



Millstone & Co

Report  
on  
Evaluation of  
**creditwest** bank  
for

**creditwest**  
Creditwest Faktoring



April 22-nd, 2019

## Table of Contents

Disclaimer	2
Executive summary	3
1. Key highlights of investment valuation report	4
2. Principles of bank investment valuation	5
3. Recent approaches to valuation of Ukrainian banks after crisis	6
4. Financial performance indicators of CreditWest Bank for valuation	6
5. After-crisis M&A deals in Ukraine in 2010-2018	8
6. Valuation using multiples of public peers	11
6.1. Public peers	12
6.2. Valuation	13
7. Forecasted financial model	14
8. DCF valuation	15
9. Conclusions & recommendations for sell strategy	18
10. References and abbreviations	19

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All estimates and opinions presented in our Report represent the independent judgment of the analysts as of the date of the issue.

## Executive Summary

Milestone&Co LLC following the Advisory Services Agreement concluded with Creditwest Faktoring A.Ş. on the 5th of March 2019 in evaluation of prospective acquisition of Joint Stock Company “WEST FINANCE AND CREDIT BANK” (EDRPOU Code 34575675, further on ‘Creditwest Bank JSC’) located on 4 Leontovycha St., Kyiv 01030, Ukraine represents the report on investment valuation of Creditwest Bank JSC.

Milestone&Co prepared valuation by both analogue valuation method and method of discounted cash flow adapted for valuation of banks. For purpose of investment valuation we conducted analysis of the recent M&A deals in 2010-2018 periods, the actual multiples of public peers in the Region: Ukraine, Turkey and Russia and the average control premium for acquisition of majority stake.

For a discounted cash flow model, we applied excess return as cash flows due to inability to identify and separate out capital expenditures and working capital investments in banks. As the bank should distribute part of its net profit to capital at growth of assets to keep capital adequacy ratio above the minimum level defined by the regulator, excess return is the residual of earnings after distribution to capital.

The report on valuation of Creditwest Bank JSC provides no commitment for Milestone&Co to complete any deals with price equaling the presented valuation.

The following materials were used in preparation of valuation:

Financial statements of Creditwest Bank JSC for 2017-2018, financial statements of peer banks, data of Mergerstat, Bloomberg, Moscow Stock Exchange, PFTS and Istanbul Stock Exchange.

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## 1. Key highlights of Report on investment valuation of Creditwest Bank

<p><b>No rose-coloured spectacles for UA banks</b></p>	<p>Investors incurred huge losses on UA banking market. Despite market clean-up foreign strategic investors do not consider Ukrainian banking market as attractive investment destination. Local investors and IFIs mandated to support Ukraine by sovereign shareholders are the key players on the local M&amp;A scene.</p>
<p><b>Creditwest at glance</b></p>	<p>Operationally profitable and overcapitalized.</p> <p>Focus of corporate lending and cross-border transactions.</p> <p>Access to low-cost funding from parent bank and IFIs</p> <p>Creditwest outperforms private UA banks on profitability, but underperforms banks with EU roots.</p> <p>Resilience evaluation of the bank did reveal no need in capital based on the Bank's performance in 2017.</p>
<p><b>Key risks</b></p>	<p>Low NPL share (9%), but amount of 8-9 categories of LE loans (worst quality of performing loans) more than doubled in 2018 to 27% of total portfolio.</p> <p>Significant share of international clients and clients with Turkish roots, who can leave the Bank after change of ownership.</p> <p>The potential buyer may demand additional provisioning on loan portfolio, discounting book value and net profit, which will result respectively in lower base for deal valuation.</p>

