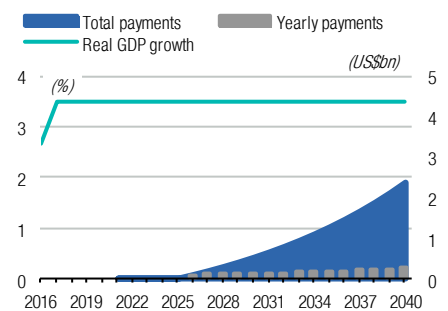


# Bond Market Insight

## Debt restructuring: Ukrainian version

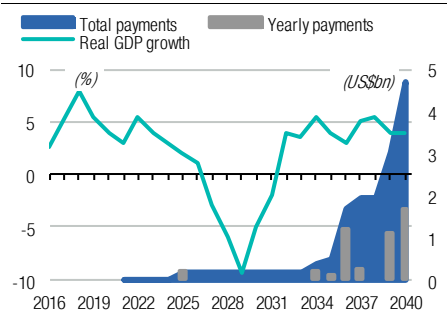
**FRIDAY, 8 DECEMBER 2015**

**Payments on warrants, scenario of stable growth**



Source: ICU.

**Payments on warrants, uneven growth scenario**



Source: ICU.

After months of negotiations with bondholders since mid-March of this year, the Ministry of Finance recently finalized the key part of the debt deal. At a successful vote at the bondholders' meeting held on 14 October, holders of 13 out of 14 Eurobond issues voted in favor of the debt exchange. According to this decision, on 12 November 80% of old debt and all accrued interest was exchanged for new Eurobonds and of the remaining 20% of the old debt was exchanged for Ukrainian GDP-linked warrants (value recovery instruments, state derivatives, or GDP-linked securities), which will include payments based on real GDP growth.

Warrants or state derivatives (according to Ukrainian Law) could generate payments in 2021-2040 under the following conditions: (a) Ukraine's GDP rises to or above US\$125.4bn; (b) real GDP growth exceeds 3%; (c) in 2021-2025, payments should not exceed 1% of GDP. Depending on the level of real GDP growth, aggregated payments could amount from US\$2.4bn to US\$80bn, but most likely they will not exceed US\$9bn.

Our view is that the current level of prices of new Eurobonds at 90-95 and yields at about 9.2% reflects the real situation in Ukraine and should remain at this level in the nearest future. At the same time, next January or February we could see spreads tightening to about 600-650bp or less, which could result in yields declining to about 8.3% and prices increasing if US Treasury yields remain stable. However, for this to occur, Ukraine's economic situation, with strong IMF cooperation, needs to improve.

The one bond maturing this December that has not been exchanged remains to be resolved. While this US\$3.0bn Eurobond held by Russia is currently classified as commercial debt by Ukraine and as official debt by Russia, the IMF is discussing changing its rules to provide support to countries which missed payments on official debt. Most likely, a moratorium will be imposed and new negotiations could begin. However, terms offered will not be better than those for other commercial creditors.

### General terms of the debt deal

Terms and conditions of the debt deal included an exchange into new Eurobonds of 80% of the principal of the old notes and the full amount of interest accrued through 1 September 2015. 20% of the principal amount of the old notes will be exchanged into value recovery instruments, warrants or GDP-linked bonds which will have a notional amount and will include payments depending on real GDP growth and under specific conditions. While there was a 20% principal haircut on the settlement date, the state budget promised additional payments if the economy rises significantly; these payments most likely will be classified as debt service.

The deal included 14 issues of Ukrainian Eurobonds with a total principal amount of approximately US\$18.0bn and US\$0.30bn of accrued interest. If all bondholders agree to these terms and all bonds are exchanged, the new bonds outstanding could be set at US\$14.7bn with US\$3.6bn in warrants. However, as Russia, which holds a US\$3.0bn Eurobond due this December, rejected the proposal, the old debt deal principal includes only US\$15.0bn.

