

Valuation of Difference in Treatment (Valuation 3)

Sberbank d.d.

In the present version of the Valuation 3 Report, the SRB, following consultation with Sberbank d.d, has redacted certain information, pursuant to Articles 88 and 89 of Regulation (EU) No 806/2014, in order to protect confidential information covered by professional secrecy and personal data.



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Please note that rounding differences to the mathematically exact values (monetary units, percentages, etc.) may occur.



List of Abbreviations

Abbreviation	Designation
AC	Amortized Cost
Bloomberg	Bloomberg L.P., New York City, USA
BRRD	Directive 2014/59/EU on recovery and resolution of credit institu-
	tions and investment firms
CACLCI	Act on Compulsory Liquidation of Credit Institutions
CDR	Commission Delegated Regulation
CHF	Currency Swiss franc
CLO	Collateralized Loan Obligation
CNB	Croatian National Bank
CPI	Consumer Price Index
CTA	Current Tax Assets
DCF	Discounted-Cashflow
DGS	Deposit Guarantee Scheme
DTA	Deferred Tax Assets
EA18	18 Euro Area countries
EBA	European Banking Authority
EC	European Commission
ECB	European Central Bank
El	Equity investments
ELA	Emergency Liquidity Assistance
EMU	European Monetary Union
EU	European Union
FOLTF	Failing or likely to fail
FVTOCI	Fair value through other comprehensive income
FVTPL	Fair Value through Profit or Loss
FWC	Framework Contract
GBV	Gross Book Value
GDP	Gross Domestic Product
HICP	Harmonised Index of Consumer Prices
HUR	Harmonised Unemployment Rate
IAS	International Accounting Standard



Valuation 3 -	Valuation of	Difference in	Treatment -	Sberbank d.d.

Abbreviation	Designation				
IDW	Institute of Auditors ("Institut der Wirtschaftsprüfer")				
IFRS	International Financial Reporting Standards				
LCR	Liquidity Coverage Ratio				
LGD	Loss Given Default				
LSTA	Loan Syndications and Trading Association, New York City, USA				
NBV	Net Book Value				
NCWO	No Creditor Worse Off				
NIP	Normal Insolvency Proceedings				
NPL	Non-performing loan				
OCI	Other comprehensive income				
OECD	Organization for Economic Co-operation and Development				
PD	Probability of Default				
PL	Portfolio of performing loans				
PPI	Producer Price Index				
Purchaser	Hrvatska poštanska banka d.d.				
RBS	Royal Bank of Scotland				
Reuters	Thomson Reuters Group, New York City, USA				
S&P	S&P Global Ratings, New York City, USA				
SME	Small and medium enterprise				
SRB	Single Resolution Board				
SSM	Single Supervisory Mechanism				
SRMR	Single Resolution Mechanism Regulation				
	(Regulation (EU) No 806/2014)				
Tariff	Tariff setting out compensation of insolvency administrators in				
	general insolvency procedures				
The Bank	Sberbank d.d., Croatia				
VDR	Virtual data room				



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Single Resolution Board Treurenberg 22, B-1049 Brussels, Belgium

11 April 2024

Dear Board members,

This report (the **Report**) has been prepared in accordance with Article 20 of the Single Resolution Mechanism Regulation (**SRMR**). Accordingly, the Report is a fair, prudent and realistic assessment of the assets and, where applicable, liabilities of Sberbank d.d., Croatia (hereinafter "the **Bank**"). It has been independently prepared and is intended to inform the decision of the Single Resolution Board (**SRB**) whether to grant compensation to the shareholder of the Bank affected by the resolution action taken in respect of that entity, in accordance with Article 76(1)(e) SRMR.

The Report is addressed exclusively to our client, the SRB. The SRB is entitled to use the Report as agreed within the Framework Contract (**FWC**) between RSM Ebner Stolz (formerly "Ebner Stolz") and the SRB.

However, this report and the information contained herein should not be interpreted as, and should not be construed as, a recommendation for action and shall not be used for any other purpose than to inform the SRB's decision whether compensation shall be granted to the affected shareholder of the Bank in accordance with Article 76(1)(e) SRMR.

Neither RSM Ebner Stolz nor any of its affiliates, employees or partners accept any liability or responsibility other than agreed within the FWC or stemming from the pertinent legal framework and shall under no circumstances be liable or responsible for the SRB's or any third party's use of the information contained in the Report or the results of such use other than agreed within the FWC between RSM Ebner Stolz and the SRB.

As stated in Article 3 of Commission Delegated Regulation (**CDR**) (EU) 2018/344 of 14 November 2017 and Article 20(17) of SRMR, the scope of the report is to compare the actual treatment received by the shareholder and creditors in resolution and to assess whether the shareholder, creditors and the relevant Deposit Guarantee Scheme (**DGS**) would have received better treatment had the entity entered into normal insolvency proceedings (**NIP**) at the time of the resolution decision.

In preparing the Report, RSM Ebner Stolz has acted as an independent valuer pursuant to Articles 37 et seq. of CDR 2016/1075.

Although the report identifies and/or analyses several legal claims and contingent claims against the Bank which, in accordance with Article 2(2) of CDR 2018/344, we have analysed through the expertise of a local legal specialist, the report in no way constitutes legal advice vis-à-vis third parties or prejudice to any of these claims or contingent claims.



On 28 February 2022, the Croatian National Bank (**CNB**) put the moratorium in force until end of 1 March 2022. On 1 March 2022 the decision to resolve the Bank was adopted. Hence, according to Article 1 of the CDR 2018/344 the reference date of the valuation (**Valuation Date**) is 1 March 2022. The Bank provided us with the financial information as of 28 February 2022. Due to the moratorium enacted by the CNB, it is reasonable to assume that the financial information as of 28 February 2022 does not materially differ from the financial information as of 1 March 2022.

Accordingly, and as far as available, the basis of preparation of this Report are the unaudited financial information as of the Bank's closing balance or opening balance as of 28 February 2022 or 1 March 2022, respectively, as provided to us. If necessary, the basis of preparation was complemented by financial information as of previous dates, especially as of 31 December 2021. Also, the additional information provided to us from the Bank was taken into account. Furthermore, we used financial and non-financial information from public sources, including digital and written information media (such as Bloomberg, OECD, Reuters, S&P Capital IQ or research reports).

Our work performed and described in this Report does not constitute an audit or review performed in accordance with international standards on auditing or international standards on review engagement or relevant national standards or practices. No due diligence or verification of figures or data was performed. Consequently, RSM Ebner Stolz does not express any assurance for the accuracy of the information referred in the Report.

RSM Ebner Stolz has assumed that no information has been omitted that - if available - would have changed, limited or replaced our statements and conclusions in this report. Similarly, we have not verified the completeness, accuracy, truthfulness, authenticity, validity and integrity (or the existence of any other documentation or information that might alter the content or analysis thereof) of the information provided by the Bank and we have assumed that such information is accurate, true, reliable and complete in all respects. In the course of our work, no serious indications or evidence to the contrary came to our attention. Hence, we consider the information to be sufficient for the purpose of conducting a reliable valuation.

It is important to highlight that the information provided by the Bank shows a number of data gaps and inconsistencies that have negatively impacted our work and led to delays in the preparation of the Report. Such inconsistencies and data gaps affected different areas of our work and were solved through a significant number of contacts with the Bank. In case of data gaps or inconsistencies that could not be resolved, we made reasonable assumptions. None of the parties involved (e.g., the former shareholders and the creditors) will be unfairly, unjustly or unilaterally influenced by our assumptions, nor will they be unjustly or unilaterally favoured or disadvantaged.

The content and conclusions herein are based on hypothetical scenarios.



Some assumptions or forecasts could have developed differently and unforeseen events and circumstances could have occurred during the periods considered by RSM Ebner Stolz. These could have included material changes in the economic and/or political environment, significant increases or decreases in interest rates and/or material regulatory changes. Therefore, the outcome of any insolvency proceedings, if they were to take place, could have been different from the outcome included in this Report. RSM Ebner Stolz considers the hypothetical scenarios and assumptions developed in this analysis to be plausible, even if they seem remote or even exceptional or alternative scenarios could be developed.

RSM Ebner Stolz accepts no responsibility for the reliability of the information obtained to the extent it is inaccurate, incomplete or misleading, for matters not covered by the Report or for matters that remained unidentified. Beyond that we have no indications of error/fraud cases as at the Valuation Date that we would have to acknowledge. Furthermore, at the time of issuing the Report, we have no serious indications or evidence that any such matters exist which would alter the reliability of the Valuation.

We consider that the contact persons appointed by the purchaser of the Bank's business is the body responsible for the information and for the data that they made available to us.

Without prejudice to the generality of the foregoing, which applies to all areas of the report, we also refer to the relevant areas where a section entitled "Sources of Uncertainty" has been included with specific qualifications and assumptions.

For your convenience, the Report has been made available to you in electronic copy format.

Yours faithfully







1. Executive Summary

Please note: Because this is a summary, we have omitted more detailed descriptions for the sake of clarity. References to the detailed explanations are given in parentheses.

Background of this Valuation

On 1 March 2022, following a failing or likely to fail (**FOLTF**) assessment by the European Central Bank (**ECB**) and the Croatian National Bank's (**CNB**) moratorium decision (28 February 2022; refer to section 3 (44) of the Resolution Decision, the SRB took resolution action in respect of Sberbank d.d. (the **Bank**), resulting in transferring all shares issued by the Bank (section 4.3.4 of the Resolution Decision) to Hrvatska poštanska banka d.d. (HPB d.d., hereinafter "the **Purchaser**").

As set out in section 4.3.4 of the **Resolution Decision**, the SRB exercised its powers to apply the **sale of business tool**. Eventually, all shares issued by the Bank were transferred to the Purchaser. In light of the Purchaser's binding offer, the consideration to be paid by the Purchaser was set to the amount of kHRK 71,000. Upon instruction of the SRB, the expenses incurred by the SRB in connection with the use of resolution tools or powers in the context of the resolution of the Bank are at the amount of approx. kHRK 4,138.¹

According to Article 15 (1) (g) of the SRMR **no creditor shall incur greater losses** than would have been incurred if the Bank had been wound up under normal insolvency proceedings in accordance with the safeguards provided for in Article 29 of the SRMR. According to Article 76 (1)(e) of the SRMR, within the resolution scheme and when applying the resolution tools, the SRB may use the Single Resolution Fund only to the extent necessary to ensure the effective application of the resolution tools for inter alia the purpose of paying compensation to the shareholder or creditors if, on the basis of Article 3 of Commission Delegated Regulation (**CDR**) 2018/344, they have incurred higher losses than they would have incurred, following a valuation pursuant to Article 20(16) of the SRMR, in a winding-up under normal insolvency proceedings (**NIP**) (section 2).

Against this background, the Report provides a valuation of the difference between the treatment of the shareholder and creditors in the resolution, as compared to a normal insolvency proceeding in a hypothetical scenario. In other terms, this valuation aims to assess whether the No-Creditor-Worse-Off (NCWO) principle has been breached.

The report was prepared by us as an independent valuer. It examines if the NCWO safeguards were adhered to and aims to assist the SRB in its decision as to whether compensation should be paid to the affected shareholder of the bank (section 2.1).

¹ The net consideration amounted to HRK 66,861,739.46 as evidenced by the bank confirmation of payment ("potvrda primitka transakcije") as of 7 July 2022.



Valuation Approach

In this case, the Bank's creditors and the relevant DGS remained financially unscathed by the application of the sale of business tool. Only the Bank's former shareholder was financially involved when the shares were transferred to the Purchaser in exchange for the consideration. Against this background the **NCWO principle** would have been safeguarded if, in normal insolvency proceedings, the shareholder would have received less than the consideration (net of the deducted resolution expenses).

Accordingly, we provide an estimate if the proceedings under normal insolvency proceedings were sufficient to cover the former shareholder's consideration (net of the deducted resolution expenses) (section 2.1).

Deviating from Article 2 (3) of CDR 2018/344 we have not identified **encumbered assets** and claims secured by those assets. The reason is that neither the DGS nor the creditors of the bank were financially affected in this resolution case. Therefore, the question of the appropriate treatment of preferred or subordinated creditors in connection with asset encumbrance does not apply, and an analysis of asset encumbrance is not necessary to illustrate a different treatment between resolution and counterfactual insolvency (section 2.1).

The opening of normal insolvency proceedings for the Bank on 1 March 2022 would have resulted in an unplanned liquidation which would have resulted in the **discontinuance of its business**. Hence, the Bank's assets and liabilities may no longer be valued under the assumption of a going concern. For example, typically goodwill or deferred tax assets may have zero value due to the discontinuance of the business (sections 2.8. and 5.0).

Additionally, during NIP the Bank may not have the capacity to provide customers with the same level of service, reliability, or access to products and services that they were accustomed to. This can lead to customer dissatisfaction and a lower degree of trust in the Bank by both the customers as well as third parties. It is reasonable to assume that customers may decide to seek out another bank to avoid these risks and to ensure that their needs are being met (section 2.8.).

Indeed, similar cases from the past led to corresponding observations. Historic NIPs of banks have demonstrated that customers often move to a financially stable bank to sustain and secure their banking operations (section 4.3.2).

Overall, experience has taught us that it is reasonable to assume that the opening of normal insolvency proceedings for the Bank on 1 March 2022 would have resulted in a **value destructive process** (section 4.2).



Historical Cases

In the past, several bankruptcy proceedings were initiated in Croatia. Currently, at least eight banks are still undergoing bankruptcy proceedings, most of which only have comparably small balance sheet totals and yet have been in winding-up procedures for well over five years, in some cases even for over 20 years:

- The latest significant bankruptcy proceeding was initiated in 2016 and is still ongoing (Banka splitsko-dalmatinska d.d., Split).
- Another bankruptcy proceeding over Tesla štedna banka d.d., Zagreb, a rather small bank in Croatia, was initiated in 2018 and is also still ongoing.
- All insolvency proceedings to date are being conducted under the previous Croatian insolvency law².

These insolvency cases were conducted on commercial banks that operated in the savings and loan business and thus acted comparable to the Bank in the market. However, we must explicitly point out that these banks were significantly smaller than the Bank, even if they are basically comparable in terms of their business model.

Consequently, these bankruptcy proceedings and their settlement periods provide only limited insight for the estimation of potential bankruptcy proceedings of the Bank.

Nevertheless, where appropriate we base our conclusions and assumptions on past experience, i.e., regarding the possible duration of a winding-up of the Bank or associated costs (section 4.3.2).

We note that there is limited comparability between the cases at hand, due to the different regulatory frameworks arising from the fact that the proceedings in Croatia took place before the adoption of the CACLCI. Nevertheless, certain conclusion can be drawn with relevance for the current case.

We summarise our main findings (section 4.3.2.) below:

- 1. Banka splitsko-dalmatinska d.d. wound-up 76% of its total assets within 6.5 years
- The costs for winding up Banka Splitsko already amount to 3.7% of the insolvency estate. 51.4% of total costs of liquidation incurred through recurring operational costs, 44.5% were employee costs and roughly 4% of the total costs refer to the liquidator and related costs.

² For the bankruptcy of INTERNET MOBILE BANK d.d. u likvidaciji (opened on 15.02.2022 under the new bankruptcy law), due to the proximity in time to the valuation date, there are no reliable data on the expected duration of the insolvency proceedings, the associated revenue ratios or the insolvency costs, which we can use in the context of a realistic and prudent valuation.



- 3. EAA reduced its cost basis to 21% in after ten roughly ten years.
- 4. FMS-WM managed to reduce its operating costs to 36% after roughly nine years.
- 5. In general, liquidations are lengthy processes that involve high administrative effort even if backed by an effective regime. However, due to the recent legislation changes in Croatia, we expect liquidations to materially accelerate in comparison to those under the old insolvency regime (see section 3.1).
- 6. Liquidations involve the trade-off of quick liquidation vs. value-preserving liquidation.
- 7. Portfolios have to be managed by experts, data must be prepared and potential purchasers are to be found, which costs a lot of human and time resources.
- 8. Close to the end of the process, rather bad assets remain.

The cases at hand show that a liquidation within 3 years under the old insolvency regime in Croatia was remote (probability of <10%) Within the CACLCI, we generally expect liquidation procedures to accelerate because of the set maximum period to 3 years (with the opportunity of a further extension after CNB consent (article 43 CACLCI)) and thus, consider a 3-year insolvency scenario as probable (probability >50%) and a 6-year scenario as reasonably possible (probability of 10-50%). At the same time, we have to point out that an insolvency scenario of much less than 3 years is still considered remote (probability <10%).

Summarising, we conclude that **no similar sized bank was put into compulsory liquidation** or insolvency in Croatia in the recent past. Hence, in many aspects the insolvency of the Bank would have been an **unprecedented event in Croatia**.

Contagion Effects

Due to the Bank's position as the eight largest bank in Croatia, NIP could cause a negative reaction by market participants leading to a subsequent disruption of the financial system, with the potential to lower the confidence in the banking system and to harm the real economy.

Low confidence in the banking system and a financial disruption may lead to an increase of the risks associated with the financial sector and, hence, a general increase in risk premiums. Also, under such conditions market participants are expected to become more restrictive with regards to credit approvals or investments.

As an effect, it cannot be ruled out that aforementioned circumstances may further reduce the potential recoveries from the Bank's NIP. However, as no reliable information is available to quantify such effects and to the benefit of the shareholder such spill-overs and contagion effects were not further quantified in the context of this valuation.



Valuation Date

In line with the ECB's FOLTF assessment of 27 February 2022, the SRB concluded on 1 March 2022 that the Bank was failing or likely to fail on the basis of Article 18.4.c of Regulation (EU) No 806/2014 (SRMR).

In accordance with Article 20(17)(a) SRMR and Article 1 of the CDR 2018/344, the date of the resolution decision (**1 March 2022**) is set as the **valuation date**. The Bank provided us with the financial information as of 28 February 2022. Due to the moratorium, it is reasonable to assume that the financial information as of 28 February 2022 do not materially differ from the financial information as of 1 March 2022 (section 2.4.1).

Liquidation Scenario

We have considered alternative scenarios and possible strategies that a liquidator would apply to **maximise realisations and to satisfy creditors in a reasonable period**. Our analysis of such hypothetical scenarios depends on several assumptions. We have adopted a prudent approach and assumptions which we consider to be realistic and favourable to the affected Shareholder in the insolvency scenarios:

- The liquidator's workout policy aims to maximise assets realisations over time while meeting the interest of all involved stakeholders,
- The creditors on the one hand aim to maximise their own recoveries and on the other hand to receive these recoveries as soon as possible. This is often accompanied by a trade-off, which leads to lower recoveries for lower insolvency ranks on the one hand, but faster recoveries for higher insolvency ranks on the other. This approach usually leads to higher discounts on the sale of assets and even to the fact that lower ranks may not receive any recoveries at all. On the other hand, a prolonged insolvency process increases the uncertainty and the risk of reduced future recoveries. Hence, a prolonged process does not per se increase the level of recoveries.
- The failure of a potentially systemic bank in Croatia has no impact of market disruption and contagion effects which would further lower recoveries.
- Beyond the litigation claims which are disclosed in the financial information of the Bank, no additional litigation claims, which only occur because of the liquidation (e.g., claims for damages or labour disputes pursuant to the liquidation decision), have become imminent.

We have performed the valuation under a compulsory liquidation scenario (see section 3.2.). It is not reasonable for us to assume that the Bank's business can be continued and can be sold as a whole while it is undergoing NIP because the banking license is terminated with the beginning of the compulsory liquidation (Article 68(1) Credit Institutions Act).



Furthermore, NIP expressly forbids pre-insolvency procedures over credit institutions (Article 3(6) Insolvency Act) and the only applicable procedure is under CALCI which involves liquidating all assets, terminating accounts and closing off operations. Art 81 CALCI prescribes that on-going insolvency procedures will be finalized under previous laws, but new procedures under compulsory liquidation scenario.

Hence, we are limited to assume an orderly sale of single assets or portfolios for the insolvency scenarios (section 2.8).

Eventually, we analyse the hypothetical disbursements of the net realisations to the shareholder and creditors according to the assessment of the relevant (legal) framework by our local legal counsels as well as RSM Ebner Stolz's understanding of the insolvency ranking in the Croatian jurisdiction.

We have estimated the outcome of the insolvency proceedings for the Bank on a legal entity basis, reflecting the nature of the insolvency process under the Act on Compulsory Liquidation of Credit Institutions (*Zakon o prisilnoj likvidaciji kreditnih institucija*, OG 146/2020) (the "**CACLCI**") (section 3.2).

Liquidation Timeline

Generally, the liquidation timeline significantly determines how much value can be realised from the run-off or sale of assets for the benefit of creditors.

Article 43 CACLCI stipulates that the compulsory liquidation proceeding shall be concluded by the compulsory liquidation manager within 3 years from the date of initiation of the compulsory liquidation proceeding. However, it is possible that the court extends the prescribed time frame if the Deposit Insurance Agency as the supervisory liquidation body gives its consent, and if the extension would certainly result in a higher settlement amount for creditors in the compulsory liquidation proceeding.

Since CACLCI is a new and more detailed framework, it is not comparable to NIP under the previous legal framework and the procedures under NIP which had not had strict deadlines and plan of liquidation.

However, the compulsory liquidation of the Banks' portfolios with some 100,000 loans is a complex process because many loans have different terms and conditions associated with them. Analysing each of these agreements, negotiations, managing the risk of defaults or taking decisions on guarantees will require significant human resources and time. Additionally, the Bank must assess and manage the risk of defaults, take decisions about guarantees, and prioritize certain loans over others. Furthermore, the Bank must be mindful of its decision-makings' consequences in terms of litigation. Each of these elements further complicates the winding-up process.

Under this perspective and in the light of the historic bankruptcy cases of credit institutions, a winding-up scenario of significantly less than three years is considered as remote (section 4.3.3).



From the above stated facts, it would be reasonable to expect that the compulsory liquidation would require at least three years, possibly the court would approve the prolongation of the procedure by three years in consideration of the complexity of the proceedings and the anticipated results.

Besides the limitations of the liquidation period resulting from the revised legal framework (section 4.3.1.) there are further arguments against a prolonged liquidation period. A longer liquidation period than the 6-year scenario would inevitably lead to higher liquidation costs, higher management and maintenance costs and increased uncertainty (i.e., macroeconomic risk) for the liquidator in terms of the levels of asset realisations. Against this background we considered that a liquidator would be unwilling to speculate as to possible upsides in the future which are highly uncertain.

Under this perspective, we consider a 3-year or a 6-year winding-up scenario as plausible.

Further, we consider a three-year period to be more likely because this liquidation plan is more likely to be approved by CNB and DGS. This is the case because it ensures faster satisfaction of the DGS as well as the unprotected deposits of individuals, SMEs, micros and corporates (>kHRK 750) and thus mitigates any contagion effects on the real economy.

We have also taken into account the following factors when determining the duration of the liquidation:

- The DGS (Deposit Guarantee Scheme) as one of the main creditors would not reject an insolvency plan or scenario that ensures a prompt and full repayment of the deposit guarantee compensation provided by the DGS.
- The liquidator will try to satisfy as early as possible all creditors whose claims are not
 protected by the DGS or whose claim failure could pose a risk for the financial stability of
 the Croatian economy (in particular claims >750 kHRK of individuals, small and medium
 enterprises (SMEs) and companies. Initially the liquidator puts emphasis on satisfying the
 claims >750 kHRK made by individuals and SMEs, followed by the claims of the larger
 companies and, eventually, claims made by financial institutions.

In the past, we have observed that financial institutions prefer, in order to ensure minimising of unknown risk and maximising of short-term cash inflows, the quickest possible, even if not full, satisfaction to a higher but more protracted satisfaction in order to mitigate uncertainties.

For more information on the DGS, please refer to Annex 4.

As a result, there are incentives in favour of a rapid liquidation, even at the cost of higher losses for lower insolvency ranks.

Accordingly, it can be assumed that in the creditors' meeting the creditors who prefer a fast and high satisfaction will not reject the corresponding insolvency plan.



At this point, we will anticipate our result, which proceeds are estimated from the liquidation of the Banks's assets in our Best Estimate. From this we have determined creditor waterfalls, specifically for the scenarios with 3 and 6 years of the duration of the liquidation. From this, we can determine which scenarios best match the aforementioned conditions.

The following illustrates our analysis of a **possible creditor waterfall in the 3-year and 6-year NIP**

	Creditor Hierarchy Croatia (kHRK)		Waterfall	3Y Scenario	(kHRK)	
Rank	Item	Amount	Year 1	Year 2	Year 3	Claim at Insolvencies' end
19	Costs of Insolvency	354,098	-135,115	-123,311	-95,672	-
18	First senior class	10,769	-10,769			0
17	Second senior class	5	-5			0
16	Third senior class - DGS	3,408,126	-3,408,126			0
15	Fourth senior class - Individuals/Micros/SMEs (>750 kHRK)	1,101,806	-674,423	-427,383		0
14	Fifth senior class - Corporates (>750 kHRK)	2,002,319		-464,826	-1,537,493	0
13	Sixth senior class - Institutional creditors	1,326,697			-995,795	330,902
4	Subordinated claims	294,181				294,181
3	Subordinated claims	1,918				1,918
2	Subordinated claims	203,664				203,664
Total		8,703,584	4,228,438	1,015,521	2,628,960	830,664

Table 1: Executive summary; Estimated creditor waterfall; 3-year Best Estimate Scenario

Creditor Hierarchy Croatia (kHRK)			Waterfall 6Y Scenario (kHRK)						
Rank	ltem	Amount	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Claim at Insolvencies' end
19	Costs of Insolvency	490,767	-110,968	-102,788	-86,430	-71,707	-61,891	-56,984	-
18	First senior class	10,769	-10,769						0
17	Second senior class	5	-5						0
16	Third senior class - DGS	3,408,126	-3,408,126						0
15	Fourth senior class - Individuals/Micros/SMEs (>750 kHRK)	1,101,806	-698,631	-403,175					0
14	Fifth senior class - Corporates (>750 kHRK)	2,002,319		-509,557	-755,237	-522,777	-214,749		0
13	Sixth senior class - Institutional creditors	1,326,697					-341,007	-985,690	0
4	Subordinated claims	294,181						-265,662	28,519
3	Subordinated claims	1,918							1,918
2	Subordinated claims	203,664							203,664
Total		8,840,253	4,228,499	1,015,521	841,666	594,483	617,647	1,308,336	234,100

Table 2: Executive summary; Estimated creditor waterfall; 6-year Best Estimate Scenario

Note: The "total" values shown in the creditor waterfall section correspond to the cash flows from asset liquidation according to our analysis. (c.f. table 4). As an example, Table 1 shows that with assets' realisations of 7,872,919 (c.f. Table 4, 3 years, best estimate), cash flows of kHRK 4,228,438, 1,015,521 and 2,628,960 would be repaid to creditors within the 3 years liquidation period, while an amount of kHRK 830,664 would remain unpaid at the end of the liquidation period. The above creditor waterfalls do not include the settlement of contingent liabilities for illustrative purposes, as they are spread across different insolvency tiers and arise at different times which are not yet foreseeable as at the Valuation Date. Thus, the settlement of contingent liabilities will increase the position "Claim at insolvencies' end" by kHRK 165,483 (3-year scenario kHRK 996,147; 6-year scenario kHRK 399,583).



The claim by the DGS of kHRK 3,408,126 can be satisfied by selling highly liquid and actively traded assets as well as by natural amortisation of the Banks' loan portfolio within one year after the initiation of the insolvency proceedings.

As a result of our analyses, the 3-year and 6-year NIPs are the most plausible scenarios, as DGS, SMEs and individuals are satisfied as fast as possible and no contagion effects are to be expected. We classify the relevance of the scenarios as follows:

- 3-year scenario: "probable" (or likely to occur; probability >50%)
- 6-year scenario: "reasonably possible" (more than remote but less than likely; probability 10-50%)

We note that we have not considered additional interest claims of creditors in the waterfall. Such claims are considered highly uncertain and rather unlikely in the insolvency scenario. Further, such claims would have to be settled from the insolvency proceeds thereby reducing the amount available to satisfy the shareholder (see sections 6 and 7).

Estimated Cash Inflows and Expenses

We have adopted a **category-by-category approach for each class of assets** as categorized in the Bank's balance sheet. According to Article 4 of CDR 2018/344, for conducting the valuation we determined the (discounted) amount of expected cash flows from the recoveries of assets under normal insolvency proceedings (section 5).

In particular cases and as an exception to Article 4(2) of CDR 2018/344, expected cash flows are not discounted. This is the case if it is reasonable to assume that the cash flows from liquid assets will be realized immediately after the opening of the compulsory liquidation and/or if the effects of discounting are not material for the valuation while being to the benefit of the shareholder.

For assets traded in an active market, we used the observed prices to reflect the expected cash flows from recoveries (Article 4(4) of CDR 2018/344). This primarily applies to liquid assets and assets recorded at International Financial Reporting Standards (IFRS) Level 1 fair values.

According to Article 4(5)(a) of CDR 2018/344, for assets not traded in an active market we used prices observed in active markets where similar assets are traded, if available. This primarily applies to assets recorded at IFRS Level 2 fair values.

For other assets not traded in an active market, we considered a number of factors, especially the likelihood of the assets generating net cash inflows under normal insolvency proceedings (Article 4(5)(d) of CDR 2018/344). This primarily applies to less liquid assets which are typically recorded at amortized costs, such as, loans.

Also, we deducted estimated cash outflows to cover contingent liabilities, consisting of litigationrelated contingent liabilities as well as financial guarantees provided. The reason is that litigations are expected to continue or payments for guarantees may be claimed, even under a hypothetical insolvency proceeding.



Additionally, we deducted the estimated costs under insolvency proceedings. These costs mainly include:

- Legal and professional fees paid to the administrator, counselors, accountant etc.;
- The general and administrative costs to manage and wind up the loan portfolio, including financing costs if identifiable;
- Termination fees (employment and other contracts).