<b>M&amp;A valuation of UA banks in 2010-2018</b>	<p><b>1.38 P\BV</b> - the average multiple in M&amp;A deals for UA banks in 2010-2017, while median P\BV totaled 1.08 in the same time.</p> <p><b>0.78 P\BV</b> valuation of the recent deal on 100% sale of small bank (CY-owned Marfin Bank) completed in 2017.</p>
<b>Analogue valuation using multiples of public peers</b>	<p><b>0.77 P\BV</b> valuation based on P\BV and P\E multiples of 14 public peers in Ukraine, Turkey and Russia.</p> <p><b>36.9%</b> the average control premium above public market valuation based on world-wide M&amp;A deals in 2017-2018.</p> <p><b>1.08 P\BV</b> valuation including control premium for acquisition of 100% stake</p> <p><b>USD 16.1mln</b> valuation of Creditwest using analogue method of valuation.</p>
<b>DCF valuation using excess return method</b>	<p>Moderate growth of assets in 2019-2023 assumed</p> <p>Balance structure and business focus remained unchanged in 2019-2023 as model assumption.</p> <p>18% NBU reference rate as discount rate</p> <p><b>USD 19.1mln</b> valuation of Creditwest using DCF</p> <p><b>1.28 P\BV</b> valuation of Creditwest using DCF</p>

## 2. Principles of bank investment valuation

Valuing banks has always been difficult. The problems with valuing financial service firm stem from two key characteristics. The first is that the cash flows to a bank cannot be easily estimated, since items like capital expenditures, working capital and debt are not clearly defined. Therefore banks are traditionally valued on equity level rather on enterprise level. The key multiple used in comparative valuation is P\BV representing premium or discount over the nominal capital of a bank. Among profitability measuring multiples P\E is preferred, as net earnings is a part of bank capital, while EBITDA or EBIT of a Bank is difficult to measure adequately.

### 3. Recent approaches to valuation of Ukrainian banks after crisis

Before 2009 Ukraine was considered as one of the fastest growing emerging markets with relatively low proliferation of banking products. As European banking groups had limited room for growth on their traditional markets, they actively explored Ukrainian market, predominantly through M&A deals with local players. Therefore local M&A market was overheated in 2005-2007 resulting in extremely high multiples up to 5 or even 7 P\BV. However 2008 economic crisis unveiled high vulnerability and structural weakness of Ukrainian economy and banking sector. Despite solid recovery in 2010-2011 valuation of Ukrainian banks didn't return to before-crisis level, as investors stopped to see Ukraine through rose-coloured spectacles. Dramatic events in Ukraine during 2014-2015 only deepened skepticism of investors on Ukraine. Despite recovering sentiment in 2016-2018, only several occasional deals in banking sector happened in that period with EBRD and local TAS group as major investors, while the largest deal on acquisition of Ukrspotsbank by Alfa Group with Russian roots was only non-cash stock swap.

Accounting misstatements and related party lending were widely used practices by Ukrainian banks in the past. Despite massive clean-up of the banking system and strengthening supervision of the National Bank, investors remain extremely cautious to financial reporting of Ukrainian banks. During high-multiple deals before 2009 European acquirers failed to indentify low quality of loan portfolio even on due diligence phase. Therefore tolerance of investors to non-performing loans on books deteriorated drastically. For example, Alfa group before acquisition of Ukrspotsbank demanded from seller UniCredit group to make additional provisions on NPL portfolio. The value of a bank can be also discounted on part of business to be lost after acquisition. For example, value of business of Ukrspotsbank on serving multinational corporations was excluded from the deal.

