



Focus  
**Ukraine**

Scope  
**Economics, bonds, equity & FX markets**

Research team  
**Taras Kotovych**

# Daily Insight

## Liquidity steady

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**WEDNESDAY, 12 OCTOBER 2016**

### UX Index (3 months to 12 Oct 2016)



Source: UX.

### Key market indicators (as of 11 Oct 2016)

|  | Last     | Daily chg (%) | YTD chg (%) |
|--|----------|---------------|-------------|
| <b>FX &amp; MONEY RATES</b>                    |          |               |             |
| USD/UAH  | 25.8000  | -0.06         | +7.37       |
| USD/UAH (1Y NDF)                               | 29.8500  | -0.05         | +17.08      |
| EUR/USD  | 1.1054   | -0.76         | +1.77       |
| USD/RUB  | 62.6900  | +1.24         | -13.56      |
| KievPRIME O/N (%)                              | 15.17    | +0bp          | -389bp      |
| KievPRIME 1M (%)                               | 17.35    | +0bp          | -490bp      |
| <b>SOVEREIGN EUROBONDS: yields and spreads</b> |          |               |             |
| Ukraine 15, Eurobond (%)                       | N/A      | +0bp          | +0bp        |
| Ukraine 17, Eurobond (%)                       | 29.14    | +26bp         | +0bp        |
| Ukraine 22, Eurobond (%)                       | 12.32    | -1bp          | +0bp        |
| Ukraine 23, Eurobond (%)                       | 11.85    | +0bp          | +0bp        |
| Ukraine 5Y CDS                                 | 663bp    | +0bp          | +0bp        |
| <b>EQUITIES</b>                                |          |               |             |
| <b>Stock market indices</b>                    |          |               |             |
| UX (Ukraine)                                   | 845.34   | -1.11         | +23.25      |
| MSCI World                                     | 413.07   | -1.14         | +3.43       |
| MSCI EM  | 905.57   | -1.43         | +14.03      |
| RTS (Russia)                                   | 1,005.48 | -1.22         | +32.82      |
| WIG-20 (Poland)                                | 1,757.04 | -0.50         | -5.49       |
| S&P 500 (USA)                                  | 2,136.73 | -1.24         | +4.54       |

Notes: Chg – percentage change, if not otherwise indicated; [1] – total traded volume for stocks listed in green- or red-shaded box means gain or loss, respectively, of the index or security.

Sources: Bloomberg, UX, Investment Capital Ukraine LLC.

# Bonds: News & Comments

## Liquidity steady

Banking sector liquidity remained steady yesterday, down only UAH0.04bn to UAH73.92bn as banks' correspondent accounts with the NBU were up UAH0.13bn to UAH41.30bn and total CDs outstanding fell UAH0.17bn to UAH32.62bn. UAH0.43bn of ON loans rolled over on Monday as UAH0.15bn of funds injected by the NBU via the FX auction had no impact on liquidity.

**Investment implications: Yesterday, the NBU held no FX auction; only the rollover of ON loans supported liquidity. As liquidity is still too low to push interest rates down further, yesterday's auction can only have an impact on liquidity on Thursday, but the amount of new bonds will have little impact.**

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## Auction flattens yield curve

Yesterday, the MoF pushed the yield curve down after the recent NBU key rate cut, decreasing rates for yields up to 2-year maturities, keeping 16.00% for 5-year bonds steady. While the MoF rejected most of the longer term demand, it raised a paltry UAH0.11bn.

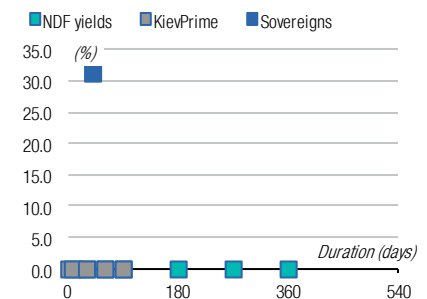
Totally demand amounted to only UAH0.16bn for the 9-month and 12-month zero-coupon bonds as well as the 2-year coupon-bearing bonds: one for the 9-month and one for 12-month bond, and two bids for the 2-year bonds. While 12-month bond demand was the same as two weeks ago, the interest rate for the 9-month bond was down 20bp to 15.30%.

2-year bonds saw one small bid for UAH1.5m at 15.50% and one for UAH40.0m at 16.0%. The MoF rejected the large bid, decreasing the cut-off interest rate to 15.50%.