Also, insolvency costs are incurred which increase depending on the duration of the insolvency.

Scenario Analysis

As the cash flow valuations and costs estimates are subject to significant uncertainty, we performed sensitivity analysis for key value drivers (e.g., the valuation parameters for the loan portfolio or probabilities of expenses for legal contingencies) to provide a valuation range around the Best Estimate to form a Best Case Scenario and a Worst Case Scenario (section 5).

- The **Best Estimate scenario** is the starting point which represents the reasonably expected recoveries of assets as well as payments for certain liabilities and expenses related to the insolvency proceedings. It is considered to reflect the common market participants' broad expectations about relevant economic developments and valuation parameters.
- In the **Best Case scenario**, we assume still favourable macroeconomic conditions would help keep credit default rates low.
- The **Worst Case Scenario** expresses a severely unfavourable economic environment in which many firms and households would become financially distressed to a point where credit default rates rise significantly.

Estimated Insolvency Proceeds

From a total balance sheet of kHRK 9,540,625, we estimate that the administrator would be able to realize total assets in a range of kHRK 7,741,171 (Worst Case, 3-year scenario) to kHRK 8,870,474 (Best Case, 6-year scenario). Please refer to the line "Total asset realizations" in the following table:



Valuation Ranges (kHRK)							
		Duration of Insolvency Proceedings					
Scenario		3 years	6 years				
	Total asset realizations	8,082,847	8,870,474				
Deat Case	Costs of insolvency	-298,014	-396,995				
Best Case	Contingent Liabilities / Guarantees	-137,548	-137,548				
	Disbursement	7,647,285	8,335,931				
	Total asset realizations	7,872,919	8,606,151				
Dest Estimate	Costs of insolvency	-354,098	-490,767				
Best Estimate	Contingent Liabilities / Guarantees	-165,483	-165,483				
	Disbursement	7,353,337	7,949,901				
	Total asset realizations	7,741,171	8,410,470				
Ward Orac	Costs of insolvency	-410,004	-590,946				
worst Case	Contingent Liabilities / Guarantees	-196,679	-196,679				
	Disbursement	7,134,488	7,622,845				

Table 3: Valuation ranges

Given that the Bank had liabilities of approx. kHRK 8,349,485 and taking into account the estimated casts of insolvency and the settlement of contingent liabilities, it becomes apparent that there will be a deficit to cover all of the Bank's liabilities in all scenarios.

The claim by the DGS of kHRK 3,408,126 can be satisfied by selling highly liquid and actively traded assets as well as via the expected amortisation of the Banks' loan portfolio within the first year after the initiation of the insolvency proceedings.

The key value drivers are the value adjustments of the loan portfolio (3-year Best Estimate kHRK 1,465,399) and the insolvency costs (3-year Best Estimate kHRK 354,098) (section 7).



Conclusion

Our conclusion is that the insolvency recovery amounts would not be adequate in any scenario to cover all liabilities, as indicated below:

Resolution vs. Best Case Insolvency Scenario (kHRK)										
		Sale of Business			3 years		6 years			
ltem F	Rank	Outstanding	Recovery Amount	Recovery Rate	Recovery Amount	Recovery Rate	Recovery Amount	Recovery Rate		
Assets Realization					8,082,847		8,870,474			
Cost of insolvency	19				-298,014		-396,995			
Cash outflows for contingent liabilities				-137,548		-137,548				
tal realization for creditors					7,647	7,285	8,335	,931		
Creditors / Liabilities	2-18	8,349,485	8,349,485	100.0%	7,647,285	91.6%	8,335,931	99.8 %		
Shareholder's Equity	1	1,191,140	66,862	5.6%	C	0.0%	0	0.0%		
Total		9,540,624	8,416,347	88.2%	7,647,285	80.2%	8,335,931	87.4%		

Resolution vs. Best Estimate Insolvency Scenario (kHRK)								
		Sale of Business			3 years		6 years	
Item	Rank	Outstanding	Recovery Amount	Recovery Rate	Recovery Amount	Recovery Rate	Recovery Amount	Recovery Rate
Assets Realization					7,872,919		8,606,151	
Cost of insolvency	19				-354,098		-490,767	
Cash outflows for contingent liabilities		-		-165	-165,483		-165,483	
otal realization for creditors					7,353	3,337	7,949	,901
Creditors / Liabilities	2-18	8,349,485	8,349,485	100.0%	7,353,337	88.1%	7,949,901	95.2%
Shareholder's Equity	1	1,191,140	66,862	5.6%	0	0.0%	0	0.0%
Total		9,540,624	8,416,347	88.2%	7,353,337	77.1%	7,949,901	83.3%

Resolution vs. Worst Case Insolvency Scenario (kHRK)								
		Sale of Business			3 years		6 years	
ltem	Rank	Outstanding	Recovery	Recovery	Recovery	Recovery	Recovery	Recovery
			Amount	Rate	Amount	Rate	Amount	Rate
Assets Realization					7,741,171		8,410,470	
Cost of insolvency	19				-410,004		-590,946	
Cash outflows for contingent liabilities				-196,679		-196,679		
al realization for creditors					7,134,488		7,622,845	
Creditors / Liabilities	2-18	8,349,485	8,349,485	100.0%	7,134,488	85.4%	7,622,845	91.3%
Shareholder's Equity	1	1,191,140	66,862	5.6%	C	0.0%	0	0.0%
Total		9,540,624	8,416,347	88.2%	7,134,488	3 74.8%	7,622,845	79.9%

Table 4: Executive summary; Resolution vs. Valuation



We estimate a 3-year insolvency scenario to be probable, with that being the most relevant timeframe.

In our **Best Estimate** scenario, insolvency proceeds are not sufficient to reimburse the shareholder at all, and liabilities are still affected (NCWO principle met under the actual resolution tool).

The **Best Case** scenario shows higher proceeds from the realisation of assets but liabilities would still suffer a shortfall. No reimbursement of the shareholder is possible.

The **Worst Case** scenario results in a reduction of asset realizations with even more liabilities suffering a shortfall and no reimbursement to the shareholder

Hence, it is reasonable to conclude that under the resolution the shareholder of the Bank in respect of which the resolution action has been effected has not incurred greater losses than he would have incurred if the Bank had been wound up under NIP (section 7).



2. Introduction

On 27 February 2022, the ECB assessed that the Bank was failing or likely to fail, implying that the Bank would not be able to pay its liabilities as they fall due in the near future, and communicated its assessment to the SRB (section 3 (39) et seq. Resolution Decision).

On 1 March 2022, which will be referred to as the "Resolution Date", the SRB took resolution action (3(51) et seq. SRB Resolution Decision) in respect of the Bank, in its determination that the conditions for resolution were met, namely:

- The entity was likely to fail and there was no reasonable prospect that any alternative private sector measure or supervisory action would prevent its failure within a reasonable time frame.
- Considering the nature of the Bank's activities, size and importance for the Croatian economy overall, resolution action was necessary in the public interest.

The SRB decided that among the alternative resolution tools available under the SRMR, the sale of business tool in the form of transfer of shares was the most appropriate to achieve the resolution objectives (4.3.2 et seq. Resolution Decision).



2.1. Purpose of this Valuation

Article 20(16)-(18) of SRMR requires a "Valuation of Difference in Treatment to assess whether shareholders and creditors would have been more favourably treated if the institution under resolution had entered into normal insolvency proceedings". Generally, Valuation of Difference in Treatment is a safeguard of the rights of shareholder and creditors who were affected under the resolution scheme.

According to section 4.3.3.2 of the Resolution Decision, the SRB considered that the Purchaser can contribute to avoiding significant adverse effects on financial stability and contain the liquidity drain. The resolution tool (sale of the Bank's business to the Purchaser) was not only aimed at the transfer of the whole business but also ensuring the entity's going concern.



Hence, as of the Resolution Date, the Bank's creditors and the relevant DGS remained financially unscathed by the sale of business tool. Only the Bank's former shareholder got financially involved when, as a consequence of the resolution, the shares were transferred to the Purchaser in exchange for the consideration. Considering this, it becomes obvious that the NCWO principle would have been followed if, in NIP, the shareholder would have received less than the consideration paid (after deduction of expenses).

Accordingly, we refrain from the requirement stipulated in Article 2 (2) of the CDR 2018/344 to estimate the proceeds each creditors' class would receive if the Bank would have been woundup under NIP as this would not offer further evidence with regard to the **NCWO principle**. Instead, we provide an estimate if the proceedings under NIP were sufficient to cover the creditors' claims as well as the former shareholders' compensation. The NCWO principle is met if, in normal insolvency proceedings, the shareholder would have received less than the consideration (net of expenses) obtained in resolution.

Deviating from Article 2 (3) of CDR 2018/344 we have not identified **encumbered assets** and claims secured by those assets. Asset-encumbrance secures the Banks refinancing so that in case of normal insolvency proceedings (NIP), a portion of the Banks' assets would have to be allocated to specific creditors. Consequently, creditors of unsecured bonds/deposits would ultimately be referred to the allocation ratio from the remaining and often less valuable insolvency estate.

In this case, claims by depositors against the DGS are not affected: They are compensated within the limit set by the deposit insurance system, independently from the insolvency estate, although the recovery claim by the DGS would be affected by asset-encumbrance.

Finally, in NIP any asset-encumbrance would ultimately affect the remaining investors in unsecured financing facilities. This is because fewer assets are available and of a lower quality than secured assets such as covered bonds or securities in repurchase agreements. Accordingly, the loss in case of insolvency for unsecured creditors increases with rising encumbrance.

It should be reiterated that neither the DGS nor the creditors of the bank were financially affected in this resolution case. Therefore, the satisfaction of preferred or subordinated satisfaction of creditors in connection with asset encumbrance is not relevant for the case at stake and an analysis of asset encumbrance is not necessary to illustrate a different treatment between resolution and counterfactual insolvency.



Generally, Valuation of Difference in Treatment is required to determine

- The treatment that the Shareholder and Creditors in respect of which resolution actions have been effected (affected Shareholders and Creditors) would have received if the Bank had entered into NIP when the resolution authority, in this case the SRB, decided to apply the resolution strategy (counterfactual treatment).
- The treatment that the affected Shareholder and Creditors received in resolution (actual treatment).
- The difference between the actual treatment and the counterfactual treatment.

Pursuant to Article 20(18) SRMR, the valuation shall:

- Assume that the institution under resolution with respect to which the resolution action or actions have been affected would have entered NIP at the time when the resolution decision was taken,
- Assume that the resolution action or actions had not been affected, and
- Disregard any provision of extraordinary public financial support to the institution under resolution.

If it is determined by the valuation report that the affected shareholder (and creditors) have suffered greater losses as a result of the resolution action than they would have suffered in NIP, they shall be entitled to a compensation for the difference.

2.2. Legal and Regulatory Framework for Valuation of Difference in Treatment

In this case, the SRB is the resolution authority. Accordingly, we have complied with the SRMR and CDR 2018/344, which was adopted on 14 November 2017 and came into force on 29 March 2018. The SRMR and CDR 2018/344 provide the general legal framework for the preparation of the report and set technical standards for the Valuation of Difference in Treatment.

2.3. Scope of the Report

As already noted above, according to Article 3(a) of the CDR 2018/344 we as an independent valuer must assess how shareholders and creditors would have been treated if the entity had initiated NIP at the resolution decision date and compare this with the outcome of the resolution tool (sale of business in the form of a share transfer from the shareholders to the Purchaser).

In this case, the Bank's creditors and the relevant DGS remained financially unscathed by the sale of business tool. Accordingly, we will only compare the actual treatment of the shareholder (receiving the cash consideration after the deduction of expenses) with the disbursements in a hypothetical insolvency scenario (counterfactual treatment).

Also, it is not necessary to assess the hypothetical contribution or the treatment of the DGS in a hypothetical insolvency scenario.



2.4. Sources of Information and Key Dates

The purpose of this section is:

- To provide a summary of the information gathering process,
- To describe our approach to the information gathered.

2.4.1. Information Request and Valuation Date

We requested directly from the Bank a variety of information that were essential for preparing our assessment on the Valuation of Difference in Treatment. The initial contact was initiated on 20 June 2022 and continued throughout the whole process. In total, we sent nine information request lists and various individual requests. The data was uploaded to a VDR by the Bank.

On 28 February 2022, the CNB put the moratorium in force until end of 1 March 2022. On 1 March 2022 the decision to resolve the Bank was adopted. Hence, according to Article 20(17)(a) SRMR and Article 1 of the CDR 2018/344 the reference date of the valuation (**Valuation Date**) is 1 March 2022. The Bank provided us with the financial information as of 28 February 2022. Due to the moratorium, it is reasonable to assume that the financial information as of 28 February 2022 does not materially differ from the financial information as of 1 March 2022.

Accordingly, and as far as available, basis of preparation of this Report is the unaudited financial information as of the Bank's closing balance or opening balance as of 28 February 2022 or 1 March 2022, respectively. If necessary, the basis of preparation was complemented by financial information as of previous dates, especially as of 31 December 2021.

In accordance with Article 1 of the CDR 2018/344 this valuation is based on both information available on the Resolution date and on information that could reasonably have been known at the Resolution date. The categories of information obtained include:

- financial information including audited financial statements and management accounts, both at a consolidated and legal entity level;
- details of the Bank's assets including details of the loan book and collateral data set as at the Valuation Date;
- a list of all claims and contingent claims;
- details of the real estate portfolio;
- details of current tax assets (CTA) and deferred tax assets (DTA) items;
- derivative contracts;
- details of the equity and fixed income data tape and the justification of their valuation;
- details of pending legal proceedings;
- information required to estimate the costs of liquidation including details as to the Bank's cost base including key contracts and leases;
- detailed employee information including salaries and bonuses and
- Liability Data Report (LDR), MREL TLAC Report as of 28. February 2022.



Furthermore, we used financial and non-financial information available from public sources, including digital and written information media (such as Bloomberg, S&P Capital IQ or research reports).

2.4.2. Description of our Approach to the Information Disclosed

We were in regular contact with a dedicated team of the Bank throughout the valuation process to obtain, understand and analyse the requested information, including clarifying uncertainties in the data required for the valuation.

We encountered several challenges and delays in the process, including:

- Issues in terms of requests for greater detail than the Bank was ordinarily used to prepare,
- Questions concerning quality, depth and the consistency of the data,
- Lack of certain information.

The problem solution required a significant number of interactions with the Bank.

Where we were unable to obtain information, or data was not reliable, we have:

- used appropriate assumptions or substitute proxies which we derived from different market analyses and/or observations of other bank insolvency cases in the Croatian market,
- focused on the most material items only in terms of their potential impact on the affected Shareholder.

As necessary, such assumptions or substitute proxies are described in detail in the relevant sections of this Report.

This process inevitably led to delays in carrying out our work. Both the interactions and the identification of solutions took a lot of effort and time. This also increased the number of assumptions we had to make. These assumptions are considered to be immaterial (e.g., the impact of the Euro introduction in Croatia - section 2.4., or customer migration as a consequence of the Bank's failure - section 5.4.1., or the approximation of intra-year lifetime PD - section 5.4.1).

The Bank provided us with a lifetime PD matrix for our analysis of the loan tape. In order to make this analysis as detailed as possible, we have calculated changes within the lifetime PD itself using linear extrapolation. We expect immaterial effects of this assumption on the valuation.

There are specific areas worth to mention, where we faced significant difficulties, e.g., in reconciling the unaudited financial statements made available to us as of 28 February 2022 with the information provided by the Bank on the individual assets. In cases where the underlying information for individual balance assets stated deviations from the financial statements, we took the higher value into account, to the benefit of the shareholder and creditors.



2.5. Macroeconomic Context for the Liquidation

We considered the macroeconomic environment (as it was anticipated at the Valuation Date) of the liquidation scenarios, e.g., appropriate benchmarks for Loan Probability of Default (PDs) or Loss Given Default (LGDs).

The projection for the economy of Croatia, which was published by European Commission (EC) (February 2022), expected an economic growth of 10.5% (real GDP) in 2021.³ The growth in 2022 was expected to be 4.8%,⁴ in 2023 to be some 3%.⁵

The inflation in 2021 reached 2.7%. Mainly because of higher commodity prices the inflation was expected to grow to 3.5% in 2022. In 2023 the inflation was expected to decline under 2%.⁶

The projection for the economy of Croatia, which was published by the CNB (December 2021), expected an economic growth of 10.8% in 2021 and 4.1% in 2022.⁷ This includes, but is not limited to, the following considerations for 2022:

- All GDP components might positively contribute to its growth in 2022, but foreign demand could be the main generator of economic growth,
- Employment was expected to rise.

The unemployment rate was expected to fall from 6.8% to 6.2%.

In our opinion, however, the assessment of CNB and EC were too optimistic due to the lack of proximity to the Valuation Date and the rapidly changing framework conditions, especially the Russian-Ukrainian war and related sanctions imposed by the European Union (**EU**) and U.S.A. against Russia soon after. Possible effects associated with Croatia's entry into the European Monetary Union (**EMU**) and the corresponding implementation of the EUR as currency were also not considered.

³ See: European Economic Forecast Winter 2022, p. 36.

⁴ See: European Economic Forecast Winter 2022, p. 36.

⁵ See: European Economic Forecast Winter 2022, p. 37.

 ⁶ See: European Economic Forecast Winter 2022, p. 37.
 ⁷ See: Macroeconomic Developments and Outlook, p. 3.



Our analysis of Eurostat data revealed that as of the Valuation Date, the Consumer Price Index (CPI) in Croatia rose by 8 percentage points in comparison to 2021. A continuation of this trend cannot be ruled out, especially with regard to the Producer Price Index (PPI) which peaked at 21.4% as of the Valuation Date (year-on-year). However, even a dramatic increase of PPI does not constitute CPI to rise accordingly, at least if it remains temporary. Nevertheless, this price pressure on producers may lead them to increase prices for their customers in order to balance out deficit spending and to avoid the erosion of their financial stability⁸ (Koenigsberg, 2022). This measure could lead customers, as well as the manufacturing sector, to expect constantly rising prices and, thus, cause them switching to stockpiling of various goods, which might put further pressure on prices. In other terms, as people base their expectations on the recent past, inflation expectations become self-fulfilling and inflation tends to remain high over longer periods of time. Therefore, and in line with a prudent valuation approach, we have considered further CPI upward potential and the corresponding loss of purchasing power of retail (e.g., private) customers. Accordingly, we considered this risk in increasing PD and LGD of consumer loans and short-term loans (e.g., overdrafts, credit cards etc.). In addition, we took into account potentially rising price levels in different scenarios when calculating liquidation costs (section 5.10).

This increasing pressure on price stability and, hence, the CNB's monetary policy may lead, inter alia, to rising interest rate levels (e.g., monetary tightening) to mitigate adverse effects and further inflation prospection. Further, it must be assumed that after the implementation of the EUR in Croatia, which we discuss later in this section, monetary policy, now managed by the ECB, will follow a tightening strategy as well. Contrary to this, on 16 December 2021 in its press release "Monetary policy decisions", the ECB announced that interest rates would remain on its current levels. "The interest rate on the main refinancing operations and the interest rates on the marginal lending facility and the deposit facility will remain unchanged at 0.00%, 0.25% and -0.50% respectively. In support of its symmetric 2% inflation target [...], the Governing Council expects the key ECB interest rates to remain at their present or lower levels until it sees inflation reaching 2% [...] it judges that realised progress in underlying inflation is sufficiently advanced to be consistent with inflation stabilising at 2% over the medium term. This may also imply a transitory period in which inflation is moderately above target"⁹ (European Central Bank, 2021).

On 3 February 2022 Reuters published its article "ECB opens door to 2022 rate hike in policy turnaround" and expressed concerns that interest rates could not remain at their low level. "Sources close to the discussion said a sizeable minority of policymakers had urged the Bank to act on Thursday, possibly by announcing a faster reduction in bond purchases, before agreeing to wait until March. According to the sources, policymakers were clear that a rate hike this year should no longer be ruled out given inflation risks and uncertain forecasts"¹⁰ (Koranyi & Canepa, 2022).

⁸ Available online here: https://hbr.org/2022/01/3-strategic-options-to-deal-with-inflation

⁹ Available online here: https://www.ecb.europa.eu/press/pr/date/2021/html/ecb.mp211216~1b6d3a1fd8.en.html

¹⁰ Available online here: https://www.reuters.com/business/ecb-seen-hold-may-acknowledge-inflation-risks-2022-02-02/



This development of the CNB's and ECB's monetary policy prospection caused us to consider increased risks in connection with variable-interest loans via the PD and LGD of the borrowers as the debtor is required to pay higher interest rates which causes either an increased duration of repayment or higher annuities (e.g., planning uncertainty or miscalculation of financing). At the same time, this assumption influences borrowers' willingness to migrate, as they are likely to take advantage of the opportunity to take out long-term fixed-rate loans in anticipation of rising interest rates.

Following Creditreform data, insolvency filings by companies in Croatia fell to a notable low in 2020 and 2021. In 2020, about 58.57% fewer insolvencies were filed compared to 2017, and in 2021 about 49.89% without 2017 being a relatively high outlier. This fact is probably due to the law of 2 April 2020: "suspension of duty to file for insolvency (debtors)¹¹ (European e-Justice, 2021): Reasons to initiate bankruptcy, that occur during the special circumstances, are not valid for the motion to initiate the bankruptcy proceedings. The triggers for the initiation of bankruptcy are insolvency and over-indebtedness, but none of these triggers are applicable if they occur during the special circumstances. Exception is that petition for opening the bankruptcy proceeding may be submitted by the debtor, the Financial Agency and the creditor only for the reasons of safeguarding the interests and safety of the Republic of Croatia, nature, the human environment and human health." As of the Valuation Date, we have no further information on the termination of this measure. This at least allows the conclusion that after the end of the measure, insolvencies might be "caught up" or stabilise at pre-pandemic levels, therefore insolvency rates in Croatia may rise again and thus affect the Bank's corporate debtors and associated NPL ratios. This led us to the conclusion that we need to consider additional risks in the PD and LGD of corporate borrowers and at the same time draw conclusions with reference to the conversion of the portfolio of performing loans (PL) to non-performing loans (NPL) during the insolvency period (see section 5.4.1).

In order to determine possible discounts for a certain part of the loan portfolio to be sold, we analysed the international market for Collateralized Loan Obligations (**CLOs**)¹² (Guse, Park, Saravay, & Yook, 2019). According to a market analysis "February Wrap: Volatility hits loan market, dragging YTD returns into red"¹³ (Lukatsky, 2022) published by Pitchbook Data, Inc.¹⁴ on the Valuation Date (1 March 2022), the CLO market suffered heavy losses in the context of the Russian invasion of Ukraine. Accordingly, this development represented the worst performance of the S&P/LSTA Leveraged Loan Index (-0.51% in February 2022) and the LL100 index (-0.54% in February 2022) since the Corona Pandemic sell-off in March 2020. This development, as well as the existing uncertainty and volatility in the CLO market, prompts us to take a rather cautious approach with regard to loan sell-off-related sales discounts in order to meet the requirements of a realistic and prudent valuation.

¹¹ Available online here: https://e-justice.europa.eu/37843/EN/covid19_impact_on_civil_and_insolvency_matters?CRO-ATIA&member=1

¹² Collateralised Loan Obligations (CLOs) are structured securities primarily backed by pools of leveraged loans to corporates. CLO securities are issued by special-purpose vehicles (SPVs) established to hold diversified portfolios of leveraged loans. Loans held in CLO issuers' portfolios include varying degrees of credit risk, called "tranches," and are actively managed by third-party asset managers (Available online here: https://www.federalreserve.gov/econres/notes/fedsnotes/collateralized-loan-obligations-in-the-financial-accounts-of-the-united-states-20190920.html)

¹³ Available online here: https://pitchbook.com/news/articles/volatility-loan-market-ytd-returns-february-2022

¹⁴ PitchBook Data inc. is a financial data and software company with offices in London, New York, San Francisco and Seattle and provides global business professionals with comprehensive data on the private and public markets.



As this constitutes an enormously important fact for the domestic economy in Croatia, we consider possible effects of Croatia's entrance to the EMU as a valuation uncertainty. Since the entry of an economic area into a currency area is always a unique event and therefore lacks empirical comparability, quantifying associated effects is always delicate. However, if we consider the impact on economic key factors of Lithuania, a (nowadays) similarly sized and economically structured candidate for admission in 2015, we can probably draw helpful conclusions where appropriate. For this purpose, we consider economic key factors from Eurostat data such as inflation rate, unemployment rate and GDP growth and compare them to the average of 18 Euro Area countries (EA18).

Considering price fluctuations in the Harmonised Index of Consumer Prices (**HICP**), Lithuania deflated in the short run (2015 avg. -0.66% HICP) whereas the EA18 inflated (avg. 0.19%) and inflated higher in the longer run (2016 avg. 0.69%; 2017 avg. 3.71%) than EA18 (2016 avg. 0.23%; 2017 avg. 1.53%). Generally speaking, if we look at data series from 2000 to 2021, Lithuanian inflation before entering the EA has always been below or equal to that of the EA. After joining the EA, inflation is (sometimes significantly) above that of the EA18, and the trend of spreading accelerates over time. It cannot be ruled out that the mentioned facts will also apply to the Croatian economy.

As expected,¹⁵ (Deutsche Bundesbank, 2016) the harmonised unemployment rate (**HUR**) followed the development of the HCPI and accordingly the expected effects occurred downstream of the price development. In Lithuania, HUR decreased from 2015 (9.13%) to 2016 (7.90%) and also dropped in the following years 2017 (7.12%) and 2018 (6.18%). Before and during the coronavirus pandemic, which of course acts as an amplifier for associated effects, the HUR increased in 2019 (6.28%) and 2020 (8.52%) until it returned to the 2017 level in 2021 (7.13%). Pre-pandemic HUR were never reached again in Lithuania as of the Valuation Date. On the other hand, the average of the EA18 followed a much more stable course. The HUR declined steadily from 2015 (10.92%) to 2019 (7.61%), with an outlier during the coronavirus crisis in 2020 (7.92%). As of the Valuation Date, the EA18 is better off in terms of the HUR than it was before the pandemic (7.20%) in January 2022. It should be noted that we have not made any seasonal adjustment at all.

Our analysis of GDP growth in Lithuania showed that it grew at a constant rate from 2000 to 2022 (average growth 8.2% per year). However, it should also be noted that the volatility of real growth increased over time. We compared the volatility from 2008 to 2015 with that from 2015 to 2022. Surprisingly, the volatility between 2015 and 2022 is 11% higher than in the previous period. This finding is not intended to constitute a causality or correlation between Lithuania's accession to the EMU and higher real GDP growth volatility, but within the scope of this report we cannot prove the contrary, nor can we ignore this fact. Consequently, we will consider these findings as a valuation uncertainty.

source/blob/664886/de60552409f6dd3f4fe614454664d800/mL/2016-04-phillips-kurve-data.pdf

¹⁵ To put it in a simplified way appropriate to the scope of this report, it can be assumed that higher employment rates will cause higher demand and thus higher prices (inflation). In recent years, however, a heated debate has flared up regarding these connections, their exact classification and if they are still applicable. For more information, please use: https://www.bundesbank.de/re-



Summarising our view on the development of valuation-relevant macroeconomic factors, this means that we expect increased risks with regard to the loan portfolio, the quantification of which remains uncertain at the Valuation Date. Therefore, we would like to explicitly mention that our quantifications are estimates, which are, however, based on observable market mechanisms and forecasts of relevant market participants. In principle, however, fundamental indicators suggest that inflation will worsen in the course of 2022 or at least remain at the same level. At the same time, it is expected that the ECB will raise interest rates successively in response to rising inflation figures. This combination is expected to have a negative impact on the solvency of all debtor classes. Likewise, in combination with possible catch-up effects in the context of corporate insolvencies, this could further erode the stability of the loan portfolio.

Credit markets are expected to come under high pressure. At the same time as volatility is rising, uncertainty on the markets is increasing and corresponding yields are falling into negative figures.

Our analysis of Lithuania has shown that its EMU entry was accompanied by increased volatility, rising inflation and lower resilience. Although we cannot quantify these factors, we will add them to the assumptions we have made so far.

In the light of the Russian invasion of Ukraine and the uncertainty surrounding the duration and impact of this conflict, it is not possible as of the Valuation Date to foresee how long this trend may continue. This leads us to evaluate particularly the loan portfolio with special caution and to adopt a conservative approach as part of a realistic and prudent valuation. As a result, we adopt adjustments to PD and LGD, which we explain in more detail later in the report (section 5.4.1.).

2.6. Best Point Estimates and Value Ranges

According to Article 6(a) of CDR 2018/344 we provide a "best point estimate of the values", and where appropriate, value ranges of the assets, certain liabilities and expenses related to the insolvency proceedings.

We have prepared three scenarios (Best Estimate, Best Case and Worst Case) to illustrate the possible ranges of valuation results.

Estimating the probabilities of scenarios is highly subjective. We have used generally accepted accounting guidelines and the categories applied for assessing the probabilities that a contingent loss or liability will occur from a future event. For a guidance we refer to the FASB Accounting Standards codification ASC 450-20.

Still, ASC 450-20 does not provide quantitative thresholds. "Probably" is not intended to be interpreted as "virtual certain".

Generally, "probable" or "likely" to occur are understood as a higher threshold than "more likely than not" or ">50% chance of occurrence".


Even though FASB guidance does not contain a quantitative discussion on "remote", the term is commonly used to signify a probability of 10% or lower ¹⁶.

Interpretive Guidance from AICPA Statement of Position 96-1 states that "reasonably possible" covers the range from "remote" to "probable". Hence, we conclude that the range would be "more than 10% to 50%".

Based on the preceding explanations, the likelihood of occurrence is categorised as follows:

- **Probable:** The future event or events are likely to occur (probability greater than 50%)
- **Reasonably possible:** The chance of the future event or events occurring is more than remote but less than likely (probability greater than 10% up to 50%)
- **Remote:** The chance of the future event or events occurring is slight (probability 10% or lower).

