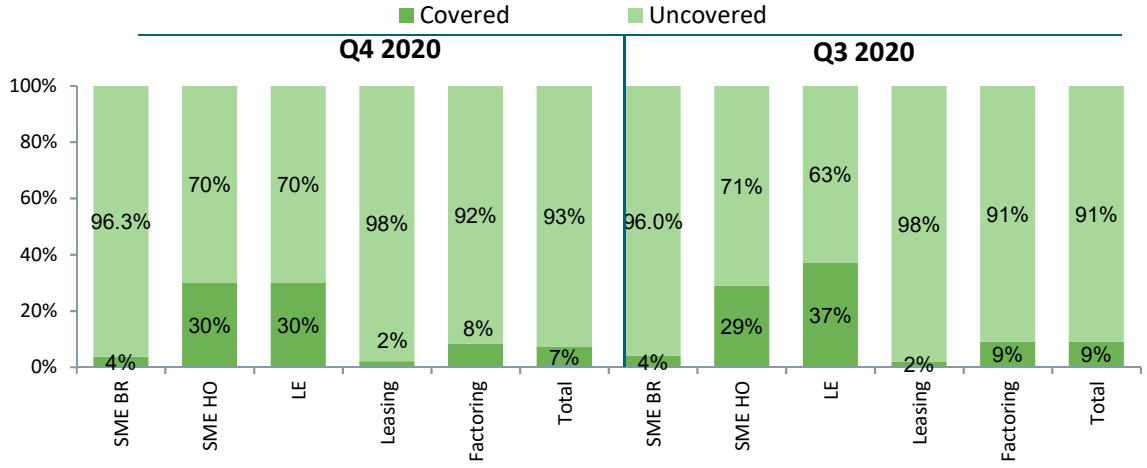


Fig. 22. Portfolio monitoring coverage by quantity



HIGHLIGHTS

- The total monitoring coverage as of Q4 2020 is 45% of the portfolio (the benchmark is 50%).
- The average monitoring coverage for 2020 is nearly 54% (the benchmark is 50%).

CORPORATE CREDIT RISK

LTV deviations: unsecured part of the portfolio

Unsecured exposures in Loan portfolio (m AMD)

Unsecured amounts	Total	Corporate	Retail SME
Unsecured part of total loan portfolio, including:	227,931	224,837	3,094
Stage 1 loans with low DSCR	25,054	24,316	738
Stage 1 loans with high DSCR	189,466	187,176	2,290
Stage 2 loans	1,870	1,812	58
Stage 3 loans	11,541	11,533	8
Loans with primary guarantee	12,123	12,123	-

Estimated expected loss on unsecured portfolio (m AMD)

Estimated losses	Total	Corporate	Retail SME
Loss on total unsecured portfolio, including:	16,575	16,441	134
Stage 1 loans with low DSCR	2,557	2,482	75
Stage 1 loans with high DSCR	1,381	1,365	17
Stage 2 loans	1,096	1,061	34
Stage 3 loans	11,541	11,533	8

HIGHLIGHTS

- The risk on Corporate unsecured portfolio estimated at the level of 15.0% of Equity.
- The risk on Retail SME unsecured portfolio is very low.

CORPORATE CREDIT RISK

Risk of loans with primary guarantee coverage

Corporate loans covered by primary guarantees *(in mil AMD)*

Borrowers' Sector	Exposure	Primary Guarantee amount
WHOLESALE TRADE	11,753	1,590
TRANSPORTATION	11,445	10,953
TRANSPORTATION	3,252	954
HOTEL AND CATERING	3,211	3,211
INDUSTRY	2,000	300
CONSTRUCTION	962	962
TRANSPORTATION	670	354
RETAIL TRADE	473	67
CULTURE, SOCIAL WORK ACTIVITIES	362	26
HUMAN HEALTH	314	81
AGRICULTURE	298	298
RETAIL TRADE	283	156
TRANSPORTATION	209	89
HOTEL AND CATHERING	197	151
WHOLESALE TRADE	195	195
OTHER SECTORS	151	62
RETAIL TRADE	117	87
CONSTRUCTION	109	102
INDUSTRY	106	31
RETAIL TRADE	92	66
REAL ESTATE ACTIVITIES	86	60
INDUSTRY	84	9
OTHER SECTORS	64	64
HOTEL AND CATHERING	53	53
ENERGY	45	45
RETAIL TRADE	43	23
TRANSPORTATION	41	41
CULTURE, SOCIAL WORK ACTIVITIES	38	38
PROFFESIONAL, SCIENTIFIC, TECHNICAL	38	38
INFORMATION AND COMMUNICATION	38	30
HOTEL AND CATHERING	34	34
HOTEL AND CATHERING	25	25
HOTEL AND CATHERING	15	1
HOTEL AND CATHERING	7	7
HOTEL AND CATHERING	4	4
Total	**36,814**	**20,207**

HIGHLIGHTS

- Primary guarantees covers only AMD 20.2b exposure, which is 4.14% of Corporate portfolio.
- The risk estimated given guarantors' default concluded to AMD 412m, which is 0.38% of Equity.

RETAIL CREDIT RISKS

Key metrics

Portfolio quality/ Key risk & early warning indicators

- ✓ Realized Risk appetite is in the "**high "** risk zone (4,2% of Equity).
- ✓ NPL is in the "**low"** risk zone (3.3% of Retail loan portfolio).

Risk profile

- ✓ **COVID 19/Conflict in neighboring Artsakh**: There is increase of Stage 2/Stage 3 loans. The Bank continues to restructure loans of COVID and conflict affected borrowers.
- ✓ **Industry:** The Bank's NPL level is lower than the NPL level in local Banking system.
- ✓ **Borrowers:** TOP 10 borrowers' share in retail portfolio is 3.3% which is 6.6% of Equity. Two clients classified Stage 2. There is no client with overdue debt.
- ✓ **Products:** 69.5% of portfolio is concentrated in 3 products (Mortgage, Scoring based lending to individuals, Retail SME). One product is in Medium risk zone (Secured consumer loans), others are in low risk zone.
- ✓ **Branches:** A large part of portfolio is disbursed by the branch Kamar (19.8%) and Head office (12.7%).Only one branch with the small portfolio (0.5% of Retail portfolio) is in high risk zone. Other branches are in low risk zone
- ✓ **Decision makers :** Risk level of portfolios approved by all acting Decision Makers is low.

RETAIL CREDIT RISKS

Key risk and early warning indicators (KRIs)

Tab. 26 Retail portfolio key risk indicators

Indicators, % Gross loan portfolio		Dec-20	Sep-20	Dec-19
IFRS result indicators	**Stage 1**	91.5%	96.2%	97.6%
	Stage 2	5.2%	1.3%	0.5%
	Stage 3	3,3%	2.5%	1.9%
	Overdue 1+	4.5%	4.6%	2.3%
	Overdue 90+	2.6%	2.2%	1.3%
	LLR	4.8%	3.3%	2.0%

HIGHLIGHTS

- **Risk indicators** have negative tendency due to COVID 19 and military conflict in neighboring Artsakh.
- Significant increase in Stage 2 is a result of loans restructuring (in the majority - grace period and prolongation).

Fig. 24. Retail portfolio quality, mil. AMD

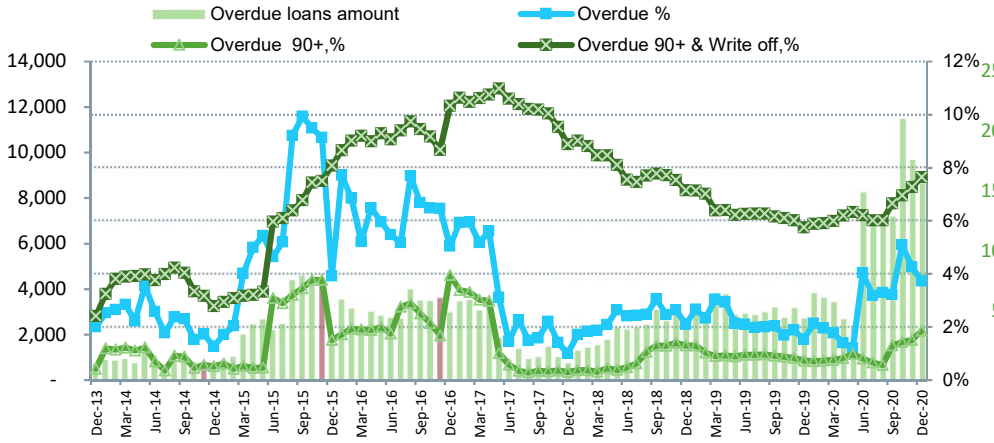
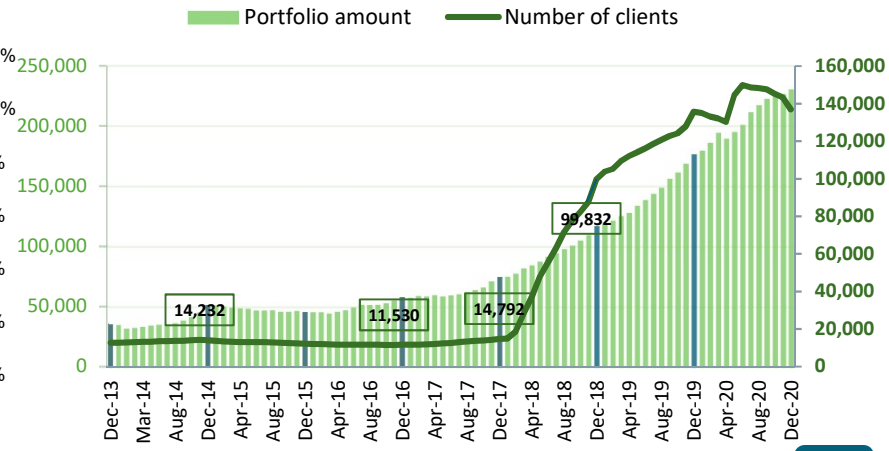