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## Yield curve of the local bond market

(as of market close on 11 Oct 2016)



Sources: Bloomberg, Investment Capital Ukraine LLC.

## Bond market indicators (as of 11 Oct 2016)

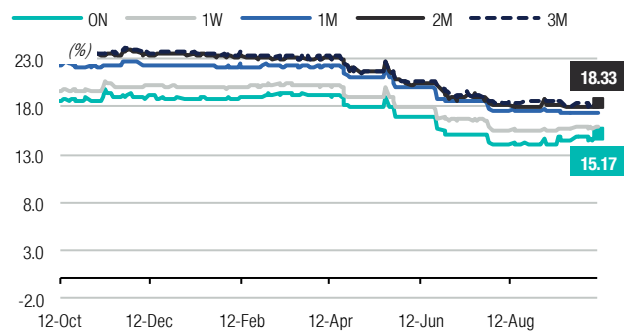
|   | Last           | Daily        | Weekly       | MoM          | YTD           |
|---|----------------|--------------|--------------|--------------|---------------|
|   | chg (%)        | chg (%)      | chg (%)      | chg (%)      | chg (%)       |
| <b>MONEY MARKET KIEV PRIME RATES (%)</b>            |                |              |              |              |               |
| O/n   | 15.17          | +0bp         | +34bp        | +104bp       | -389bp        |
| 1wk   | 15.83          | +0bp         | -17bp        | +33bp        | -417bp        |
| 1m  | 17.35          | +0bp         | +0bp         | -15bp        | -490bp        |
| 2m  | 18.00          | +0bp         | +0bp         | -25bp        | -550bp        |
| 3m  | 18.33          | +0bp         | +0bp         | -17bp        | -542bp        |
| <b>LIQUIDITY WIDE MEASUREMENT (UAHm)</b>            |                |              |              |              |               |
| CB acc's <sup>1</sup>                               | 41,304         | +0.31        | -0.95        | +22.65       | +7.39         |
| CDs <sup>2</sup>                                    | 32,617         | -0.52        | -8.21        | -22.87       | -62.42        |
| Sovgns <sup>3</sup>                                 | 10,935         | +0.00        | +20.09       | +10.97       | +131.8        |
| <b>Total</b>  | <b>84,856</b>  | <b>-0.05</b> | <b>-1.72</b> | <b>-1.13</b> | <b>-34.71</b> |
| <b>HOLDERS OF UAH SOVEREIGN BONDS (UAHm)</b>        |                |              |              |              |               |
| C.bank  | 367,007        | +0.00        | +0.00        | -1.05        | -3.37         |
| Banks   | 153,218        | -0.07        | +0.02        | +2.47        | +87.84        |
| Resid's <sup>4</sup>                                | 13,855         | -0.51        | -2.10        | +0.73        | -34.02        |
| Non-res <sup>5</sup>                                | 18,603         | -0.22        | -0.38        | -3.01        | -16.60        |
| <b>Total</b>  | <b>552,682</b> | <b>-0.04</b> | <b>-0.06</b> | <b>-0.12</b> | <b>+9.51</b>  |
| <b>NDF IMPLIED YIELDS (%)</b>                       |                |              |              |              |               |
| 3m  | N/A            | N/A          | N/A          | N/A          | N/A           |
| 6m  | N/A            | N/A          | N/A          | N/A          | N/A           |
| 9m  | N/A            | N/A          | N/A          | N/A          | N/A           |
| 1yr   | N/A            | N/A          | N/A          | N/A          | N/A           |
| <b>LOCAL CURRENCY UAH SOVEREIGN BOND YIELDS (%)</b> |                |              |              |              |               |
| Mar '13   | N/A            | N/A          | N/A          | N/A          | N/A           |
| Jan '14   | N/A            | N/A          | N/A          | N/A          | N/A           |
| Aug '15 <sup>6</sup>                                | N/A            | N/A          | N/A          | N/A          | N/A           |
| <b>EUROBONDS USD SOVEREIGN BOND YIELDS (%)</b>      |                |              |              |              |               |
| CDS 5yr   | 663            | +0bp         | +0bp         | +2bp         | +0bp          |
| Jun '16   | N/A            | +114bp       | +0bp         | +0bp         | +0bp          |
| Jul '17   | 29.14          | +26bp        | +0bp         | +0bp         | +0bp          |
| Sep '20   | 14.02          | +4bp         | +0bp         | +0bp         | +0bp          |
| Sep '21   | 14.22          | +0bp         | +0bp         | +0bp         | +0bp          |
| Sep '22   | 12.32          | -1bp         | +0bp         | +0bp         | +0bp          |
| Feb '23   | 11.85          | +0bp         | +0bp         | +0bp         | +0bp          |

Notes: [1] banks' account balance at NBU; [2] certificates of deposits issued by NBU; [3] UAH sovereign bonds due next 30 days; [4] residents; [5] non-residents; [6] VAT bond.