Best Estimate Scenario

The Best Estimate Scenario indicates the reasonably expected recoveries of assets as well as payments for certain liabilities and expenses related to the insolvency proceedings. Based on an analysis of appropriate and valid historical data, observations and drawn conclusions from the macroeconomic forecast (see section 2.5), the Best Estimate is considered to reflect the common market participants' broad expectations about relevant economic developments and valuation parameters. The observation time is as of the Valuation Date, meaning that future events that cannot reasonably be anticipated on the valuation date are not reflected in the Best Estimate Scenario. Also, unduly optimistic or pessimistic assumptions are not incorporated. In the light of the macroeconomic developments, the Best Estimate Scenario expresses a mildly unfavourable economic environment. We consider the Best Estimate Scenario as the probable scenario.

Still, as the valuation and the herein estimated cash flows are subject to significant uncertainty, we performed sensitivity analysis for key value drivers (e.g., the valuation parameters for the loan portfolio or probabilities of expenses for legal contingencies) to provide a valuation range around the Best Estimate in the form of a Best Case Scenario and a Worst Case Scenario, respectively.

¹⁶ Deloitte: "Roadmap - Contingencies, Loss Recoveries, and Guarantees", March 2023



Best Case Scenario

In the Best Case Scenario, we assume still favourable macroeconomic conditions, despite growing headwinds as illustrated in section 2.5 of this report. An optimistic outcome is considered as reasonably possible, especially if the end of the Russia-Ukraine war is within sight, sanctions start to roll back, inflation cools down and monetary policy continues to be fairly loose. These factors would contribute towards a favourable economic development and would help to keep credit default rates low.

Worst Case Scenario

Compared to the Best Case Scenario, the Worst Case Scenario assumes an unfavourable macroeconomic development. A rather pessimistic outcome is considered as reasonably possible as the Best Case Scenario, as a scenario of the continuance of the Russia-Ukraine war including sanctions against Russia, supply chain disruptions, elevated commodity prices, relatively high inflation rates and a tightening monetary policy. The Worst Case Scenario expresses a severely unfavourable economic environment in which many firms and households would become financially distressed to a point where credit default rates rise significantly.

For details of how these scenarios are reflected in the loan portfolio please refer to section 5.4.1.



2.7. Sberbank d.d. Balance Sheet as of the Valuation Date

As noted in section 2.4.1 of this Report, our work is based on the unaudited financial information as of the Bank's closing balance or opening balance as of 28 February 2022 or 1 March 2022, respectively, as provided to us by the Bank.

Assets (kHRK)	
Item	Book Value
Cash and cash equivalents	1.483.651
Financial assets held for trading	96.585
Financial assets measured at fair value through other comprehensive income	568.095
Financial assets measured at amortised cost	7.144.351
- Loans and advances to banks	113.126
- Loans and advances to customers	7.031.224
Tangible assets	93.414
Investment in other participations	141
Intangible assets	103.240
Deferred tax assets	23.445
Other assets	27.705
Total Assets	9.540.625

Table 5 The Bank's balance sheet as of the valuation date - assets

Liabilities and Equity (kHRK)	
Item	Book Value
Financial liabilities measured at amortised cost	7,966,167
- deposits from banks and central banks	2,538,268
- deposits from non-bank customers	5,110,007
- subordinated liabilities	317,892
Provisions	162,053
Other Liabilities	221,265
Total Liabilities	8,349,485
Share capital	1,530,668
Accumulated other comprehensive income	-10,983
Retained earnings	-335,883
Profit / loss for the year	7,337
Total Equity	1,191,140
Total Liabilities and Equity	9,540,625

Table 6: The Bank's balance sheet as of the valuation date - liabilities and equity



2.8. Methodological Approach Taken

In reviewing the basis for our valuation work, we have considered the requirements of Delegated Regulation (EU) 2018/344 (CDR 2018/344) and the SRMR.

We have considered the insolvency scenario of the Bank on a legal entity basis, reflecting the winding-up process, which would apply under the CACLCI.

A liquidation scenario is a must under the CACLCI and the assets are to be sold as portfolio, parts of portfolio or individually according to the plan (Art. 35 (1) 1 CACLCI).

There is no possibility to continue operation as the banking license is revoked by the opening of compulsory liquidation procedure (Art. 68 Credit Institutions Act). Art. 36 CARCI orders the cessation of business activities.

During the winding-up process, the Bank is expected not to be able to provide customers with the same level of service, reliability, or access to products and services that they are accustomed to experiencing. This can lead to customer dissatisfaction and a lower degree of trust in the Bank by both, the customers as well as third parties. Historically, winding-ups of similar banks have revealed that customers often transfer their business to more reliable, financially stable banks in order to ensure that their needs are met. (see section 4.3.2. et seq. for details).

At the same time, it is important to realise that NIP involves the liquidation of all assets, termination of accounts and the closure of operations.

A sale as a going concern is not possible. Art 37 (2) CARCI prescribes the mode of sale, and expressly prohibits of entire credit institution ("..., the sale of the credit institution in compulsory liquidation as a legal entity to the debtor is not allowed, but only the sale of its assets and the transfer of obligations in whole or in part.")

Also, the initiation of compulsory liquidation leads to the loss of the banking license. This means that units may not be sold as there would be no banking license. Also, the liquidator has the duty to cease operation and realize the assets for the creditors. This does not allow operation of the Bank as going concern.

Hence, we assume that the procedure would provide for the disposal of assets on a portfolio basis or piecemeal. This assumption also takes a balanced perspective with neither advantage nor disadvantage to the shareholder. The reason being that our approach, based on the asset based approach, relies the most on available facts and values (especially book values or fair values according to the Notes to the Financial Statements) and the least on future speculative assumptions. We summarise the reasons for this in section 4.



Taking the above into account, we have reflected a liquidator's probable approach in our valuation. Typically, a liquidator pursues two objectives. Firstly, the aim to conduct a fast liquidation, and secondly, the target to maximise the proceeds. However, a quick sale of assets requires accepting higher discounts. Hence, speed and maximising proceeds are frequently in conflict with each other.

In this context, the DGS may play a prominent role. The DGS sets aside a relatively large amount to refund the secured deposits to the depositors as quickly as possible. As a result, the DGS will urge the liquidator to realise the amount required for the repayment of the funds it has set aside.

The pressure of having a strict schedule imposed by the DGS can come in conflict with the need to find an attractive market price for assets that will ensure unsecured and unguaranteed creditors receive fair returns. The liquidator has to balance the time available and the realisable value of the assets in order to take the most effective decisions that can be approved by all stakeholders. In this context, we simulate the time periods, in which individual creditor categories can expect to be satisfied with a certain amount from the ongoing NIP. Based on this, we draw conclusions on which hypothetical insolvency plans would probably be more or less acceptable for the different creditor categories in terms of achieving a quick and substantial satisfaction of their claims. Furthermore, we draw conclusions regarding our hypothesis, which insolvency durations represent probable scenarios.

We have applied specific assumptions for each asset class, to our valuation methods in order to estimate the liquidation value (in cash) based on the liquidator's expected liquidation strategy, as further described in section 4.2.

In addition, we have estimated the costs of the liquidation process that would reduce the net recoveries to creditors (i.e., liquidation fees, staff costs, operating costs and potential contract termination costs) - see section 4.4.

We have also assessed contingent claims which are potentially not fully reflected in the Bank's balance sheet but could arise in the insolvency proceedings and would further decrease recoveries to the shareholder and creditors (i.e., legal contingencies - see section 5.11.1).

Where information was unavailable, we made hypotheses and assumptions from detailed analysis when certain information was unavailable (see section 2.4).

We strictly adhered to the requirements of Art. 4 of the CDR 2018/344 - Determination of the treatment of the shareholder and creditors under NIP. Specifically, we have considered the expected cash flows arising from asset realisations and costs during the liquidation period on a discounted basis based on our envisaged liquidation scenario.

On this basis, we have examined if the NCWO principle has been met. The insolvency proceeds would be distributed among equity and liability holders according to the creditor hierarchy determined by the Croatian jurisdiction.



3. Insolvency Scenario

Below, we describe the hypothetical insolvency scenario under NIPs. For detailed information and references to the legal framework, please refer to section 9 Annex 1.

3.1. Legal Framework for Insolvency

As of 1 January 2021, Croatia implemented several laws regulating the resolution and compulsory liquidation of the credit institutions, as well as a deposit insurance scheme into Croatian law:

- Act on Resolution of Credit Institutions and Investments Firms (Zakon o sanaciji kreditnih institucija i investicijskih društvo, OG 146/2020, 21/2022) (CARCI),
- Act on Compulsory Liquidation of Credit Institution (Zakon o prisilnoj likvidaciji kreditnih institucija, OG 146/2020) (CACLCI)
- Deposit Guarantee Scheme Act (OG 146/2020).

In addition to this legislation, the Bankruptcy Act (OG 71/2015, 104/2017) forms part of the relevant legal framework for the insolvency of banks in Croatia.

Based on the counterfactual assumption of the opening of normal insolvency proceedings and pursuant to Article 20(18) SRMR, we conclude that a compulsory liquidation of the Bank would be the relevant insolvency scenario.

3.2. Normal Insolvency Proceedings (NIP)

For the purpose of the Report, we have concluded that a compulsory liquidation of the Bank under the CACLCI is the appropriate basis, because:

- Article 20 (18) of SRMR states that a Valuation of Differences in Treatment¹⁷ should be performed assuming that the entity has entered into NIP (under the national law; Article 4(2)(94) of CARCI),
- The applicable national law in this instance is the CACLCI which provides a termination of a bank by compulsory liquidation.

¹⁷ The valuation shall indicate the subdivision of the creditors in classes in accordance with the priority of claims referred to in Article 17 and an estimate of the treatment that each class of shareholders and creditors would have been expected to receive, if an entity referred to in Article 2 were wound up under normal insolvency proceedings. That estimate shall not affect the application of the 'no creditor worse off' principle referred to in Article 20 (18) of SRMR.



3.2.1. Compulsory Liquidation Proceedings

A compulsory liquidation proceeding of the credit institution can be divided into the following phases:

- Initiation of the compulsory liquidation proceedings by CNB,
- Appointment of a liquidator,
- Opening of the compulsory liquidation proceedings by the Court,
- Determination of claims,
- Adoption of the compulsory liquidation proceeding plan,
- Monetisation of assets by the liquidator,
- Final hearing,
- Completion of compulsory liquidation proceedings.

Initiation of compulsory liquidation proceedings (Article 13 CACLCI)

If the reasons for initiating compulsory liquidation proceedings occur, the CNB is responsible for initiating compulsory liquidation proceedings. Before adopting a proposal to initiate compulsory liquidation proceedings, the CNB is required to inform the Deposit Insurance Agency of its intention.

Subsequently, the CNB shall submit a proposal for the initiation of compulsory liquidation proceedings to the competent court, and CNB shall inform the Deposit Insurance Agency, the Finance Agency, the Croatian Financial Services Supervisory Authority, and the credit institution concerned on the submitted proposal.

Appointment of a liquidator (Article 14 CACLCI)

The Deposit Insurance Agency as the supervisory liquidation authority shall then submit a proposal for the appointment of one or more liquidators and submit to the competent Court within two working days of receipt of the CNB's proposal.

Opening of compulsory liquidation proceedings (Article 15 CACLCI)

The Court will determine whether the reasons for opening the compulsory liquidation procedure have been met and decide on the proposals within eight days from the date of receipt of the CNB's proposal and the proposal on the appointment of liquidators.

The decision to open the compulsory liquidation proceeding shall include:

- Information to identify a credit institution in compulsory liquidation,
- Appointment decision and liquidator(s)' information,
- Day, hour and minute of opening of compulsory liquidation proceedings,
- Instruction to creditors to report their claims to the liquidator within 60 days from the date of publication of the decision,



- An invitation to the debtors of a credit institution in forced liquidation to fulfil their obligations without delay to the credit institution in compulsory liquidation,
- Invitation to the examination and reporting hearing.

Furthermore, the Court will order the opening of compulsory liquidation proceedings and the appointment of liquidator(s) to be entered in registers, public books and logbooks.

Finally, the Court's decision on opening of the compulsory liquidation proceeding will be published online (e-Notice Board of the Courts) and submitted by the Court to

- The CNB,
- The credit institution over which the compulsory liquidation proceeding was initiated,
- The liquidator,
- The Deposit Insurance Agency as supervisory liquidation authority,
- The competent tax administration office according to the debtor's seat,
- The competent public prosecutor's office,
- Legal entities performing payment transactions for a credit institution in compulsory liquidation.

Determination of claims (Article 24 CACLCI)

The liquidator shall prepare

- A table of claims filed,
- A table containing claims and creditors which have separate satisfaction right,
- A table containing creditors which have exclusion rights.

Claims shall be deemed to have been determined if they are recognised by the liquidator and are not disputed by another creditor.

The Court shall issue a decision on the determined and contested claims at the examination hearing based on the liquidator's tables. In this context, the Court also decides on the referral to civil proceedings in order to determine or challenge the claim.



Adoption of the compulsory liquidation proceeding plan (Article 35 CACLCI)

The liquidator is obliged to draft a plan for the compulsory liquidation proceeding and, following the consent of the deposit protection agency and adoption by the creditors' assembly, to conduct the proceedings entirely in accordance with this plan.

The compulsory liquidation plan shall describe in detail the monetisation method of the credit institution's assets during the compulsory liquidation proceedings.

For more information on the compulsory liquidation plan, please refer to Annex 3.

Liquidator's reports (Article 40 CACLCI)

The liquidator shall submit reports on the course of the compulsory liquidation procedure to the Deposit Insurance Agency as the supervisory liquidation authority (quarterly) and to the CNB for each six-month period.

A final report on the compulsory liquidation proceeding and a proposal of a decision on the division of the remaining assets of the credit institution shall be drawn up once all the obligations of the credit institution at hand have been settled. Such report and proposal shall be approved by the supervisory liquidation authority.

Monetisation of assets by the liquidator (Article 30 CACLCI)

The main aim of the liquidator is to maximise the recoveries for former creditors and the shareholder. Accordingly, the liquidator's strategy will be adjusted to this target first and foremost.

In addition, it is also necessary to ensure that assets will be liquidated swiftly, for example, in order to satisfy the DGS within a reasonable period of time and also to avoid contagion effects on the real economy and thus to ensure financial stability of the domestic economy.

These two objectives are in constant conflict and the liquidator has to balance these conflicting objectives without ignoring the stakeholders who need to give their consent.

Final hearing (Article 42 CACLCI)

The Court shall hold the final hearing when granting consent to the final division of the remaining assets of the credit institution.

Creditors shall decide on the non-cashable objects of the liquidation mass and discuss the liquidator's final account. If applicable, creditors shall object to the final report. In that case, the Court shall decide on the creditors' objections on the same day at the final hearing.



Completion of compulsory liquidation proceedings

The compulsory liquidation proceeding shall be concluded by the liquidator within three years from the date of initiation of the compulsory liquidation proceeding according to Article 43 of the CACLCI. However, the Court might extend the prescribed timeframe if:

- The Deposit Insurance Agency, as the supervisory liquidation body gives its consent, and
- The extension would certainly result in the higher amount settlement for creditors in the compulsory liquidation proceeding.

After the distribution of proceeds from the monetization of all assets to creditors or after the final distribution, the liquidator submits the final financial report and the final report on the compulsory liquidation to the supervisory liquidation authority and the CNB.

The liquidator shall submit an application for the completion of compulsory liquidation proceedings to the Court. The Court rules on the closure or eventual suspension of compulsory liquidation proceedings and orders the deletion of the credit institution from the court register. Also, the Court shall publish the aforementioned decision on the court's website and submit to the supervisory liquidation authority as well as the CNB without delay.

The credit institution in compulsory liquidation proceedings shall cease to exist on the day of registration of the deletion from the court register.

Creditor Hierarchy

The proceeds of realisation of assets will be disbursed according to the creditor hierarchy according to the insolvency jurisdiction in Croatia. Basis for our conclusions are the existing European and Croatian legal frameworks, together with expert commentary of local law specialists.

The table below sets out a summary of the creditor hierarchy:



Credito	editor Hierarchy			
Rank	Label of the claims	Legal basis		
20 b)	Secured claims Claims for the exclusion of certain assets from the liquidation estate Rights over assets that do not belong to the liquidation estate.	Act on Compulsory Liquidation of Credit Institutions (OG 146/20), Article 7 in conjunction with the Bankruptcy Act (OG 71/15 and 104/17), Article 147 para 1		
20 a)	Secured claims Claims secured with mortgage or other rights that entitles the holder to separate settlement.	Act on Compulsory Liquidation of Credit Institutions (OG 146/20), Article 7 in conjunction with the Bankruptcy Act (OG 71/15 and 104/17), Article 149		
19	 Obligations of the liquidation estate Court expanses and fees Claims of unpaid salaries of employees in gross amount determined in the liquidation proceedings which are higher than three unpaid salaries that the employee is entitled to pursuant to lex specialis, up to the amount of three unpaid minimum wages in the Republic of Croatia. The provisions of this point shall not apply to persons who were members of the management board of a credit institution Liquidator's reward Other expenses for which the Act on Compulsory Liquidation or other law envisages to be settled as expenses of the proceedings. 	Act on Compulsory Liquidation of Credit Institutions (OG 146/20), Article 12 para 3		
18	First senior rank 1) Claims of employees and former employees of the credit institution incurred before the date of the opening of the compulsory liquidation proceedings 2) Claims of the state budget, institutes or funds in accordance with lex specialis in the amount of the corresponding part of the total costs of salary or salary compensation 3) Severance payments up to the amount laid down by law or the collective bargaining agreement and claims for damages due to injury at work or due to occupational hazard.	Act on Compulsory Liquidation of Credit Institutions (OG 146/20), Article 33 para 2		
17	Second senior rank Claims of Croatian National Bank and claims for public charges as defined by tax laws.	Act on Compulsory Liquidation of Credit Institutions (OG 146/20), Article 33 para 3		
16	Third senior rank Claims arising from insured deposits, i.e. claims of the Croatian Deposit Insurance Agency that were subrogated to it after the repayment of insured deposits in accordance with lex specialis.	Act on Compulsory Liquidation of Credit Institutions (OG 146/20), Article 33 para 4		
15	Fourth senior rank Claims arising from eligible deposits held by natural persons, micro, small and medium-sized enterprises that exceed the coverage level provided for in the law governing deposit insurance and deposits held by natural persons, micro, small and medium-sized enterprises that would be eligible deposits if they were not held with a branch of the credit institution located in a third country.	Act on Compulsory Liquidation of Credit Institutions (OG 146/20), Article 33 para 5		
14	Fifth senior rank Claims arising from eligible deposits that exceed the coverage level provided for in the law governing deposit insurance and claims that would be eligible deposits if they were not held with a branch of the credit institution located in a third country, which are not included in the fourth senior rank.	Act on Compulsory Liquidation of Credit Institutions (OG 146/20), Article 33 para 6		
13	Sixth senior rank All other claims against the credit institution apart from: 1) those classified as junior claims; and 2) subordinated debt.	Act on Compulsory Liquidation of Credit Institutions (OG 146/20), Article 33 para 7		
12	First junior rank Interests on creditors' claims as of the opening of the compulsory liquidation proceedings.	Act on Compulsory Liquidation of Credit Institutions (OG 146/20), Article 33 para 10		



11	Second junior rank Claims for reimbursement of creditors' expenses (costs) incurred by their participation in the compulsory liquidation proceedings.	Act on Compulsory Liquidation of Credit Institutions (OG 146/20), Article 33 para 10
10	Third junior rank Fines imposed for a criminal or misdemeanour offense and the costs of criminal or misdemeanour proceedings.	Act on Compulsory Liquidation of Credit Institutions (OG 146/20), Article 33 para 10
9	Fourth junior rank Claims concerning debtor's considerations free of charge.	Act on Compulsory Liquidation of Credit Institutions (OG 146/20), Article 33 para 10
8	Fifth junior rank Claims for repayment of loans granted by the shareholders as a means of raising the capital of the company or equivalent claims.	Act on Compulsory Liquidation of Credit Institutions (OG 146/20), Article 33 para 10
7	Subordinated debt not covered under points 16-20 Other claims that result from a contract that contains a clause stating that such claims shall be settled after all other claims, both senior and junior, provided that such claims cannot be included in points 2 to 6.	Act on Compulsory Liquidation of Credit Institutions (OG 146/20), Article 33 para 8 in conjunction with para 11
6	Subordinated debt Claims of the holder of subordinated debt that is not additional tier 1 or tier 2 capital.	Act on Compulsory Liquidation of Credit Institutions (OG 146/20), Article 33 para 8 in conjunction with para 11
5	Subordinated debt Claims of owners of instruments used in accordance with the Act on the Resolution of Credit Institutions and Investment Firms to meet the minimum requirement for own funds and eligible liabilities and for which it has been arranged that when bail-in tool is applied, the instruments shall be written down or converted to shares or other instruments of ownership.	Act on Compulsory Liquidation of Credit Institutions (OG 146/20), Article 33 para 8 in conjunction with para 11
4	Subordinated debt Claims of parent undertakings as owners of instruments used by subsidiaries to meet the minimum requirement for own funds and eligible liabilities on an individual basis.	Act on Compulsory Liquidation of Credit Institutions (OG 146/20), Article 33 para 8 in conjunction with para 11
3	Subordinated debt The principal amount of subordinated debt that is included in tier 2 capital.	Act on Compulsory Liquidation of Credit Institutions (OG 146/20), Article 33 para 8 in conjunction with para 9 and 11
2	Subordinated debt The principal amount of subordinated debt that is included in additional tier 1 capital.	Act on Compulsory Liquidation of Credit Institutions (OG 146/20), Article 33 para 8 in conjunction with para 11
1	Shareholder's equity Rights derived from stocks to receive what remained in the liquidation estate, after all expenses of the proceedings are covered and all other creditors have been settled in full, in proportion to their participation in credit institution's equity.	Act on Compulsory Liquidation of Credit Institutions (OG 146/20), Article 41 para 2

Table 7: Creditor hierarchy Croatia



3.2.2. Role and Purpose of the Liquidator

The liquidator's ultimate objective is to carry out the asset realisation within a reasonable period.

Article 43 of the CACLCI stipulates that the compulsory liquidation proceeding shall be concluded by the compulsory liquidation manager within 3 years from the date of initiation of the compulsory liquidation proceeding. However, it is possible that the court extends the prescribed time frame if the Deposit Insurance Agency as the supervisory liquidation body gives its consent, and if the extension would certainly result in the higher settlement amount for creditors in the compulsory liquidation proceeding. Our legal experts consider it reasonable to assume that a prolongation would extent the time frame for another 3 years.

Duties and powers of the liquidator in a compulsory liquidation proceeding are stated in Article 24 of the CACLCI. The liquidator e.g.:

- Assumes the powers of the management of the credit institution and is obliged to carry them out in accordance with the needs of the compulsory liquidation proceedings,
- Represents the credit institution proceedings independently and individually,
- Shall act with the care of a prudent and diligent businessman,
- Shall draw up a list of all claims classified in the ranks,
- May, from the moment of appointment until the end of the compulsory liquidation proceeding, contest on behalf of the credit institution the legal acts of the debtor taken at the expense of the creditors if it considers them necessary to meet the objectives of the proceedings,
- Shall submit to the supervisory liquidation authority written reports on the course of the compulsory liquidation proceeding at least quarterly,
- Shall, upon opening the compulsory liquidation proceeding, close all accounts of the credit institution without delay and open a new account of the credit institution in forced liquidation or several accounts if necessary, and designate persons authorized to dispose of the funds in those accounts.

For more information on the duties and powers of the liquidator, please refer to Annex 2.

Other bodies in a compulsory liquidation proceeding are according to Article 6 of the CACLCI:

- Court (Commercial Court in Zagreb),
- Supervisory liquidation authority (Deposit Insurance Agency),
- Creditors' assembly.



4. Liquidation and Asset Realisation Strategy

An essential part of our analysis is to depict the overall strategy that a liquidator is likely to apply to recover value from the Bank's assets and to disburse the proceeds to the shareholder and creditors.

As this is a hypothetical situation for which there is no precedent under the CACLI in the Croatian market for an institution of the size and complexity of the Bank, it is necessarily highly subjective and requires the exercise of professional judgement based, inter alia, on our expertise regarding the following:

- Consideration of legal requirements for the strategy
- Liquidation scenario including the duration of the liquidation,
- Asset realisation strategy, including the liquidator's risk appetite,
- Applicable insolvency law and practice in the relevant jurisdiction, which may influence factors such as the expected disposal period or recovery rates¹⁸.
- Consideration whether the financial condition of the entity would have affected the expected cash flows, including through restrictions on the administrator's ability to negotiate terms with potential purchasers (European Commission 2017)¹⁹,
- Prices observed in respect to active markets where similar assets are traded, i.e. financial assets classified at IFRS Level 2 fair values in the Banks' balance sheet,
- Prices observed in NIP or otherwise distressed transactions involving assets of a similar nature and condition; i.e. prices of the loan portfolio in fire sale circumstances,
- The likelihood of an asset generating net cash inflows under NIP; i.e. principal and interest payments from loans to customers,
- The length of a given disposal period shall reflect the implications of the applicable insolvency law, including the expected length of the liquidation process, or the characteristics of the relevant assets (European Commission 2017)²⁰; i.e. the winding-up and sale of the loan portfolio,
- Liquidation costs,
- Macroeconomic expectations, contingent liabilities and possible legal uncertainties that have not been subject to court decisions yet.

¹⁸ Article 4(3)(a) CDR 2018/344.

¹⁹ Article 4(6) CDR 2018/344.

²⁰ Article 4(5) CDR 2018/344



4.1. Consideration of Legal Requirements for the Strategy

Previously, in section 3 of this report, we have outlined the essential requirements for bank winding-ups according to Croatian law. From this, important but unpredictable factors can be concluded. Specifically, these are questions about price discoveries in asset realisation, diligent management of the assets and what distribution of proceeds to creditors is conceivable.

Price discovery

Regarding the question to what extent the type of price discovery matters and which proceeds are derived from auctions, tenders or direct negotiations, no reliable historical data from comparable cases is available. To obtain a best estimate of the expected sale proceeds, we use the Equivalent Value Theory²¹.

The Equivalent Value Theory is an approach to compare auctions and other price discoveries such as fixed-priced negotiations. It states that in expectation, all bidders in an auction will pay the same price, namely the price that the second highest bidder is willing to pay. This means that all auction formats, be it English auctions, limited payment auctions or commitment auctions will yield the same price in expectation, namely the amount that the second highest bidder pays. The Equivalent Value Theorem is evidence that auctions are not necessarily preferable to fixed price ones or direct negotiations. This is because, in both an auction and a direct negotiation the bidder will at most pay the market value of the asset.

From this one can infer that the estimated value can also be set as the best estimator for the expected achievable price, regardless of the form of transaction performance.

In an auction, bidding buyers generally achieve the market price of the asset, as there are several bidders competing against each other. In contrast, in a tender the price is usually lower, as the seller typically evaluates and screens the individual offers, and only selects the best offer. In this respect we assume to the benefit of the shareholder that also in tenders no expected prices are achieved that lie beneath the expected price achieved in an auction or direct negotiation.

Diligent management of the assets

For some assets, market prices or market benchmarks are available, which makes pricing relatively easy and fast, e.g. for IFRS Level 1 securities. In contrast, the essential asset that is not readily marketable is the customer credit portfolio. This must be prepared for sale, e.g. in tranches of the same customer, creditworthiness, types of collateral, etc.

²¹ Ralf Peters, Internet-Ökonomie, 2010



First, the liquidator must make an assessment of the fair market value achievable. Subsequently, a certain amount of time must usually elapse to find interested parties. In addition, potential buyers will not buy "a pig in a poke" and subject the (partial) portfolio to a due diligence prior to submitting an offer. Subsequently, the respective contracts for the transaction must be drafted. Until the completion of all these actions, the liquidator has to administer the credit portfolio, in particular receive interest and regular and early repayments, which are a significant part of the liquidation proceeds to be distributed to the creditors.

4.2. Basic Considerations for Asset Valuation and Realisation

The liquidation would proceed on the basis of a disposal of the entity's assets either in portfolios or piecemeal.

The aim of the liquidation stage is to maximise asset recoveries for the purposes of repaying creditors. An insolvent liquidation process is by its nature value destructive (assets sold at distressed prices, costs of the process are high, etc.); this is exacerbated in the case of an unplanned process as such.

Below is a summary of our assumptions for realisation strategies and the valuation approach:

- **Cash and cash equivalents** (kHRK 1,483,651) consist of 100% liquid assets which should be collected immediately.
- Derivatives (kHRK 1,394) are sold or closed-out immediately.
- Equity and debt instruments (kHRK 664,822) consist of Level 1 and Level 2 Fair Values and are sold immediately at market prices.
- Loan portfolio (kHRK 7,144,350): Performing loans (PLs) will be run off until the end of the liquidation period, followed by a sale of the remaining book. PLs are valued at the discounted value of anticipated realisations during liquidation plus interest payments received. The remainders are sold with the application of a prospective investor's discount rate according to market standards. Non-performing loans (NPLs) will be sold shortly after the beginning of the liquidation and are valued at market value.
- **Tangible Assets** (kHRK 93,414) consist of inventory, real estate in **Example**, as well as right-of-use assets and are valued at market value. Inventory will be sold as a bulk with high discounts and the real estate in **Example** will be realised at its market value.
- Intangible assets (kHRK 103,240) mainly consist of software as well as licenses and the own-developed mobile banking app. For licenses and other software, it is expected that no or only minimal value can be recovered. The mobile banking app is expected to recover value via a sale at a discounted price.
- Tax assets (kHRK 23,445) are not traded in an active market and devalued to zero.
- Other assets (kHRK 26,311) are collected immediately and valued at their Fair Value.