Fig. 25. Retail portfolio dynamics, mil. AMD



** - overdue end subjective classified*

RETAIL CREDIT RISKS

Product risk

Tab. 27. Individuals portfolio risk distribution by sectors (mil. AMD)

Sector	Bank Q4 2020		Banking system* Nov 2020)		Sector risks	Risk level	Risk outlook
	Portfolio	Overdue loans	Portfolio	Overdue loans and subjective classifieds			
Mortgage	110, 154	1.4% (Sep 3.2%)	459, 659	2.4%	transfers	Medium	Negative
					unemployment	Medium	Negative
					inflation	Medium	Negative
					real estate prices	Medium	Short term decreasing
Consumer	80, 101	8.6% (Sep 9.7)	936, 727	10.8%	transfers	Medium	Negative
					unemployment	Medium	Negative
					inflation	Medium	Negative
Total	196,688	4.4% (Sep 5.4)	1,396,386	8.0%			

Tab. 28 Portfolio structure by products (mil. AMD)

Products	Dec-20			Sep-20			Plan-20	
	Amount	Wgt. %	NPL Stage 3, %	Amount	Wgt. %	NPL Stage 3, %	Amount	Wgt. %
Total portfolio	**232,579**	**100%**	**3.3%**	224,238	100%	2.5%	**210, 285**	**100%**
SME	29,044	12.5%	4.4%	28,626	12.8%	2.6%	35, 149	17%
SME online + SME tab	6,912	3.0%	4.0%	6,455	2.9%	2.1%		
Mortgage	106,363	45.7%	1.8%	100,934	45.0%	1.0%	87, 070	41%
Investment loans	2,974	1.3%	0.0%	2,819	1.3%	0.0%	2, 390	1%
Car loans	4,160	1.8%	3.0%	4,255	1.9%	1.6%	5, 075	2%
Overdrafts to individuals	6,346	2.7%	1.6%	6,399	2.9%	1.3%	11, 952	6%
Secured consumer loans	15,707	6.8%	7.1%	14,748	6.6%	6.2%	61, 000	23%
Unsecured consumer loans	2,910	1.3%	6.4%	3,497	1.6%	4.1%		
Scoring based loans	26,152	11.2%	6.1%	26,525	11.8%	5.6%		
Consumer finance	18,221	7.8%	6.4%	17,478	7.8%	6.0%	19, 600	9%
Employee	13,789	5.9%	0.0%	12,503	5.6%	0.0%		

HIGHLIGHTS

- **Industry:** The risk in Mortgage and Consumer loan portfolios is lower than in local Banking System in terms of overdue loans. As result of COVID19 and military conflict in neighboring Artsakh there is increase of overdue loans during 2020 of the Banking system and the Bank.
- **Risk outlook**: Outlook of the Inflation risk was changed from Stable to Negative. .
- **Concentration:** The product concentration risk is acceptable. Only Mortgage has essential deviation from the BP. 45.7% of the portfolio is allocated in 1 product (Mortgage), **69.5%** of the portfolio is allocated in 3 products (Mortgage, SME, Scoring based consumer loans).
- **High Risk Zone:** There is no product in high risk zone, only one product in Medium risk zone (Secured consumer loans)
- **Tendency**: As a result of COVID 19 and military conflict in neighboring Artsakh there is increase of risk almost in all products.

*Banking system data is based on Monetary Overview of CB.

RETAIL CREDIT RISKS

Branch risk

Tab. 2-9 Portfolio structure by branches (mil. AMD)

Branches	Dec 20				Sep 20			
	Amount	% in Portfolio	NPL	Overdue, number	Amount	% in Portfolio	Overdue loans	Overdue, number
Head Office*(incl Empl)*	22,939	12.7%	0.0%	208	21,196	12.2%	0.0%	207
Kajaran	3,126	1.7%	0.1%	16	3,119	1.8%	0.0%	13
Dilijan	2,034	1.1%	0.3%	100	2,014	1.2%	0.2%	81
Gr. Lusavorich	15,866	8.8%	2.2%	213	15,115	8.7%	1.3%	173
Komitas	14,597	8.1%	2.4%	608	14,633	8.4%	2.1%	511
Moskovyan	17,146	9.5%	2.5%	158	16,501	9.5%	2.0%	131
Vanadzor	5,205	2.9%	3.2%	288	4,991	2.9%	2.5%	204
Shengavit	8,132	4.5%	4.3%	416	7,766	4.5%	2.3%	346
Sayat-Nova	14,092	7.8%	4.7%	222	13,080	7.5%	4.9%	170
Arshakunyats	5,393	3.0%	0.8%	402	5,307	3.1%	0.4%	330
Kapan	2,313	1.3%	0.1%	98	2,221	1.3%	0.1%	89
Yeritasardakan	9,152	5.0%	0.6%	223	8,428	4.8%	0.1%	185
Kumayri	6,800	3.8%	3.6%	471	6,456	3.7%	0.9%	306
Kochar	5,953	3.3%	0.7%	240	5,730	3.3%	0.5%	181
Jermuk	889	0.5%	**16.8%**	56	888	0.5%	6.5%	54
Kamar	35,879	19.8%	3.8%	271	35,382	20.4%	2.5%	225
Nor Nork	2,895	1.6%	5.7%	159	2,652	1.5%	2.2%	116
Abovyan	2,772	1.5%	0.5%	44	2,415	1.4%	0.8%	30
Ejmiacin	1,347	0.7%	0.0%	-	1,179	0.7%	0.0%	-

HIGHLIGHTS

- **Concentration: 19.8%** of the portfolio is concentrated in the Kamar* branch, **12.7%** in the Head office.
- **Risk Zone:** Loan portfolio of 1 branch in high risk zone (Jermuk), other branches in low risk zone.
- **Tendency:** As a result of COVID 19 and military conflict in neighboring Artsakh there is increase of risk almost in all products.

*since a big part of Head office portfolio had been transferred to new Branch Kamar

RETAIL CREDIT RISKS

Decision makers risk

Tab. 30 Retail Portfolio structure by decision makers (mil. AMD)

Decision makers	Sep 20				Sep 20			
	Amount	%	NPL, %	NPL, number	Amount	%	NPL, %	NPL, number
Total	232,579	100%	3.3%	14,413	224,238	100%	2.5%	13,241
Board of Directors	100	0.0%	0.0%	-	53	0.0%	0.0%	-
Large Credit Committee	55,339	23.8%	3.7%	63	51,390	22.9%	2.1%	41
Small Credit Committee	59,617	25.6%	2.1%	87	57,084	25.5%	1.1%	53
Retail banking director	14,590	6.3%	0.5%	16	14,528	6.5%	0.2%	9
Retail Lending Department Head	8,313	3.6%	1.0%	22	8,234	3.7%	0.5%	12
Individuals lending unit head	12,039	5.2%	0.2%	21	11,820	5.3%	0.2%	16
SME lending unit head	1,174	0.5%	1.8%	2	1,116	0.5%	1.1%	1
Specialists of Individuals lending unit	14,922	6.4%	0.2%	6	13,703	6.1%	0.0%	2
Specialists of SME lending unit	844	0.4%	5.3%	4	780	0.3%	2.4%	2
Branch managers	7,143	3.1%	2.4%	91	7,099	3.2%	1.2%	69
Ex decision makers / units heads	7,818	3.4%	13.3%	4,196	8,604	3.8%	11.6%	3,379
Automatically approved	50,679	21.8%	6.0%	9,905	49,827	22.2%	5.3%	9,657

HIGHLIGHTS

- **Concentration:** The risk of personal approval of loans is low. 49.5**%** of retail portfolio is approved by the Collegial Bodies of the Bank.
- **High Risk Zone:** Portfolios approved by all acting Decision Makers are in low risk zone.
- **Tendency:** There is increase of NPL level in portfolios off almost all Decision Makers .