### New Eurobonds

On 12 November, Ukraine issued nine new Eurobonds with a coupon rate of 7.75% and semi-annual coupon payments starting 1 March 2016. All new notes bear interest from and including 1 September 2015. The 7.75% coupon rate is a bit higher than the weighted average interest rate of 7.67% on all old notes exchanged under this deal. According to the Cabinet of Ministers resolution, US\$11.95bn of bonds and US\$2.92bn of warrants were issued (for details, please see the table below).

**Table 1. Conditions of new Eurobonds and current quotes**

	Amt Out	Curr	Coupon	YTM	Price	spread	Maturity
<b>UKRAIN 7.75% '19</b>	1,154.94	USD	7.750	9.184	95.540	752	01.09.2019
<b>UKRAIN 7.75% '20</b>	1,531.00	USD	7.750	9.267	94.280	760	01.09.2020
<b>UKRAIN 7.75% '21</b>	1,377.76	USD	7.750	9.267	93.356	760	01.09.2021
<b>UKRAIN 7.75% '22</b>	1,354.82	USD	7.750	9.267	92.508	726	01.09.2022
<b>UKRAIN 7.75% '23</b>	1,330.11	USD	7.750	9.249	91.834	703	01.09.2023
<b>UKRAIN 7.75% '24</b>	1,315.07	USD	7.750	9.296	90.875	708	01.09.2024
<b>UKRAIN 7.75% '25</b>	1,306.03	USD	7.750	9.229	90.620	701	01.09.2025
<b>UKRAIN 7.75% '26</b>	1,295.40	USD	7.750	9.196	90.249	698	01.09.2026
<b>UKRAIN 7.75% '27</b>	1,286.23	USD	7.750	9.164	89.947	695	01.09.2027
<b>UKRAIN '40 (VRI)</b>	2,916.42	USD			45.094		31.05.2040

Notes: Quotes as of 08 December, 2015

Sources: Bloomberg, MoF, ICU

According to our assumptions, bonds due in 2019 received mostly holders of old bonds which should be repaid this September and October amounted to about US\$940m and only about US\$215m of new UKRAIN 7.75% '19 were distributed between other bondholders. At the same time, we see a significantly larger amount outstanding of UKRAIN 7.75% '20, which might have occurred because of the following reasons:

- If the allocation of new bonds due 2019 is below US\$100,000, the holder should receive bonds due in 2020;
- If 1/8 of the new bonds for any holder is below US\$100,000, this holder should receive a new note of US\$100,000 in principal amount of each series started from 2020 and moving forward until its balance will be below US\$100,000.

In our view, these conditions caused a significant difference between the two bonds maturing in 2019 and 2020, as well as between bonds from the other seven maturities.

#### **VRI or GDP warrants**

GDP-linked securities (value recovery instruments or GDP warrants) could generate payments from the Ukrainian government in 2021-2040 under the following conditions: (a) Ukraine's baseline year GDP rises to or above US\$125.4bn; (b) real GDP growth the same year exceeds 3%; whereas, for the debut payment which could occur in 2021, the baseline year would be 2019, with the payment amount calculation in nominal GDP will be based in 2018 with the inflation in 2019. At the same time, payments are capped at 1% of the nominal GDP of the baseline year for five years.

So, if we see nominal GDP in 2019 equal or larger than US\$125.4bn and real GDP growth exceeds 3%, in 2021 Ukraine will not pay more than 1% of the nominal GDP amount. Moreover, payments through 2025 will not exceed 1% of nominal GDP seen in 2020-2023. At the same time, this cap is set only for five years; the other 15 payments will be paid in full amounts.

Also, if real GDP growth exceeds 3% in the baseline year, Ukraine will have to pay 15% of this growth. However, if real GDP growth exceeds 4%, Ukraine will pay an additional 40% of this growth.