### 4. Financial performance indicators of CreditWest Bank for valuation

#### Balance sheet indicators

In UAH mln	2018	2017
Cash	46.9	293.7
Securities	300.4	216.0

In UAH mln	2018	2017
Loan portfolio, net	1 265.9	1 080.1
Allowance for loan impairment	-12.0	-5.7
Other assets	67.7	18.7
Total assets	1 680.9	1 608.5
Due to banks	160.1	141.6
Due to clients	874.5	900.9
Due to IFIs	191.4	167.7
Other liabilities	13.6	5.2
Subordinated debt	38.5	38.3
Total liability	1 278.1	1 253.7
Book Value	402.8	354.7
<i>Capital Adequacy Ratio</i>	<i>30.47%</i>	<i>35.44%</i>
<i>Risk-weighted assets</i>	<i>1 330.8</i>	<i>1 108.9</i>
<i>Non-performing loans (90d+ overdue)</i>	<i>124.4</i>	<i>109.5</i>
<i>8 and 9 category of LE loans*</i>	<i>363.5</i>	<i>144.4</i>
<i>Interest-bearing assets</i>	<i>1 566.3</i>	<i>1 296.1</i>
<i>Interest-bearing liabilities</i>	<i>1 264.5</i>	<i>1 248.5</i>

Note \*: the lowest quality of performing loans incl. 60-90d+ overdue

Source: 2017 – audited annual report; 2018 – trial balance.

### Profit & Loss indicators

In UAH mln	2018	2017
Interest income	203.1	153.2
Interest expense	93.6	60.9
Net interest income	109.5	92.4
Net fee & commission income	24.9	24.8
Trade result	12.4	7.5
Other operational income	9.3	0.8
Operational expenses	-91.1	-73.2
Net income before provisions	65.0	52.3

In UAH mln	2018	2017
Total provisions	14.2	-3.7
Net income before tax	79.2	48.6
Income tax	-15.0	-8.8
Net income after tax	64.2	39.8
Average interest-bearing asset rate	14.2%	13.9%
Average interest-bearing liability rate	7.4%	5.6%
Net interest margin	6.8%	8.3%
Cost-to-Income Ratio (CIR)	58.4%	58.3%
Return on Assets (RoA)	3.9%	2.9%
Return on Equity (RoE)	17.0%	13.0%

Source: 2017 – audited annual report; 2018 – trial balance.

#### Creditwest Bank in comparison with market in 2018

	Creditwest	Banks with EU roots	State banks	Private UA banks
Net interest margin	6.8%	11.6%	4.3%	8.0%
CIR	58%	48%	63%	78%

## 5. After-crisis M&A deals in Ukraine in 2010-2018

M&A deals	Stake	Seller	Acquirer	Type of deal
<b>2019</b>				
Ukrzazbank (pending)	n/a	Ministry of Finance	IFC	n/a
<b>2018</b>				

M&A deals	Stake	Seller	Acquirer	Type of deal
Lviv Bank	11%	Petursson Macgeir	responsAbility Participations AG	combined
Pivdenniy	10%	East Capital	Villa Flora, Latvia	cash out
<b>2017</b>				
Lviv Bank	40%	Petursson Macgeir	responsAbility Participations AG	combined
VS Bank	100%	Sberbank Russia	TAS Group	cash out
Ukrainian Bank of Reconstruction and Development	100%	Deposit Guarantee Fund	Bohai Commodity Exchange, China	license
Marfin Bank	100%	Marfin Popular Bank	M.Partikevitch, I.Zgurov	cash out
<b>2016</b>				
Universal Bank	100%	Eurobank EFG	TAS Group	cash out
Ursotsbank	100%	Unicredit	ABH Holdings (Alfa group)	stock swap
Neosbank	100%	Alfa-bank	ERC group	cash out
Ukrsibbank	25%	BNP Paribas	EBRD	cash in
<b>2015</b>				
Astra Bank	100%	Deposit Guarantee Fund	NCH Capital	license
Raiffeisen Aval	30%	RZB	EBRD	cash in
<b>2014</b>				
Bank Cyprus	100%	Bank of Cyprus group	Alfa-Bank	cash out
<b>2013</b>				
Astra Bank	100%	Alpha Bank, Greece	Delta Bank	cash out
ProFin Bank	99%	Societe Generale	Xeronia Limited	cash out
<b>2012</b>				