RETAIL CREDIT RISKS

Big borrowers risk

Tab. 31 Top 10 borrowers as of (mil. AMD)

List	Net exposure*	NPL by IFRS	%,capital	% Retail portfolio
Client 1	1,400	Stage 1	1.3%	0.6%
Client 2	922	Stage 1	0.8%	0.4%
Client 3	857	Stage 1	0.8%	0.4%
Client 4	785	Stage 1	0.7%	0.4%
Client 5	781	Stage 1	0.7%	0.4%
Client 6	625	Stage 1	0.6%	0.3%
Client 7	548	Stage 2	0.5%	0.2%
Client 8	497	Stage 1	0.5%	0.2%
Client 9	466	Stage 1	0.4%	0.2%
Client 10	331	Stage2	0.3%	0.1%
Total	**7,212**		**6.6%**	**3.3%**

HIGHLIGHTS

- **Concentration:** TOP 10 borrowers' share in the retail portfolio is 6,6%, comprising 3.3% of the Capital. Only one borrower from the list has exposure more than 1% of Equity (low risk zone).
- **Quality**: There is no client from TOP 10 list with overdue debt or classified as Stage 3 NPL. Two clients were classified as Stage 2 as a result of Covid-restructuring. Only one borrower from the list has exposure more than 1% of Equity (low risk zone).

* The present value of debt less provision according to IFRS.

MARKET RISK

MARKET RISK
Key metrics

Market risk

- ✓ **Total market risk appetite** is within the limits . Significant losses from **FX position** overnight re-evaluation accumulated during March. Total loss amount is **0.31%** of Equity.
- ✓ **Security portfolio** YTD revaluation was **0.05%** of Equity. Losses mainly accumulated from Government portfolio revaluation amid local yields upshift increase during October-November.
- ✓ Bank is exposed to **interest rate risk** due to negative 1 Year GAP ratio (**64%,** limit is **100%**). In the event of adverse changes in interest rates, significant losses may occur. Total IRR risk is estimated at the level of 2.6% annualized.

FX Risk

- ✓ The actual result from open currency position management is negative, **-350m** AMD YTD, which was compensated by large bid & ask spreads resulting in extra income from FX.
- ✓ **VaR-99% was still in** "low" risk zone but the values increased from normal levels almost three times, amid high volatility in the market.
- ✓ **Bid & Ask spreads** in financial market increased almost twice and covered actual volatility.
- ✓ **Income** from currency conversions is at its maximum levels, covering revaluation losses.

Interest Rate Risk

- ✓ **Floating rate portfolio** repricing risk reduced significantly, by the means of hedging and but since the LIBOR was flat no losses accumulated so far.
- ✓ **LIBOR 6 month** rate growth can generate cumulative loss estimated at the level of **648m AMD** per 100 bps YTD rate increase, which is **0.59%** of Equity.
- ✓ **Total duration** gap is 1.09 and the estimated risk over the whole term structure is 7.77% of Equity.

Security Portfolio Risk

- ✓ **Duration of AFS** portfolio deceased during Q3 from 3.29 to 3.27 years, and is in "medium" risk zone.
- ✓ **Total amount of AFS portfolio** exposed to yield curve risk market risk is AMD **19,912m** or **28%** of total portfolio.
- ✓ **Estimated loss per 100 bps** yield parallel increase of both USD and AMD bonds is about AMD **651m** (previous quarter figure was **677m)**, which is 0.6**%** of Equity.

MARKET RISK

Actions to be taken

Subject, reason:	Actions:
✓ **Interest risk is significant but decreased during Q4 as duration gap of assets and liabilities decreased. Estimated risk per annum is around 2.6% of Equity.**	✓ Bank should put effort in long term bonds issuance in line with market conditions where and when possible. ✓ Floating rate liabilities should be kept hedged.
✓ **Although gains from Bid-Ask spreads covered the losses from FX position revaluation, negative revaluation was around 0.31% of Equity, which is a limit breach for the line.**	✓ Liquidity providers among large corporate clients and IFIs should be determined and preliminary measures should be taken to satisfy currency demand under critical conditions. ✓ Bid & Ask spreads should be managed conservatively to cover the volatility.
✓ **As yields were highly volatile during October-November, negative revaluation accumulated from securities portfolio.**	✓ Bank should optimize the securities portfolio structure in terms of credit risk and liquidity. ✓ Duration of AFS portfolio should be kept within acceptable limits defined in risk appetite framework.

MARKET RISK

Market risk appetite

Tab. 32. Utilized Market risk appetite and benchmarks (in m AMD)

					Risk Appetite limits, as % of Equity		
	Jan-Dec 2020	Utilized RA, % Equity*	***Jan-Dec 2019***	*Utilized RA, % Equity**	**Risk zones**	**Operational**	**Strategic**
Security portfolio P/L	(56.4)	0.05%	*1,609*	*0.00%*	Low (<0.73%)	1.13 %	1.96%
FX position P/L	(350.1)	0.31%	*(105)*	*0.11%*	High (>0.21%)	0.25%	0.25%
Floating rate loans P/L	1,058	0.00%	*283*	*0.00%*	Low (<0.47%)	0.72%	1.43%
Total*	**(406.5)**	**0.36%**	***(105)***	***0.11%***	**Low (<1.4%)**	**2.10%**	**3.64%**

Simulated Risk measures (in mil AMD)

	Value	%, Average exposure	%, Equity	Risk Zone
FX VaR 99%**	**154**	4.0%	0.14%	Low
FX ES 99%**	**184**	4.8%	0.17%	Low
Security portfolio VaR 99%	**402**	2.02%	0.37%	Low
Security portfolio ES 99%	**441**	2.22%	0.40%	Low

**Value will be zero, if results are positive*
*** VaR – Value at risk, ES - Expected shortfall*

HIGHLIGHTS

- **Total market risk** is within appetite limits.
- **Floating rate** portfolio repricing risk is essential, but since the LIBOR was declining, gap repricing was positive.
- **FX position revaluation result was -350m AMD YTD. Negative revaluation was accumulated mainly during March-April amid Covid-19 restrictions implementations.**
- **Security portfolio** YTD revaluation was -56.4m AMD. Negative revaluation mostly accumulated from Government Bonds after local markets yields upshifts during October.

MARKET RISK INDICATORS

Foreign exchange risk

Tab. 33. FX operations summary (m AMD)

As at Dec-20

	Position, average	Position,% Equity	Revaluation	Trade Income	Income from FX derivatives	Net income, % Position
USD	3,806	3.47%	44.66	363		10%
EUR	60.49	0.06%	2.36	82		136%
RUR	6.58	0.01%	(0.36)	81		1236%
Other	-	-	48.69	156		0%
Total	**873**	**3.53%**	**95.35**	**683**	**27**	**18%**

HIGHLIGHTS

- FX average positions were in low risk zone during Q4-2020.
- Net FX trading income comprised to **5,725m** AMD during Q4-2020.

Fig. 27. Income, revaluation and position for USD/AMD, mil. AMD

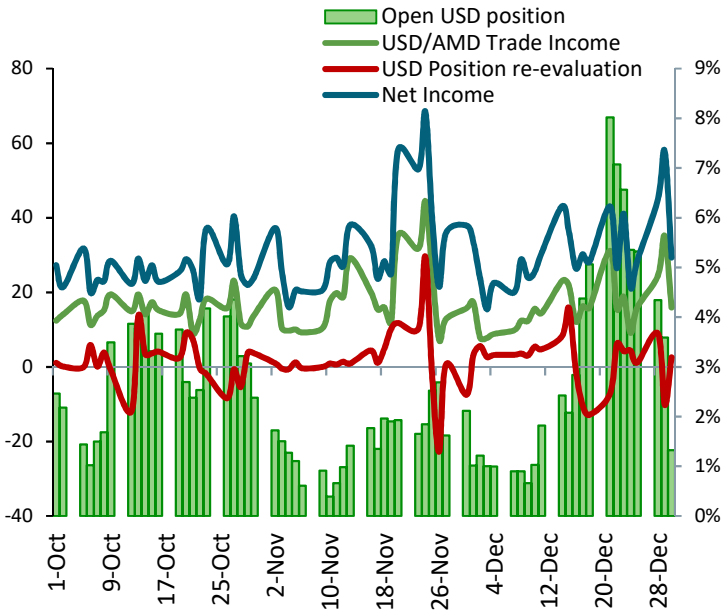
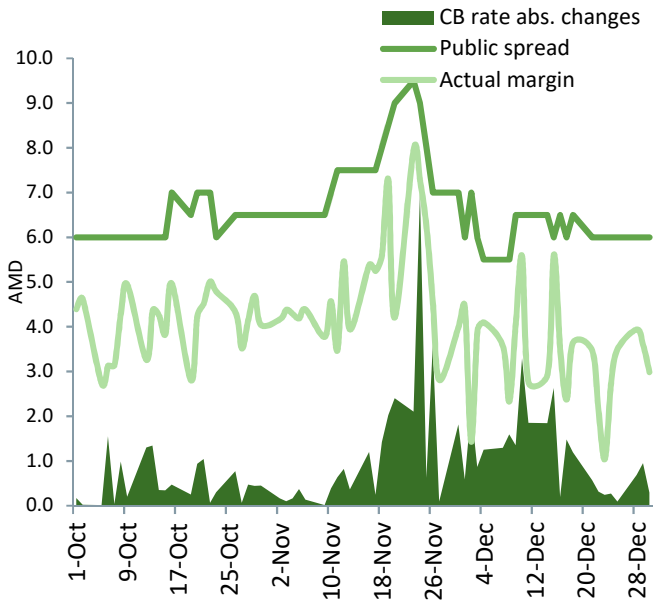