#### **Precedents: Argentinian and Greek warrants**

The most famous examples of warrant issues which generate payments based on GDP growth come from previous restructuring deals in Argentina and Greece. Both deals included warrants as the key element, but with several differences.

In Argentina, creditors received warrants which required payments the year following the deal. Conditions were based on real GDP and growth which had to exceed baseline levels, as set in a prospectus. At the same time, a general cap was set at 48% of the notional amount of the warrants, such that investors could receive large payments if the Argentinean economy grew rapidly.

The conditions of the Greek warrants were less attractive for investors, but more favorable for the government, with a 1% cap of the notional amount for each year of payments if nominal GDP and real GDP growth exceed the baseline levels.

#### **Ukrainian warrants**

The Ukrainian version of the GDP-linked securities combine the conditions of the warrants issued by Argentina and Greece. Caps benefit the government more than investors, but still remains attractive for both.

Of the benefits for the Ukrainian government are as follows:

- More than a 5-year grace period, not a 1-year as occurred in Argentina or 3-year in Greece;
- The first five payments are capped at 1% of nominal GDP of the baseline year (2019-2023 for payments in 2021-2025);
- Only one baseline level of GDP at the beginning of the payments was set in the prospectus;
- Baseline real GDP growth is set at 3% for all years, which is close to Argentina but higher than that in Greece;
- The floating baseline level of GDP, 5-year grace period, and 2-year offset of the baseline years allows Ukraine to have nearly eight years (up to 2023) to grow fast and stabilize, preparing for less volatile growth in 2024-2039.

At the same time, the investor enjoys the following favorable conditions:

- The cap lasts for only the first five years;
- Payments are not limited by the notional amount of the warrants;
- Significant payments are possible if the Ukrainian economy's growth is highly volatile.

At the same time, there are some negative points for both sides of the deal. For Ukraine, beginning in 2026, payments could be very different, from zero to significant volumes if real GDP growth exceeds 4%, there are no caps on these payments. For investors, the most negative conditions are: (a) 5-year grace period; (b) 2-year gap between the payment year and baseline year; and (c) 1% cap for 2021-2025.

**Table 2. Condition of warrants in different debt deals**

	Argentina	Greece	Ukraine	positive(+)/negative(-) for Ukraine	positive(+)/negative(-) for investors
<b>Payments started</b>	Next year	3-year grace period	5-year grace period	+	-
<b>Cap</b>	48% of notional amount of warrants for all years	1% of notional amount for each year	1% of nominal GDP of baseline year	+	-
<b>Duration of cap</b>	Until 48% will be not paid	Until warrants maturity	5 years of possible payments (2021-2025)	-	+
<b>Baseline nominal GDP</b>	Set in prospectus for each year	Set in prospectus for each year	Set the minimum level which must be achieved	+	+
<b>Baseline level of real GDP growth</b>	started from 4.26% with decline to 3%.	He меншеNot lower than 2%, but not higher than 2.9%	3%	+	+
<b>Baseline year</b>	T-1	T-1	T-2 for real GDP growth and T-3 for nominal GDP amount	+	-

Source: Prospectus or exchange offering memorandum

### Estimates of possible payments on warrants

Our base-case macro scenario is that Ukraine's GDP will grow slowly. Over the next several decades, we forecast real annual GDP growth of 2%, starting from 2017. This scenario generates no warrant payments. While economic growth could exceed 2% annually, it could be quite volatile. Therefore, for the purpose of evaluating a new instrument, we calculated several scenarios, among which are the two main scenarios, including stable growth and uneven growth.

Our **scenario of stable growth** is based on the Ukrainian economy growing stably but not rapidly, slightly compensating for lost territories. Under this scenario, we use our forecast real GDP growth for 2016 at 2.7% and, beginning in 2017 we forecast GDP growth of 3.5% as it between the baseline level of growth and the threshold for payments increase (3% and 4%, respectively). Also, we use a GDP deflator of 7% and a slight weakening of the national currency.