4.3. Possible Duration of the Liquidation Proceedings

We note that the following bankruptcy proceedings were governed by the previous legislation which is not applicable anymore. Accordingly, the comparability of the cases at hand is limited since, inter alia, the proceedings in Croatia took place before the adoption of the CACLCI (and the BRRD) and the existence of different framework conditions and business perspectives due to the lack of temporal proximity. A significant difference is that the previous insolvency regime did not provide for a maximum wind-down timeframe, whereas the new insolvency regime in Croatia provides for a maximum period of 3 years plus, in exceptional cases, a prolongation of 3 more years (see section 3.2.2). One of the reasons for the introduction of the CACLCI was explicitly to shorten the duration of the insolvency procedure as clearly stated in the recitals of the final proposal of CACLCI²².

Under the new insolvency regime solely the bankruptcy of INTERNET MOBILE BANK d.d. u likvidaciji has occurred yet (opened 15.02.2022). However, due to the proximity to the Valuation Date, we have no reliable data on the expected duration of the insolvency proceedings, associated recovery rates or insolvency costs that we can use in the context of a realistic and prudent valuation.

4.3.1. Past Bankruptcy Proceedings in Croatia

Our research shows that, historically, bankruptcy procedures over banks in Croatia, which were carried out under the old framework, also extend to a period well over 15 years. A bankruptcy proceeding may not be concluded while the disputes in relation to assets are on-going, and this is also one of the factors for which at least 3 years would be required to finalise the procedure.

In our opinion and for the above stated reason, we cannot rule out that the court would approve a prolongation of the procedure, especially if there are ongoing disputes regarding assets and liabilities of the Bank which may lead to a higher repayment of creditors in the case the Bank succeeds therein. As the settlement of potential disputes could require more than three years, we consider a timeframe up to six years for a forced liquidation of a credit institution in Croatia under the new framework to be fundamentally conceivable. However, as stated before this would require that a prolongation on these grounds would certainly result in higher liquidation proceeds. Since CACLCI has the goal of shortening the procedure in relation to the previous framework, it may be assumed that the courts would test the reasons.

Regardless of disputes, the prolongation of procedure may be allowed if there would certainly be higher return to creditors.

²² "The purpose of this Act is to shorten the duration of the insolvency procedure, [to achieve] controlled exit of failed credit institutions from the market with goal of reducing risk and spill-over of negative consequences to the rest of financial market, as well as expedient and efficient collective repayment of creditors of a credit institution within compulsory liquidation by preserving the value of the financial assets and monetizing assets of the credit institutions in the shortest term." https://edoc.sabor.hr/DocumentView.aspx?entid=2031528



Also, we anticipate that for any large and complex insolvency proceedings such as the Bank, a very quick process may lead to distressed prices and low realisations whereas a longer process would allow a more orderly work out of the Bank's assets (which tend to be more complex compared to other bankruptcy scenarios). The most significant of which is its loan portfolio, as we have found in our analysis that the loan portfolio amortises relatively well over time, resulting in substantial cash inflows from interest and repayments over an extended period. On the other hand, it must be considered that the uncertainty and risk concerning future insolvency proceeds increase over time. In addition, a prolonged insolvency process will create further operational and management costs.

4.3.2. Comparison to other failed Bank Cases

We have considered whether other Croatian liquidation cases could provide insight into the hypothetical liquidation scenario for the Bank.

Reports of the Deposit Insurance Agency state that from 1998 thirty bankruptcy proceedings of credit institutions occurred in Croatia, some of which are still pending. The latest significant bankruptcy proceeding, which may provide reliable insight concerning a liquidation timeframe, started back in 2016.

Banka Splitsko-Dalmatinska d.d., Split

The insolvency proceeding for Banka Splitsko-Dalmatinska d.d. (Banka Splitsko) was initiated on 1 July 2016 and is still undergoing as of the Valuation Date.

As of 31 January 2023, approx. kHRK 364,534 of the Bank's insolvency estate was cashed in, while approx. kHRK 118,156 gross / kHRK 36,565 net remains uncashed, which means that 76% of total assets were realised within 6.5 years (realisation rates for the first 3 years were not made available to us).

To assess and cash-in the insolvency estate, the following was conducted: 1) settlement of the receivables (credit loans, interest and fee payments) 2) recovery of deposits with CNB and other banks, 3) real estate sale, 4) sale of other tangible assets, 5) sale of securities and 6) sale of shares in the companies.

To settle the claims of insolvency creditors, from the beginning of the insolvency proceeding, 73 settlements (distributions of the cashed-in insolvency estate) were carried out.

The costs for winding up Banka Splitsko already amount to 3.7% of the insolvency estate. 51.4% of total costs of liquidation incurred through recurring operational costs, 44.5% were employee costs and roughly 4% of the total costs refer to the liquidator and related costs.



Other bank insolvency cases in Croatia

Since April 1999, eight bank insolvency cases (including Banka Splitsko) occurred in Croatia of which all are still ongoing. For five of those cases, there are no publicly available information, whereas three cases are well documented. The most recent insolvency case of a bank in Croatia relates to the smallest Croatian bank Tesla štedna banka d.d. with total assets of roughly kHRK 1,500 (equivalent to 0.0004% of Croatian banking markets' total assets), which is still ongoing after five years.

Other Bank Insolvency Cases in Croatia		
Name of bank/ savings bank	Date of bankruptcy proceedings initiation	Status (Completion - rank high to low)
Tesla štedna banka d.d., Zagreb	30 March 2018	Active (no data on payments or costs)
Nava banka d.d., Zagreb	1 December 2014	Active (no data on payments or costs)
		Active
		Costs of Insolvency – 2,374,424 HRK
		Obligations of the liquidation estate –
		76,901,008 HRK
Centar banka d.d., Zagreb	30. Sep 13	Secured claims – 43,863,570 HRK
-		First senior Rank– 9,633,584 HRK (100%)
		Second senior rank – 264,953 HRK (100%)
		Third senior rank – 241,571,708 HRK (46%)
		Fourth senior rank – 206,863,517 (0%)
		Active
		Cost of insolvency and other obligations of
		estate 66,613,103 HRK (out of which the
		administrator received 901,666 HRK)
		First senior rank – employees - 9,562,567
		HRK (100%)
Credo banka d.d., Split	16 January 2012	Second senior rank – CNB (national bank) -
		9,118 HRK (100%)
		Third senior rank – DAB (deposit insurance) -
		465,792,500HRK (100%)
		Fourth senior rank - consumers - 117,068,963
		HRK (71,10%)
		Fifth senior rank – legal persons -
		200,038,461 HRK (33,73%)
Alpe Jadran banka d.d., Split	15 May 2002	Active (no data on payments or costs)
Trgovačko-turistička banka d.d., Split	08. Sep 00	Active (no data on payments or costs)
Glumina banka, Zagreb	30. Apr 99	Active (no data on payments or costs)

Table 8: Other bank insolvency cases in Croatia

While the cases described above provide some insight on the factual liquidation timelines, the costs of liquidation and the amount of proceeds realized from the sale of the banks' assets, it must be clear that this information is of limited use since the law applicable in the case of the Bank has significantly changed. Especially it can be expected that the liquidation timeline will be significantly shortened as a result of the specific provisions of the new legal framework described above.



4.3.3. Conclusions to be drawn

From the consideration of the cases shown, we draw conclusions for the expected duration of the insolvency proceedings.

For the purpose of the valuation, we have assessed two scenarios. For each of these we analyse the treatment that the affected shareholder of the Bank would have received under a bankruptcy liquidation proceeding.

The compulsory liquidation of the Bank with some 100,000 loans is still a rather complex process because many loans have different terms and conditions associated with them. Analysing each of these agreements, understanding the legal framework and negotiating the best possible resolution will require significant human resources and time. Additionally, the Bank must assess and manage the risk of defaults, make decisions about guarantees, and prioritize certain loans over others.

Then, the liquidator must make an assessment of the fair market value achievable, find interested parties and allow the potential acquirers a due diligence prior to submitting an offer. Eventually, the respective contracts for the transaction must be drafted.

Furthermore, the Bank must be mindful of its decision-makings' consequences in terms of litigation. Each of these elements further complicates the winding-up process. Under this perspective and as the historic failed bank cases have demonstrated that **a winding-up scenario of less than 3 years can be considered as remote**.

In our valuation we consider liquidation scenarios of 3 and 6 years as working hypotheses. The assessment of how to evaluate the probabilities of each scenario primarily depends on the following factors:

- First and foremost, it is assumed that the DGS (Deposit Guarantee Scheme) as one of the main creditors would not reject an insolvency plan or scenario that ensures a prompt and full repayment of the deposit guarantee compensation provided by the DGS.
- Additionally, depositors who are not compensated by the DGS because their deposits exceed the deposit insurance limit of EUR 100,000 play a significant role. These include households, micro-enterprises, and SMEs, referred to as "not covered but preferential" deposits according to Article 108 BRRD. Also, deposits from corporates exceeding the compensation limit of EUR 100,000 play a role, and they are classified as "not covered and not preferential," unlike the aforementioned deposits.

This reflects the legal provision of Article 35(2) CALCI which prescribes that the plan must have consent of the supervisory body (DGS) and approval of a majority of creditors. Further, Article 39 CACLCI refers to the provisions of Articles 103 - 108 Bankruptcy Act which prescribe how the creditors' assembly is assembled, and which creditors have votes. The recognized creditors have the right to vote, while the disputed creditors do not have the right to vote unless they have enforcement title for their claim (Art 106 Bankruptcy Act).



- In both cases, it can be assumed that the CNB and the DGS would only not reject an
 insolvency plan if a reasonably fast and full satisfaction of unprotected claims of individuals, micros, SMEs and corporates is guaranteed. Such an insolvency plan is also in the
 public interest to avoid contagion effects and overall economic disadvantages resulting
 from the default of these creditor groups.
- Deposits from financial institutions are typically not covered by the DGS. Our experience shows that financial institutions prefer a swift repayment of their claims, even if it involves comparatively high write-offs, rather than waiting for a lengthy resolution process, especially considering the higher uncertainties associated with delayed repayments.

For this purpose, the creditor hierarchy, the claims assigned to each creditor group, and the liquidation proceeds in each scenario need to be analysed. Finally, we examine how the liquidation proceeds will be distributed among the aforementioned creditor groups in these scenarios. From this analysis, we can infer which liquidation plan is least likely to be rejected by the relevant creditors and therefore should be classified as the most probable.

As a preview of the results described in sections 6 and 7, we classify the scenarios as follows:

- 3-year scenario: "probable" (probability >50%)
- 6-year scenario: "reasonably possible" (probability 10-50%)

Considering the pace in which historical bank insolvency cases in Croatia were wound up, a 6year insolvency scenario is fundamentally conceivable. However, if one includes in this assessment the fact that the relevant (new) legal framework provides for a liquidation within three years, the granting of an extension of the insolvency period by three years seems less likely than the 3year scenario. Especially since the Bank would be the first institution to be wound-up under the new insolvency regime in Croatia and, thus, an extended liquidation procedure would have an undesirable signal effect on the effectiveness of the new framework.



4.4. Liquidation Costs

This section provides a rough overview of the basis for our assumptions before we go into detail in section 5.10 "Costs of Liquidation".

However, Article 12 para 2 of the CACLCI stipulates that the costs of compulsory liquidation proceedings include:

- Court costs of compulsory liquidation proceedings;
- Claims of unpaid salaries to workers in gross amounts as determined in the compulsory liquidation proceedings and exceeding three unpaid salaries realised by the worker according to a special regulation, up to a maximum of three unpaid minimum salaries in Croatia. The mentioned does not apply to persons who were authorised to manage the bank's operations;
- Remunerations and expenses of the compulsory liquidation manager;
- Other costs that the relevant or another legal act stipulates to be settled as costs of compulsory liquidation proceedings.

All costs that occur after the initiation of procedure are senior to pre-petition claims, and these costs would also include the remaining employees of the credit institution and costs of service providers.

In compulsory liquidation proceedings, each creditor bears its own costs of proceedings (Art. 12 para 1).

We assume that under liquidation the following main costs are likely:

- The costs incurred in connection with the performance of the tasks and powers of the liquidator, mainly:
 - Assets and liabilities valuation by an expert
 - Hiring of other independent experts cooperating with the planning and implementation of measures
 - Compensation of the liquidation manager
 - Execution of instruments and exercise of powers for compulsory liquidation
- Other costs of execution of liquidation instruments and payments of creditors, such as:
 - Legal fees (attorneys)
 - Accounting and audit fees
 - Costs of independent appraisers
 - Costs of brokerage
 - Costs of expert knowledge
- Costs of other Bank liabilities relating to administration, incurred after the start of the compulsory liquidation such as:
 - o Personnel cost
 - Office space and utilities
 - Cost of service provider (ICT et al.)



4.4.1. Remuneration Costs

The CACLCI does not provide for any guidance with respect to the remuneration costs for the liquidator; however, it stipulates that the provisions of the law governing bankruptcy and the law governing the rules of civil proceedings before commercial courts apply accordingly.

The Regulation on the criteria and method of calculating and paying the reward to the insolvency administrator (OG 105/2015) provides that remuneration to the insolvency administrator amounts to a maximum of kHRK 795, of which a maximum of kHRK 630 is based on the value of the monetized bankruptcy estate, on the basis of an additional reward of a maximum of kHRK 150 and a maximum of kHRK 15 on the basis of a special reward.

The award to the insolvency administrator on the basis of the value of the monetized bankruptcy estate is calculated using the value table of the monetized bankruptcy estate and the reward in percentages from 5% for value up to kHRK 12 and additional 1% for the amounts above it.

When determining the additional award, the court shall take into account the degree of settlement of the creditors in bankruptcy and the particular commitment of the insolvency administrator.

Furthermore, it may be expected that a monthly salary is paid to the insolvency administrator / liquidator.

According to the Tariff on rewards and reimbursement of costs for the lawyers (OG 142/2012, 103/2014, 118/2014, 107/2015, 37/2022, 126/2022) rewards and reimbursement roughly amount to 1.5% of dispute value per court action with a cap of kHRK 100 per court action.

In a typical litigation scenario, the cost of litigation may come to 10% of dispute value taking into account hearings and submissions.

4.4.2. Costs Arising from the Termination of Contracts

The Bank is a contracting party to a large number of lease and rental agreements, senior management contracts and other material contracts. In the course of its liquidation, it is reasonable to assume that these will be terminated but the Bank will incur the costs of an early termination.

According to Article 19 (8) of the CACLCI the legal consequences of the initiated bankruptcy procedure will accordingly apply to the procedure of a compulsory liquidation of a credit institution.

Article 181 of the Bankruptcy Act stipulates that after the initiation of bankruptcy procedure the performance of bilateral agreements is up to the discretion of the bankruptcy administrator who may decide to perform those agreements and request performance of other parties or notify the counterparty that the bankruptcy debtor will not perform the contract. In the latter case, the counterparty may request damages as bankruptcy creditor.



Rental and lease agreements in which insolvency debtor was tenant may be terminated with a statutory notice period. The contingent landlord's claim for damages due to early termination may be posed as a claim within the bankruptcy procedure (i.e., compulsory liquidation procedure).

Employee Cost

It is reasonable to assume that a significant number of employees would not be required once the liquidation has begun because the Bank would no longer accept deposits or initiate new business activities.

Pursuant to Art. 191 of the Bankruptcy Act, the opening of bankruptcy proceedings is a specially justified reason for the termination of an employment contract. Employment or service contracts concluded with the debtor as an employer do not cease to exist upon the opening of bankruptcy proceedings.

Upon opening bankruptcy proceedings, the liquidator may terminate the employment contracts regardless of the agreed duration of the contract and irrespective of the legal or agreed provisions on the protection of workers. The notice period is one month. The rules on collective dismissal do not apply in the case of insolvency.

In case of termination of employment agreement in the insolvency procedure, each employee has the priority claim to amounts of severance pay under the law which amounts 1/3 of the gross salary for each year of service, but no more than 6 gross salaries. The amounts above those prescribed by law represent general claims (sixth order under compulsory liquidation rules).

Operating Costs

We would expect that during the liquidation, the branches would be closed but for the head office, which should remain open to deal with the customers. In particular, the head office would collect outstanding loans, realise other assets and would handle claims and other liquidation procedures. To a large part, related costs include communications, maintenance of premises and equipment as well as other operating costs.

The operating costs depend on the duration of the liquidation process. However, we consider a decrease of operating costs over time due to the decreasing need for certain services and running costs.

To estimate the development of operating costs in the course of the insolvency proceedings we have also considered the information available from the cases of Erste Abwicklungsanstalt and FMS Wertmanagement as reference points.



Erste Abwicklungsanstalt (EAA), Germany

As part of its public mandate, the EAA took over a first portfolio with a nominal volume of EUR 77.5 billion in 2009 and 2010. In 2012 - a second portfolio with a volume of some EUR 100 billion was transferred. This so-called replenishment was carried out as part of the restructuring of WestLB AG required by the EU Commission. The restructuring measures led to WestLB AG discontinuing its new business as a bank on 1 July 2012.

EAA has, as of the Valuation Date, reduced well over four-fifths of the positions it took over. This was made possible by a swift but prudent liquidation of assets and a constant reduction of operating costs. Accordingly, EAA reduced its cost basis to 21% in 2021.

FMS Wertmanagement (FMS-WM), Germany

FMS-WM was founded in 2010 as a federally owned winding-up agency for the nationalised Hypo Real Estate Holding AG (HRE Group) with the aim of taking over and winding down risk positions and non-strategic with a nominal value of EUR 175.7 billion from the HRE Group and its subsidiaries and special purpose entities in Germany and abroad, as well as short-term refinancing funds in the corresponding amount and associated derivatives for hedging purposes.

As of 1 October 2010, FMS-WM took over risk positions and non-strategic business units. The winding-up plan originally drawn up by the HRE Group was designed for a term of ten years. The part of the portfolio not wound down during this period was to be sold at the end of the term without affecting the carrying amount.

Total assets at the end of the business year 2020 amounted to EUR 124.3 billion. The nominal value of the portfolio was EUR 54.1 billion at the end of 2021. Nevertheless, FMS-WM managed to reduce its operating costs to 36% in 2019.

Further details are set out in section 5.10.4. "Operating Cots".

Bank Guarantees and other contingent claims

With the initiation of compulsory liquidation proceedings, no new bank guarantees or other obligations can be entered into, as the Bank loses its license.

Contingent liabilities from bank guarantee or similar instruments must be registered within 60 days as of the initiation of the compulsory liquidation procedure (Art 15 CACLCI). If a (contingent or existing) claim is not filed within the prescribed period, the claim for payment in the compulsory liquidation proceedings expires.



5. Liquidation Valuation: Analysis of Results

5.0. Explanatory Note: Accounting Principles

5.0.1. Valuation Under a Going Concern Assumption

The starting point of our valuation are the Bank's financial statements which have been prepared in accordance with the IFRS, as adopted by the EU.

The preparation of the financial statements and the measurement of the individual financial instruments are based on the going concern assumption. Thus, in accordance with IFRS 9, financial assets are measured at either:

- Amortized cost (**AC**)
- Fair value through other comprehensive income (FVTOCI)
- Fair value through profit or loss (FVTPL)

Amortized cost is an accounting method under which all financial assets must be reported in the balance sheet at their amortized value which is equal to their acquisition costs total minus their principal repayments and any discounts or premiums minus any impairment losses and exchange differences.

Financial assets are measured at AC if they are held to collect contractual cash flows ("held to collect"), and those cash flows consist solely of principal and interest on the principal amount outstanding. After initial recognition, they are subject to impairment and are measured at the amortized cost using the effective interest method.

For non-financial assets, e.g., tangible assets such as property, plant and equipment, amortized costs are the equivalent of the assets' acquisition costs minus/plus depreciation/appreciation.

Fair value is a market-based valuation. The objective of a fair value measurement is to estimate the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date under current market conditions. In other terms, the fair value provides a proxy for the observed market price.

IFRS 13 specifies a fair value hierarchy with respect to the quality of the inputs and assumptions used to measure financial and non-financial assets. This hierarchy gives the highest priority to observable market data from independent sources when available, and the lowest priority to unobservable market data inputs that reflect individual assumptions.



The fair value hierarchy comprises the following levels:

- Level 1 inputs are quoted prices (unadjusted) in active markets. Level 1 includes listed equities, debt instruments, derivatives, units of investment funds, and other unadjusted market prices of assets and liabilities. When an asset or liability may be exchanged in multiple active markets, the principal market for the asset or liability must be determined. If no principal market is available, the most advantageous market must be determined for the asset or liability.
- Level 2 inputs include prices quoted for similar assets or liabilities in active markets and prices quoted for identical or similar assets, and liabilities in markets that are not active. Thus, inputs are observable, either directly (i.e., prices) or indirectly (i.e., derived from prices).
- Level 3 inputs are not based on observable market data. In case relevant observable inputs are not available, unobservable inputs are used. Unobservable inputs must reflect the assumptions that market participants would use when pricing an asset or liability.

The Bank also reports contingent liabilities, defined as:

- A possible obligation arising from past events an whose existence will be confirmed only by the occurrence or non-occurrence of one or more future events not totally under control.
- A current obligation that arises from past events but is not recognized because use of resources aimed at producing economic benefits will likely not be required to settle the obligation or because the amount of the obligation cannot be measured with sufficient reliability.

Contingent liabilities must be treated differently depending on their probability of occurrence if:

- the possibility of future outflows of resources due to legal obligations is probable the contingent liability must be disclosed as a liability. The presentation in the annual financial statements is based on the rules for accounting for liabilities and provisions and the disclosure in the notes ("probable");
- the possibility of future outflows of resources due to legal obligations are possible but not probable, a note is to be made to the financial statements ("possible");
- the possibility of future outflows of resources due to legal obligations is unlikely, the contingent liability does not have to be disclosed or recognized ("remote").

Accordingly, only contingencies that are assessed as "probable" are reported as a liability in the Bank's balance sheet with the probable amount.



5.0.2. Valuation Under Liquidation

Our valuation is based on the assumption that the Bank will be wound up under NIP (i.e., compulsory liquidation). In the event of a compulsory liquidation, the going concern assumption cannot be maintained and assets must be valued differently. For valuation purposes, we must assume that the assets will no longer serve to continue the business operations but, therefore, will typically generate expected cash flows from their collection (i.e., short-term receivables, interest and loan repayments) or sale at the best price possible. If neither of these options are feasible, the expected recovery amount is assumed to be zero. Against this background, this approach is based on expected cash flows discounted to the Valuation Date as stipulated by Article 4(1) CDR 2018/344.

In the case of non-current assets of the Bank, it should be noted that these are often subject to company-specific use or are custom-made for the Bank. Certain assets, such as tax assets, have a value in use in a going concern scenario and, thus, a benefit exclusively for the Bank itself, but not for any third parties. In the event of liquidation, such assets are therefore of very little or no value.

As soon as the going-concern premise is no longer given due to liquidation and the Bank is forced to liquidate the assets, the Bank might have to accept a lower selling price for the assets than under normal circumstances. If a sale takes place under compulsion, the price that may be realized in the process is usually lower than an agreed price between a willing buyer and a willing seller, under normal conditions without pressure.

Assets that are company-specific or show company-specific signs of use are usually valued using IFRS Level 2 or 3 inputs. The price determined by using IFRS Level 2 or 3 inputs must be understood as an approximate value that might not be achieved in an actual transaction, especially under insolvency proceedings.

In the event of a liquidation, contingent liabilities must be recognized as liabilities if cash outflows for the related obligation must be expected in the assessment period provided that the contingent creditors have registered claims²³. In our valuation under insolvency proceedings, we must therefore also take those balance contingencies into account.

²³ Under Article 33(1) CACLCI, the contingent claims may fall in the 6th of claims ((i)after workers, (ii) national bank, (iii) DGS, (iv) SMEs and consumers above 100Kclaims, and (v) other deposits. If a contingent creditor would seek recognition of a full claim, this may be disputed in the procedure. According to Article 41 (1) CACLCI the amounts for disputed claims will be reserved before repaying the next, lower class of creditors.



5.1. Cash and Cash Equivalents

Overview

Cash and cash equivalents as of 28 February 2022 are classified as current and highly liquid financial assets:

Cash and Cash Equivalents (kHRK)	
Item	Book Value
Cash in hand	246,828
Cash and cash equivalents with central banks	597,789
Cash and cash equivalents other than central banks	182,999
Mandatory cash balances with central banks	456,035
Total	1,483,651

Table 9: Cash and cash equivalents - overview

The following table shows the Bank's cash and cash equivalents country-by-country:

Cash and Cash Equivalents (kHRK)	
Item	Book Value
Croatia	1,394,602
Slovenia	46,147
Germany	20,549
Austria	11,526
Switzerland	7,110
Russia	1,290
Other countries	2,426
Total	1,483,651

Table 10: Cash and cash equivalents - breakdown by countries

Based on further analysis and in view of the Russian war in Ukraine on 24 February 2022 and the sanctions imposed on Russia, we assume all cash and cash equivalents held in Russia are impaired.



According to the Bank, deposits are held with affiliated companies, however, some affiliated banks listed below are rated as failing or likely to fail.

Cash and Cash Equivalents (kHRK)	
Item	Book Value
Sberbank banka d.d. (Slovenia)	46,147
Sberbank Europe AG (Austria)	11,526
Sberbank CZ, A.S. (Czech Republic)	701
Sberbank Srbija A.D. (Serbia)	151
Sberbank BH d.d. (Bosnia and Herzegovina)	79
Sberbank Magyarorszag ZRT (Hungary)	68
Total	58,672

Table 11: Cash and cash equivalents - Sberbanks

- Sberbank banka d.d., Slovenia: As of 28 February 2022, the ECB reached the conclusion that Sberbank banka d.d. will be unable to pay its debts or other liabilities as they fall due in the near future. Like with the Bank, the resolution tool of sale of business was applied to Sberbank banka d.d as of 1 March 2022²⁴ (European Central Bank, 2022). Therefore, following the transfer of the business of Sberbank banka d.d. to a solvent and robust bank, we expect full recovery of cash amounts held at the Slovenian affiliate.
- **Sberbank Europe AG**: As of 1 March 2022, the SRB decided that resolution is not necessary; insolvency procedures will be carried out according to national law²⁵ (Single Resolution Board, 2022).
- **Sberbank CZ**: As of 28 February 2022, the Czech National Bank launched steps towards the revocation of the banking license of Sberbank CZ, a.s.²⁶ (Fišerová, 2022).
- **Sberbank Hungary**: As of 1 March 2022, the Magyar Nemzeti Bank has revoked the domestic credit institution's operating license and has ordered its winding-up²⁷ (Magyar Nemzeti Bank, 2022).

Methodological Approach and Hypothesis Explanation

According to the Bank's financial statement as of 31 December 2021, cash equivalents are highly liquid assets that are readily convertible to known amounts of cash and are subject to an insignificant risk of changes in value.

Therefore, according to Article 4(4) of CDR 2018/344, we use the book value as a proxy for the observed price, except where the circumstances laid out below hamper the marketability of these assets.

The exposure in Russia has a zero value in all scenarios. Therefore, cash and cash equivalents need to be adjusted by kHRK 1,290 in all three scenarios.

²⁴ https://www.bankingsupervision.europa.eu/press/pr/date/2022/html/ssm.pr220228~3121b6aec1.en.html ²⁵https://www.srb.europa.eu/en/content/srb-determines-sberbank-europe-ag-austria-and-its-subsidiaries-croatia-and-slo-

venia-failing#:~:text=Following%20the%20European%20Central%20Bank's,failing%20or%20likely%20to%20fail. ²⁶ https://www.cnb.cz/en/cnb-news/press-releases/CNB-launches-steps-to-revoke-the-licence-of-Sberbank-CZ/

²⁷ https://www.mnb.hu/en/pressroom/press-releases/press-releases-2022/winding-up-proceedings-to-start-at-sberbankhungary-and-its-austrian-parent



According to information received from the Bank, the affiliated bank companies (listed in table 11) also have liquidity problems / liquidity shortages, apart from the Slovenian and the Serbian entity (which we further describe below). Based on these assumptions, cash amounts held with affiliated companies, except for the Slovenian and the Serbian entity, have zero value in any liquidation scenarios and, hence, need to be adjusted to the full amount.

As of 28 February 2022, the National Bank of Serbia reported that the subsidiary in Serbia (Sberbank Srbija) is highly liquid and well capitalized. Moreover, the National Bank of Serbia implemented measures for the monetary and financial stability of the institution and consented to the acquisition of the ownership to the AIK banka a.d. Beograd. Also, we consider this item to be immaterial for valuation purposes. Therefore, we refrain from devaluing this item²⁸ (National Bank of Serbia, 2022).

Concerning Sberbank banka d.d., Slovenia, the SRB determined on 27 February 2022 that this bank also was failing or likely to fail due to a rapid deterioration in its liquidity situation. Like in the case of the Bank, a moratorium was initially enacted and on 1 March the SRB adopted resolution schemes (Sale of Business). Due to the adoption of the Sale of Business tool, and thus, the transfer of all assets and liabilities to the purchaser, being a solid and solvent entity, we expect a recovery of 100% of cash held at Sberbank banka d.d..

Outcome of Valuation

Based on the aforementioned facts on cash and cash equivalents, the adjustments are as follows:

Cash and Cash Equivalents (kHRK)				
Itom	Book Value		Adjustments	
item	Feb 22	Best case	Best estimate	Worst case
Cash and Cash Equivalents	1,483,651	-13,664	-13,664	-13,664

Table 12: Cash and cash equivalents - valuation

Thus, expected recoveries are kHRK 1,469,987 in all scenarios.

Sources of Uncertainty

Caused by the above mentioned facts, cash and cash equivalents might be subject to an increasing risk of impairment which, at the Valuation Date, cannot be reliably quantified.