Fig. 28. USD/AMD margin and CB rate daily change



MARKET RISK INDICATORS

Foreign exchange risk

Fig. 29. Trading net income and position (mil. AMD)

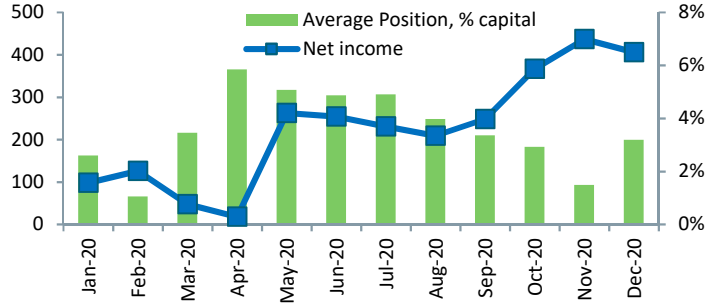


Fig. 30. Simulated VaR (mil AMD) and losses as % of Income

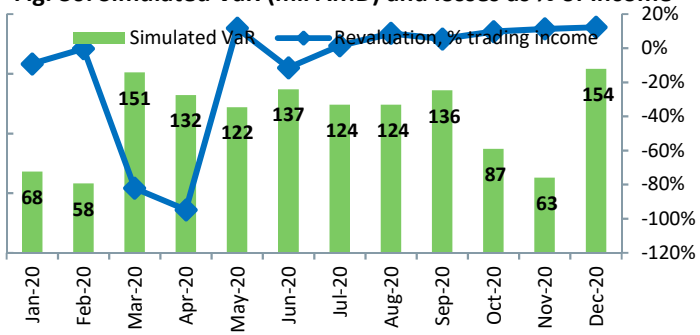


Fig. 31. Historical VaR and Losses (mil. AMD)

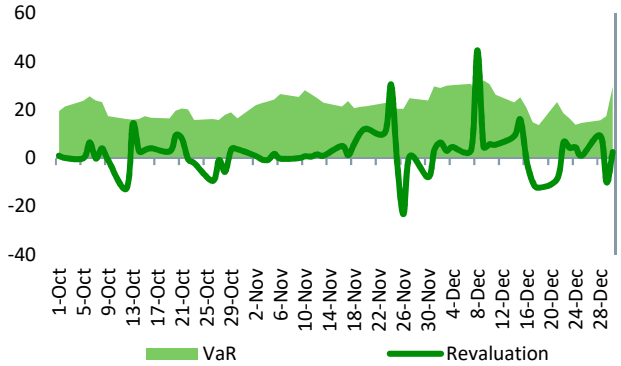


Fig. 32. Trading income, volatility and spread (mil. AMD)

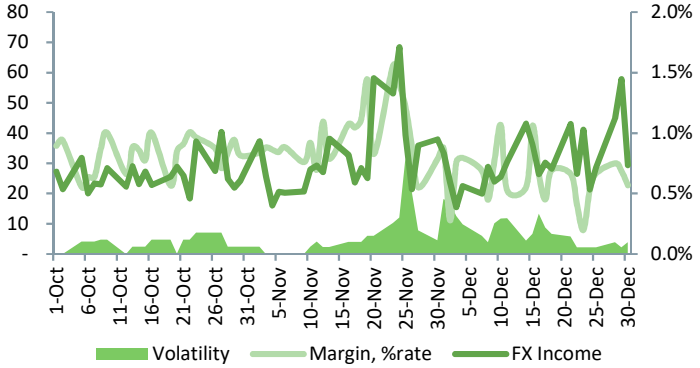


Fig. 33. USD/AMD operations (mil. AMD)

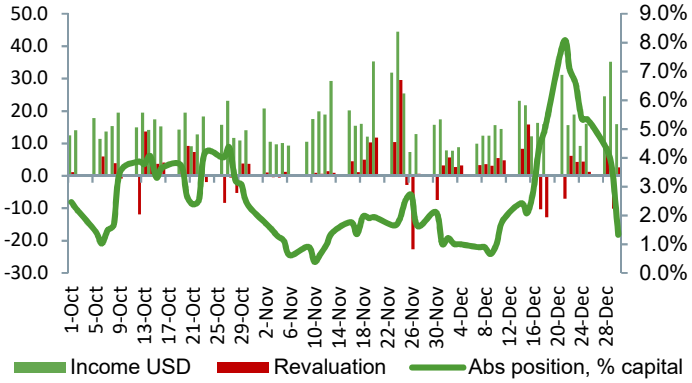
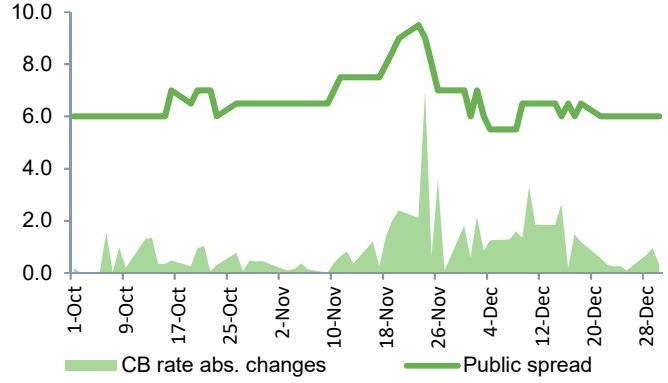


Fig. 34. USD/AMD Bid&Ask spread vs volatility



HIGHLIGHTS

- Real margin of currency conversion covered the volatility of USD/AMD rate.
- Simulated FX VaR measure was in low risk zone but is almost three times larger compared to previous year.

MARKET RISK INDICATORS

Investment portfolio risk

Tab. 34. Bond portfolio structure (mil AMD)										
	Q4 - 2020					Q3 - 2020				
	Amount	%, Portfolio	%, Equity	Revaluation, YTD	Duration	Amount	%, Portfolio	%, Equity	Revaluation, YTD	Duration
Gov. Bonds	64,940	91%	59%	(391.00)	4.15	64,692	85%	60%	53.0	4.05
Eurobonds	0	0%	0%	193.94	-	3,648	5%	3%	(22.3)	-
Foreign bonds	979	1%	1%	(68.81)	2.97	2,792	4%	3%	(12.3)	3.20
Other bonds	5,719	8%	5%	12.81	1.37	5,132	7%	5%	(38.5)	1.52
Total (+Trading Income)	**71,638**	**100%**	**65%**	**(241.90)**	**3.27**	**76,263**	**100%**	**71%**	**(19.1)**	**3.29**

HIGHLIGHTS

- Risk level in Bond portfolio is at acceptable level in terms of weighted short duration (**3.27** years) and major share of Government bonds (91% of total portfolio).

Simulated VaR for Security portfolio (m AMD)				
Confidence	Value	%, Portfolio	%, Equity	Risk Zone
95%	**300**	1.51%	0.27%	Low
97.5%	**353**	1.77%	0.32%	Low
99%	**402**	2.02%	0.37%	Low

MARKET RISK INDICATORS

Investment portfolio risk

Tab. 37. AFS Portfolio (mil AMD)

	Dec-20		Sep-20	
	Amount	%, AFS Port.	Amount	%, Port.
Gov. Bonds	13,458	68%	12,891	63%
Eurobonds	0	0%	0	0%
Foreign bonds.	979	5%	2,792	14%
Other bonds	5,475	27%	4,881	24%
Total	**19,912**	100%	**20,565**	100%

Fig. 35. Portfolio structure (%)

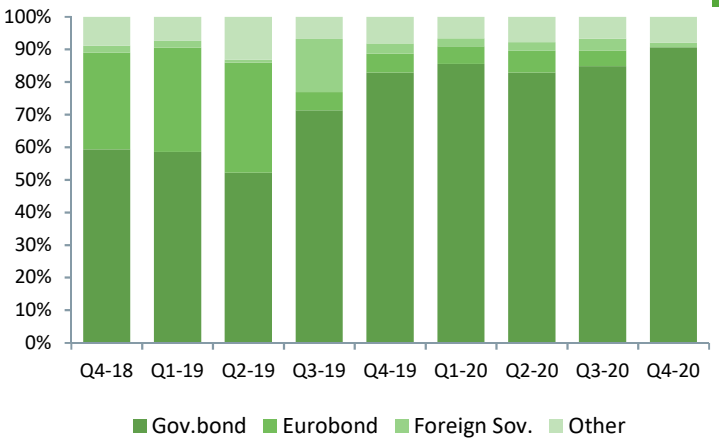


Fig. 36. Portfolio revaluation (mil AMD)