Under this scenario, Ukrainian nominal GDP will rise to US\$125.4bn in 2024 and payments will start in 2026. However, all payments made up to 2040 will amount to US\$2.4bn. At the same time, if real GDP rises faster and also remains stable during all years until the warrants mature, the total amount of payments will rise significantly. At 4% growth, payments will amount to US\$5.34bn, and at 5% - US\$23.27bn (see Table 3). However, if we calculate the amount of payments weighted by the probability of each level of real GDP growth, payments could amount only to US\$8.99bn.

**Table 3. Possible total amounts of payments on GDP-linked securities**

Real GDP growth, %	1.0	2.0	3.0	3.5	4.0	5.0	6.0	7.0
<b>Total amount of payments, US\$bn</b>	0	0	0	2.4	5.34	23.27	46.42	76.68
<b>Probability</b>	0	50%	12%	11%	9%	7%	6%	5%

Note: Level of GDP growth used for all years from 2017 up to 2040

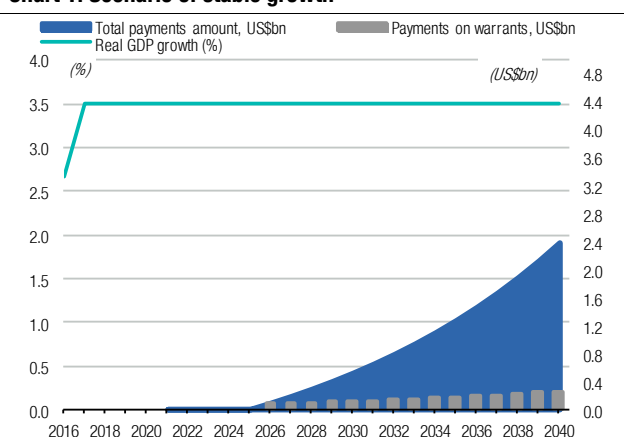
Source: ICU.

We also calculated an **uneven growth scenario** based on the following estimates:

- Real GDP growth will be unstable, with the economy growing over the next 10 years; however, in 2025-2030 we will see the economy decline with negative movements of real GDP;
- The largest decline will be -9.3% and the largest growth will be 5.55% (median of real GDP falling and real GDP growth since Ukraine's independence, respectively);
- We use the same inflation and exchange rate dynamic as in other scenarios.

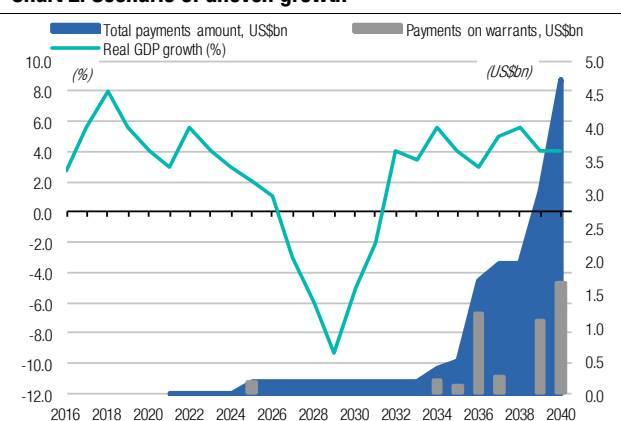
Under this scenario, the first payment will be made in 2025, and until the warrants mature, Ukraine should pay US\$4.72bn.

**Chart 1. Scenario of stable growth**



Source: ICU

**Chart 2. Scenario of uneven growth**



Source: ICU

**Evaluation of proposed warrants**

Under a stable growth scenario, we calculated cash-flows for different levels of GDP growth from 2% to 7% at real GDP growth of 3.5%. All cash-flows were discounted using exit yields from 8% (just 25bp higher than the coupon rate on the new bonds) up to 14%. All these discounted flows were also weighted using the probability of these scenarios. Results of these calculations are described in Table 4, providing possible prices of warrants. If we use an exit yield close to the YTM's of quasi-sovereign Eurobonds (Oschadbank and Ukreximbank Eurobonds), which are slightly above 11%, we will see warrant prices very similar to the current market conditions for these GDP-linked securities.