M&A deals	Stake	Seller	Acquirer	Type of deal
Swedbank	100%	Swedbank group	Deltabank	cash out
Creditprombank	100%	Donetsksteel	Deltabank	cash in
Erstebank	100%	Erste group	Nikolay Adarich	cash out
Forum	96%	Commerzbank	Smart Holding	cash out
<b>2011</b>				
Ukrsibbank	15%	BNP Paribas	EBRD	cash out
<b>2010</b>				
Home Credit Bank	100%	Home Credit	Platinum Bank	cash out
Renaissance Credit	100%	Renaissance Group	FUIB	cash out

### Valuation of M&A deals

	Deal amount	Marketcap, UAH mln	Book Value, UAH mln	P\BV
<b>2017</b>				
Ukrainian Bank of Reconstruction and Development*	UAH 83mln	83	0	
Marfin Bank	UAH 81mln	81	104	0.78
<b>2016</b>				
Ukrsotsbank**	9.9% in ABH Holdings	8 270	8 269	1.00
Ukrsibbank	UAH 2 350mln	7 848	4 187	1.87
<b>2015</b>				
Astra Bank*	UAH 127mln	127	0	
Raiffeisen Aval	UAH 3 150mln	10 500	5 461	1.92
<b>2014</b>				
Bank Cyprus***	EUR 200mln	2 016	594	3.40
<b>2013</b>				

	Deal amount	Marketcap, UAH mln	Book Value, UAH mln	P\BV
Astra Bank	EUR 82mln	871	1 168	0.75
<b>2012</b>				
Swedbank	USD175mln	1 400	896	1.56
Creditprombank****	USD 1	min.1 000	0	
Erstebank	EUR 63mln	664	1 140	0.58
Forum	USD80mln	660	610	1.08
<b>2011</b>				
Ukrsibbank	USD82mln	4 373	4 962	0.88

Note\*: acquisition of license

Note\*\*: nominal value of 9.9% in ABH Holdings in exchange for nominal value of 100% Ukrsotsbank.

Note\*\*\*: Bank Cyprus had undervalued commercial real estate in Kiev on books.

Note\*\*\*\*: The bank was sold for USD 1, however under condition that the new owner will increase capital by min. UAH 1bn.

**P\BV multiple for 2010-2018 deals varied from 0.58 to 3.40. The average P\BV multiple for the period 2010-2018 was 1.38, while median P\BV multiple totaled 1.08 in the same time.**

## 6. Valuation using multiples of public peers

For purpose of valuation report we used multiples of public peers, in particular Price-to-Book Value (P\BV) and Price-to-Earnings (P\E). As peers we considered public commercial universal banks listed on a stock exchange in Ukraine, Turkey and Russia. We consciously didn't include to the peer group banks from Eastern European countries, members of European Union, as valuation of these banks includes premium for EU membership, while economy of EU Eastern European countries didn't suffer from severe economic crisis recently like Ukraine did. Similar to Ukraine, both Turkey and Russia have experienced economic crisis together with currency devaluation and have faced deepening political\geopolitical risks.

## 6.1.Public peers

Ukraine					
In UAH mln	Market cap	Book Value	TTM Net profit	P/BV	P/E
Raiffeisen Aval	22 083	11 623	5 088	1.90	4.34
Turkey					
In TL bn	Market cap	Book Value	TTM Net profit	P/BV	P/E
AK Bank	34 632	43 787	5 709	0.79	6.07
Seker Bank	1 401	2 458	156	0.57	8.99
Garanti Bank	36 414	46 887	6 707	0.78	5.43
Vakif Bankasi	12 275	28 350	4 154	0.43	2.95
Yapi ve Kredi Bankasi	17 401	39 000	4 667	0.45	3.73
Halk Bankasi	8 988	29 021	2 522	0.31	3.56
Russia					
In RUB mln	Market cap	Book Value	TTM Net profit	P/BV	P/E
Sberbank	4 430 721	3 656 300	827 900	1.21	5.35
VTB	467 616	1 463 400	184 400	0.32	2.54
Rosbank	92 774	149 415	12 194	0.62	7.61
Moscow Credit Bank	147 882	183 508	22 983	0.81	6.43
Saint Petersburg	25 257	72 960	8 280	0.35	3.05
Avangard	45 192	23 207	5 593	1.95	8.08
Uralsib	23 229	85 311	7 567	0.27	3.07
<b>Average</b>				<b>0.77</b>	<b>5.09</b>