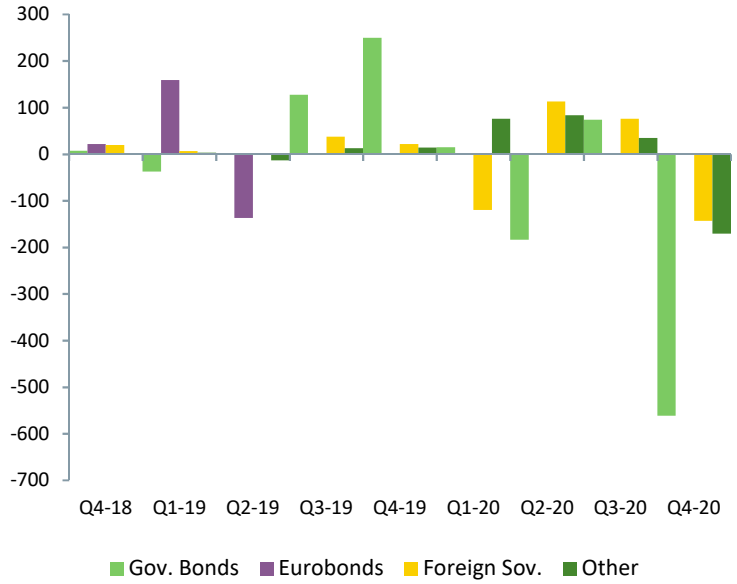
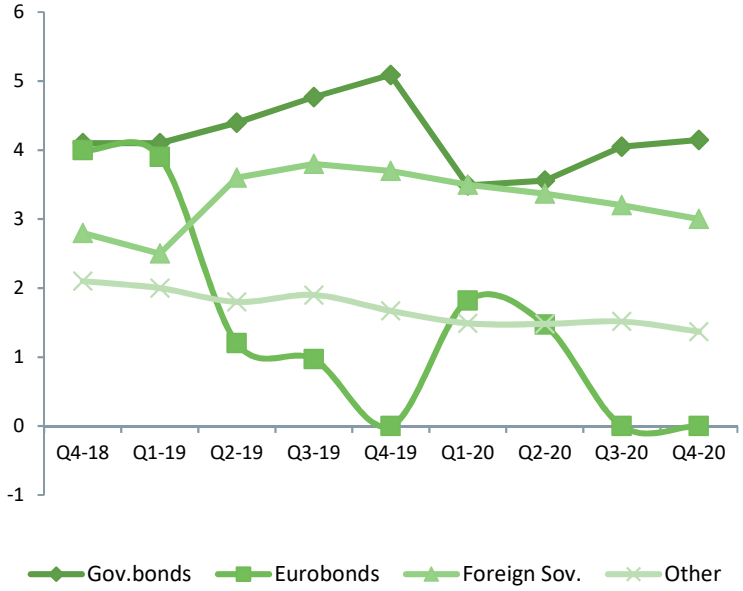


Fig. 37. Average AFS portfolio duration (years)



HIGHLIGHTS

- ✓ Average duration of yield sensitive bond portfolio decreased during the quarter and was **3.27** years (previous value was 3.29).
- ✓ AFS portfolio sensitivity to yield curve fluctuations estimated at the level of **651 mln** AMD, which is 0.59**%** of Equity.

MARKET RISK INDICATORS

Floating rate risk

Fig. 38. A&L under floating rate by repayment months (mil. AMD)

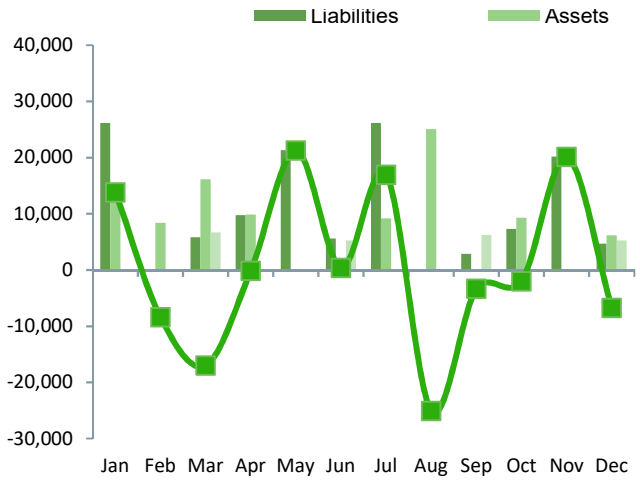


Fig. 39. A&L under floating rate (in USD m)

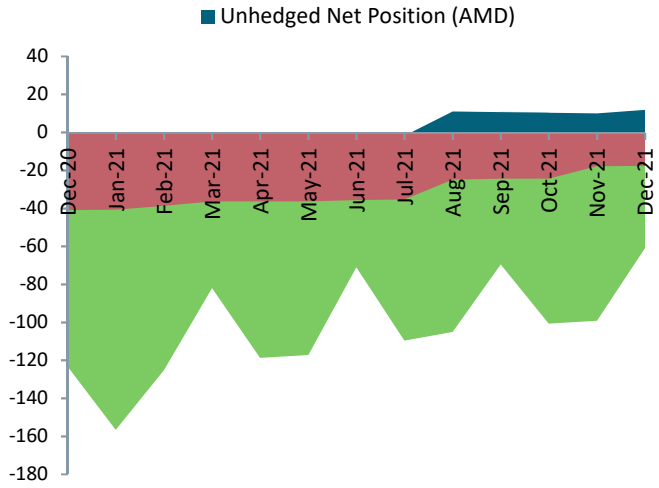
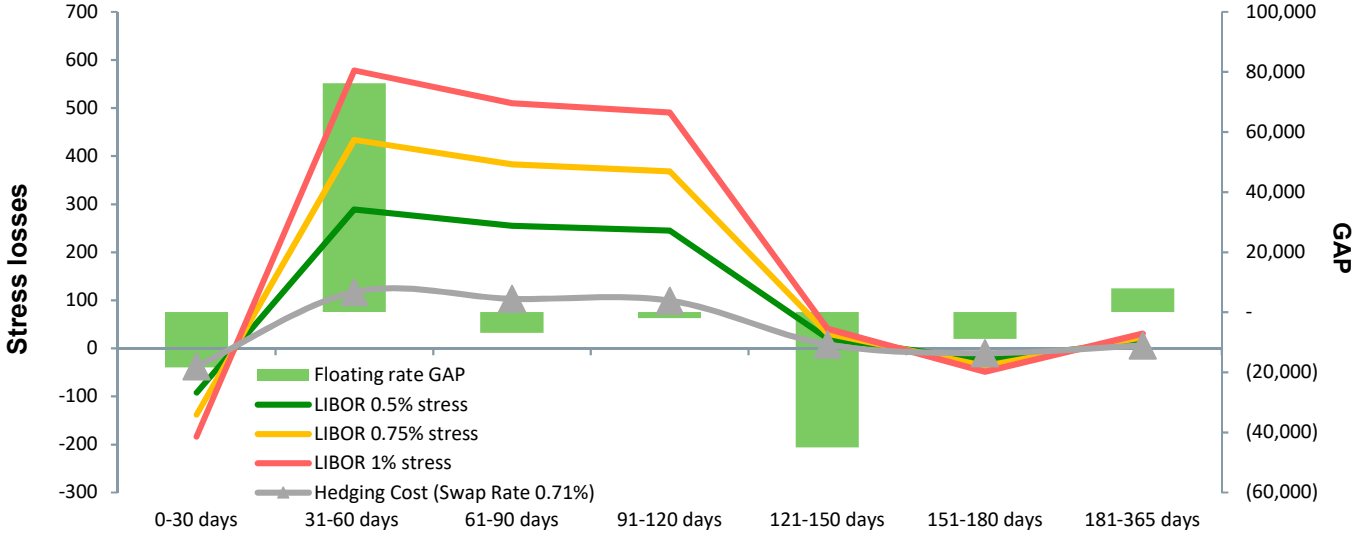


Fig. 40. Stress losses vs hedging costs *('000' USD)*



HIGHLIGHTS

- Fixed rate market spreads were around 0.20p.p in December. During January, IR swap rates increased by almost 0.07pp. Considering the fact that LIBOR was almost flat, the IR spread increased to 0.27pp by January.
- Losses arising from total USD unhedged position are estimated at the level of AMD **648m** per **100bp** immediate rate increase of Libor, which is **0.59%** of Equity.