Table 4. NPV of warrants

Real GDP growth long-term trend	Exit-yield							Probability
	8.00%	9.00%	10.00%	11.00%	12.00%	13.00%	14.00%	
2.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	50.00%
3.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	12.00%
3.50%	19.9%	17.0%	14.5%	12.4%	10.7%	9.2%	8.0%	11.00%
4.00%	45.4%	38.8%	33.4%	28.7%	24.8%	21.5%	18.7%	9.00%
5.00%	200.4%	172.0%	148.2%	128.1%	111.0%	96.6%	84.3%	7.00%
6.00%	393.1%	336.7%	289.4%	249.6%	216.0%	187.5%	163.2%	6.00%
7.00%	645.2%	552.5%	474.8%	409.5%	354.4%	307.7%	268.0%	5.00%
<b>Probability weighted price</b>	<b>76.1%</b>	<b>65.2%</b>	<b>56.1%</b>	<b>48.4%</b>	<b>41.9%</b>	<b>36.3%</b>	<b>31.7%</b>	<b>100.00%</b>

Source: ICU

### New Eurobond perspectives

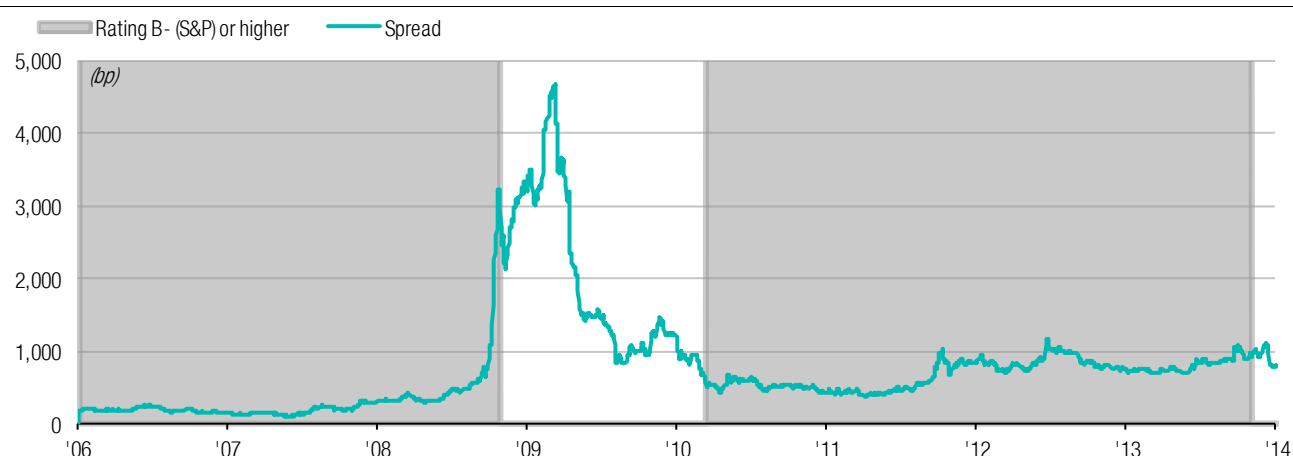
S&P was the first agency to review Ukrainian sovereign credit ratings and upgraded its long-term credit rating in foreign currency to B-. The agency has rated Ukraine from category B twice: in 2001 to 2008 it was at B and higher, and then in 2010 to 2013, it was B- and B+.

During the first period, when Ukraine had a stand-by agreement but no secured IMF funds, annual real GDP growth usually exceeded 5% since Ukraine returned to the capital markets in 2003; moreover, spreads to the benchmark were at their tightest, at about 400bp in 2006-2008, according to Bloomberg.