²⁸ https://www.nbs.rs/en/scripts/showcontent/index.html?id=17823



5.2. Financial Assets Held for Trading

Overview

Financial assets held for trading exclusively consist of bonds of the Republic of Croatia (IFRS Level 1; kHRK 96,585).

Financial Assets Held for Trading (kHRK)	
Item	Book Value
Bonds of Republic of Croatia	
ISIN	
HRRHMFO23BA4	27,702
HRRHMFO26CA5	<mark>6</mark> 8,220
Accrued interest	<mark>6</mark> 63
Total	96,585

Table 13: Financial assets held for trading - overview

Methodological Approach and Hypothesis Explanation

Using the market value approach, we compared the value of the corresponding balance sheet item as of the Valuation Date with current market prices for those bonds as of the same date.

We found that one tranche of those bonds (HRRHMFO23BA4) has a lower market value than the one stated in the annual financial statement of the Bank and the other tranche of related bonds (HRRHMFO26CA5) has a higher market value than the one stated in the Banks' annual financial statement as of the Valuation Date.

We also analysed the accrued interest for those bonds, using the corresponding coupon rate and the relevant interest days. We did not find any difference within the Banks's calculation.



Outcome of Valuation

Since the Bank has recognized these assets as IFRS Level 1, we determine their amount of expected cash flows according to Article 4 (4) of CDR 2018/344. We therefore assumed that the expected cash flows will be an amount equivalent to the market prices as of 28 February 2022. Possible reductions of the recovery rates due to accelerated sales are considered to be immaterial and are disregarded to the benefit of the shareholder.

Financial assets held for trading are expected to recover higher cash flows than stated in the Banks' annual financial statement (kHRK 97,859) in all scenarios.

Valuation Financial Assets Held for Trading (kHRK)				
ltom	Book Value	Adjustr	nents	
item	Feb 22	3 years	6 years	
Bonds of Republic of Croatia				
ISIN				
HRRHMFO23BA4	27.702	-130	-130	
HRRHMFO26CA5	68.220	1.404	1.404	
Accrued interest	663	0	0	
Total	96.585	1.274	1.274	

Table 14: Financial assets held for trading - valuation

5.3. Financial Assets Measured at Fair Value Through Other Comprehensive Income

Overview

The balance sheet item financial assets at fair value through other comprehensive income consists exclusively of Croatian government bonds traded in active markets (IFRS Level 1 Fair Values) as of 28 February 2022.

Financial Assets Measured at Fair Value Through Other Comprehensive Income (kHRK)	
Item	Book Value
Debt securities at FVTOCI other than securities pledged under repurchase agreements	568,095
- General governments	568,095
Total	568,095

Table 15: Financial assets measured at fair value through OCI

Methodological Approach and Hypothesis Explanation

The Bank records these assets at IFRS Level 1 fair value, meaning that the fair values are derived from observed market prices. Hence, we use the observed price according to Article 4(4) of CDR 2018/344. In our judgement the expected cash flows will be an amount equivalent to their market prices.



As part of a prudent valuation, we first compared the individual book values at fair value with the market prices of each Croatian government bond valid as of 28 February 2022. This resulted in minor deviations with regard to the exchange rate used for the calculation and the individual bond prices as of the Valuation Date.

Furthermore, we found that the Bank used one excess day for the interest calculation (probably 28.02.2022 itself). We have adjusted the accrued interest for each bond in our valuation for this excess day.

Outcome of Valuation

We expect identical recoveries of kHRK 567,649 in all scenarios.

5.4. Financial Assets at Amortized Costs

Overview

As detailed in the table below, the NBV of financial assets measured at amortised cost as of 28 February 2022 was kHRK 7,144,350 and comprised the following sub-categories:

Financial Assets Measured at Amortized Cost (kHRK)	
Item	Book Value
Loans and advances to customers	7,031,224
Loans and advances to credit institutions, other financial corporations and central governments	113,126
Total	7,144,350

Table 16: Financial assets measured at amortized costs

Details on the composition of Financial Assets measured at Amortized Costs are set out below.

5.4.1. Loans and Advances to Customers

5.4.1.1 Overview

The loan tape provided by the Bank contains the loans and advances to customers:

Loans and Advances to Customers (kHRK)		
Item	Gross	Net
	Book Value	Book Value
Performing loans	6,998,934	6,930,151
Non-performing loans	374,743	101,073
Total loans according to loan tape	7,373,678	7,031,224
- Difference to balance sheet		0
Total Loans according to Balance Sheet	7,373,678	7,031,224

Table 17: Loans and advances to customers - overview



In general, our review of the loan tape did not reveal any indications of material individual commitments that would have to be written off immediately, i.e., major loans with reference to Russia or Belarus. We consider some 20 loans to Russian borrowers (NBV: kHRK 1,178) to be immaterial and, thus, not subject to an individual asset quality review for valuation purposes, Further, reconciliation differences were close to zero.

5.4.1.2 Methodological Approach and Hypothesis Explanation

Typically, loans and advances to customers are not traded in an active market. Hence, we need to consider a number of factors according to Article 4(5) of CDR 2018/344, especially the likelihood of the assets generating net cash inflows under NIP. Generally, the net cash flows from loans are the proceeds from repayments and interest payments less the expected credit losses, liquidation of collateral or the sale of loan portfolios to investors.

Pursuant to Article 4(2) of CDR 2018/344, the expected cash flows are discounted at rates reflecting the timing associated with the expected cash flows.

5.4.1.3 Reclassification to Original Loan Data Tape

Taking the increasingly deteriorating macroeconomic conditions into account (we refer to chapter 2.5. Macroeconomic Context for the Liquidation), we presume that defaults will occur. In advance to the valuation of the individual loans, we reclassified the PLs and NPLs. In doing so, we reclassified those PLs with a one-year PD greater than or equal to 50% as NPL. One can assume that loans exceeding this threshold will migrate to NPL status in the short term. Insofar as the one-year PD is even greater than or equal to 50%, it is more likely than not, that loans will become non-performing in the near future. These loans are highly speculative and subject to substantial risks.

According to the Global Corporate Average Cumulative Default Rates (1981-2021) from S&P Global Ratings Research and S&P Global Market Intelligence's CreditPro, a one-year PD of 26.55% corresponds to a rating of CCC, which is equivalent to an extremely poor credit rating and in acute danger of default. (S&P Global Ratings 2022)²⁹

Consequently, it could have been argued that loans with a one-year default probability of 26.55% could also be transferred to the NPL status. However, our analysis revealed that it is an immaterial small amount. To the benefit of the Shareholder, we have refrained from reclassifying them.

²⁹ See S&P Global Ratings: Default, Transition, and Recovery: 2021 Annual Global Corporate Default And Rating Transition Study p. 64.



Following this reclassification, the book values develop as follows:

Loans and Advances to Customers (kHRK)		
	Book Value	
Item	Before	After
	reclassification	reclassification
Performing loans	6,930,151	6,898,813
Non-performing loans	101,073	132,411
Total	7,031,224	7,031,224

Table 18: Loans and advances to customers; PL/NPL

5.4.1.4 Clustering

After reclassification, we have clustered these loans based on the segmentation according to FINREP.

Loans and Advances to Customers (kHRK)	
Item	Book Value
I) Performing loans	6,898,813
1) Non-financial corporations	2,518,633
a) Loans to customers	2,458,515
b) Short-term	60,119
2) Households	4,380,179
a) Loans to customers	4,191,063
b) Short-term	189,116
II) Non-performing loans	132,411
1) Secured	3,099
2) Unsecured	129,312
Total	7,031,224

Table 19: Loans and advances to customers - clustering

PLs were segmented by type of borrower, namely non-financial corporations and households.

Non-financial corporations

We allocated the non-financial corporate loans cluster into the following subcategories:

Loans to customers can be categorized as investment loans, project financing, syndicated loans, trade financing and working capital loans.

We distinguished between loans to customers with variable or fixed interest rates.

Within a short time, a large proportion of the portfolio and several banking activities would be required to be wound-up. Consequently, it is reasonable to assume that the Bank will not tend to prolong loan agreements during the liquidation and fixed interest borrowers will migrate to another bank once the fixed-interest period of the loan expires.


Another alternative to value these loans is to assume that they would be prolonged after the end of the fixed-interest period. This would require numerous assumptions, e.g., regarding the future interest rate, the creditworthiness of the borrower or the duration of the (new) fixed-interest period. However, these assumptions are accompanied by a high degree of uncertainty. For this reason, we have applied the procedure described above which is also common practice.

According to our analysis, there are no loans with a residual debt at the point in time when the fixed-interest period ends within the insolvency periods.

Furthermore, we have assumed that borrowers will redeem their existing loan as a result of the interest rate environment developing in their favour and migrate to another bank at short notice in order to obtain better loan conditions. Since the interest rate conditions for variable-interest loans are continuously adjusted and borrowers thus benefit from the favourable interest rate level as at the Valuation Date even if they continue their customer relationship with the Bank, migration is an option for fixed interest borrowers only.

The following figure illustrates the favourable development of the ECB's interest rate for main refinancing operations in the period from January 2006 to February 2022:



Figure 1: ECB interest rate for main refinancing operations / end-of-month rate.³⁰

³⁰ See German Federal Bank: ECB interest rate for main refinancing operations / end-of-month rate.



An early termination of the credit and a related switch to another bank is regularly only possible if the borrower possesses a sufficiently good credit rating, therefore being acceptable for other banks. This should be the case if the one-year PD is lower than 2%, which rating agencies consider as investment-grade. Higher one-year PDs already indicate a poorer credit rating.³¹ (S&P Global Ratings, 2022) In addition, the fixed interest rate of the loan must have been agreed before March 2016. Since then, the ECB interest rate has been stable at 0%. Hence, the borrower would not benefit from an improved interest rate environment.

We identified a total of four loans amounting to Gross Book Value (**GBV**) kHRK 4,134 and assumed that these loans are repaid at GBV.

We summarised the product types credit cards and overdrafts in the category "**short-term**". We assume that the companies will leave the Bank very soon after the insolvency proceedings have been opened, as they need a solid banking relationship for their daily business. We assume that these items will be repaid at an amount equivalent to their GBVs.

Households

We have allocated the loans to households into the sub-categories of loans to customers (mainly personals loans and mortgage loans) and short-term products.

Again, we have separated **loans to customers** into variable and fixed-rate loans in order to identify those loans that will be redeemed at GBV after the fixed-interest period has expired. In the 3year-scenario this is applicable to loans amounting to GBV kHRK 565,156 and in the 6-yearscenario loans in the amount of GBV kHRK 904,257.

Based on our observations in the banking sector, we assume that households, unlike companies, are not willing to make the effort to migrate if interest savings are only small. Therefore, we consider migration on a material scale as unlikely.

We have summarised overdrafts and credit cards in the category **short-term**. As in the nonfinancial corporations' segment, we assume that these items will be repaid at an amount equivalent to their GBVs.

Non-performing Loans

No detailed information especially concerning prices for NPLs in Croatia, was either made available to us or received from publicly available sources, e.g., CNB or annual reports from other banks.

We have, therefore, applied different approaches and used different sources to calculate prices or discounts, respectively, for NPL of a bank in Croatia.

³¹ See S&P Global Ratings: Default, Transition, and Recovery: 2021 Annual Global Corporate Default And Rating Transition Study p. 64.



Firstly, we have considered the results of historical bank failures in Slovenia as described in section 4.3.2. These historical cases show haircuts in a rather broad range between 45% and 90%. However, it has to be considered that these assets did not only consist of NPLs, but of inhomogeneous portfolios with different asset types and qualities, e.g. collateralised and non-collateralised loans, securities, etc.

Also, one has to note that these historical transactions relate to a different economic environment and the comparability of parameters may be limited.

To use more up-to-date information, we have referred to the results of the recent Banca d'Italia publication "Bad Loan Recovery Rates in 2020" (Banca D'Italia 2021)^[1] Italy and Croatia are both part of the European Union, which means that they share a similar legal and regulatory framework. Furthermore, both countries have open investment opportunities, making them attractive to international investors. Also, Italy is one of Croatia's main trading partners, accounting for a significant portion of Croatia's imports and exports. Many industries and sectors in Italy and Croatia overlap, such as tourism, manufacturing, and agriculture. This means that economic developments and trends in Italy can have a direct impact on the Croatian economy and financial market. Accordingly, we expect that the Croatian financial market will most probably see similar international players like in Italy. Against this background, we deem this case study for the Italian financial market suitable to provide a good estimate for the Croatian financial market as well.

Accordingly, the average price for bad loans sold in 2020 was 24% of the gross book value at the time of the sale. The price averaged 35% for bad loans secured by collateral and 10% for other (unsecured) loans. On this basis the average discount would be 76%, thereof 65% for secured and 90% for unsecured NPL.

Thirdly, we have considered the information published by the EBA in its quarterly Risk Dashboard Q4/2021ⁱ. In the Risk Dashboard the EBA discloses coverage ratios for NPL for the different countries in the EU. For Croatia the EBA states a NPL coverage ratio of 62,8%. As can be seen from the Risk Dashboard the coverage ratio has increased since Q1/2021 reflecting the increasing negative macroeconomic outlook.

In this context we have also considered the country dispersion of NPL as published in the EBA Risk Dashboard as of 31 December 2021. While the average ratio of NPL amounts to appr. 2.0% of the total loan portfolio of European banks, the NPL ratio in Croatia amounts to 3.6% of the total portfolio. This equals the NPL ratio in Italy which we consider to be comparable for our valuation purposes. However, the EBA data cannot fully take into account the specific implications of the war of Russia against the Ukraine and the resulting sanctions with their negative impact on the macroeconomic environment (see also section 2.5.).

Based on the available information and further considerations we conclude that an average discount of \blacksquare % for the NPL portfolio will be appropriate for a prudent valuation.

^[1] A. L. Fischetto, I. Guida, A. Rendina, G. Santini, M. Scotto di Carlo: "Bad loan recovery rates 2020", published in "Notes on Financial Stability and Supervision No. 27", November 2021 by Banca d'Italia.



This discount is below the average within the range of comparable discounts between 45% and 90% of the historical cases above. It also reflects recent information concerning discount levels together with the unfavourable economic environment and the specifics of the insolvency process the liquidator has to face when offering the portfolios in the market.

5.4.1.5 Discounted Cash-Flow ("DCF") Model

Our DCF model is based on the following assumptions:

- During the liquidation period, the Bank collects the scheduled cash flows consisting of interest and principal payments. These cash flows have been discounted to the valuation date using their specific discount rates.
- Near the end of the insolvency proceedings, the loans which, according to the Bank's interest and redemption schedule, still have a residual debt are sold with the acceptance of a discount. Cash flows from these proceeds have been discounted to the valuation date using their specific discount rates.

During the liquidation periods of the different insolvency scenarios, we discounted the scheduled monthly cash flows to the valuation date using a discount factor for matching maturities (derived from spot rates). Furthermore, we have considered administrative costs, which have been deducted from the cash flows and cost of risk, that have been determined at the valuation date.

To the benefit of the shareholder, regulatory capital costs are not applied, as after the initiation of insolvency proceedings the Bank is no longer obligated to back loans with regulatory capital.

The procedure described can be, simplified, expressed as the following DCF-formula:

$$NPV = \sum_{t=0}^{T} \frac{CF_t - aC_t}{(1 + CR_t)^{t-t_0}} - CoR_{t_0}$$

Notations:

- *NPV* Net Present Value as of 28.02.2022
- *CF* Cash Flow (principal payment + interest payment)
- aC Administrative Costs
- *CR* Capitalisation Rate (safe alternative investment yield + average refinancing costs):
- CoR Cost of Risk
- t Point in time when principal and interest is paid (with $t_0 = 28.02.2022$)
- T Total number of cash flows



Cash Flow (principal payment + interest payment)

We were provided with an interest and redemption schedule by the Bank, which comprises principal and interest payment both for fixed-interest and variable-interest loans. According to the Bank, the repayment and interest payment is calculated based on the current contractual interest rate (valid as of 28 February 2022 per single contract), meaning no changes of variable rates were considered for the future interest payments.

Administrative Costs

The Bank was unable to provide us with information concerning its average administrative costs for the loan portfolio. Therefore, we used the audited annual financial statement as of 31 December 2021. The administrative expenses for the financial year 2021 amounted to kHRK 188,556. Putting this amount in relation to the average value of the loan portfolio, the annual cost ratio is 0.9%.

Capitalisation Rate (risk free alternative investment yield + average refinancing costs)

The capitalisation rate is defined as the return on an alternative investment that is adequate for the investment in the loans to be valued.

As already described under the general principles, the present valuation is carried out according to the certainty equivalence method. According to this method, the uncertainty components are already largely considered in the numerator of the valuation calculation. Only the remaining uncertainty components attributable to risks from refinancing are still to be reflected in the denominator, i.e., in the capitalisation interest rate.

The capitalisation rate is therefore predominantly shaped by the risk-free reinvestment yield. As a representative yield for the risk-free alternative investment from a bank's point of view, we have used the Euro-Swap Curve based on the 3M6M Euribor as it can be retrieved daily from Bloomberg in the designation "GC S45". The yield curve at the valuation date is set out below.³²

³² See Bloomberg: GC S45.





Valuation 3 - Valuation of Difference in Treatment - Sberbank d.d.

Figure 2: Yield curve as of the valuation date

Since the yield curve largely provides spot rates on an annual basis, we have determined the monthly spot rates by means of interpolation.

We were informed that the Bank's average refinancing costs are **100%**.

To derive at the total discount rate, we added this funding spread of **Second**% to the respective spot rates specific to the term from the Euro-Swap Curve.

Cost of Risk

We determined the cost of risk as the lifetime expected loss as at the Valuation Date and calculated them per loan:

$$EL = GBV \times cum_PD \times LGD$$

Notations:ELLifetime Expected LossGBVGross Book Valuecum_PD(Cumulated) Probability of DefaultLGDLoss Given Default

Based on PD-matrices for different segments that were provided to us by the Bank, we determined the maturity-specific cumulated probability of default depending on the residual maturity and the borrower's rating or the number of days the loan is already overdue.



Sale of the residual portfolio

The valuation assumes the sale of the remaining loans towards the end of the insolvency process. We refer to the "rump portfolio" as that part of the loan tape which has not been amortised naturally by the end of the liquidation period and is therefore sold in its entirety at the end of the NIP.

Lacking previous cases of Croatian banks which ran into difficulties and as a result were urged to dispose of its loan portfolio, we refer to Slovenian banks, which had to accept significant discounts at the time of the asset transfer. We consider these cases to be appropriate comparisons since prevailing financial market conditions of Croatia and Slovenia are comparable with respect to the legal and regulatory framework or market entrance opportunities for international players.

The impairments were in the range from

- 45% in case of Probanka d.d. and 58.0% in case of Factor Banka d.d., both having transferred a rump portfolio which comprised loans from defaulters, non-marketable (poor liquidity) shares and a real estate portfolio in 2016,
- 63% in case of Nova KBM Group having transferred assets at a gross amount of EUR 1,032mn in 2013,
- 63% in case of Abanka having transferred bad debt/assets of 229 customers to the Slovenian Bank Asset Management Company (BAMC) in 2014, to
- 72% in case of NLB d.d. having transferred 1,427 credit receivables to BAMC in 2013.33

To calculate an appropriate discount for the rump portfolio we have applied the following considerations:

Firstly, we note that the nature and composition of the "historical" portfolios is inhomogeneous what is also reflected in the significant range of discounts. It is reasonable to assume that the discounts increase with the relevance of NPL in the portfolio.

Secondly, based on our assessment of the macroeconomic development, we expect that the appetite of potential buyers of loan portfolios of this size will be limited.

Thirdly, it can be expected that the quality of rump portfolio will have deteriorated over time when the sale will take place. As described in connection with the sale of NPL and explained in our macroeconomic assessment (see section 2.5.) we expect an increase both in the level of NPL as well as the required discounts in the years 2022 and following. This will be fueled by:

- the increasing interest rates in the EU,
- the significant losses and high volatility in the credit (e.g., CLO) markets,
- the expectation of increasing insolvencies in the markets back to pre- pandemic levels after the suspension of the obligation to file for insolvency caused by the effects of corona will end.

³³ All figures were taken from the annual financial statements.



Fourthly, the appropriate discount needs to reflect the fact that potential buyers will ask for an additional discount due to the fact that the liquidator will not be able to provide the usual warranties and representations and the depth of due diligence of potential buyers will be limited in the context of an insolvency scenario.

Finally, we expect that "Accelerated Sale Adjustments" to reflect the market's absorptive capacity and potential buyers' behavior need to be considered when estimating the appropriate discount. Market participants will notice the need of the liquidator to sell a large portfolio in a reasonable timeframe and will also consider the considerable operational costs required to manage the portfolio after acquisition.

Based on this evidence, we have applied a discount of **S**% on the residual GBV of the loan portfolio (the "rump portfolio") in all scenarios. This corresponds to the level of Probanka d.d. which is the lowest level of discount as observed in the past.

After having determined the purchase price that a buyer would probably be willing to pay, we eventually discounted this amount to the valuation date. It is important to note that no further haircuts have been applied to the discount rate to reflect the increased inherent risk in the rump portfolio. Instead, these risks have been considered in the expected cash flows resulting from the sale of the portfolio.

5.4.1.6 Sensitivity and Scenario Analysis

Approach

According to Article 6(a) of CDR 2018/344 we provide a best point estimate for the value of the loan portfolio, and where appropriate, value ranges. The value of the loan portfolio represents the recoveries / expected cash flows from running off and winding-up the portfolio. In the following we illustrate how the value ranges have been derived.

In practice, the usual procedure is to identify the key parameters and assumptions to which the valuation is most sensitive. In the next step, value ranges can be derived through varying the key parameters for different scenarios under model conditions.

At a basic level, sensitivity tests vary one single parameter while all other factors remain constant. As this approach gives an indication on the value's sensitivity to a given parameter, it would ignore the effects from the variation of multiple key parameters. In a more sophisticated approach, scenario analyses vary multiple parameters simultaneously.



Our analysis suggests that the valuation gap between the loan portfolio's GBV and its Net Present Value is mainly driven by the cost of risk and the proceeds from the transfer of the residual portfolio at the end of the insolvency proceedings. Furthermore, both factors are the main sources of uncertainty. On the contrary, due to the fairly low discount rates as at the Valuation Date the effect of discounting is rather limited. Similarly, the administration costs are a less relevant factor for the valuation gap. Furthermore, they are a minor source of uncertainty since they are, to a wide extent, predetermined based on market observation or data from the Bank.

This corresponds with the common practice to quantify the cost of risk or expected loan losses by a limited set of key parameters, i.e., the credit ratings including credit migration risk, probabilities of default (PD) and loss given default (LGD).

Scenarios

Probability of Default

Our approach is to analyse how varying PDs in the Best Case, Best Estimate, and Worst Case scenarios affects the calculated value of the credit portfolio. The basic principle is to simulate a rating shift as is regularly applied by banks for their stress tests for credit risk. In other words, we have assumed different PD curves in each scenario.

Corporates and SMEs

This rating shift can be simulated through a shift in rating classes ("rating notches") for corporates and SMEs.

As of the Valuation Date we lack specific and reliable data on default trends in Croatia.

To estimate those default trends for the year 2022, we used, among others, a study about global annual default trends from Moody's (published on 8 February 2022), which we consider suitable due to its diversified and sound approach. Under their baseline scenario, Moody's Credit Transition Model forecasts that the trailing 12-month global default rate for speculative-grade corporate issuers will gradually rise to 2.4% by the end of the year. Moody's has also developed a pessimistic default scenario and a more optimistic scenario, given the high degree of economic uncertainty. The default rate could surge to 9.1% in a most pessimistic scenario. In the optimistic scenario, the default rate could be approximately 2.0%. (Moody's 2022)³⁴

According to S&P's Global Credit Outlook 2022, European speculative-grade defaults are expected to remain fairly low through 2022 with default rates at 2.5% (baseline scenario). In a pessimistic scenario the rate could rise to 5%. (S&P Global Ratings, 2022)³⁵

³⁴ See Moody's: Default Trends – Global: Annual default study: After a sharp decline in 2021, defaults will rise modestly this year.

³⁵ See S&P: Global Credit Outlook 2022 - Aftershocks, Future Shocks, And Transitions.



Compared to this, the average one-year PD, weighted by GBV, of the Bank's performing loan portfolio of non-financial corporations is roughly 1.4%. From S&P's and Moody's outlooks we conclude that it is reasonable to assume an increase in PDs in our Best Case, Best Estimate and Worst Case Scenarios.

Doing so, the Best Estimate or Worst Case Scenarios reflect a mildly or severely unfavourable economic environment, respectively, in which credit ratings tend to deteriorate. This corresponds with our observation that banks would typically assume a rating downgrade by two or four rating classes ("notches") for their ICAAP stress tests to reflect mild or severe economic downturns, respectively.

The Best Case Scenario reflects favourable macroeconomic conditions that would help keep credit default rates low, however, we have to bear in mind that downside risks for credit conditions will become imminent. Considering this, we assume a rating migration down by only one notch such that the portfolio average PD are expected to be closer to the Moody's forecast of some 2%.

In case of a rating migration by one rating class, the average PD increases to **Example** (Best Case), a deterioration by two rating classes leads to an average PD of **Example** (Best Estimate) and a migration of four rating classes results in an average PD amounting to **Example** (Worst Case).

Individuals and Micros

For individuals (households and mortgages) and micros the lifetime PDs are determined by the number of days the loan is already overdue ("days past due"). From information provided by the Bank we understand that the lifetime PDs are the cumulative PDs, representing the risk of defaulting in a given period. Based on that we estimated the marginal PDs for each lifetime period.

Again, the cumulative PD is the likelihood that a borrower will default **up to** the specific period. In contrast, the marginal PD is the likelihood, that the borrower will default **in** the specific period. Simplified, the cumulative PD is:

$$CPD^{T} = 1 - \prod_{t=1}^{T} (1 - MPD_{t})$$

 Notations:

 CPD^T
 Cumulative PD in T

 MPD_t
 Marginal PD in t

 T
 Duration of Specific Period

 t
 Specific Period



The following table shows the lifetime/cumulative PDs for individual loan agreements (mortgages), as stated by the bank (original cumulative PD) and the derived marginal PD. According to our analysis, the marginal PD increases from 1.16% in the first year to **margin**% in the sixth year and stays high thereafter. In the next step, we have recalculated the lifetime/cumulative PDs for simulation purposes but assumed that the marginal PD had the highest value of **margin**% from the first year on and remained constant for all subsequent years:

Marginal PD Individuals					
Horizon	Original cumulative PD	Marginal PD	New cumulative PD calculated with marginal PD = 3.11%		
1	1.16%				
2	2.78%				
3	4.42%				
4	6.99%				
5	9.86%				
6	12.66%				
7	15.38%				
8	18.01%				
9 - 30	20.55 - 59.07%				

Table 20: Marginal PD - individuals

We repeated the same procedure for non-delinquent micro-loans, as stated by the bank (original cumulative PD) and the derived marginal PD. The marginal PD increases from 3.2% in the first year to 2000% in the sixth year and stays high thereafter. Next, we assumed that the marginal PD had the highest value of 2000% from the first year on 2000%

Marginal PD Mic	cros		
Horizon	Original cumulative PD	Marginal PD	New cumulative PD calculated with marginal PD = 5.79%
1	3.20%		
2	7.37%		
3	11.49%		
4	16.36%		
5	21.20%		
6	25.76%		
7	30.06%		
8	34.11%		
9 - 30	37.92 - 82.25%		





Loss Given Default

Research studies suggest that the long-term average recovery on first-lien corporate debt in Europe remained broadly stable between 2003 and 2021 at 72.5%. Second-lien recoveries average 34% (or an approximate LGD of 66%) which is lower than mezzanine recoveries of 39%.³⁶ Due to the lack of more accurate data for Croatia and Croatia's close integration to the EU financial markets, we consider the underlying data to be a reasonable proxy for our analyses.

According to our legal experts the value of foreclosed assets depends on whether the debtor is a natural or commercial person. In case of natural persons and a regular enforcement of insolvency two rounds of sales are held: a first auction with a minimal value set at 80% and, if necessary, a second auction with a minimal value of 60% of the estimated market value. The lowest price for which a real estate may be sold is 60% and the procedure leading up to the sale may take several years. When it comes to a commercial insolvency four rounds of auctions may occur with following thresholds (minimal values): 1) 75%, 2) 50%, 3) 25% and 4) 1 HRK. According to market participants, observations suggest that real estates are sold in the second or third auction (for additional information, please refer to Annex 3).

In order to accelerate the Bank's winding-up of defaulting loans we need to bear in mind that the Bank cannot delay the liquidation of pledged collateral. Hence, it is reasonable that the Bank would have to accept a discount on the appraised value of the collateral. In doing so, we rely on the values in case of natural persons and a regular enforcement out of insolvency, which are even higher than the threshold in commercial insolvencies. In a Best Case, most collaterals can be realised in the first round of an auction (see above), leading to an average discount of **1**% of the appraised value. In a Best Estimate, chances for both scenarios are even, meaning an average discount of **1**% of the appraised value.

Accordingly, we have adjusted the value of the loan collateral in the scenarios by different discounts, which leads to an increase in the LGD. The average LGD, weighted by GBV, of the Bank's performing loan portfolio is approximately . If the value of the loan collateral is adjusted by the LGD rises to . If the value of the loan collateral declines by . , the LGD increases to . , and an adjustment by . , entails an LGD of .

³⁶ See S&P: European Corporate Recoveries 2003-2021: Stability Prevails Despite The Pandemic.