MARKET RISK INDICATORS

Interest rate & liquidity risk

Fig 41. Short term (less than 1 year) repricing GAP ratio, % Equity

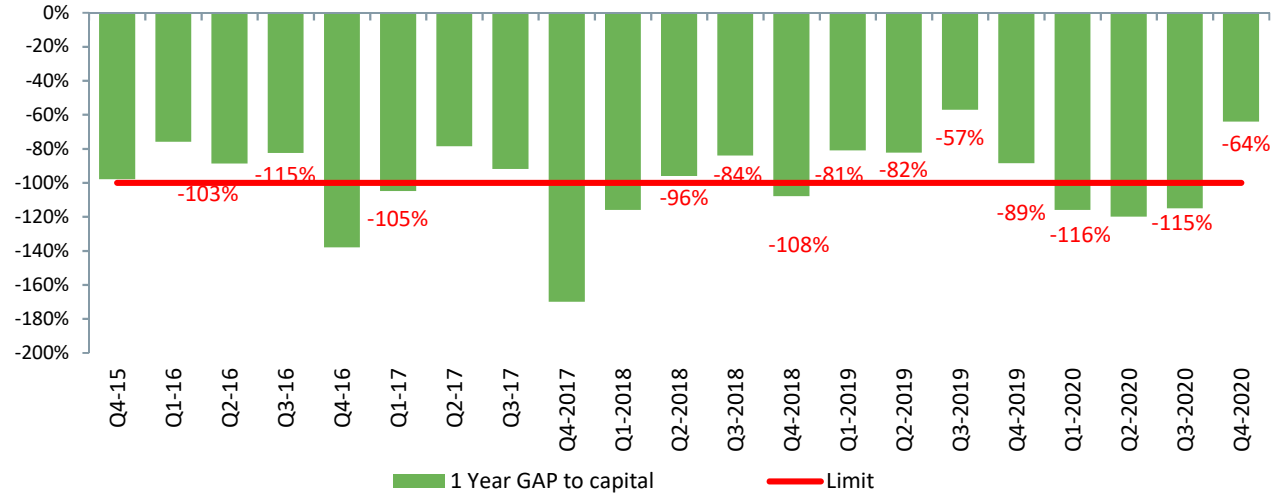
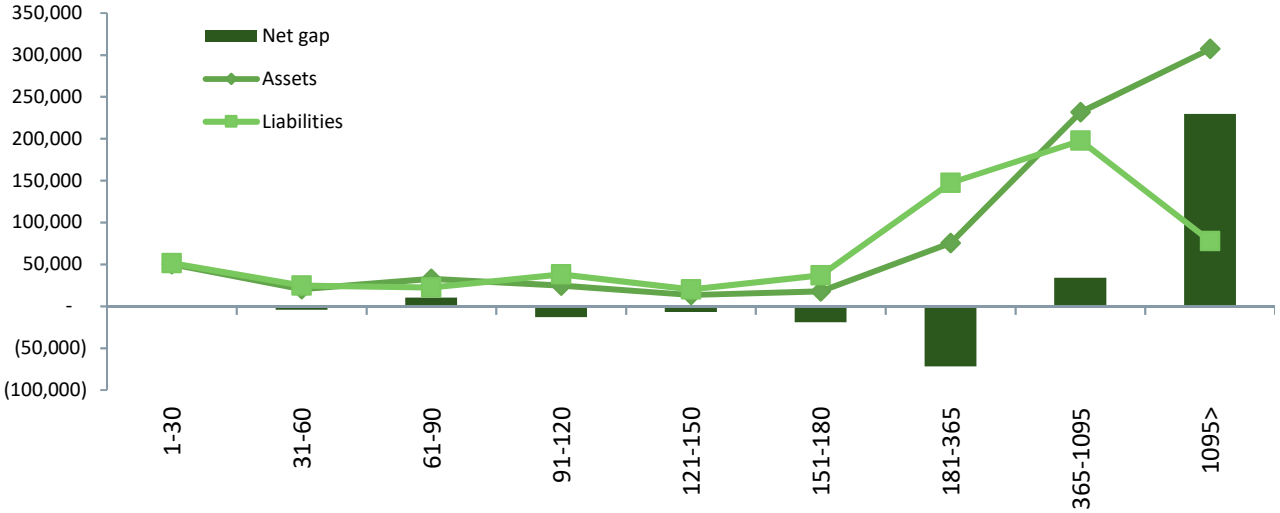


Fig 42. Liquidity GAP structure by maturity (mil. AMD)



HIGHLIGHTS

- Bank is exposed to interest rate risk due to negative A/L short GAP (64% of Capital, limit is 100%).
- Sensitivity of 1 year total GAP to rates increase is estimated at the level of **0.9%** of Equity under medium risk scenario.

OPERATIONAL RISK

OPERIATIONAL RISK
Key metrics

Operational losses

- ✓ During the reporting period **Operational Loss Parameter was in Low Risk zone** and has used **0.003%** of equity **AMD (3.5m**).
- ✓ **The number of events has decreased** – 1459 **events in** current reporting period compared to 1539 in 2019.
- ✓ Both the **average loss per event** and the **average loss per employee** increased due to decreased of losses compared to the previous year.

Operational losses by risk types

- ✓ **94.8% of events occurred in Execution Delivery & Process Management**, majority due to cash transactions and claims for failing to send account statements. According to Operational Risk data Exchange Association (hereafter ORX) report the most common event type is Clients, Products & Business Practices (CPBP) which accounts for almost 58% of loss events.
- ✓ **52.3% of losses occurred in Execution Delivery & Process Management.** In particular, **40.4 %** of losses occurred in **Execution Delivery & Process Management in Retail Banking Department, 3.8% of losses occurred in Corporate Banking Department, 3.3% of losses occurred in Cash Transactions, 2.5% of** losses occurred in **Trading Department, 2.4% of** losses occurred in **Back Office and Other** due to cash transactions , claims for not sending account statement and fraud in the process of online lending.
- ✓ **38.1% of losses occurred in External Fraud** in Retail Banking Department and Cash Transactions**.**
- ✓ **9.6% of losses occurred in Technology & Infrastructure Failures** in Retail Banking Department, Cash Transactions and Back Office and Other.

Operational events by business lines

- ✓ **48.1%** of events and **86.8%** of losses occurred in **Retail Banking**. Losses were mainly due to fraud via online lending, claims for failing to send account statements.
- ✓ **46.1%** of events and **4.4%** of losses occurred in **Cash Transactions.**
- ✓ **4%** of events and **2.6%** of losses occurred in **Back Office and Other.**
- ✓ **1.2%** of events and 2**.5%** of losses occurred in **Trading Department.**
- ✓ **0.5%** of events and 3**.8%** of losses occurred in **Corporate Banking Department**

Operational losses by locations

- ✓ **About 56.8% of all reported operational events and 33.4% of losses** occurred in **branches, 43.2% of operational events and 66.6% of losses** occurred in **Head Office.**

Insurance coverage

- ✓ Bank's current insurance coverage is **comprehensive and efficient (BBB, Cash, Property, ATM, TPL, Cyber, Card, Bordereau Property Insurance and etc.),**

Risk map

- ✓ **30 internal processes and 6 IT systems** were evaluated.

OPERATIONAL RISK

Actions

Subject, reason:	Actions: 2020
✓ Cyber risk insurance implementation	✓ The project was finalized and appropriate agreement was signed on 01.04.2020.
✓ Credit card fraud insurance implementation	✓ The project was finalized and appropriate agreement was signed on 13.04.2020.
✓ Ameriabank CJSC Recovery Plan for restoring financial condition of the Bank in case of possible ad versed stress scenarios.	✓ The decision had been approved, the final policies were represented to the Management Board for approval.
✓ Business Continuity Actions	✓ Risk assessment and Anti-Covid group formation and implementation of continuity actions for different scenarios.
✓ Operational Risk Database Management Optimization/Automation	✓ Automation of cash surplus and deficit risk incidents closing process.
✓ Stress scenario	✓ Operational Risk Stress scenarios and appropriate methodology implementation.
✓ Business Continuity Plan of Military situation	✓ Business management policies on military situation was launched, the emergency groups were formed and necessary actions for risk mitigation took place.
✓ Recovery plan testing	✓ The Recovery plan was tested by the responsibles from all directions, and the test results were finalized and sent to the Central Bank of RA.
✓ Operational Risk Key Risk Indicators	✓ Development of Operational Risk Key Risk Indicators methodology and reporting.
✓ Products operational risks and capital distribution forms	✓ Automation of Products operational risks and capital distribution calculations.