Notice: TTM – trailing twelve months

Source: Bloomberg, Borsa Istanbul, Moscow Stock Exchange, PFTS

## 6.2. Valuation

Credit West Bank 2018 performance indicators	
Book Value, UAH mln	402.8
Net profit, UAH mln	64.2
Average multiples of public peers	
P\BV	0.77
P\E	5.09
Valuation based on public peers	
P\BV, UAH mln	310.2
P\E, UAH mln	326.8
<b>Average valuation, UAH mln</b>	<b>318.5</b>
<b>Average valuation, USD mln</b>	<b>11.8</b>

Note: 27.00 USD\UAH exchange rate used for calculation of USD denominated value

The above valuation of the Bank is made on basis of valuation of minority stocks listed on public markets. However strategic investors pay control premium on top of public market valuation in merger and acquisition deals. The premium is expressed as a percentage of the unaffected marketable minority price. We used the study of Mergerstat with the latest available data of control premium for worldwide M&A deals in banking sector. The sample of Mergerstat study included 70 deals with acquisition of 50%+ stake completed during 2017-1H 2018. The average control premium totaled 36.9% of valuation based on multiples of public peers.

Average valuation based on public peers, UAH mln	318.5
Average worldwide control premium for banks	36.9%
Control premium for 100% Credit West Bank, UAH mln	117.5
<b>Total valuation using multiples, UAH mln</b>	<b>436.0</b>
<b>Total valuation using multiples, USD mln</b>	<b>16.1</b>
<b>P\BV for total valuation</b>	<b>1.08</b>

Note: 27.00 USD\UAH exchange rate used for calculation of USD denominated value

**Please note, that the potential buyer may demand additional provisioning on existing NPL portfolio (124 mln) and portfolio of lowest quality performing loans (364 mln) before sale, discounting book value and net profit, which will result respectively in lower base for valuation using multiples.**

## 7. Forecasted financial model

### 7.1. Assumptions

#### Stable macroeconomic environment

EBRD and World Bank expect that Ukraine will demonstrate modest economic growth at ~3% GDP in the next years, which will also support growth of banking sector revenue.

#### Declining inflation

With long-term goal of the National Bank of Ukraine to achieve inflation at 5% we expect that inflation will gradually slow to the targeted levels in 2019-2023, which will result in deceleration of growth in nominal values of banking system assets.

#### Growth of the Bank's assets and liabilities decelerating in line with inflation trend

2019f	2020f	2021f	2022f	2023f
20%	20%	15%	15%	15%

#### Growth of the Bank's OPEX decelerating in line with inflation trend

2019f	2020f	2021f	2022f	2023f
12%	12%	10%	10%	10%

Growth of the Bank's non-interest income is projected at 5% per year, as this income didn't demonstrated strong growth in previous years.

Cost of funding will grow

We expect that after change of shareholder the Bank's cost of funding will grow, while average interest-bearing liability rate will increase from 7.4% in 2018 to 8.4% in 2020.