In summary, our assumptions for the different scenarios are as follows:



5.4.1.7 Outcome of Valuation

In the Best Case our valuation results in the following value adjustments to the loan portfolio³⁸:

Loans and Advances to Customers - Best Case (kHRK)				
Itom	Book Value	Adjustm	nent	
item	Feb 22	3 years	6 years	
I) Performing loans	6,898,813	-1,183,031	-395,465	
1) Non-financial corporations	2,518,633	-384,811	-183,825	
a) Loans to customers	2,458,515	-385,401	-184,415	
b) Short-term	60,119	590	590	
2) Households	4,380,179	-798,220	-211,639	
a) Loans to customers	4,191,063	-800,568	-213,987	
b) Short-term	189, 116	2,347	2,347	
II) Non-performing loans	132,411	-90,491	-90,491	
1) Secured	3,099	-1,932	-1,932	
2) Unsecured	129,312	-88,558	-88,558	
Total	7,031,224	-1,273,522	-485,956	

Table 22: Loans and advances to customers - Adjustment Best Case

These adjustments lead to the following economic values as proxies for the expected recoveries:

Loans and Advances to Customers - Best Case (kHRK)			
lto m	Book Value	Economic	Value
item	Feb 22	3 years	6 years
I) Performing loans	6.898.813	5.715.782	6.503.348
1) Non-financial corporations	2.518.633	2.133.823	2.334.808
a) Loans to customers	2.458.515	2.073.114	2.274.099
b) Short-term	60.119	60.709	60.709
2) Households	4.380.179	3.581.959	4.168.540
a) Loans to customers	4.191.063	3.390.495	3.977.076
b) Short-term	189.116	191.464	191.464
II) Non-performing loans	132.411	41.920	41.920
1) Secured	3.099	1.166	1.166
2) Unsecured	129.312	40.754	40.754
Total	7.031.224	5.757.701	6.545.267

Table 23: Loans and advances to customers - Economic Value Best Case

³⁸ Please note for the following tables: The economic values are derived from the loan GBVs while the adjustments are derived from the economic values minus the Bank NBVs.



Loans and Advances to Customers - E	Best Estimate (kHR	K)	
Itom	Book Value	Adjustm	ent
item	Feb 22	3 years	6 years
I) Performing loans	6,898,813	-1,374,908	-641,736
1) Non-financial corporations	2,518,633	-409,342	-218,802
a) Loans to customers	2,458,515	-409,932	-219,392
b) Short-term	60,119	590	590
2) Households	4,380,179	-965,566	-422,934
a) Loans to customers	4,191,063	-967,913	-425,281
b) Short-term	189, 116	2,347	2,347
II) Non-performing loans	132,411	-90,491	-90,491
1) Secured	3,099	-1,932	-1,932
2) Unsecured	129,312	-88,558	-88,558
Total	7,031,224	-1,465,399	-732,227

In our **Best Estimate** we have calculated the following adjustments:

Table 24: Loans and advances to customers - Adjustment Best Estimate

Taking these adjustments into account, the economic values develop as follows:

Loans and Advances to Customers - Best Estimate (kHRK)				
Itom	Book Value	Economic	Value	
item	Feb 22	3 years	6 years	
I) Performing loans	6.898.813	5.523.905	6.257.077	
1) Non-financial corporations	2.518.633	2.109.291	2.299.831	
a) Loans to customers	2.458.515	2.048.582	2.239.122	
b) Short-term	60.119	60.709	60.709	
2) Households	4.380.179	3.414.614	3.957.245	
a) Loans to customers	4.191.063	3.223.150	3.765.782	
b) Short-term	189.116	191.464	191.464	
II) Non-performing loans	132.411	41.920	41.920	
1) Secured	3.099	1.166	1.166	
2) Unsecured	129.312	40.754	40.754	
Total	7.031.224	5.565.824	6.298.996	

Table 25: Loans and advances to customers - Economic Value Best Estimate



Loans and Advances to Customers - Worst Case (kHRK)				
Itom	Book Value	Adjustr	nent	
item	Feb 22	3 years	6 years	
I) Performing loans	6,898,813	-1,488,604	-819,366	
1) Non-financial corporations	2,518,633	-457,505	-283,630	
a) Loans to customers	2,458,515	-458,095	-284,220	
b) Short-term	60,119	590	590	
2) Households	4,380,179	-1,031,099	-535,736	
a) Loans to customers	4,191,063	-1,033,446	-538,084	
b) Short-term	189,116	2,347	2,347	
II) Non-performing loans	132,411	-90,491	-90,491	
1) Secured	3,099	-1,932	-1,932	
2) Unsecured	129,312	-88,558	-88,558	
Total	7,031,224	-1,579,095	-909,857	

In our Worst Case we have anticipated the following adjustments to the loan portfolio:

Table 26: Loans and advances to customers - Adjustment Worst Case

The adjustments result in the following economic values:

Loans and Advances to Customers - Worst Case (kHRK)				
ltom	Book Value	Economic	Value	
item	Feb 22	3 years	6 years	
I) Performing loans	6.898.813	5.410.209	6.079.447	
1) Non-financial corporations	2.518.633	2.061.129	2.235.004	
a) Loans to customers	2.458.515	2.000.420	2.174.295	
b) Short-term	60.119	60.709	60.709	
2) Households	4.380.179	3.349.080	3.844.443	
a) Loans to customers	4.191.063	3.157.616	3.652.979	
b) Short-term	189.116	191.464	191.464	
II) Non-performing loans	132.411	41.920	41.920	
1) Secured	3.099	1.166	1.166	
2) Unsecured	129.312	40.754	40.754	
Total	7.031.224	5.452.128	6.121.367	

Table 27: Loans and advances to customers - Economic Value Worst Case



5.4.2. Loans and Advances to Credit Institutions, Other Financial Corporations and General Governments

Overview

As per 28 February 2022 loans and advances to credit institutions, other financial corporations and general governments are as following:

Loans and Advances to Credit Institutions, Other Financial Corporation	ons and Central Governments (kHRK)
Item	Book Value
Credit institutions	6,255
Other financial corporations	10,888
Central governments	95,983
Total	113,126

Table 28: Loans and advances credit institutions, other financial corporations and central governments - overview

The total amount shown in the Bank's balance sheet correspondents with the information provided by the Bank for valuation purposes.

Methodological Approach and Hypothesis Explanation

Like the loans and advances to customers, these loans are not traded in an active market. Therefore, the same methodological approach was taken as for the loans and advances to customers.

There are no NPLs included, nor is a reclassification to original loan tape data required (no loans have been identified with a one-year PD equal or higher than 50%).

Loans and advances to credit institutions, other financial corporations and central government loans can be clustered as loans and short-term products.

Loans amounting to GBV kHRK 104.775 are composed of syndicated loans, trade finance and working capital loans, which are valued by using the identical methodology as described in chapter 5.4.1.2.

None of these loans come into consideration for a migration due to an expired fixed interest period or fulfil the conditions for an early redemption as a result of the interest rate environment developing in their favour to obtain better loan conditions.

We have summarised overdrafts and credit cards, having an GBV of kHRK 5,339 in the category **Short-term**. Again, we assume that these items will be repaid at an amount equivalent to its GBVs.



Five loans remain with an amount equalling to GBV kHRK 3,012 (**Rest**), of which one loan is a money market instrument that has a GBV of kHRK 2,787. In absence of cash-flow tables or further information, we recognize these loans, to the benefit of the shareholder, at their GBVs.

Neither PD-shifts nor adjustments to collateral values were made.

Outcome of Valuation

The following adjustments increase the book values as proxies for expected recoveries:

Loans and Advances to Credit Institutions, Other Financial Corporations and Central Governments (kHRK)			
Itom	Book Value	Adjusti	ments
item	Feb 22	3 years	6 years
Loans	104,775	3,762	3,823
Short-term	5,339	12	12
Rest	3,012	1	1
Total	113,126	3,775	3,836

Table 29: Loans and advances to credit institutions, other financial corporations and central governments - valuation

5.5. Tangible Assets

Overview

The Bank's tangible assets as of 28 February 2022 are summarised in the table below:

Property Plant and Equipment (kHRK)	
Item	Book Value
Tangible assets	93,414
- Right-of-Use assets of premises, land and equipment	59,212
- Office and business equipment	17,366
- Real estate	7,726
- Other	9,110
Total	93,414

Table 30: Property, plant and equipment - overview

Right-of-Use assets primarily include office premises (kHRK 58,301). Office and business equipment mainly consist of IT hardware (kHRK 13,779) and other equipment and fixtures (kHRK 3,398). The item "Real estate **Exercise**" exclusively consists of the Bank's branch in **Exercise**. Other tangible assets include investments for interior design (kHRK 8,507) and buildings in use (kHRK 503).



Methodological Approach and Hypothesis Explanation

Mostly, these assets are not traded in an active market and, according to Article 4(5)(b) of CDR 2018/344, we must consider prices in comparable distressed transactions involving assets of similar nature and condition.

It is reasonable to assume that the most appropriate strategy to maximise value from the property, plant and equipment (i.e., tangible assets) is to sell the real estate **state** and other tangible assets as a bulk immediately. This reflects our understanding of the Croatian real estate market, the Bank's portfolio, the minimising of costs within the liquidation scenarios and our view as to how the market is likely to evolve in the future regarding the price evolution forecasts and macro-economic estimations (see also section 2.5.).

In a gone concern scenario, there are no expected recoveries from Right-of-Use assets. Hence, they have a zero value after the beginning of liquidation proceedings and, thus, are fully devalued.

We obtained a valuation report on the real estate in **Constant** (dated 17 December 2021), which indicates a market value of kHRK 8,357, which is why we increased the current book value by kHRK 631. In our view this is appropriate, as we see no reason why this market value could not be realised in an active market with sufficient absorptive capacity. Furthermore, we consider discounting effects as immaterial to the benefit of the shareholder.

For equipment we estimated a devaluation of 90% in each insolvency scenario, because based on our experience, there is no or a very limited secondary market for these items.

There are no expected recoveries from other tangible assets (mainly interior design) after liquidation proceedings started, hence they are fully devalued. We would like to point out that there may be even expenses for the deconstruction of the structural changes within the rented premises, which, however, cannot be quantified sufficiently without detailed information on the changes in interior design and, hence, have not been considered in the valuation.

Outcome of Valuation

The Bank's tangible assets are estimated to realise recoveries of kHRK 10,094 in all scenarios.

Sources of Uncertainty

The realisation from the real estate in **Example** is dependent on the strategy of sale, assumptions around the macroeconomic forecast and the development of the Croatian real estate market, especially in the area of **Example**. Moreover, costs for deconstruction of the structural changes within the rented premises may only be broadly estimated due to the unknown complexity of those changes as well as the development of related prices for service and material over the referring liquidation period.



5.6. Investment in Other Participations

Overview

Within the scope of our analysis of the interim financial statements as at the Valuation Date, we identified an item in the amount of kHRK 141, which is carried in the accounts at fair value through OCI. We assume that this item refers to an investment in company's shares, however, this it is not further specified.

Methodological Approach and Hypothesis Explanation

Due to the immateriality of this item and to the benefit of the shareholder, we assume that the expected cash flows from this item are equivalent to its fair value.

Outcome of Valuation

We consider expected cash flows equivalent to this items' fair value of kHRK 141 in all scenarios.

5.7. Intangible Assets

Overview

Intangible assets as of 28 February 2022 comprise software and licenses including, to a large extent, the software for the Banks' Mobile Banking App:

Intangible Assets (kHRK)	
Item	Book Value
Mobile Banking App	40,115
Other Software and Licenses	63,125
Total	103,240

Table 31: Overview intangible assets

Intangible assets are reported at acquisition and capitalisation cost less amortisation / depreciation (expected useful life of five years) and impairment of the assets.

Methodological Approach and Hypothesis Explanation

These assets are not traded in an active market and, according to Article 4(5)(b) of CDR 2018/344, we must consider prices in comparable distressed transactions involving assets of similar nature and condition.



We have considered the following factors, which are relevant for the liquidation scenarios:

- Licenses: The value of licenses is related to a stable operational business on a going concern basis. The Bank will gradually discontinue its operational activities, so no revenues from license sales can be expected anymore.
- **Software:** The liquidator would continue to use this in the liquidation (including existing systems, etc.); extracting value from this would be dependent on potential buyers. In principle, banking software needs to be customized and other market participants are running their individual applications. Hence, we assume it to be unlikely to find prospective buyers and that the software has zero value at the end of each insolvency scenario.
- **Mobile Banking App:** A special feature of the Bank is its mobile banking app which, according to statements from the Bank, meets the latest standards. Unlike for the other existing software, we assume that there is a market for the Mobile Banking App.
 - In a Best Case Scenario, we assume that the Mobile Banking App is sold at a price of 90% of the development costs incurred. A potential buyer would only purchase the software at a discount, as integration costs would be incurred in any case. Otherwise, it would be more economical for a potential buyer to develop the software himself. We initially set this discount rate to 10%.
 - In a **Worst Case Scenario**, we assume that no buyer can be found for the software and that its value needs to be adjusted to the full amount.
 - The Best Estimate assumes that there are even chances to find a prospective buyer (Best Case) for the software or not (Worst Case). Hence, as a Best Estimate, we consider the average of the Best Case and the Worst Case to be reasonable:

Mobile Banking App (kHRK)				
Item	Book Value		Economic Value	
	Feb 22	Worst Case	Best Estimate	Best Case
Mobile Banking App	40,115	0	18,052	36,103

Table 32: Intangible assets - mobile banking app

Outcome of Valuation

In a **Best Estimate** Scenario, the economic value of the Mobile Banking App is kHRK 18,052 while other software and licenses will not recover any value in any of the liquidation scenarios and, hence, need to be adjusted to the full amount. Thus, expected recoveries from intangible assets are, independent of the liquidation duration, kHRK 36,103 in a **Best Case Scenario** and kHRK 18,052 in a **Best Estimate S**cenario. In a **Worst Case** Scenario, there will be no recovery from intangible assets.

Sources of Uncertainty

Since we cannot fully evaluate the applicability of banking specific software in Croatian language for potential buyers, we assume a wide value range.



5.8. Tax Assets

Overview

Tax Assets (kHRK)	
Item	Book Value
Deferred Tax Assets	23,445

Table 33: Tax assets - overview

Tax assets as of 28 February 2022 exclusively consist of deferred tax assets (kHRK 23,445).

The valuation of deferred tax assets is essentially based on the recoverability of tax assets according to the provisions defined in the Croatian Tax Legislation. According to the information received from the Bank we expect no future recovery of the deferred tax assets during the insolvency process. It is also unlikely that tax losses carried forward can be utilised by way of offsetting against future tax profits in the insolvency. Hence, we assume a value of zero to the tax assets in all three insolvency scenarios.

Methodological Approach and Hypothesis Explanation

Tax assets are not traded in an active market. According to Article 4(5) of CDR 2018/344, we especially must consider the likelihood of the tax assets generating net cash inflows under NIP.

Deferred tax assets and tax credits reduce a company's taxable income in the future. However, it is very unlikely that a company in insolvency proceedings would generate future profits. Hence, it is not reasonable to assume that a company in an insolvency will benefit from the tax assets. Also, there is not an active market for tax assets. Consequently, there are no cash flows or recoveries to be expected from the Bank's deferred tax assets.

Outcome of Valuation

As noted above, we expect no cash flows or recoveries from the Bank's tax assets.



5.9. Other Assets

Overview

Other assets as of 28 February 2022 comprise of the following items:

Other Assets (kHRK)	
Item	Book Value
Settlements	13,211
Advanced payments	1,970
Premises in stock	4,049
Deferred expenses	7,080
Derivatives	1,394
Total	27,705

Table 34: Other assets - overview

Methodological Approach and Hypothesis Explanation

We have no indication that the other assets are traded in an active market. According to Article 4(5) of CDR 2018/344, we especially must consider the likelihood of other assets generating net cash inflows under NIP.

Settlements mainly consist of credit balances on clearing accounts related to the ongoing business activities of the Bank. Since we do not see any indications for impairment, and due to the short-term nature of this item, we value settlements at their book value.

The advanced payments predominantly refer to advanced payments of tax abroad equalling kHRK 1,886. Thus, there is no requirement of depreciation.

Since we have no evidence for impairment, we have recognized premises in stock at its book value.

The deferred expenses mainly contain advance payments for rent amounting to kHRK 5,602. The residual amount of kHRK 1,479 is composed of advance payments for insurances and other services. It includes advance payments to contract partners based in Russia as well as to Sberbank Europe AG in the amount of kHRK 1,292. We consider a write-off to the full amount as required because in a gone concern scenario we do not expect a future use or cash flows from the advance payments.

Since we consider the derivatives in the amount of kHRK 1,394 as immaterial, we have not conducted an individual asset review. Hence, we have recognized this item at its book value.



Outcome of Valuation

In summary, we assume cash flows / recoveries from the other assets equivalent to their book value except for the deferred expenses:

Other Assets (kHRK)			
Itom	Book Value	Adjustr	nents
item	Feb 22	3 years	6 years
Settlements	13,211	0	0
Advanced payments	1,970	0	0
Premises in stock	4,049	0	0
Deferred expenses	7,080	-1,292	-1,292
Derivatives	1,394	0	0
Total	27,705	-1,292	-1,292

Table 35: Other assets - valuation

A source of uncertainty is if the Bank will have a future economic benefit from the deferred expenses. To the benefit of the shareholder, we expect this to be the case.

5.10. Costs of Liquidation

Overview

A liquidation of the Bank would be the most complex bank insolvency case Croatia has ever experienced. In this context, we would like to point out that there are significant inherent uncertainties associated with estimating costs that arise in a process that lasts several years. Such valuation involves subjective assumptions on how the environment, including staff, clients and service providers will behave, as well as the anticipation of how the process will develop. Significantly prolonged and costly litigation on a variety of issues is inevitable.

We have considered the following costs which would arise in a liquidation of the Bank:

- Compulsory liquidation fees and costs,
- Employee related costs,
- Contracts' termination costs
- Operating costs.



It should be noted that the cost of bankruptcy is partially based on rudimentary estimates, country-specific assumptions and domestic legal expert's judgement. Against this background, a direct comparability of bankruptcy costs in other countries is not given.

These would constitute priority payment obligations against the insolvency estate (see section 3.2.1 Creditor hierarchy):

Costs of Liquidation (kHRK)							
Itom	3	3-Year Scenario	0	6-Year Scenario			
	Best case	Best estimate	Worst case	Best case	Best estimate	Worst case	
Liquidation fees and costs	21,893	37,256	52,696	25,073	41,455	58,162	
Liquidator's fees	9,965	11,190	12,491	13,146	15,389	17,957	
Lawyer's fees	11,927	26,066	40,204	11,927	26,066	40,204	
Employee related costs	249,592	280,324	313,002	330,722	387,439	452,439	
Remuneration	183,880	192,140	200,592	244,780	266,931	291,597	
Incentives	61,082	83,040	106,752	81,312	115,364	155,183	
Collective dismissals	4,629	5,144	5,658	4,629	5,144	5,658	
Contract termination costs	0	4,389	6,578	0	4,389	6,578	
Operating costs	26,529	32,129	37,729	41,201	57,484	73,768	
Total Costs	298,014	354,098	410,004	396,995	490,767	590,946	

Table 36: Costs of liquidation

Details are illustrated below.



5.10.1. Liquidation Fees and Costs

As mentioned in section 4.4.1 we have approximated the costs of the liquidator ("Liquidator's fees") including other related costs such as insurances for the liquidator, court costs and costs for the creditor committee, using historical compulsory liquidations in Croatia as a benchmark.

At the same time, we have worked out a benchmark with our legal experts in Croatia, based on their experience and knowledge, and harmonised these two figures.

Finally, we assume liquidator's fees (and other related costs) in the amount of 5% of the total costs for the compulsory liquidation. The range within our six modelled scenarios is between kHRK 9,965 (3-year Best Case) and kHRK 17,957 (6-year Worst Case).

In addition, we have assumed that there will be a significant number of lawsuits filed by those clients whose deposits are not fully covered by the DGS (i.e., private deposits above kHRK 750). For this purpose, we analysed the deposit tape we received from the Bank and recorded the corresponding items.

We have identified 1,129 customers whose deposits extend the DGS coverage (kHRK 750) by %. We assume that such customers have an incentive to file a lawsuit, or at least announce to do so, to recover their deposit in full. For this reason, the Bank would reasonably engage a team of legal experts to process those claims. In a **Best Case** Scenario, this causes cash outflows of kHRK 11,927 for lawyer fees if the lawyers charge fees equal to 1% of the amount in dispute or maximum kHRK 100 per case. Our **Worst Case** Scenario is based on lawyers' fees of 10% of the amount in dispute and would result in cash outflows of kHRK 40,204³⁹. Accordingly, our **Best Estimate** Scenario is the midpoint between these two scenarios and would result in cash outflows of kHRK 26,066.

Thus, total liquidation fees and costs are expected to cause cash outflows between kHRK 21,893 (3-year Best Case) and kHRK 58,162 (6-year Worst Case).

5.10.2. Employee Related Costs

In calculating employee-related costs, we have considered the insolvency administrator's staffing requirements for a frictionless liquidation process, incentives to be paid to staff so that they do not leave the Bank prematurely and to keep key personnel, as well as costs for compulsory collective dismissals.

According to an employee tape provided by the Bank, there were 476 staff employed as of 28 February 2022.

³⁹ Fees according to Croatian legislation and market observations.



For the remaining staff, we have considered the current gross salaries, as well as current incentives and operational requirements for the liquidation process included in the Banks' employee tape. In our judgement, some level of incentive payments will need to be paid to retain key personnel and facilitate their continued cooperation and motivation during the liquidation process.

Our Best Estimate is summarised below:

Employee Related Costs (kHRK)		
Item	3 years	6 years
Remuneration	192,140	266,931
Incentive	83,040	115,364
Collective Dismissals	5,144	5,144
Total Costs	280,324	387,439

Table 37: Employee related costs

Remuneration

For calculating employee's remuneration costs, we considered the salary of personnel retained during the liquidation process, taking into account a payroll average for employees plus social security expenses.

Our Valuation range is the result of different considerations. For example, we have considered a reduction of staff over the insolvency period, starting at **starting** of employees at the beginning of the liquidation process (after a collective dismissal of **starting**) and regular salary adjustments during the liquidation process based on macroeconomic indicators in Croatia.

To model potential scenarios how employee-related costs might develop, we have taken as a basis the cases of two German bank winding-up agencies, which we have already highlighted in section 4.4.2.. These are especially appropriate as a benchmark for the Bank because both institutions had similar employee levels and a comparably structured portfolio. Accordingly, we have assumed the reduction rates of both agencies to model the development of employee costs, namely FMS-WM for our **Worst Case** Scenario and EAA for our **Best Case** Scenario. Our **Best Estimate** Scenario is the midpoint between those two cases.



The following graph illustrates the development of employee-related costs during the liquidation proceedings (Valuation Date = 100%):



Figure 3: Development of employee-related costs

Incentives

Attracting and retaining the right talented personnel is essential to ensure proper and swift liquidation. In view of this, financial incentives for key personnel are an important factor.

We believe that an incentive of **B**% (**Best Estimate**) of base salary plus the mean of currently paid incentives (**Best Estimate**) would be appropriate under these circumstances to retain the key personnel needed for the settlement and an efficient process. In a **Worst Case** Scenario, an amount equal to **B**% of base salary plus the mean of currently paid incentives would be required. In a **Best Case** Scenario, there will be no need to pay any additional incentives but the currently paid ones.

This incentive will be applied from March 2022 until the end of the liquidation process. (**Best Estimate** of kHRK 83,040 to kHRK 115,364).

Collective dismissals

In all three liquidation scenarios, the majority of collective dismissals would occur in the first six months after the Bank would have entered into liquidation. Thus, roughly 6% of personnel would leave the Bank shortly after the initiation of liquidation proceedings and would therefore be entitled to severance payments.

Further, we have considered workers' seniority, average payrolls and professional categories for our estimated cost of the collective dismissal process. For more detailed information, please refer to section 4.4.2.

In our **Best Estimate** the costs of collective dismissal are assumed to amount for kHRK 5,144.



5.10.3. Contract Termination Costs

The Bank is a counterparty to several different agreements. As a result of the liquidation, many contracts will no longer be required and the Bank will experience cash outflows for their termination. For our analysis, we have focused exclusively on essential contracts as disclosed in the contract and lease tape obtained by the Bank.

According to Article 181 of the Croatian Bankruptcy Act, the performance of bilateral agreements after the opening of liquidation proceedings is at the discretion of the liquidator, who may decide to stop performing contracts. In the latter case, the counterparty may claim damages as a bankruptcy creditor.

Thus, costs are incurred to compensate the lessor for the lost profit until it has found a new lessee within a reasonable period. We have modelled these costs based on our experience and the experience of local legal specialists. In the **Best Estimate**, the Bank has to compensate **I** months of lost profit, in the **Worst Case I** months and in the **Best Case** the Bank has to pay no compensation at all.

The costs of terminating contracts are estimated between kHRK 4,389 and kHRK 6,578.

5.10.4. Operating Costs

The main operating costs (such as IT, consulting and other communication services) during the liquidation proceeding would be incurred to windup operations as well as due to fixed and variable running costs.

The starting point for our analysis is the material and service costs incurred by the Bank in 2021, as reported in the Bank's financial statements as of 31 December 2021. We expect the following items to result in recurring cash outflows over the course of the liquidation:

Costs of Materials, Services and Other Recurring Costs (kHRK)	
Item	FY 21
Electronic data processing costs (including consultancy and maintenance)	25,495
Other expenses	14,410
Material and services	7,187
Professional fees	6,206
Leasing fees	2,417
Leasing fees HQ	806
Total	56,521

Table 38: Costs of materials and services

The IT system will remain the main cost element because we deem the Bank's data availability and quality to be crucial to allow an effective portfolio management, including fast portfolio sales.



On the other hand, we assumed that some costs incurred in 2021, e.g., for other rent but the HQ, business materials or seminars, will not be necessary during the insolvency proceedings anymore.

In the next step, we have assumed that during the liquidation process no branches but the headquarter would remain in use to deal with the realisation of assets. We expect the liquidator to keep administrative costs to a minimum during the liquidation to increase realisations for creditors and the shareholder. Consequently, the liquidator will, as far as possible, reduce certain services that are no longer needed at a certain point. As an effect, the costs can be reduced gradually.

Here, the Best Estimate constitutes the mean between Best Case (EAA) and Worst Case (FMS-WM). In total, we have modelled six different cost developments for this cost category across the various insolvency scenarios and included them into the overview presented in section 5.10. This calculation also considers our expectations of the course of inflation that is emerging as at the Valuation Date (see section 2.5.). In addition, we considered an inflation rate of 10% for year 1 (2022), which decreases constantly until it reaches 2% in year 5 (2026).

Costs of Materials and Services Including Inflation Prospection (kHRK)								
Item	FY21	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Total
Total Costs (% of FY21)	56,521							
Total Costs	100%							
3 years (% of FY21)		106%	96%	76%				
3 years		59,764	54,286	42,951				157,001
6 years (% of FY21)		106%	96%	76%	58%	46%	40%	
6 years		59,764	54,286	42,951	32,996	26,305	23,023	239,325

Below we illustrate the anticipated cost development the Best Estimate Scenario:

Table 39: Costs of materials and services - reduction



Figure 4: Development of operating costs



Accordingly, we have estimated general expenses (common services, IT, office supplies, insurance, security, etc.) during the liquidation of kHRK 157,001 in the 3-year scenario and of kHRK 239,325 in the 6-year scenario (**Best Estimate**).

To exclude double counting of administrative costs, we deduct the administrative costs already included in the valuation of the loan portfolio.

Operating Costs (kHRK)		
Item	3 Years	6 Years
General and administrative costs	157,001	239,325
Adjustment for administration costs loan valuation	124,872	181,841
Total Costs	32,129	57,484

Table 40: Operating costs

As a result, we expect cash outflows in the amount of kHRK 32,129 in a 3-year and kHRK 57,484 in a 6-year **Best Estimate** Scenario, which are attributable to operating costs in context of the liquidation (excluding loan the loan book).



5.11. Contingent Liabilities

Contingent liabilities include those that are recognised in the Bank's financial statement as liabilities or provisions as well as those that are off-balance sheet. Off-balance sheet contingent liabilities are obligations for which future cash outflows are deemed possible but less probable.

Since future expenditures cannot be entirely ruled out, all potentially relevant contingent liabilities must be identified and assessed in respect of the possible related cash outflows (Article 2 (2) of CDR 2018/344). According to the information provided for us, the Bank's contingent liabilities consist of litigation-related contingent liabilities and financial guarantees provided.

Accordingly, the cash outflows would primarily result from the settlement of pending claims against the Bank or the compensation of a potential acquirer for assuming the risks from financial guarantees provided.

The estimation of the cash flows primarily relies on expert judgement, historical information and probability-weighted cash flows in the different scenarios.

In this light, the potential cash outflows can be considered as the Bank's liability, however, it remains rather vague which creditors class the contingent liabilities should be allocated to. In any case, contingent liabilities would rank above the shareholders, who are the only ones affected by the resolution of the Bank. Therefore, we apply a simplified approach and subtract the potential cash outflows for contingent liabilities from the proceeds from assets realisations. In other terms, the potential cash outflows reduce the insolvency estate which would be disbursed to the creditors and the shareholder.

Contingent liabilities (kHRK)							
Itom	Book value of	Book value of Adjustments					
litem	Provisions	Best Case	Best Estimate	Worst Case			
Legal contingencies	134.838	0	27.935	59.131			
Guarantees	2.146	564	564	564			
Total	136.984	564	28.499	59.695			

Below we summarise the results of the valuation of legal contingencies and financial guarantees:

Table 41: Contingent liabilities

Total contingent liabilities (sum of book value of provisions plus the adjustment for the corresponding scenario) therefore amount to kHRK 137,548 in a Best Case scenario, kHRK 165,483 in a Best Estimate Scenario and kHRK 196,679 in a Worst Case Scenario.



5.11.1. Legal Contingencies

Overview

According to the Banks' financial statement as of 28 February 2022, the Bank has recognised provisions for pending litigation cases in the amount of kHRK 134,838.