Sources: Bloomberg, Investment Capital Ukraine LLC.

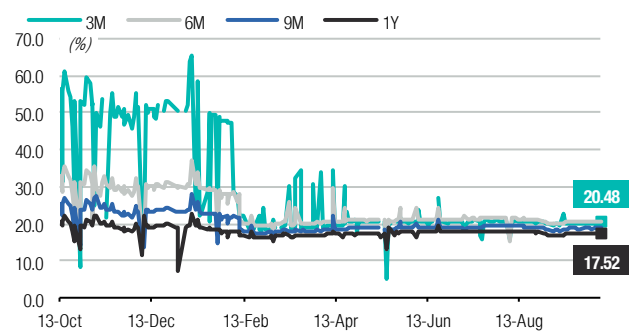
Chart page: Local bond market & Eurobond markets

Chart 1. Kiev Prime rates (%), last 12-month period



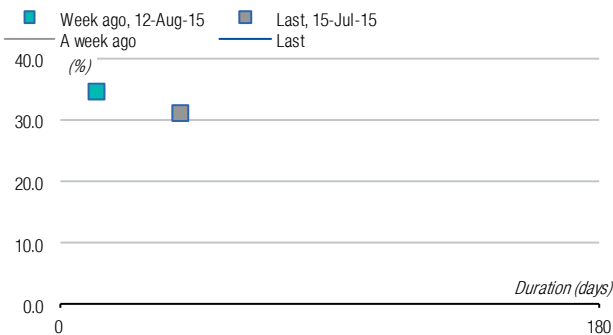
Sources: Bloomberg, Investment Capital Ukraine LLC.

Chart 2. UAH NDF implied yields (%), last 12-month period



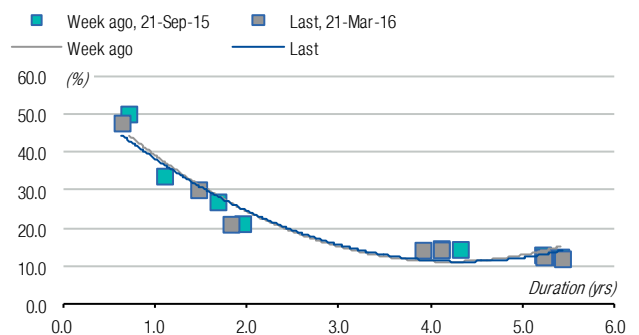
Sources: Bloomberg, Investment Capital Ukraine LLC.

Chart 3. UAH sovereign yield curve (%) as of 11 Oct 2016



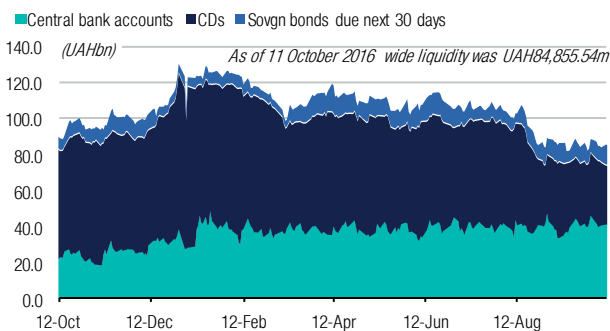
Sources: Bloomberg, Investment Capital Ukraine LLC.

Chart 4. USD sovereign yield curve (%) as of 11 Oct 2016



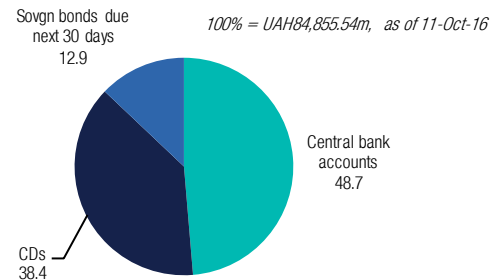
Sources: Bloomberg, Investment Capital Ukraine LLC.