## 7.2 Forecasted financial model

in UAHmln	2019f	2020f	2021f	2022f	2023f
Interest income	223.6	268.3	314.6	361.8	416.1
Interest expense	109.9	140.2	151.7	177.6	204.3
Net interest income	113.7	128.1	162.9	184.2	211.8
Net fee & commission income	26.1	27.5	28.8	30.3	31.8
Trade result	13.0	13.7	14.4	15.1	15.8
Other operational income	9.8	10.3	10.8	11.3	11.9
Operational expenses	-102.0	-114.3	-125.7	-138.3	-152.1
Net operating income before provisions and tax	60.6	65.2	91.2	102.5	119.2
Total provisions	-4.8	-5.8	-6.6	-7.6	-8.8
Net income before tax	55.8	59.4	84.5	94.9	110.4
Income tax	10.0	10.7	15.2	17.1	19.9
Net income after tax	45.7	48.7	69.3	77.8	90.5
Interest-bearing assets	1 717.4	2 060.9	2 370.1	2 725.6	3 134.4
Total assets	1 841.4	2 196.2	2 515.4	2 882.6	3 304.8
Risk-weighted assets	1457.9	1738.7	1991.5	2282.2	2616.5
Interest-bearing liabilities	1 517.4	1 820.9	2 094.0	2 408.1	2 769.3
Book Value*	448.5	497.2	566.6	644.4	734.9
CAR*	30.8%	28.6%	28.4%	28.2%	28.1%

\* assuming no dividends

## 8. DCF valuation

In a discounted cash flow model, we consider the value of an asset to be the present value of the expected cash flows generated by that asset. But inability to identify and separate out capital expenditures and working capital investments in financial service firms makes cash flow based valuation difficult. Therefore especially for banks analysts use implausible variants on cash flows.

a. Earnings as cash flows: There are some analysts who value banks by discounting their earnings back to the present. They make the argument that banks have little or no net capital expenditure needs and that working capital needs– inventory, accounts receivable etc. – are non-existent. The problem, though, if this bank issues no new equity, its book equity will stay frozen at current levels forever. If this bank continues to grow its loan portfolio, it will end up sooner or later with capital adequacy ratio calculated as equity to risk-weighted assets that is lower than the regulatory minimum.

b. Excess return as cash flows: As the bank should distribute part of its net profit to capital at growth of assets to keep capital adequacy ratio above the minimum level defined by the regulator, excess return is the residual of earnings after distribution to capital.

in UAHmln	2019f	2020f	2021f	2022f	2023f
Net income after tax	45.7	48.7	69.3	77.8	90.5
Equity frozen at 2018 level	402,8	402,8	402,8	402,8	402,8
Equity for CAR 12%	174.9	208.6	239.0	273,9	314.0
Excess return	45.7	48.7	69.3	77.8	90.5

As the Bank is currently overcapitalized even adjusted after 100% provision on NPL, its capital is enough to cover projected growth of assets within five-year forecast period, therefore excess return of the Bank in 2019-2023 is projected as equal to earnings.

### Discount rate

For purpose of valuation we use 18% as discount rate equaling the actual reference rate of the National Bank of Ukraine.

in UAHmln	2019f	2020f	2021f	2022f	2023f
Excess return	45.7	48.7	69.3	77.8	90.5
Discount factor	1.18	1.39	1.64	1.94	2.29
Discounted excess return	38.8	35.0	42.2	40.1	39.6
Sum of PV of excess returns	195.6				
Growth rate of excess returns in terminal period	5%				

in UAHmln	2019f	2020f	2021f	2022f	2023f
Terminal value of excess returns	<u>Nominal excess return in 5 year (90.5)</u> Discount rate 18% - terminal growth rate 5% divided by 2023 discount factor 319.6				
<b>Value of equity today</b>	<b>515.3 (195.6+319.6)</b>				
<b>Value of equity, USD mln</b>	<b>19.1</b>				
<b>P/BV</b>	<b>1.28 (515.3/402.8 BV)</b>				

Note: 27.00 USD\UAH exchange rate used for calculation of USD denominated value

Value of a company calculated under DCF method consists of two parts: first part is sum of discounted cash flows during the five-year forecasted period and terminal value as the second part. The terminal value is used in valuation of companies, which will be a going concern and will not go out of business or stop operating after the projection window in the DCF. The basis behind the terminal value is that it assumes the company will grow not only during five-year forecast period, but generate free cash flows forever at a consistent rate.