OPERATIONAL LOSS EVENTS UNDER THE RECOVERY PROCESS

Open Incidents

Operational Incident	Incident Date	Description	Residual Amount (000' AMD)	Status
OL-2601	October 7, 2019	Execution of card account transactions in offline mode	**8.1 m**	Insurance claim process Criminal act was proceeded
OL-2640	October 15, 2019	Execution of card account transactions in offline mode	**10.9 m**	Insurance claim process Criminal act was proceeded
OL-2650	October 15, 2019	Execution of card account transactions in offline mode	**9.8 m**	Insurance claim process Criminal act was proceeded
OL-3492	February 10, 2020	Execution of transactions through the use of card data on the online platform	**3.3 m**	Security process Criminal act was proceeded
OL-3948	March 02,2020	Getting an online loan with Scoring credit due to Smart account liveness issue	**1.4 m**	Criminal act was proceeded
OL-3904	April 25, 2020	Execution of transactions through the use of card data on the online platform	**803,2 m**	The problem is in the stage of discussion between the Card Department, ARCA and MasterCard
OL-3964	June 29, 2020	Counterfeit money acceptance	**3.5 m**	Insurance claim process Criminal act was proceeded
OL-3968	June 29, 2020	Counterfeit money acceptance	**1.3 m**	Criminal act was proceeded
		Total	**39.1 m (the amount to be recovered is 0.036% of Equity)**	

OPERATIONAL RISK

Operational losses /Overall summary

Tab 35. Operational losses dynamics (000' AMD)

	2020 Q4	2019 Q4
Number of Events	1459	1539
Average Loss per Event	(2.4)	(7,1)
Number of Staff	1131	1076
Average Loss per Employee	(3.1)	(10,1)
Events with Actual Losses	44	50
Average Loss Event	(80.7)	(217,3)
Total Loss	(3,549)	(10,865)
Operational Losses/Equity (%)	0.003%	0.01%
Operational Risk Appetite (%)	0.5%	0.5%

HIGHLIGHTS

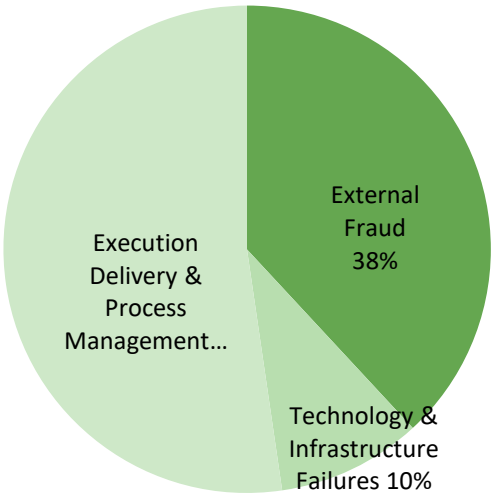
- During the reporting period Operational Loss Parameter was in Low Risk zone and amounted to **0.003%** of Equity **AMD (3.5 m**). The respective number was **0.01%** as of 31.12.2019 (**AMD 10.87 m**). Total risk appetite dedicated to operational risk is 0.5% of Equity.
- The number of events **has decreased by 5.2%** compared to 2019.
- The total amount of losses has decreased by **7.3m.** compared to 2019.
- The average loss per event and the average loss per employee has increased amounting to **AMD 2433** and **AMD 3139** respectively.
- The **52.3%** of losses were in Execution Delivery and Process Management category, which are counted to AMD **1.9m.**

OPERATIONAL RISK

Operational loss events by risk types

Fig. 43 Operational Losses by risk types

Ameriabank-2020



ORX* 2013-2018

HIGHLIGHTS

- The distribution of operational losses (as of 31.12.2020) by risk types differs significantly from international practice. The cause of difference is that incidents in our bank are few and thus do not represent the whole set of possible incidents.

- According to Operational Risk data Exchange Association (hereafter ORX) report total loss in Clients, Products & Business Practices (CPBP) and Execution, Delivery & Process Management are the most severe accounting for 58% and 23% respectively.

*Operational Risk data Exchange Association. The data is based on Top 5 largest loss events from January to June 2019.

OPERATIONAL RISK

Operational losses by locations & by business lines

Fig. 44. Op. event distribution by locations (number of events)

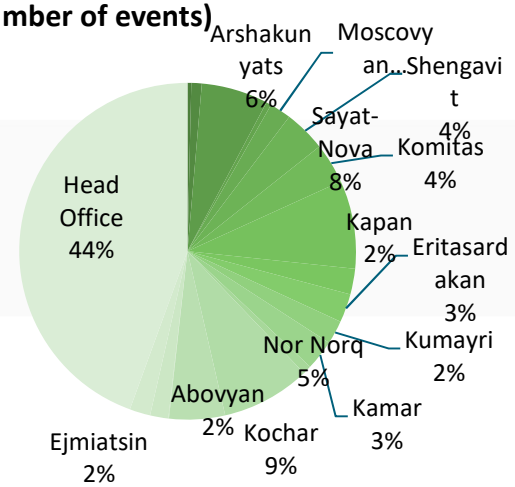


Fig. 45 Op. losses distribution by locations (loss amount)

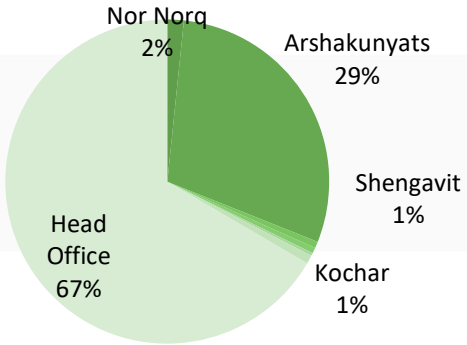


Fig. 46 Op. events by risk types according to O.R.X. report for 2020 Q3

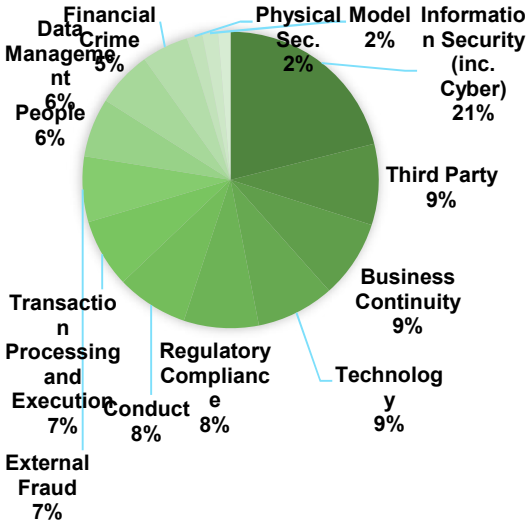
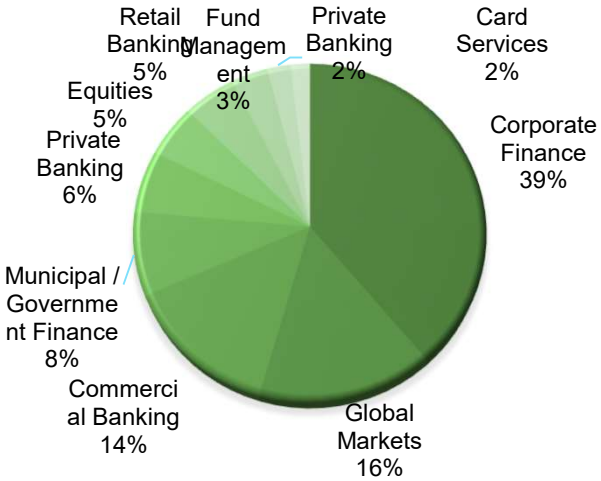


Fig. 47 TOP Op. losses by business lines according to O.R.X. report for 2020 Q3



HIGHLIGHTS

- About 57.2% of all reported operational events occurred in branches. The majority of events took place in Sayat Nova and Kochar branches, their share was 16.5%.
- 66.6% of losses (by amount) occurred in Head Office.
- 48.12% of operational events occurred in Retail Banking Department.
- According to O.R.X. report in international practice top 3 sectors for operational risk losses are Corporate finance ($ 2,6bn), Global markets ($ 1,048 bn.) and Commercial banking ($ 0,94 bn.).
- In fact, according to O.R.X. report top operational risks events are Information Security (inc. Cyber) (21%), Third Party (9%), Business Continuity (9%), Technology and Regulatory Compliance (8%) risks.

Tab. 36. Bank's insurance coverage by companies (million AMD – approximate /1 USD = 500 AMD, 1EUR= 530 AMD/)

Insurance Company	Property	Property for terrorism	ATM	Cash	General Liability	Liability for terrorism	BBB*	Archive Liability	Health	Personal Accident	Travel Support	Bordero of property	Cyber	Card
RGS	12,327	480	1,552	-	500	500	1,500	1000	-	-	-	12,500	500	Annually per card 2,65
INGO	-	-	-	2,000	-	-	-	-	-	140	by request	12,500		
RESO	-	-	-	-	-	-	-	-	-	-	-	5,000		
Reinsurance Companies	Hannover Rueckversinherung (Standard & Poor's AA-) 42.9%; SCOR Perestrakhovaniye (Standard & Poor's AA-) 21.9%; BMIIC (A.M. Best AA-) 23.5%; GIC RE (A.M. Best AA-) 8.4%	Amlin Lloyd's syndicate AML 2001 (Standard & Poor's A+) 40%; Chaucer Lloyd's syndicate CSL 1084 (Standard & Poor's A+) 32.5%; Hiscox Lloyd's syndicate HIS0033 (Standard & Poor's A+) 27.5%;	Hannover Rueckversinherung (Standard & Poor's AA-) 42.9%; SCOR Perestrakhovaniye (Standard & Poor's AA-) 21.9%; BMIIC (A.M. Best AA-) 23.5%; GIC RE (A.M. Best AA-) 8.4%	SCOR Perestrakhovanie (Standard & Poor's AA-)' 53.84%, Polish Re (A.M. Best A)' 44.05%:	Hannover Rueckversinherung AG (Standard & Poor's AA-) 50%; SCOR Perestrakhovaniye (Standard & Poor's AA-) 50%	Lloyd's syndicate CSL 1084 (Standard & Poor's A+) 33.3; Amlin Underwriting Limited (Standard & Poor's A+) 25%; Markel Syndicate Management Ltd. (Standard & Poor's A+) 20%; Hiscox Syndicates Limited (Standard & Poor's A+) 21.6%	Barents Reinsurance S.A. (Luxemburg) London Branch 40%; American International Group UK Limited 40%; XL Insurance company SE 20%	Hannover Rueckversinherung (Standard & Poor's AA-) 43.7%; SCOR Perestrakhovaniye (Standard & Poor's AA-) 43.7%;	-	-	-	RGS and Ingo Armenia have 100% reinsurance	American International Group UK 100% reinsurance	Lloyd's of London, syndicate Canopius