Since future expenditures cannot be entirely ruled out, all potentially relevant contingent liabilities must be identified and assessed in respect of the possible related cash outflows (Article 2 (2) of CDR 2018/344). For this purpose, the Bank provided us with a data sheet from which we took a sample of 2,261 cases for which provisions of **Exercises** have been recognised.

We clustered our sample of the reviewed lawsuits into the following divisions:

Legal contingencies (kHRK)			
Item	Value of lawsuits	Book value of	Count
		Provisions	
Lawsuits			
CHF-lawsuits			
converted			
non-converted			
Other lawsuits			
Total			

Table 42: Legal contingencies - sample overview

Our legal experts inspected the Bank's analysis of its legal contingencies. In particular, we have analysed the calculation of the corresponding provisions. In addition, we have investigated the Bank's assessment of a negative outcome of the cases based on the documents provided to us. Additionally, we identified **manual** off-balance sheet activities (e.g., guarantees) which we will further analyse later in this section.

In the following we have described our assessment of the CHF lawsuits.

Historical background for CHF lawsuits

In 2012, the consumer protection association "Potrošač" filed a lawsuit against eight Croatian banks (including the Bank), claiming that consumers who applied for indexed CHF loans in the period 2004-2008 were a) not adequately informed by the banks about all the risks associated with such loans and b) that the variable interest rate in these loan agreements was unlawful.

The court of first instance in Zagreb rendered a judgment in favour of the plaintiff "Potrošač" on 4 July 2013. On the basis of the evidence presented by the Bank in the first proceedings and in the appeal proceedings, the Supreme Commercial Court dismissed the claim against the Bank in its entirety on 4 July 2014.



In a next step, the "Potrošač" Association filed a petition for review of the judgment with the Supreme Court against eight Croatian banks (including the Bank) on 22 August 2014. The Supreme Court rejected the review (appeal) on 9 April 2015, so all ordinary and extraordinary remedies have been exhausted and all claims and allegations against the Bank have been dismissed in full.

The association "Potrošač" then filed a constitutional complaint with the Constitutional Court of the Republic of Croatia against the ruling of the Supreme Court. On 20 December 2016, the Constitutional Court published the decision in the proceedings initiated by the association "Potrošač" against the decision of the Supreme Court. The Constitutional Court partially upheld the claim of the "Potrošač" association and overturned the Supreme Court's decision. The proceedings continued before the Supreme Court, which ruled on 3 October 2017 that the earlier decision of the Supreme Court in this matter was partially annulled and the case was remitted to the Supreme Commercial Court for a new decision.

The Supreme Commercial Court rendered its judgment (received by the Bank on 20 July 2018) in favour of "Potrošač", essentially confirming the decision of the Commercial Court of Zagreb (first level decision from 2013) against all eight banks. The Bank appealed against this ruling to the Supreme Court and also filed a constitutional complaint with the Constitutional Court. As at the valuation date, there is no further information on the outcome of this appeal.

In October 2018, the "Potrošač" Association filed an appeal against the costs of the case (the Bank responded to this appeal in December 2018). This relates to the non-converted loans. As regards the converted CHF loans, certain CHF consumer loans were converted and forcibly converted in 2015 in accordance with the law. All banks affected by the CHF conversion filed a constitutional complaint against the "Conversion Law", which was, however, dismissed and the Constitutional Court confirmed that the "Conversion Law" is in line with the Constitution.

In a so-called "Exemplary Proceeding", the Supreme Court ruled in March 2020 on the legal question of whether a CHF loan conversion agreement is void if the original CHF loan clause and the variable interest rate are void and took the position that the conversion agreement is valid and legally effective even if the original CHF loan clause and the variable interest rate are void. Since this legal opinion of the Supreme Court and the decision of the Constitutional Court are legally binding for all courts in the Republic of Croatia, this means that converted CHF loans cannot be enforced. The Bank received the decision of the Supreme Court, on the basis of which all appeals, including that of the Bank, were dismissed - the claimant was successful in these proceedings and the relevant decision was received on 24 September 2019.

The Bank subsequently filed a constitutional complaint against the Supreme Court's decision on 23 October 2019. The Constitutional Court's decision on the Banks' appeals was issued in February 2021 and all the Banks' appeals were dismissed.⁴⁰

Within our analysis of CHF lawsuits, we have to distinguish between lawsuits regarding converted and non-converted CHF loans.

⁴⁰ The Banks' annual financial statement 2021; p. 75



CHF-lawsuits, non-converted loans

In these cases, the consumers filed lawsuits disputing the use of variable interest which was changed unilaterally by the Bank and/or the use of CHF clause as unfair. This group of consumers did not use the opportunity to convert their loans into EUR by the operation of the law in 2015 (i.e., non-converted). Based on the practice of Croatian court and the fact that the unilateral change of interest rate and the use of CHF clause was determined to be unfair in the collective consumer case, we deem that there is a high risk for loss of those cases. Reservation in these cases was made high (100% of the claim) which we would not deem to be inappropriate.

CHF-lawsuits, converted loans

This group of consumers used the opportunity to annex their existing CHF-denominated loan and to switch them retroactively into EUR-denominated loans. Nonetheless, these consumers insist on additional payment of difference by the Bank for the period since the origination of the loan until the annex converting it into EUR which occurred in 2015.

This group of cases is most difficult to predict as the court practice is not unified, and there was a standstill in those cases while the matter was at the CJEU (Court of Justice of the European Union) which did not decide on the issue. Regardless of the lack of reliable information, our legal experts reviewed sample cases no.

The Bank's attorneys had an optimistic view on the issue, and we hold that reservation in these cases of 0% of the claim value is too optimistic. Latest decisions by the Supreme Court of Republic of Croatia indicate that consumers may be entitled to a part of their request for interest (roughly **base**)% of claimed amount), and there is still no clarity on the full amounts requested. The full amount requested is exorbitant, but it is a risk that persists with the Bank.

In conclusion, the courts in Croatia are still divided and it is possible that either all the cases are lost, or that all are won by the consumers. In any case, the consumers may claim interest per latest stance of the Supreme Court. For these reasons, we are of the opinion that a higher reservation is appropriate for the calculation of this risk in the amount of at least **10**% up to **10**%.



Other lawsuits

As a sample, we reviewed the largest cases by value (case no. **Example 1999**) and we see no reason to doubt the Banks' reservations in those cases.

This group includes defensive cases against enforcement grouped as:

- a. Plaintiff (guarantor) requesting annulment of loan agreement;
- b. Plaintiff requesting annulment of loan agreement for formal reasons;
- c. Plaintiff requesting annulment for formal reasons;
- d. Disputing enforcement initiated by the Bank;
- e. Compensation of damages for various non-CHF loans;
- f. Payment by the Bank for various non-CHF loans;
- g. Dispute in insolvency;
- h. Enforcement over natural persons.

Lastly, employment cases, misdemeanours and various payment request by natural persons (non-CHF loans) were also included.

Clustering

In order to classify the risk associated with our sample of contingent liabilities, these were first clustered into three categories:

Legal contingencies (kHRK)				
Drobability of loss	Value of	Book value of Reservation		
Probability of loss	lawsuits	provisions	rate	
Great probability of loss				
Middle probability of loss				
Low probability of loss				
Total				

Table 43: Legal contingencies; clustering

When preparing the sample, we found that the Bank applied different reservation rates within the same clusters. In all clusters there were provisions between 0% and 100% of the claim values. For example, Case No. E shows a great probability of loss and a claim value of kHRK 266 but a reservation rate of 0%; Case No. E shows a low probability of loss and a claim value of kHRK 10 but a reservation rate of 100%.


For our analysis, we follow the approach as set out in IAS 37, where contingent liabilities do not require a provision, but if they are considered "possible", they must generally be disclosed. Moreover, no disclosures are required for contingent liabilities that are classified as "remote".

In the following, we describe the categorisations of contingent liabilities defined in IAS 37:

- If future cash outflows due to legal obligations are unlikely, the contingent liability does not have to be disclosed or recognised ("remote" herein "Low probability of loss").
- If future cash outflows due to legal obligations are possible but not probable, a reference is made in the financial statements ("possible" herein "Middle probability of loss").
- If future cash outflows due to legal obligations are probable ("more likely than not"), the contingent liability must be recognised as a liability in anticipation. Here, the presentation in the consolidated financial statements is based on the regulations for accounting for liabilities and provisions as well as the information in the notes ("probable" or "likely" herein "Great probability of loss").

The valuation of contingent liabilities is always purpose-specific, as different sources/types of information and expertise are required for different categories of provisions, e.g. for the valuation of pension-, restructuring- or litigation-related provisions.

Legal disputes categorised as "likely" are considered "more likely than not", i.e. the probability of occurrence and, accordingly, the future claim is above 50%. We assume that the Bank will have to bear cash outflows with a probability between 50% and 100% and an average probability of **1**% from these contingent liabilities. "Possible" claims occur with a probability of **1**%, whereby we assume the probability of cash outflows accordingly. Typically, "remote" indicates a probability of cash outflows below **1**% or **1**%.

Consequently, we have assumed that contingencies with a great probability of loss (according to the Bank's classification) should be backed by provisions of % to %. For contingencies with a middle probability of loss, provisions of % to % should be recognised. For contingencies with a low probability of loss, the Bank should hold provisions of 1 to %. We have based our calculation on these values unless the Bank has already applied higher reservation rates. In this case, we have applied the Bank's higher reservation rates.

In a Best Case scenario, we assume that there is no need to adjust provisions. The Best Estimate Scenario represents the middle of the required reservation rate range, whereas the Worst Case represents the upper limit of this range.

Legal Contingencies - IAS37 vs. Reservation Rates									
Conneria	IAS 37 Categorisation			Required Reservation Rates			Actual (gross) Reservation Rates		
Scenario	Remote	Possible	Likely	Low*	Middle*	Great*	Low	Middle	Great
Best Estimate	0.10%	< F0%	> E0%						
Worst Case	0-10%	< 50%	> 50%						

* The Bank's risk classification

Table 44: Legal contingencies - IAS37



Outcome of Valuation

This approach led us to make the following adjustments to the provisions made for our sample:

Legal Contingencies (kHRK)				
Item	Book value		Adjustments	
		Best Case	Best Estimate	Worst Case
Provisions				

Table 45: Legal contingencies - outcome of valuation; sample

We extrapolate these ratios of our sample to the total legal contingencies (book value 134,838 kHRK), the following adjustments to the provisions are deemed to be necessary:

Legal Contingencies (kHRK)					
Item	Book value	Adjustments			
		Best Case	Best Estimate	Worst Case	
Provisions	134.838	0	27.935	59.131	

Table 46: Legal contingencies - outcome of valuation; extrapolation

In a **Best Case** Scenario, the Bank's outstanding lawsuits (neither CHF lawsuits nor other lawsuits) will be settled according to the Bank's assessment. No adjustments are required and the provisions already assessed within the scope of a previous statutory audit of the Bank's annual financial statement are considered appropriate.

For our **Best Estimate** we assume that \blacksquare % of contingencies with high probability of loss, \blacksquare % of contingencies with a middle probability of loss and \blacksquare % of contingencies with a low probability of loss are expected to materialise. Accordingly, we are of the opinion that additional provisions are required to mitigate corresponding potential cash outflows. This would mean an additional amount of kHRK 27,935 to be allocated to provisions.

In a **Worst Case** Scenario, we expect that **1**% of contingencies with high probability of loss, **1**% of contingencies with a middle probability of loss and **1**% of contingencies with a low probability of loss will materialize and thus cause cash outflows in that amount. This would mean that an additional amount of kHRK 59,131 would have to be added to the provisions.



5.11.2. Financial Guarantees

Overview

Off-balance sheet items consist of financial guarantees, performance guarantees, undrawn credit commitments and letters of credit in the amount of NBV kHRK 904,434. The Bank already recognised provisions in the amount of kHRK 5,099.

Methodological Approach and Hypothesis Explanation

Claims from existing contingent liabilities under bank guarantees or similar instruments need to be registered within 60 days as of the initiation of the compulsory liquidation procedure (Art. 15 Bank Liquidation Act). Failing to register a claim within the prescribed term results in the loss of right to claim payment in the compulsory liquidation procedure.

Generally, it could assumed that the Bank incurs cash outflows if guarantees are being called. Alternatively, the Bank could transfer the guarantees to another party and pay a consideration to dispose of the risk. However, it has to be noted that as a result of the initiation of insolvency procedures the banking licence will be revoked by the CNB. Therefore, we do not expect that undrawn credit commitments and letters of credit can be utilised.

The off-balance portfolio includes guarantees issued to secure claims against the Slovenian Sberbank banka d.d. in the amount of NBV kHRK 28,916 and guarantees amounting to NBV kHRK 2,710 to the benefit of the Sberbank BH d.d. in Bosnia and Herzegovina. Existing provisions amount to kHRK 2.146. We assume that the guarantees to the benefit of Sberbank BH d.d. would be called upon. However, we consider the resulting claim for repayment against Sberbank BH d.d. to be worthless. Regarding the guarantees to the benefit of Sberbank banka d.d., we assume that they will not be called upon (we refer to chapter 5.1.).

We have not distinguished between a Best Case, Best Estimate and Worst Case.

Outcome of Valuation

Duscu	011	uio	assumptions	maac,	***	nuve	ouloulutou	uio	lonowing	adjustments.
Guarante	es (kH	IRK)								
ltem			Off-Balance	Bo	ook value	of		Adjustments		
			Book Value	ł	Provisio	ns Best	Case	Best Estimate	Worst Case	
Guarantee	es			904.434		2.14	46	564	564	564

Based on the assumptions made we have calculated the following adjustments:

Table 47: Guarantees



6. Estimated Assets Realisations

Generally, following any resolution decision - in this case, the application of the sale of business tool – it must be considered whether the Bank's affected shareholder and/or creditors would have received better treatment if the entity had entered NIP under Croatian insolvency law (NCWO principle).

In this resolution case and as already noted in section 2. of this Report, only the Bank's shareholder was financially affected by the application of the sale of business tool. Accordingly, our assessment of the NCWO principle can be confined to an analysis if, in NIP, the shareholder would have received less than the consideration received in the resolution.

For the purposes of this analysis, we have prepared an analysis of the estimated recovery amount in an insolvency scenario.

Based on our category-by-category approach, we estimate the realizations for each asset class in the insolvency scenario. The adjustments mainly account for accelerated terminations of contracts, winding-ups and sales.

Below, we set out the outcome of our analysis showing the **estimated realisation values** for each type of asset portfolio in a 3-year and 6-year liquidation scenario:



Estimated Ass	et Realisations (kHRK)			
		Book Value	Estimated reali	sation values
Case	Assets/items	Feb 22	3 years	6 years
	Cash and cash equivalents	1,483,651	1,469,987	1,469,987
	Financial assets held for trading	96,585	97,859	97,859
	Financial assets measured at fair value through other comprehensive income	568,095	567,649	567,649
	Financial assets measured at amortised cost (loans and advances to banks)	113,126	116,901	116,962
All Cases	Tangible assets (PPE and rights of use)	93,414	10,094	10,094
	Investment in other participations	141	141	141
	Deferred tax assets	23,445	0	0
	Other assets	27,705	26,413	26,413
	Total Assets other than the below	2,406,162	2,289,043	2,289,104
	Loans and advances to customers (FAAC)	7,031,223	5,757,701	6,545,267
	Intangible assets	103,240	36,103	36,103
Best Case	Costs of insolvency		-298,014	-396,995
	Contingent liabilities / Guarantees		-137,548	-137,548
	Total insolvency proceeds	9,540,625	7,647,285	8,335,931
	Loans and advances to customers (FAAC)	7,031,223	5,565,824	6,298,996
Bost	Intangible assets	103,240	18,052	18,052
Estimate	Costs of insolvency		-354,098	-490,767
Estimate	Contingent liabilities / Guarantees		-165,483	-165,483
	Total insolvency proceeds	9,540,625	7,353,337	7,949,901
	Loans and advances to customers (FAAC)	7,031,223	5,452,128	6,121,366
	Intangible assets	103,240	0	0
Worst Case	Costs of insolvency		-410,004	-590,946
	Contingent liabilities / Guarantees		-196,679	-196,679
	Total insolvency proceeds	9,540,625	7,134,488	7,622,845

Table 48: Estimated asset realisations and insolvency proceeds



From a total balance sheet of kHRK 9,540,625 we estimate that the administrator would be able to realise total assets in a range of:

Estimated Ass	et Realisations (kHRK)			
		Book Value	Estimated real	sation values
Case	Assets/items	Feb 22	3 years	6 years
All Cases	Total Assets other than the below	2,406,162	2,289,043	2,289,104
	Loans and advances to customers (FAAC)	7,031,223	5,757,701	6,545,267
	Intangible assets	103,240	36,103	36,103
Best Case	Costs of insolvency		-298,014	-396,995
	Contingent liabilities / Guarantees		-137,548	-137,548
	Total insolvency proceeds	9,540,625	7,647,285	8,335,931
	Loans and advances to customers (FAAC)	7,031,223	5,565,824	6,298,996
Bost	Intangible assets	103,240	18,052	18,052
Estimato	Costs of insolvency		-354,098	-490,767
Estimate	Contingent liabilities / Guarantees		-165,483	-165,483
	Total insolvency proceeds	9,540,625	7,353,337	7,949,901
	Loans and advances to customers (FAAC)	7,031,223	5,452,128	6,121,366
	Intangible assets	103,240	0	0
Worst Case	Costs of insolvency		-410,004	-590,946
	Contingent liabilities / Guarantees		-196,679	-196,679
	Total insolvency proceeds	9,540,625	7,134,488	7,622,845

Table 49: Estimated asset realisations and insolvency proceeds - summary

As noted in section 5.11. of this Report, we deduct estimated cash outflows to cover contingent liabilities and obligations from guarantees arising from the loan portfolio off-balance exposure.

Additionally, we deduct the estimated costs under insolvency proceedings.



In summary, we estimate the following net proceeds which would be disbursed to creditors and the shareholder:

Valuation Ranges (kHRK)							
		Duration of Insolv	ency Proceedings				
Scenario		3 years	6 years				
	Total asset realizations	8,082,847	8,870,474				
Dest Ores	Costs of insolvency	-298,014	-396,995				
Best Case	Contingent Liabilities / Guarantees	-137,548	-137,548				
	Disbursement	7,647,285	8,335,931				
	Total asset realizations	7,872,919	8,606,151				
Dest Estimate	Costs of insolvency	-354,098	-490,767				
Best Estimate	Contingent Liabilities / Guarantees	-165,483	-165,483				
	Disbursement	7,353,337	7,949,901				
	Total asset realizations	7,741,171	8,410,470				
Ward Orac	Costs of insolvency	-410,004	-590,946				
worst Case	Contingent Liabilities / Guarantees	-196,679	-196,679				
	Disbursement	7,134,488	7,622,845				

Table 50: Valuation ranges

Given that the Bank had liabilities of approx. kHRK 8,349,485, this analysis already suggests that there will be a deficit to cover all of the Bank's liabilities in all scenarios.

For our analysis it is relevant to determine in approximately which years the assets will be realised. This is in order to answer the question of when the individual classes of creditors can be satisfied from the possible proceeds. We are not assuming a linear asset realisation path here, but rather different liquidation dates ranging from "immediately after the start of the liquidation" (e.g., realisation of cash and cash equivalents and customer migration⁴¹), "ongoing" (in particular collection of interest and payments) to "shortly before completion of the liquidation" (in particular sale of the rump loan portfolio). Below we present the asset realisation paths⁴² for the Best Estimate Scenarios:

⁴¹ This item refers to customer migration (Section 5.5.2.3) not to reclassification from PL to NPL.

⁴² Under the item "migration", we summarise 1) Non-financial corporation's migration because of more favourable interest at another bank 2) Non-financial corporation's short-term agreements 3) Household's short-term agreements, which we expect to leave the bank immediately after initiation of compulsory liquidation.



Asset Realisation Path 3-Year Insolvency Scenario (kHRK)								
ltem / Realisation until years' end	Year 1	Year 2	Year 3					
Cash and cash equivalents	1,469,987							
Financial assets measured at fair value through other comprehensive income	567,649							
Loans to Credit Institutions	116,901							
Other assets	124,413		28,145					
Loans to customers (FAAC)								
Amortisation	1,651,263	1,015,521	841,666					
Migration	256,306							
Sales	41,920		1,759,149					
Total	4,228,438	1,015,521	2,628,960					
Cumulative Total	4,228,438	5,243,959	7,872,919					

Table 51: Asset realisation path 3-year insolvency scenario (Best Estimate).



Figure 5: Asset realisation path 3-year insolvency scenario (Best Estimate)



Asset Realisation Path 6-Year Insolvency Scenario (kHRK)									
Item / Realisation until years' end	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6			
Cash and cash equivalents	1,469,987								
Financial assets measured at fair value through other comprehensive income	567,649								
Loans to Credit Institutions	116,962								
Other assets	124,413					28,145			
Loans to customers (FAAC)									
Amortisation	1,651,263	1,015,521	841,666	594,483	617,647	561,997			
Migration	256,306								
Sales	41,920					718,194			
Total	4,228,499	1,015,521	841,666	594,483	617,647	1,308,336			
Cumulative Total	4,228,499	5,244,020	6,085,686	6,680,169	7,297,816	8,606,151			

Table 52: Asset realisation path 6-year insolvency scenario (Best Estimate)



Figure 6: Asset realisation path 6-year insolvency scenario (Best Estimate)



7. Estimated Recoveries to the Shareholder

Based on our valuation, we have assessed whether the shareholder or creditors would have received better treatment in any insolvency scenario rather than under the resolution (NCWO principle). This would apply in any case if the pay out from the hypothetical insolvency scenario for the shareholder exceeded the purchase price paid of kHRK 71,000 reduced by the resolution costs of approx. kHRK 4,138.

As noted in section 2. of this Report, only the Bank's shareholder but not the Bank's creditors or the relevant DGS were directly financially affected by the application of the sale-of-business tool.

Accordingly, we refrain from the requirement stipulated in Article 4 (8) of CDR 2018/344 to allocate the hypothetical proceeds resulting from the valuation for each creditor in accordance with the priority levels in NIP, as identified according to Article 2 of CDR 2018/344. Instead, we provide an estimate if the proceedings under NIP would have exceeded the consideration (net of resolution expenses) paid to the former shareholder.

Resolution process: actual treatment received

Following the application of sale of business tool under resolution, the consideration to be paid to the affected shareholder was kHRK 71,000 less the expenses incurred by the CNB and the SRB in the amount of approx. kHRK 4,138.

Shortfalls under Resolution									
Creditor	Book Value	Net Consideration	Shortfall						
	kHRK	kHRK	kHRK	%					
Creditors *	8,349,485		0	0.0%					
Shareholders **	1,191,140	66,862	1,124,278	94.4%					
Total	9,540,625		1,124,278	11.8%					

The shortfalls of shareholder and creditors are set out below:

Table 53: Shortfalls under resolution

* Liabilities as reported in (preliminary, unaudited) balance sheet as of 28 February 2022

** Total equity as reported in (preliminary, unaudited) balance sheet as of 28 February 2022

Under resolution, neither the creditors suffered a shortfall, nor was the Croatian DGS called upon.

Insolvency proceeding

Below we analyse how the insolvency proceeds are distributed to the individual classes of creditors. Here, not only does the question arise as to what extent the individual classes of creditors can be satisfied, but also in which periods the individual classes of creditors can expect the payouts.



In this regard, we refer to our remarks in Section 4.3.3, according to which certain classes of creditors (in particular DGS, private households and SMEs) are interested not only in being satisfied as much as possible, but also as early as possible. Also, that there may be trade-offs here, namely that some creditors may be willing to give up part of their claims in the interest of an early satisfaction (e.g., credit institutions).

The aim of the analysis is to estimate the potential shortfall for the individual classes of creditors and to make a statement about which duration for the insolvency scenarios appears plausible.

In that respect, we asked the Bank to provide the Liability Data Report and the MREL TLAC reporting as of the Valuation Date. Based on that, we derived the following insolvency ranking for illustration purposes:

Ranking in a Hypothetical Insolvency Scenario	
Rank	KHRK
First Senior Class	10,769
Second Senior Class	5
Third Senior Class	3,408,126
Forth Senior Class	1,101,806
Fifth Senior Class	2,002,319
Sixth Senior Class	1,326,697
Subordinated Claims	499,763
Total liabilities	8,349,485
Shareholder's Equity	1,191,140
Grand total	9,540,625

Table 54: Creditor hierarchy with amounts

Based on this ranking, we allocated the recoveries from the hypothetical insolvency to the creditors as a whole as well as to the shareholder. As noted above (see section 2.1.) this simplified approach is deemed to be sufficient to assess if the NWCO principle has been breached.

Here, intragroup liabilities of approximately kHRK 1,026,480 (as of 28 February 2022) are included in the item creditors. We note that the treatment of receivables and liabilities within a group of insolvent entities have not been harmonised in all countries. Generally, most jurisdictions do not take a consolidated view and apply the appropriate national law separately for each entity within the group.

Against this background, it remains uncertain if and to what extent the claims of intragroup entities will have to be satisfied. As a result of the lack of better information we assume that the Bank will be required to satisfy its intragroup liabilities.

This assumption represents a balanced perspective. In this perspective, neither the shareholder nor the other stakeholders are advantaged or disadvantaged. This also considers the concept that it would be difficult to justify that the shareholder would benefit from a failure to satisfy intragroup liabilities.



We have not considered additional interest claims of creditors in the construction of the waterfall. Principally creditors can claim additional interest if their claims are not settled as they become due in the course of the insolvency proceedings. However, due to the fact that in the majority of insolvency proceedings even the principal claims are not fully settled, there is a low incentive for creditors to assert additional claims and incur additional (administrative and legal) cost given the small probability of success. Based on this evidence it is rather unrealistic to calculate a reasonable amount of such claims.

Beyond this argument it must be noted that these additional claims would have to be settled from the insolvency proceeds. As they rank prior to the shareholders claims, their settlement would reduce the amount of proceeds available for the shareholder. The omission of these additional creditors in the construction of the waterfall is therefore in the interest of the shareholder.

Disbursements to Creditors

We have examined how the liquidation proceeds will be distributed among the aforementioned creditor groups in these scenarios ("Creditors Waterfall").

As already mentioned before, an important aim is to determine the claim of the DGS, which should be satisfied within the first year of the liquidation proceedings. Thus, a liquidator would seek to adjust his strategy for this aim and to settle the claim of the DGS (kHRK 3.408.126) as well as higher ranking claims (kHRK 10,796 First Senior Class, kHRK 5 Second Senior Class and Costs of Insolvency between kHRK 88,543 and kHRK 135,115) before the end of the first year of liquidation.

Additionally, we considered the liquidators aim to minimise adverse effects on the Croatian economy by speeding up asset sales until all claims against SMEs and Corporates, which are not covered by the DGS, are recovered and distributed.

We refer to section 6 for the detailed realisation paths. We illustrate the creditor waterfall in the tables below:

3-year scenario (best estimate)

Creditor Hierarchy Croatia (kHRK)				Waterfall 3Y Scenario (kHRK)			
Rank	ltem	Amount	Year 1	Year 2	Year 3	Claim at Insolvencies' end	
19	Costs of Insolvency	354,098	-135,115	-123,311	-95,672	-	
18	First senior class	10,769	-10,769			0	
17	Second senior class	5	-5			0	
16	Third senior class - DGS	3,408,126	-3,408,126			0	
15	Fourth senior class - Individuals/Micros/SMEs (>750 kHRK)	1,101,806	-674,423	-427,383		0	
14	Fifth senior class - Corporates (>750 kHRK)	2,002,319		-464,826	-1,537,493	0	
13	Sixth senior class - Institutional creditors	1,326,697			-995,795	330,902	
4	Subordinated claims	294,181				294,181	
3	Subordinated claims	1,918				1,918	
2	Subordinated claims	203,664				203,664	
Total		8,703,584	4,228,438	1,015,521	2,628,960	830,664	

Table 55: Estimated creditor waterfall; 3-year best estimate scenario

For the 3-year scenario (best estimate), it can be concluded that:

- DGS would have no reason to reject this insolvency plan as the prompt and full repayment of the deposit guarantee compensation is to be expected
- Households, micro-enterprises, and SMEs ("Fourth senior class" deposits) can expect a full repayment of their claims within 2 years
- Corporates ("Fifth senior class" deposits) can expect a full repayment in the second and third year
- Financial institutions are likely to be repaid in the third year but would suffer a shortfall of some 27%.



We note that the CNB will only agree to those liquidation plans which fulfil the following three aims:

- 1) conformity with the law;
- 2) appropriate to the case at hand; and
- 3) in accordance with the objectives of the CNB and DGS.

By law (Art. 5 CACLCI), the liquidator must ensure swift and value-preserving liquidation of the Bank's assets while, in line with the objectives of the CNB, ensuring the avoidance of contagion effects which could harm the financial stability of the domestic economy. As stated before, Article 43 CACLCI requires that the procedure needs to be completed in 3 years. An extension is only possible if there is certainty of higher return to creditors.

In addition, the liquidation plan must have the short-term objective of satisfying the claim of the DGS in order to obtain its approval. We note that the DGS has a twofold role - firstly as the creditor which has the right to vote, and secondly as the liquidation supervisory body which effectively substitutes the committee of creditors in regular insolvency.

The DGS has the obligation to oversee the compulsory liquidation procedure under the Article 34 Act on the Deposit Insurance System (OG 146/20, 119/22) and is liable for damages if it does not act with due professional care (Art. 44 CACLCI).

In the case at hand we note, that in a 3-year insolvency scenario the unprotected claims by Individuals, SMEs and corporates are fully satisfied within the liquidation procedure. In our view, this fulfils the objective of preventing contagion effects on the real economy.