For calculation of terminal rate Gordon Growth Model is used, while Terminal Value is calculated under the following formula:

Last Year CF\* (1+g)

WACC-g

Where

Last Year CF – cash flow in the last year of forecast period

g – terminal growth rate represents growth of cash flows beyond the end of a forecast period until perpetuity.

WACC – discount rate.

The received amount is discounted by WACC raised to the power of the last year of forecasted period.

For calculation of Creditwest Bank terminal value we applied following figures:

90.5mln - excess return in 2023f, last year of forecasted period.

WACC – 18% discount rate

g – 5% as forecast of growth until perpetuity correlated with long-term inflation target of the NBU.

## Conclusions and recommendations for buy strategy

We made valuation under two methods analogue method and DCF method. Among two methods of evaluation the analogue method using multiples of peers is preferred at the moment in Ukraine, as DCF valuation is to the great extent based on judgments and vulnerable to deliberate distortions and inflated expectations in assumptions of future growth. It should also be noted that the current M&A market in Ukraine is the buyer's market. That is why sellers can't disregard buyers' approaches to evaluation and can't unilaterally dictate their own rules to buyers, even if DCF valuation is made by top international brands like BIG4.

In our DCF valuation we used conservative assumptions and valued the Bank at 1.28 P\BV. The DCF valuation can be used as additional supportive factor in negotiations with potential investors.

**However according to the valuation method based on actual multiples of public peers we valued Creditwest Bank at 1.08 P\BV and USD 16.1mln respectively. We consider this valuation as a fair value of the Bank under current market conditions.**

Please also note, that the additional provisioning on existing NPL portfolio (124mln) and portfolio of lowest quality performing loans (364mln) can be demanded before actual acquisition, discounting book value and net profit, which may result respectively in lower base for valuation using multiples.

We recommend using our valuation of the fair value of the Bank at 1.08 P\BV as the guide for the market price of the deal in future negotiations with the seller. **Furthermore we propose to consider the average valuation between the analogue valuation (1.08 P\BV) and the DCF valuation (1.28 P\BV) or USD 17.6 mln as justified and appropriate.**

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## Abbreviations

M&A – merger & acquisition

P\BV – price to book value

P\E – price to net profit after tax

DCF – discounted cash flow

EBITDA – earnings before interest, tax, depreciation and amortization

EBIT – earnings before interest and tax

EBRD – European Bank of Reconstruction and Development

IFC – International Financial Corporation, part of World Bank

CIR – cost to income ratio

RoA – return on assets

RoE – return on equity

UAH – Ukrainian Hryvnia

TL – Turkish Lira

RUB – Russian Ruble

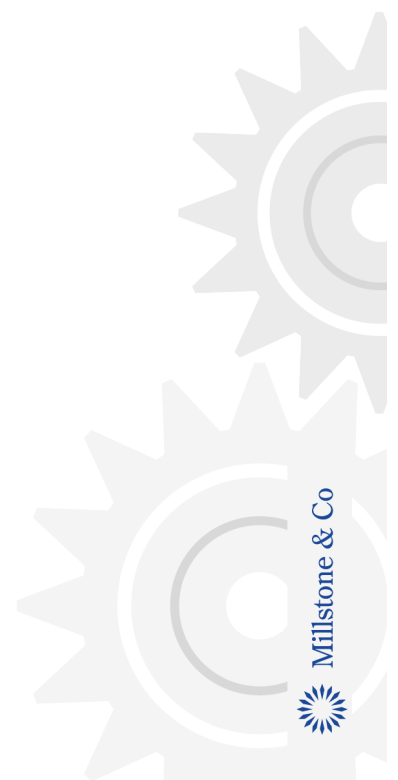
NPL – non-performing loan

OPEX – operational expenses

PV – present value

CAR – capital adequacy ratio

IFI - international financial institution





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