The second "B" period began in 2010, with lower growth (after falling -14.8% in 2009, Ukraine's economy grew only 4.1% in 2010, 5.2% in 2011, and just 0.2% in 2012). The IMF discontinued its support of the country, and Ukraine had to borrow short-term funds from Russian banks. During these years, spreads were more volatile in the 500-1,000bp range (see chart below).

Chart 3. Historical spreads to benchmark

Average spreads of sovereign Eurobonds



Source: Bloomberg, ICU.

Real GDP declining in 2014-2015, with the low level of GDP growth forecasted for 2016, the slow implementation of reforms, postponed tranche from the IMF and other macro-finance support, create the same background as was seen in 2010-2013 prevent spreads from tightening significantly. This fact that new Eurobonds trade at 650-700bp spreads at

the end of November was very positive and mostly supported by a successful restructuring and its conditions, especially since old debt will not have cross-default on new bonds.

At the same time, some positive expectations could allow spreads to tighten slightly albeit not rapidly. While the IMF has some targets which will allow it to issue a new tranche which will open doors for other loans, including the US\$1bn US guarantee on a Eurobond issue, spreads should tighten. The yield spreads of other countries with a B- rating under S&P view are mostly at about 500bp, but their ratings were reviewed a few years ago and their economies experienced stable growth over the last few years (see the table below).

#### **Debt not yet restructured**

Currently, the restructurings of the City of Kyiv Eurobonds schedule for a vote on 8 December 2015 and of the US\$3.0bn of Eurobonds held by Russia loom over Ukraine. The MoF also has to restructure several guaranteed loans (according to the EFF program) which are partially repaid by the state budget. The most likely guaranteed loans to be restructured amount to US\$1.0bn.

Russia rejected the restructuring offer that included the same terms as those for other Eurobonds. Their official counter-proposal is yet to be received, but they proposed US\$1.0bn per year in 2016, 2017 and 2018 without a haircut. To accept this proposal, Ukraine would have to receive approval from the IMF as it could violate EFF program requirements. Also, this debt was included for the restructuring, which was ignored by Russia, and its terms require the approval from other commercial creditors who agreed to the main restructuring proposal.

Most likely, Ukraine will declare a moratorium on this debt and begin a new round of negotiations, particularly as the IMF announced that this debt restructuring should be discussed between the two countries.

The City of Kyiv announced an investor meeting on its US\$300m 2016 Eurobond which it proposed to exchange for two sovereign Eurobonds due in 2019 and 2020, with 75% of the old debt to be exchanged in equal volumes for these bonds with accrued interest from 2 November 2015 (not 1 September, per the original issue), and the remaining 25% of the old debt to be exchanged for GDP-linked securities, with 22% of the old debt to be exchanged for warrants for all investors but 3% of the old debt to be exchanged in warrants only to be granted to investors who voted in favor of the exchange. For investors in the City of Kyiv 2015 Eurobonds, they could accept the deal with similar conditions (with 25% of old debt exchanged in warrants will get all holders who accepted the deal).

This page is intentionally left blank



# Disclosures

## ANALYST CERTIFICATION

This research publication has been prepared by the analyst(s), whose name(s) appear on the front page of this publication. The analyst(s) hereby certifies that the views expressed within this publication accurately reflect her/his own views about the subject financial instruments or issuers and no part of her/his compensation was, is, or will be directly or indirectly related to the inclusion of specific recommendations or views within this research publication.

## EQUITY RATING DEFINITIONS

**Buy:** Forecasted 12-month total return greater than 20%

**Hold:** Forecasted 12-month total return 0% to 20%

**Sell:** Forecasted 12-month total return less than 0%

Note: total return is share price appreciation to a target price in relative terms plus forecasted dividend yield.