Chart 5. Banking sector liquidity (UAHbn), last 12-month period



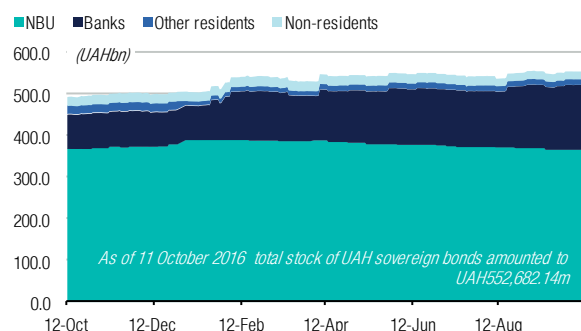
Sources: National Bank of Ukraine, Ministry of Finance of Ukraine, ICU.

Chart 6. Breakdown of liquidity pool (%) as of 11 Oct 2016



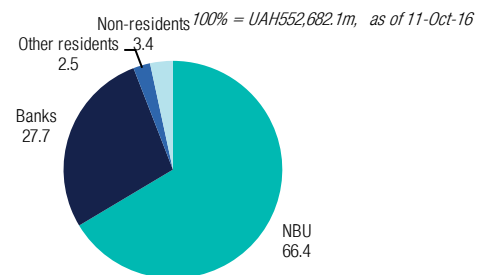
Sources: National Bank of Ukraine, Ministry of Finance of Ukraine, ICU.

Chart 7. Holders of sovereign bonds (UAHbn), last 12 months



Sources: National Bank of Ukraine, Investment Capital Ukraine LLC.

Chart 8. Domestic sovereign debt (%) as of 11 Oct 2016



Sources: National Bank of Ukraine, Investment Capital Ukraine LLC.

Table 1. Ukrainian stocks (closing prices as of 11-Oct-2016)