HIGHLIGHTS

- Current insurance coverage protects our assets from damages occurring from natural disasters, fire, crime, fraudulent actions, cyber attacks, card frauds and etc. The bank also has general liability insurance, professional indemnity, directors liabilities and other relevant coverages.
- At the beginning of 2020 Ameriabank CJSC has obtained ***Cyber Liability Insurance Policy*** with comprehensive coverage sections: ***Data Protection and Cyber Liability, Network Interruption, Event Management, Cyber Extortion*** and the following policy extortions: **Digital Media, Criminal Reward Fund**. Cut through clause is also applicable for this policy. Policy aggregate limit of Liability sum insured is USD 1 million .
- At the beginning of 2020 Ameriabank CJSC has obtained ***Fraudulent Card Misuse Insurance Policy*** with comprehensive coverage. Cut through clause is also applicable for this policy. Policy aggregate limit per card is EUR 5000, per occurrence limit is EUR 2000 per each card.

*Including Internal fraud, Computer crimes, Directors' liabilities, Professional Indemnity etc. Overall limit combined over all sections is USD 3 million.

Tab 37. Heat Map of evaluated processes/ IT software

Processes*

Process	Risk	Ameriastream	H
Operational day opening	L	IB online registration	H
Leasing	**L**	Token Activation new method	L
Cards Issue	M	C2C transfers via Online Banking	H
Overlimit	L	E-signed Docs Emailing	M
SME Online	L	Information Security	M
Bank employee's authorities	M	STAK contract and conditions	M
Salary project	L	CRM Dynamics_ClientCreation	M
Smart account	L	Investigation of IB client opening event	M
IBX stage 1	M	Autoloan_Web	M
Brokerage	M	Autoloan_dealer	M
State bond process automation	M	IS effectiveness evaluation	
Filing Centre	M	COVID 19 risk assessment	H
Customer Onboarding_Application	M	Automation the court process_scoring	L
Smart Vista	M	AdriveHRM_Tutorial	M
Card order Instruction	L	Ameriabroke Process	**H**
Ameria3.0_Scoring	M	Student card,loan	M
IBX stage 1	M	Card delivery contracts	M
Process of preparing and maintaining brokerage code cards	M	Card delivery	M
Procurement process automation project	M	GETRESPONSE ENTERPRIS Mailing	M
Mortgage	M		M
YVA	M	Accuity settings	M
Cards offline transactions	H		M
TALEO 2nd release		Double customer code	M
Deposit	M	E-signed loan agreements	M
E-signing	M	Money transfer process by Contact Center	M
CRM Incoming and outgoing correspondence	M	STAK	M
CRM contracts	M	Mapping Dictionary risk analytics in IB	M
CRM Loan Process	M	Digital card	M
Esputnik emailing system	M	Visa direct payment	M
SME project stage 2	M	SME flow chart	M
SME 2nd stage Authorities	M	Mortgage flow chart	M
Shares_pledge	M		
Business Continuity	M		
MTD	M		

IT Systems

System	Risk		
Ediafactoring	M	Customer Onboarding	L
Internet Bank and Mobile Bank	L	Routers	M
Aggregator-FX	M	Switches	M
Unistream	M	SMART VISTA	M
WSUS	L	Server room	M
Terrasoft	L	Customer Onboarding Project_Adminka	M
SCOM	L	OTP Card Issuing process	M
SWIFT	L	TALEO	M
BES	L	Mortgage	M
Alfaforex	M	Unistream	M
Saxotrader	M	MoneyGram	M
Nasdaq OMX	M	Alfa Dealing Terminal	M
Saxotrader	M	Ekeng-Testing	M
Nasdaq OMX	M	JIRA_testing	M
Alfaforex	M	POS AS Bank Integration	M
QMS	L	Management decision module in Portal	**M**
Unsigned Portal	L	CRM Dinamics	M
Sigue	L	A-Drive	**M**
Thomson Reuters terminal	L	Paloalto3060	**M**
AVAYA	L	SME project stage 2	M
AMETA	L	Autoloan_adminka	M
Terminal Server	L	IB/MB unsigned transaction	H
Bloomberg	L	Accuity_New screening	M
Bloomberg STP	L	AS Bank -IB configuration	M
ATM controller	M	Ameriabroke IT	H
BANKWORLD	M	Ameriastream	M
CR2	M		
HEIMDALL	M		
Instant cash	M		
P2P	M		
PSI	M		
MICEX Trade Currency	L		
Unsigned transaction	L		
Hello Soda	M		
ID electronic	M		

* Processes and IT systems evaluated in reporting period are in bold format, the others were evaluated in previous periods.

Tab 38. Significant residual risks

Risk description	Risk level	Suggestion	Process	Product Essentiality
In case of brokerage commission services there is a possibility of making a transaction which differs from original customer order	(High)	Automated check of deviations and limits	Brokerage	11 (Low)
Risk of false check of customer account funds (in case of a customer not having terminal) and making a transaction with insufficient funds	(High)	Decrease of failures in Trading department terminals	Brokerage	11 (Low)
In case of insufficient funds for making a brokerage transaction by a client risk of not closing transaction by Interactive Brokers	3 (Low)*	Transfer of financial responsibility to the client by the contract	Brokerage	11 (Low)
Failure of Cards' workflow system. The whole procedure of production and distribution of payment cards is centered on CFD system, which is responsible for the whole procedure. The system isn't implemented yet.	12 (Medium)	Project planning and risk evaluation of Cards' workflow system.	Card Accounts	11 (Low)
Availability to transfer one currency to a different currency using ARCA card to card transfer system	12 (Medium)		Card Accounts	11 (Low)
Site administrator has authorities to take actions without verification, which may lead to unauthorized access to data or unauthorized actions within portal	12 (Medium)		Unsigned transactions site in Intranet Portal	12 (Medium)
IT systems' updates or new versions might be tested improperly: Testing may not capture all the functionalities or they may be tested by wrong units	12 (Medium)	Elaborating testing methodology, which will cover the minimum steps and minimum functionalities to be tested. Appointing responsibles for all the critical IT systems, who will decide whether the system update or new version is ready to process or not	IT new versions and updates	N/A
Bulk SMS and emails are sending to customers after manual handling.	9 (Medium)	To automate informational messages sending process.	Remote Service	N/A
Risk of skimming clients' cards from our ATMs and withdrawing clients' funds from risky countries	15 (Medium)	Restricting ATM withdrawals from risky countries and enhancing client awareness with focused marketing actions	Cards Loss, Fraud, Chargeback	11 (Low)
Robbery risk because of lack of online surveillance for several ATMs.	12(Medium)	Provide all ATMs with online cameras and alarm system connected to Security Guard Professional Service.	ATM maintenance	22 (low)
Absence of disaster recovery of Ameriabank's server	16 (High)	Disaster recovery server should be built far away from Yerevan, not at the same seismic zone as a subset of business continuity	Business continuity	(High)
Absence of log's of Smart Vista system. As a result the actions of users cannot be saved in the Bank and appropriate reports couldn't be made and archived.	(High)	The clause of giving logs of Smart Vista system to the Bank periodically should be implemented in the agreement with ARCA . This data should be monitored, reported and archived.	Smart Vista/Card transaction system	(High)
Any changes /Bank's rules, limits changes, block and unblock process and etc./ could be made by the employees of Card Service Unit, Card Chargeback without any approval.	(High)	The system of approval should be implemented, the process should be automated with the instrument of attaching files, the online logs of Smart Vista system should be saved in Ameriabank.	Smart Vista/Card transaction system	(High)
Losses from cards' offline transactions made via Internet Bank.	(High)	The restriction was made, the limit per transaction was set.	Internet Bank	High
Implementation / modification of remote system settings is performed by a single system administrator	(High)	It is necessary to make the implementation / change of all settings with approval	AS Bank -IB configuration	12(Medium)
Risk of parallel use of transaction approval authority	(High)	The risk was accepted by the Board of Directors	Transactions approval limits	(High)
False currency acceptance risk	(High)	The decision was made that the 500 Euros will be accepted at the Head office	Cash	(Medium)
The increased risk of cyber attacks due to military situation	(High)	The controls were strengthened by IT and IS	IT /IS	(Medium)
The risk of not recording the incoming calls via Avaya system in Contact Centre	(High)	The system should be changed and tested properly during 2021.	Contact Centre calls	(High)

*Required by BoD