## DEBT RATING DEFINITIONS

**Buy:** Forecasted 12-month total return significantly greater than that of relevant benchmark

**Hold:** Forecasted 12-month total return is in line with or modestly deviates from relevant benchmark

**Sell:** Forecasted 12-month total return significantly less than that of relevant benchmark



11th floor, LEONARDO Business Centre  
19-21 Bogdan Khmelnytsky Street  
Kiev, 01030 Ukraine  
Phone/Fax +38 044 2200120

WEB [www.icu.ua](http://www.icu.ua)



@ICU\_UA

## CORPORATE FINANCE

**Makar Paseniuk, CFA**, Managing Director  
makar.paseniuk@icu.ua

**Ivan Shvydanenko**, Vice President  
ivan.shvydanenko@icu.ua

**Roman Nikitov, ACCA** Director  
roman.nikitov@icu.ua

**Yuriy Kamarytskyi**, Vice President  
yuriy.kamarytskyi@icu.ua

**Ruslan Kilmukhametov**, Director  
ruslan.kilmukhametov@icu.ua

**Ruslan Patlavsky**, Vice President  
ruslan.patlavsky@icu.ua

## STRATEGY AND CORPORATE DEVELOPMENT

**Vlad Sinani**, Director  
vlad.sinani@icu.ua

## SALES AND TRADING

**Konstantin Stetsenko**   
Managing Director  
konstantin.stetsenko@icu.ua

**Liliya Kubytovych**   
Asset Management Product Sales  
liliya.kubytovych@icu.ua

**Sergiy Byelyayev**  
Fixed-Income Trading  
sergiy.byelyayev@icu.ua

**Julia Pecheritsa**  
Ukraine and CIS International Sales  
julia.pecheritsa@icu.ua

**Vitaliy Sivach**   
Fixed-Income & FX Trading  
vitaliy.sivach@icu.ua

**Yevgeniya Gryshchenko**  
Fixed-Income Sales  
yevgeniya.gryshchenko@icu.ua

## RESEARCH DEPARTMENT

**Alexander Valchyshen**   
Head of Research  
alexander.valchyshen@icu.ua

**Taras Kotovych**   
Senior financial analyst (Sovereign debt)  
taras.kotovych@icu.ua

**Alexander Martynenko**   
Head of corporate research  
alexander.martynenko@icu.ua

**Mykhaylo Demkiv**   
Financial analyst (Banks)  
mykhaylo.demkiv@icu.ua

**Bogdan Vorotilin**   
Financial analyst (Food & Agribusiness)  
bogdan.vorotilin@icu.ua

**Lee Daniels, Rolfe Haas**  
Editors

Investment Capital Ukraine LLC is regulated by Securities and Stock Market State Commission of Ukraine (license numbers: dealer activity AE 263019, broker activity AE 263018, underwriting activity AE 263020 dated 11 April 2013).

## DISCLAIMER

This research publication has been prepared by Investment Capital Ukraine LLC solely for information purposes for its clients. It does not constitute an investment advice or an offer or solicitation for the purchase or sale of any financial instrument. While reasonable care has been taken to ensure that the information contained herein is not untrue or misleading at the time of publication, Investment Capital Ukraine makes no representation that it is accurate or complete. The information contained herein is subject to change without notice. Copyright and database rights protection exists in this report and it may not be reproduced, distributed or published by any person for any purpose without the prior express consent of Investment Capital Ukraine LLC. All rights are reserved. Any investments referred to herein may involve significant risk, are not necessarily available in all jurisdictions, may be illiquid and may not be suitable for all investors. The value of, or income from, any investments referred to herein may fluctuate and/or be affected by changes in exchange rates. Past performance is not indicative of future results. Investors should make their own investigations and investment decisions without relying on this report. Only investors with sufficient knowledge and experience in financial matters to evaluate the merits and risks should consider an investment in any issuer or market discussed herein and other persons should not take any action on the basis of this report.



Additional information is available upon request.