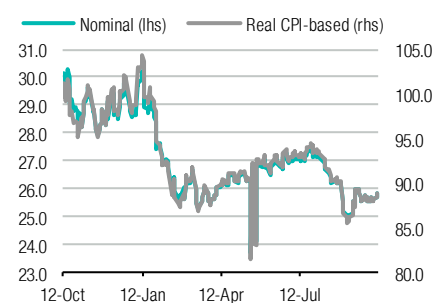
| Company                      | Bloomberg Ticker | Listing     | Share price performance (% change) |       |        |        | Valuation (US\$) |            |                | Free float (FF) & Liquidity |        |                    |                              | P/E                         |                     |                    | EV/EBITDA |       |       | EV/Sales |       |       | Ratios |       |       |         |                 |
|------------------------------|------------------|-------------|------------------------------------|-------|--------|--------|------------------|------------|----------------|-----------------------------|--------|--------------------|------------------------------|-----------------------------|---------------------|--------------------|-----------|-------|-------|----------|-------|-------|--------|-------|-------|---------|-----------------|
|                              |                  |             | Last price                         | Daily | MoM    | YTD    | YoY              | Last price | Market cap (m) | EV (m)                      | FF (%) | FF mkt cap (US\$m) | Last day turnover (US\$ 000) | 3M avg. turnover (US\$ 000) | FF share traded (%) | FF turnover (days) | 2014      | 2015E | 2016E | 2014     | 2015E | 2016E | 2014   | 2015E | 2016E | P/B (x) | Debt/Assets (%) |
| <b>ENERGY</b>                |                  |             |                                    |       |        |        |                  |            |                |                             |        |                    |                              |                             |                     |                    |           |       |       |          |       |       |        |       |       |         |                 |
| Cadogan Petrol...            | CAD LN           | London      | 9.25 GBp                           | -3.9  | +27.6  | +13.8  | -22.1            | 0.11       | 26.2           | -14.1                       | 40.2   | 10.5               | 6.2                          | 5.7                         | 0.11                | 941                | Neg.      | N/A   | N/A   | 1.6      | N/A   | N/A   | Neg.   | N/A   | N/A   | 0.5     | 17.5            |
| Centrenergo                  | CEEN UK          | Kiev, UX    | 10.62 UAH                          | -1.4  | +13.5  | +132.8 | +94.1            | 0.41       | 151.4          | 133.4                       | 21.7   | 32.9               | 9.7                          | 12.2                        | 0.04                | 2,852              | 179.5     | 5.9   | 6.5   | 0.4      | 3.0   | 3.3   | 0.5    | 0.4   | 0.3   | 1.3     | 3.4             |
| Coal Energy                  | CLE PW           | Warsaw      | 1.60 PLN                           | -5.9  | +213.7 | +201.9 | +125.4           | 0.41       | 18.6           | 90.6                        | 25.0   | 4.6                | 37.1                         | 13.5                        | 0.65                | 153                | Neg.      | N/A   | N/A   | 12.4     | N/A   | N/A   | 0.8    | N/A   | N/A   | 0.7     | 56.9            |
| Donbasenergo                 | DOEN UK          | Kiev, UX    | 13.57 UAH                          | -0.6  | +8.1   | -13.9  | -27.0            | 0.52       | 12.4           | 23.5                        | 14.2   | 1.8                | 1.0                          | 1.5                         | 0.08                | 1,240              | Neg.      | N/A   | N/A   | 0.1      | N/A   | N/A   | 0.1    | N/A   | N/A   | 0.7     | 4.2             |
| JKX Oil & Gas                | JKX LN           | London      | 17.00 GBp                          | -6.8  | -11.7  | -37.6  | -35.8            | 0.21       | 35.8           | 41.3                        | 47.2   | 16.9               | 84.0                         | 3.8                         | 0.04                | 2,270              | Neg.      | Neg.  | Neg.  | Neg.     | 2.8   | N/A   | 0.5    | 0.6   | 0.6   | 0.2     | 13.0            |
| Regal Petroleum              | RPT LN           | London      | 3.75 GBp                           | +0.0  | +25.0  | +0.0   | -2.6             | 0.05       | 14.8           | -18.3                       | 80.9   | 11.9               | 0.2                          | 0.8                         | 0.01                | 16,248             | Neg.      | Neg.  | 7.4   | Neg.     | Neg.  | Neg.  | Neg.   | Neg.  | Neg.  | 0.2     | 0.0             |
| Sadova Group                 | SGR PW           | Warsaw      | 0.80 PLN                           | +48.1 | +300.0 | +166.7 | +166.7           | 0.21       | 8.9            | 50.1                        | 25.0   | 2.2                | 35.1                         | 7.2                         | 0.42                | 236                | Neg.      | N/A   | N/A   | Neg.     | N/A   | N/A   | 48.3   | N/A   | N/A   | N/A     | 239.6           |
| Zakhidenergo                 | ZAEN UK          | Kiev, PFTS  | 63.00 UAH                          | +5.0  | N/A    | N/A    | N/A              | 2.43       | 31.1           | 61.1                        | 5.0    | 1.6                | 0.7                          | N/A                         | N/A                 | N/A                | Neg.      | N/A   | N/A   | 0.1      | N/A   | N/A   | 0.1    | N/A   | N/A   | 0.4     | 11.6            |
| <b>METALLURGY</b>            |                  |             |                                    |       |        |        |                  |            |                |                             |        |                    |                              |                             |                     |                    |           |       |       |          |       |       |        |       |       |         |                 |
| Alchevsky Meta...            | ALMK UK          | Kiev, UX    | 0.01 UAH                           | -1.2  | +17.1  | -26.3  | -40.1            | 0.00       | 8.2            | 2,387.5                     | 3.9    | 0.3                | 0.0                          | 0.2                         | 0.04                | 2,492              | Neg.      | Neg.  | Neg.  | 14.6     | 25.1  | 22.7  | 7.9    | 7.1   | 7.4   | N/A     | 192.1           |