In the past, we have noted that financial institutions prefer the quickest possible, even if not full, satisfaction to a higher but more protracted satisfaction, for several reasons. One reason is to mitigate uncertainty: financial institutions are constantly exposed to uncertainty in the financial market. This uncertainty can arise from various factors such as changes in economic conditions, market volatility, regulatory changes, and unforeseen events. Also, by opting for quicker satisfaction, financial institutions can improve their liquidity position. They can use the funds received to finance other profitable ventures, providing a higher return on investment. This also helps in diversifying their portfolio and reducing the concentration of risks. Furthermore, the capital tied up in the liquidation / insolvency estate causes opportunity costs, i.e., the cost of forgoing an alternative investment opportunity. A quick satisfaction allows the financial institutions to capitalise on new opportunities sooner than in a protracted liquidation scenario.

Summarising, we consider all the above-mentioned requirements fulfilled in the present 3-year insolvency scenario.

6-year scenario (best estimate)

Creditor Hierarchy Croatia (kHRK)				Waterfall 6Y Scenario (kHRK)							
Rank	ltem	Amount	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Claim at Insolvencies' end		
19	Costs of Insolvency	490,767	-110,968	-102,788	-86,430	-71,707	-61,891	-56,984	-		
18	First senior class	10,769	-10,769						0		
17	Second senior class	5	-5						0		
16	Third senior class - DGS	3,408,126	-3,408,126						0		
15	Fourth senior class - Individuals/Micros/SMEs (>750 kHRK)	1,101,806	-698,631	-403,175					0		
14	Fifth senior class - Corporates (>750 kHRK)	2,002,319		-509,557	-755,237	-522,777	-214,749		0		
13	Sixth senior class - Institutional creditors	1,326,697					-341,007	-985,690	0		
4	Subordinated claims	294,181						-265,662	28,519		
3	Subordinated claims	1,918							1,918		
2	Subordinated claims	203,664							203,664		
Total		8,840,253	4,228,499	1,015,521	841,666	594,483	617,647	1,308,336	234,100		

Table 56: Estimated creditor waterfall; 6-year best estimate scenario

In contrast, the 6-year scenario (best estimate) suggests the following:

- DGS would have no reason to reject this insolvency plan as the prompt and full repayment of the deposit guarantee compensation is to be expected.
- Households, micro-enterprises, and SMEs ("Fourth senior class" deposits) can expect a full repayment of their claims within 2 years.
- Corporates ("Fifth senior class" deposits) are still expect a full repayment, however, have to wait until the fifth year.
- Financial institutions are likely to be repaid in full, but not before the sixth year.
- First-class Subordinated claims would recover 82% of their claims.



Here, the trade-off is evident, whereby Corporates would have to wait longer for their money in favour of better satisfaction of lower insolvency ranks (e.g. Financial Institutions and Subordinated claims; see section 4.3.3). Given that contagion effects might arise from Corporates having to wait longer for their money, the 3-year-scenario is seen as more favourable than the 6-year-scenario. It is also not apparent why CNB should agree to an insolvency plan that makes unprotected corporates wait longer for their money, only to the benefit of Financial Institutions.

In our opinion it is also reasonable to consider the 3-year scenario as the most appropriate scenario, since it is in conformity with the law, namely:

(1) it ensures a swift and value-preserving liquidation of the Bank's assets,

(2) it is in line with the objectives of the CNB, ensuring the avoidance of contagion effects which could harm the financial stability of the domestic economy,

3) it is in line with the requirement that the liquidation plan must have the short-term objective of satisfying the claim of the DGS in order to obtain its approval.

Further, the 3 -year-scenario is in line with the preferred timeline set out in the new insolvency in Croatia.

In this light, the 3-year-scenario is seen to be superior to, and thus more likely than, the 6-year scenario.

From the previous considerations, which scenarios can be considered superior to the other scenarios and thus more likely, we can deduce the following order of probabilities:

• 3-year scenario: "probable" (probability >50%)

• 6-year scenario: "reasonably possible" (probability 10-50%)

We have also taken these considerations into account for the Best Case and Worst Case Scenarios.

Since the insolvency proceeds are lower in all Worst Case Scenarios than in a Best Estimate Scenario, it is obvious that nothing changes in terms of assessment of which insolvency periods are to be classified as more or less likely.

In the Best Case Scenarios, higher insolvency proceeds emerge than in the Best Estimate. These additional proceeds may lead to an earlier satisfaction of individual creditor classes. But even here, the trade-off is observed that individual creditor classes would have to agree to an insolvency plan in which they would have to wait longer for their money in order to allow a lower creditor class a higher satisfaction rate. Therefore, the considerations also apply in the best case that the shorter insolvency durations are more likely than the longer insolvency durations.



The table below shows the assumed costs of insolvency (highest ranking), followed by the outstanding amount and shareholders' equity as stated in the balance sheet as of the valuation date:

Resolution vs. Best Case Insolvency Scenario (kHRK)										
		Sale of Business		3 years		6 years				
Item	Rank	Outstanding	Recovery Amount	Recovery Rate	Recovery Amount	Recovery Rate	Recovery Amount	Recovery Rate		
Assets Realization					8,082,847		8,870,474			
Cost of insolvency	19				-298,014		-396,995			
Cash outflows for contingent liabilities		-1		-137	,548	-137,548				
Total realization for creditors					7,647	7,285	8,335	,931		
Creditors / Liabilities	2-18	8,349,485	8,349,485	100.0%	7,647,285	91.6%	8,335,931	99.8 %		
Shareholder's Equity	1	1,191,140	66,862	5.6%	C	0.0%	0	0.0%		
Total		9,540,624	8,416,347	88.2%	7,647,285	80.2%	8,335,931	87.4%		

Resolution vs. Best Estimate Insolvency Scenario (kHRK)								
	Sale of Business		s	3 years		6 years		
Item Rar	nk	Outstanding	Recovery Amount	Recovery Rate	Recovery Amount	Recovery Rate	Recovery Amount	Recovery Rate
Assets Realization					7,872	2,919	8,606	,151
Cost of insolvency	19			-354,098		-490,767		
Cash outflows for contingent liabilities				-165,483		-165,483		
Total realization for creditors		1			7,353	3,337	7,949	,901
Creditors / Liabilities 2	2-18	8,349,485	8,349,485	5 100.0%	7,353,337	88.1%	7,949,901	95.2%
Shareholder's Equity	1	1,191,140	66,862	5.6%	C	0.0%	0	0.0%
Total		9,540,624	8,416,347	88.2%	7,353,337	77.1%	7,949,901	83.3%

Resolution vs. Worst Case Insolvency Scenario (kHRK)										
		Sale of Business			3 years		6 years			
ltem Ra	ink	Outstanding	Recovery Amount	Recovery Rate	Recovery Amount	Recovery Rate	Recovery Amount	Recovery Rate		
Assets Realization					7,741,171		8,410,470			
Cost of insolvency	19				-410,004		-590,946			
Cash outflows for contingent liabilities					-196	,679	-196,	679		
Total realization for creditors					7,134	1,488	7,622	,845		
Creditors / Liabilities	2-18	8,349,485	8,349,485	100.0%	7,134,488	85.4%	7,622,845	91.3%		
Shareholder's Equity 1		1,191,140	66,862	5.6%	C	0.0%	0	0.0%		
Total		9,540,624	8,416,347	88.2%	7,134,488	74.8%	7,622,845	79.9 %		

Table 57: Resolution vs. Valuation



Conclusion

The insolvency recovery amounts would not be adequate to cover the shareholder's equity and all liabilities in none of the best estimate scenarios.

In addition, it is reasonable to conclude that the affected shareholder has not incurred greater losses in resolution than he would have incurred if the entity had been wound up under NIP.

In detail:

We estimate a **3-year insolvency scenario** to be probable, with that being the most relevant timeframe.

In our **Best Estimate scenario**, insolvency proceeds are not sufficient to reimburse the shareholder at all, and liabilities are still affected.

The **Best Case scenario** shows higher from the realisation of assets, but liabilities would still suffer a shortfall. No reimbursement of the shareholder is possible.

The **Worst Case scenario** results in a reduction of asset realisations, with even more liabilities suffering a shortfall and no reimbursement to the shareholder.

As already mentioned, liquidation proceedings are estimated to run for 3 years or 6 years, whereas - from our point of view - 3 years is the most reasonable time frame. For more granular information on the duration of liquidation proceedings, please refer to section 3.2.2.

Next, we illustrate the key determinants for the shortfalls of the shareholder and creditors in the Best Estimate 3-year insolvency scenario:





Table 58: Disbursement of Insolvency Proceeds; 3-year best estimate scenario

The key value drivers are the value adjustments of the loan portfolio (kHRK 1,465,399) and the insolvency costs (kHRK 354,098). Eventually, the disbursement of the net recovery amount of kHRK 7,353,337 would not even cover all liabilities.

Regardless of the actual insolvency ranking, our analysis concludes that under the actual resolution no shareholder was worse off than in a hypothetical insolvency.

It is also reasonable to conclude that the Croatian DGS incurred no losses neither under the resolution tool nor in a Best Estimate insolvency scenario.

References

- Banca D'Italia. (2021, November). No. 27 Bad loan recovery rates in 2020. https://www.bancaditalia.it/pubblicazioni/note-stabilita/2021-0027/index.html?com.dotmarketing.htmlpage.language=1&dotcache=refresh.
- Centralna Banka Bosne I Hercegovine. (2022, March 3). *Meeting of the Standing Committee for Financial Stability of BH Held*. Retrieved from https://cbbh.ba/press/ShowNews/1418?title=Meeting-of-the-Standing-Committee-for-Financial-Stability-of-BH-held&lang=en
- Czech National Bank. (2022, February 28). CNB launches steps to revoke the licence of Sberbank CZ. https://www.cnb.cz/en/cnb-news/press-releases/CNB-launches-steps-to-revokethe-licence-of-Sberbank-CZ/.
- Deloitte Development LLC. (2023, March). Roadmap Contingencies, Loss Recoveries, and Guarantees. Retrieved from https://dart.deloitte.com/USDART/pdf/9e3e0e7c-0097-11ea-beaf-e5571abf9f98
- Deutsche Bundesbank. (2016, April 31). Die Phillips-Kurve als Instrument der Preisanalyse und Inflationsprognose in Deutschland. Retrieved from https://www.bundesbank.de/resource/blob/664886/de60552409f6dd3f4fe614454664d8 00/mL/2016-04-phillips-kurve-data.pdf
- Deutsche Bundesbank. (2022). ECB interest rates. https://www.bundesbank.de/en/statistics/money-and-capital-markets/interest-rates-andyields/ecb-interest-rates-626986.
- European Central Bank. (2021, December 16). *Monetary Policy Decisions*. Retrieved from https://www.ecb.europa.eu/press/pr/date/2021/html/ecb.mp211216~1b6d3a1fd8.en.htm l
- European Central Bank Risk Dashboard Q4 2021

https://www.eba.europa.eu/sites/default/files/document_library/Risk%20Analysis%20an d%20Data/Risk%20dashboard/Q4%202021/1029360/EBA%20Dashboard%20-%20Q4%202021%20for%20publication.pdf

- European Central Bank. (2022, February 28). ECB Assesses That Sberbank Europe AG and Its Subsidiaries in Croatia and Slovenia Are Failing or Likely to Fail. Retrieved from https://www.bankingsupervision.europa.eu/press/pr/date/2022/html/ssm.pr220228~312 1b6aec1.en.html
- European Central Bank. (2023). Croatia (Since 1 January 2023). Retrieved from https://www.ecb.europa.eu/euro/changeover/croatia/html/index.en.html
- European Central Bank. (2023). *Lithuania (SInce 1 January 2015)*. Retrieved from https://www.ecb.europa.eu/euro/changeover/lithuania/html/index.en.html

- European Central Bank. (n.d.). Statistical Data Warehouse Quick View. https://sdw.ecb.europa.eu/quickview.do;jsessionid=7A59104BABDE8AF5DA414C10B6 EE7658?SERIES_KEY=165.YC.B.U2.EUR.4F.G_N_A.SV_C_YM.SR_1Y&resetBtn=+R eset+Settings&start=&end=&trans=N.
- European Commission. (2017, November 14). COMMISSION DELEGATED REGULATION (EU) 2018/344. https://eur-lex.europa.eu/legalcontent/EN/TXT/?uri=CELEX%3A32018R0344.
- European Commission. (2022, February 10). Winter 2022 Economic Forecast: Growth expectedtoregaintractionafterwinterslowdown.https://ec.europa.eu/commission/presscorner/detail/en/ip_22_926.
- European Council. (2022, February). EU restrictive measures against Russia over Ukraine (since 2014). https://www.consilium.europa.eu/en/policies/sanctions/restrictive-measures-against-russia-over-ukraine/.
- European e-Justice. (2021, October 22). Covid-19 Impact on Civil and Insolvency Matters. Retrieved from https://ejustice.europa.eu/37843/EN/covid19_impact_on_civil_and_insolvency_matters?CROAT IA&member=1
- Federal Reserve System. (2019, September 20). Collateralized Loan Obligations in the Financial Accounts of the United States. https://www.federalreserve.gov/econres/notes/fedsnotes/collateralized-loan-obligations-in-the-financial-accounts-of-the-united-states-20190920.html.
- Fischetto, A. L., Guida, I., Rendina, A., Santini, G., & Scotto di Carlo, M. (2021). Bad Loan Recovery Rates in 2020. *Banca d'Italia, Notes on Financial Stability and Supervision*(27).
- Fišerová, M. (2022, February 28). CNB Launches Steps to Revoke the Licence of Sberbank CZ. Retrieved from Czech National Bank: https://www.cnb.cz/en/cnb-news/pressreleases/CNB-launches-steps-to-revoke-the-licence-of-Sberbank-CZ/
- Guse, M., Park, W., Saravay, Z., & Yook, Y. (2019, September 20). Collateralized Loan Obligations in the Financial Accounts of the United States. Retrieved from Board of the Governors of the Federal Reserve System: https://www.federalreserve.gov/econres/notes/feds-notes/collateralized-loanobligations-in-the-financial-accounts-of-the-united-states-20190920.html
- Ifo Institute. (2009). Bad Banks: Überzeugt das Konzept der Bundesregierung. https://www.ifo.de/DocDL/ifosd_2009_13_1.pdf.
- International Association of Deposit Insurers. (n.d.). Eligible Deposits**. https://www.iadi.org/en/core-principles-and-guidance/glossary/eligibledeposits/#:~:text=Loss%2Dsharing%20Agreement-,Eligible%20Deposits**,International%20Association%20of%20Deposit%20Insurers.

- Koenigsberg, O. (2022, January 18). *3 Strategic Options to Deal with Inflation*. Retrieved from Harvard Business Review: https://hbr.org/2022/01/3-strategic-options-to-deal-withinflation
- Koranyi, B., & Canepa, F. (2022, February 3). ECB Opens Door to 2022 Rate Hike in Policy Turnaround. Retrieved from Reuters: https://www.reuters.com/business/ecb-seen-holdmay-acknowledge-inflation-risks-2022-02-02/
- Lukatsky, M. (2022, March 1). February Wrap: Volatility Hits Loan Market, Dragging YTD Returns into the Red. Retrieved from PitchBook: https://pitchbook.com/news/articles/volatilityloan-market-ytd-returns-february-2022
- Magyar Nemzeti Bank. (2022, March 1). Winding Up Proceedings to Start at Sberbank Hungary and Its Austrian Parent. Retrieved from https://www.mnb.hu/en/pressroom/pressreleases/press-releases-2022/winding-up-proceedings-to-start-at-sberbank-hungaryand-its-austrian-parent
- McKinsey & Company. (2012, April). Good riddance; Excellence in managing wind-down portfolios. https://www.mckinsey.com/~/media/mckinsey/dotcom/client_service/risk/working%20pa pers/31_excellence_managing_wind-down_portfolios.ashx.
- Moody's. (2022). Default Trends and Rating Transitions. https://www.moodys.com/creditfoundations/Default-Trends-and-Rating-Transitions-05E002/reports.
- National Bank of Serbia. (2022, February 28). Sberbank Srbija Highly Liquid and Well Capitalized, Operating as an Independent Legal Entity Based in Serbia. Retrieved from https://www.nbs.rs/en/scripts/showcontent/index.html?id=17823
- OECD. (2022). Producer price indices (PPI). https://data.oecd.org/price/producer-price-indicesppi.htm.
- OECD. (n.d.). OECD Data. Retrieved from https://data.oecd.org/conversion/purchasing-powerparitiesppp.htm#:~:text=Purchasing%20power%20parities%20(PPPs)%20are,in%20price%20I evels%20between%20countries.
- Peters, R. (2010). Internet-Ökonomie. Springer-Verlag.
- PitchBook. (2022, March 1). February Wrap: Volatility hits loan market, dragging YTD returns into the red. https://pitchbook.com/news/articles/volatility-loan-market-ytd-returns-february-2022.
- Reuters. (2022, February 3). ECB opens door to 2022 rate hike in policy turnaround. https://www.reuters.com/business/ecb-seen-hold-may-acknowledge-inflation-risks-2022-02-02/.

- S&P Global Ratings. (2022). Default, Transition, and Recovery: 2021 Annual Global Financial Services Default And Rating Transition Study. https://www.spglobal.com/ratings/en/research/articles/221212-default-transition-andrecovery-2021-annual-global-financial-services-default-and-rating-transition-study-12573274#:~:text=The%20year%202021%20marked%20the,%25%2C%20down%20fr om%200.94%25.
- S&P Global Ratings. (2022, May 31). European Corporate Recoveries 2003-2021: Stability Prevails Despite The Pandemic. https://www.spglobal.com/_assets/documents/ratings/research/101561518.pdf.
- S&P Global Ratings. (2022). Global Credit Outlook 2022: Aftershocks, Future Shocks, and Transitions. https://www.spglobal.com/ratings/en/research/pdf-articles/211201-globalcredit-outlook-2022-aftershocks-future-shocks-and-transitions-100772320.
- Single Resolution Board. (2022, March 1). Adoption of a Resolution Scheme in Respect of Sberbank
 d.d.
 Retrieved
 from

 https://www.srb.europa.eu/system/files/media/document/2022-06-10_SRB-Nonconfidential-version-of-the-resolution-decision-in-respect-of-Sberbank-d.d_1.pdf
 from
- Single Resolution Board. (2022, February 28). SRB Determines Sberbank Europe AG in Austria, and Its Subsidiaries in Croatia and Slovenia as Failing or Likely to Fail. Retrieved from https://www.srb.europa.eu/en/content/srb-determines-sberbank-europe-ag-austria-andits-subsidiaries-croatia-and-sloveniafailing#:~:text=Following%20the%20European%20Central%20Bank's,failing%20or%20li kely%20to%20fail.
- The European Parliament and the Council of the European Union . (2014, July 15). Establishing uniform rules and a uniform procedure for the resolution of credit institutions and certain investment firms in the framework of a Single Resolution Mechanism and a Single Resolution Fund and amending Regulation (EU) No 1093/2010 . https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014R0806.
- TheWorldBank.(2019,May).ResolvingInsolvency.https://archive.doingbusiness.org/en/data/exploretopics/resolving-insolvency.

Appendix

Annex 1: Insolvency regime

The procedure of compulsory liquidation is carried out for the purpose of quick and effective collective settlement of creditors of the credit institution in forced liquidation, by preserving the value of the financial assets of the credit institution, by cashing in the assets of the credit institution and distributing the collected funds to creditors.

Act on Compulsory Liquidation of Credit Institution (OG 146/2020) transposed into Croatian legislative following EU Directives:

- Directive 2001/24/EC of the European Parliament and of the Council of 4 April 2001 on the reorganisation and winding up of credit institutions;
- Directive 2014/59/EU of the European Parliament and of the Council of 15 May 2014 establishing a framework for the recovery and resolution of credit institutions and investment firms and amending Council Directive 82/891/EEC, and Directives 2001/24/EC, 2002/47/EC, 2004/25/EC, 2005/56/EC, 2007/36/EC, 2011/35/EU, 2012/30/EU and 2013/36/EU, and Regulations (EU) No 1093/2010 and (EU) No 648/2012, of the European Parliament and of the Council as it was last amended by Directive (EU) 2019/2162 of the European Parliament and of the Council of 27 November 2019 on the issue of covered bonds and covered bond public supervision and amending Directives 2009/65/EC and 2014/59/EU;
- Directive (EU) 2017/2399 of the European Parliament and of the Council of 12 December 2017 amending Directive 2014/59/EU as regards the ranking of unsecured debt instruments in insolvency hierarchy;

Bankruptcy Act (OG 71/2015, 104/2017), whose provisions are subordinated applicable to bankruptcy of credit institution transposed Directive (EU) 2019/1023 of the European Parliament and of the Council of 20 June 2019 on preventive restructuring frameworks, on discharge of debt and disqualifications, and on measures to increase the efficiency of procedures concerning restructuring, insolvency and discharge of debt, and amending Directive (EU) 2017/1132 (Directive on restructuring and insolvency).

Annex 2: Duties and powers of the liquidator

Article 24 of the Act on Compulsory Liquidation of Credit Institution (OG 146/2020) provides for duties and powers of liquidator in compulsory liquidation proceeding stating:

The appointed liquidator assumes the powers of the management of the credit institution in forced liquidation and is obliged to carry them out in accordance with the needs of the compulsory liquidation proceeding.

The liquidator represents a credit institution in compulsory liquidation proceedings independently and individually.

The liquidator shall act with the care of a prudent and diligent businessman, in particular:

- 1. Secure the assets of the credit institution in compulsory liquidation proceedings;
- Update the credit institution's accounts, bookkeeping and other documentation in compulsory liquidation proceedings until the date of opening of the compulsory liquidation procedure;
- 3. Designate an asset listing commission and draw up a list of the assets of the credit institution in the compulsory liquidation proceeding;
- 4. Draw up the initial balance sheet or statement on the initial financial situation of the credit institution in the compulsory liquidation proceeding on the opening day of the forced liquidation;
- 5. Draw up a compulsory liquidation plan to which the supervisory liquidation authority gives its consent and is approved by the creditors' assembly;
- 6. With the care of a good businessman, take care of the completion of the commenced and unresolved operations of the credit institution in compulsory liquidation and the conduct all action necessary to prevent damage to the bankrupt's estate from occurring;
- Take care of the collection of claims of a credit institution in compulsory liquidation proceedings;
- 8. Draw up a pre-estimate of the costs of the liquidation proceeding and submit it for prior approval to the supervisory liquidation authority;
- 9. Comment on the reported claims of creditors, including the claim of the Croatian Deposit Insurance Agency on the basis of the disbursement of secured deposits.

The liquidator shall draw up a list of all claims of the credit institution in compulsory liquidation proceedings classified in the ranks and until the examination hearing has to comment on whether it recognizes or contests each claim declared, so that the court can issue a decision deciding in what amount and in what order of payment individual claims have been established or contested.

From the moment of appointment until the end of the compulsory liquidation proceedings the liquidator may, after approval by the supervisory liquidation authority and the approval of the court, contest on behalf of the credit institution the legal acts of the debtor taken at the expense of the creditors if it considers them necessary to meet the objectives of the proceedings.

The liquidator shall submit to the supervisory liquidation authority written reports on the course of the compulsory liquidation proceeding, regularly report on the execution of orders and instructions, in particular the economic and financial situation of the credit institution in the compulsory liquidation proceeding and the measures it has carried out in the performance of its duties, at least quarterly.

Upon opening the compulsory liquidation proceeding, the liquidator shall close all accounts of the credit institution without delay and open a new account of the credit institution in forced liquidation or several accounts if necessary, and designate persons authorized to dispose of the funds in those accounts.

Annex 3: Compulsory liquidation plan (Article 35 CACLCI)

The liquidator of the credit institution is obliged to make a compulsory liquidation plan. The liquidation plan shall describe in detail the way in which the assets of the credit institution will be cashed in the shortest possible time and in the largest possible amount in the compulsory liquidation procedure for the purposes of settling creditors.

The compulsory liquidation plan may provide for a different method of liquidation of assets than the method provided for in the provisions of the law governing bankruptcy, and represents the basis on which the procedure of forced liquidation of the credit institution is carried out and must contain:

- Assessment of the realization of assets according to the criteria of cessation of business according to the principle of unlimited business time (going concern), collection of claims and cashing out of tangible assets,
- 2. The amount and term structure of insured deposits by remaining maturity dates and the total amount of insured deposits,
- 3. Report on the maturity structure of assets and liabilities by remaining maturity dates,
- 4. List of all recognized claims classified by payment order,
- 5. Plan for settling obligations to creditors,
- 6. Assessment of the possibility of selling or transferring assets, rights and obligations of the credit institution in the process of forced liquidation in whole or in part,
- 7. Communication plan with creditors with special reference to depositors and payments of insured and uninsured deposits,
- 8. Assessment of the costs of the forced liquidation procedure, including the liquidator's fees,
- 9. The way of organizing the work of a credit institution in forced liquidation and the working status of employees, including the costs of terminating employment contracts and other business arrangements (outsourced services, consulting services, etc.),
- 10. Plan to cancel the contract and all business arrangements that are not necessary for the operation of the credit institution in forced liquidation,
- 11. Assessment of the completion of existing and potential future court proceedings, including potential costs for the credit institution in forced liquidation,
- 12. The time frame of the compulsory liquidation procedure.

During the implementation of the compulsory liquidation procedure, the liquidator is obliged to act in accordance with the approved plan of compulsory liquidation. Liquidator is authorized to undertake legal actions with the purpose of the entire or partial sale of assets, with or without the transfer of the liabilities of the credit institution in forced liquidation, as well as other actions of liquidation of bankruptcy assets as prescribed by the law regulating bankruptcy, whereby he does not need the consent of the credit institution in to the process of forced liquidation of shareholders, creditors or any third person, and the procedural provisions of the regulations governing the business of companies and the capital market do not apply to such legal actions in the part that would be contrary to this article and the purpose of legal actions for the sale of assets. However, if the plan for the compulsory liquidation proceeding does not deviate from methods of monetization set by Bankruptcy Act, then sales options are as follows:

- 1. Individual sale of assets through a public auction conducted by the Financial Agency (four rounds with following minimal prices 75%, 50%, 25% and 1 HRK);
- 2. The sale of a larger or smaller units (loan portfolios);
- 3. The sale of the credit institution's assets as a whole.

Article 35 of the Act on Compulsory Liquidation of Credit Institution prescribes that the plan for the compulsory liquidation proceeding, which is drawn up by liquidator (Art. 24, para. 5, p. 5) shall describe in detail monetization method of the credit institution's assets during the compulsory liquidation proceedings.

Annex 4: Deposit protection scheme

Article 8 of the Croatian Deposit Guarantee Scheme Act (Zakon o sustavu osiguranja depozita, OG 146/2020) (the "CDGSA") provides that any depositor of the credit institution, except those stated below, at the time the insured case occurs in that credit institution, shall be entitled to the maximum amount of kEUR 100 in HRK equivalent (approx. kHRK 750), calculated using the midpoint exchange rate of the Croatian National Bank on the date of occurrence of the insured event.

In addition to the above-mentioned general rule, deposits representing a temporary high balance are protected in an additional amount of up to kEUR 30 or up to an inclusive total level of up to kEUR 130 in HRK equivalent, according to the midpoint exchange rate of the Croatian National Bank, three months after the date of posting of the amount or three months from the moment when such deposits become legally transferable, related to deposits:

- 1. from the sale of the immovable property in which the depositor resided;
- 2. of transactions relating to the events of marriage, divorce, retirement, dismissal, disability, illness or death; or
- 3. based on the payment of compensation from insurance or compensation for victims of crime or victims of judicial errors.

Deposits that are not covered by insurance are:

- Deposits of other credit institutions, regardless of their registered office, which are in their name and which are held on their account;
- Instruments of depositors of a credit institution in respect of which the insured case occurred, which are included in the own funds as defined in Article 4(1)118. Regulation (EU) No. 575/2013;
- Deposits of financial institutions;
- Obligations under the debt securities of a credit institution in respect of which the insured case has occurred and obligations under its own acceptances and own bills of exchange;
- Deposits of insurance and deposits of reinsurance companies in accordance with the law governing the operations of insurance and reinsurance companies;
- Deposits of voluntary and mandatory pension funds in accordance with the law governing the operation of mandatory pension funds and the law governing the operations of voluntary pension funds;
- Deposits of investment firms in accordance with the law governing the capital market
- Deposits of joint venture entities under the law governing the capital market;
- Deposits of public law bodies;
- Deposits arising from operations in respect of which final judgments have been issued for the crime of money laundering in accordance with the Criminal Code ("Official Gazette", No. 111/2013). 125/11, 144/12, 56/15, 61/15, 101/17, 118/18 and 126/19)
- Deposits not in the name but on an anonymous holder of an encrypted password or deposits whose holder has never been identified until the date of the occurrence of the insured case;

- Claims of clients of an investment firm, clients of a credit institution for which the credit institution concerned provides certain investment services, and clients of an investment fund management company when the company concerned provides investment services, which are included in the investor protection system in accordance with the law governing the capital market;
- Deposits of mother company, subsidiaries and affiliated companies with together with the credit institution, in relation to which the insured case has arisen, constitutes a concern;
- Deposits of the members of the management board and members of the supervisory board who performed those functions on the date of the occurrence of the insured event or in the 12 months prior to the occurrence of the insured case and deposits of share-holders who together with the immediate family members participate with at least 5 % in the share capital of the credit institution for the preceding three years;
- Deposits of the auditing company that audited the last financial statements for the preceding three years of the credit institution prior to the occurrence of the insured case;
- Deposits or parts of deposits that occurred after the Croatian National Bank revoked the authorisation to operate a credit institution.

If the insured case occurred, the Deposit Insurance Agency is obliged to renumerate relevant depositor of the credit institution, to the amount up to the kEUR 100 and it will take that subrogated claim as the creditor of the third senior rank. Natural persons and SME's companies, as the creditors, may claim an amount exceeding the insured amount as the creditors of the fourth senior rank. Other depositors, which are not natural persons and SME companies, may claim an amount exceeding the insured persons and SME companies, may claim an amount exceeding the insured amount as the creditors of the fourth senior rank.