| Ferrexpo PLC                 | FXPO LN          | London      | 88.00 GBp                          | +3.8  | +39.1  | +309.3 | +127.1           | 1.08       | 635.6          | 1,387.6                     | 22.4   | 142.4              | 2,171.5                      | 1,556.5                     | 0.80                | 124                | 19.2      | 4.3   | 5.2   | 10.0     | 4.9   | 6.2   | 1.4    | 1.5   | 1.5   | 2.2     | 73.7            |
| Yasynivsky Cok...            | YASK UK          | Kiev, UX    | 0.20 UAH                           | +0.0  | +0.0   | -13.0  | -20.0            | 0.01       | 2.1            | 2.7                         | 9.0    | 0.2                | 0.0                          | 0.3                         | 0.39                | 255                | Neg.      | N/A   | N/A   | Neg.     | N/A   | N/A   | 0.0    | N/A   | N/A   | 0.0     | 0.0             |
| <b>FOOD AND AGRIBUSINESS</b> |                  |             |                                    |       |        |        |                  |            |                |                             |        |                    |                              |                             |                     |                    |           |       |       |          |       |       |        |       |       |         |                 |
| AgroGeneration               | ALAGR FP         | EN Paris    | 0.31 EUR                           | +0.0  | -8.8   | -22.5  | -26.2            | 0.34       | 34.0           | 72.0                        | 34.0   | 11.6               | 88.0                         | 46.4                        | 0.46                | 216                | Neg.      | 8.6   | 2.2   | 3.9      | 3.7   | 2.6   | 1.1    | 1.0   | 0.9   | 0.4     | 40.7            |
| Agroliga                     | AGL PW           | Warsaw      | 14.70 PLN                          | +3.4  | +2.1   | +29.2  | -11.3            | 3.79       | 5.8            | 7.0                         | 16.7   | 1.0                | 0.0                          | 1.6                         | 0.24                | 422                | 1.9       | N/A   | N/A   | 1.9      | N/A   | N/A   | 0.4    | N/A   | N/A   | 0.5     | 10.7            |
| Agrotron                     | AGT PW           | Warsaw      | 3.00 PLN                           | -1.6  | -2.3   | +197.0 | +165.5           | 0.77       | 16.8           | 25.3                        | 26.2   | 4.4                | 25.2                         | 143.0                       | 1.82                | 55                 | Neg.      | 2.1   | 1.9   | 1.1      | 1.7   | 1.3   | 0.6    | 0.7   | 0.6   | 0.3     | 32.4            |
| Astarta Holdin...            | AST PW           | Warsaw      | 54.01 PLN                          | +1.0  | +4.0   | +56.6  | +72.6            | 13.92      | 348.1          | 506.8                       | 31.0   | 108.0              | 145.8                        | 185.1                       | 0.16                | 638                | 19.8      | 4.2   | 3.8   | 3.9      | 3.3   | 3.7   | 1.5    | 1.3   | 1.2   | 1.0     | 41.5            |
| Avangard                     | AVGR LI          | London Intl | 0.43 USD                           | -5.8  | +32.8  | -66.0  | -52.2            | 0.43       | 27.1           | 366.2                       | 21.7   | 5.9                | 0.4                          | 4.5                         | 0.04                | 2,744              | Neg.      | Neg.  | 0.7   | Neg.     | Neg.  | 10.5  | 1.6    | 2.8   | 2.2   | 0.2     | 53.9            |
| IMC                          | IMC PW           | Warsaw      | 6.70 PLN                           | -2.3  | +1.4   | +12.2  | +1.5             | 1.73       | 54.1           | 134.1                       | 23.9   | 12.9               | 0.5                          | 17.9                        | 0.20                | 494                | 3.6       | 2.7   | 2.1   | 2.0      | 2.4   | 2.8   | 1.0    | 1.0   | 0.9   | 0.9     | 56.8            |
| Kernel Holding...            | KER PW           | Warsaw      | 59.90 PLN                          | +0.3  | -2.0   | +24.5  | +10.7            | 15.44      | 1,230.5        | 1,669.0                     | 58.8   | 723.2              | 1,828.3                      | 1,523.3                     | 0.21                | 480                | 11.5      | 5.8   | 2.2   | 4.2      | 4.8   | 4.6   | 0.7    | 0.8   | 0.7   | 1.3     | 32.0            |
| KSG Agro                     | KSG PW           | Warsaw      | 1.96 PLN                           | -0.5  | +1.6   | +110.8 | +81.5            | 0.51       | 7.6            | 70.9                        | 34.4   | 2.6                | 15.8                         | 29.8                        | 0.61                | 163                | Neg.      | N/A   | N/A   | 7.1      | N/A   | N/A   | 2.2    | N/A   | N/A   | N/A     | 67.4            |
| MHP                          | MHPC LI          | London Intl | 9.33 USD                           | +0.5  | +0.9   | +0.3   | -0.7             | 9.33       | 985.9          | 2,255.4                     | 22.3   | 220.0              | 10.3                         | 325.2                       | 0.12                | 857                | Neg.      | 7.1   | 4.7   | 4.9      | 5.6   | 5.2   | 1.9    | 1.8   | 1.7   | 1.3     | 61.6            |
| Milkiland                    | MLK PW           | Warsaw      | 1.88 PLN                           | +1.6  | -1.1   | +32.4  | +34.3            | 0.48       | 15.1           | 134.1                       | 20.0   | 3.0                | 13.8                         | 29.8                        | 0.70                | 143                | Neg.      | Neg.  | Neg.  | Neg.     | 17.0  | 8.8   | 0.6    | 0.8   | 0.6   | 0.4     | 57.6            |
| <b>CONSTRUCTION</b>          |                  |             |                                    |       |        |        |                  |            |                |                             |        |                    |                              |                             |                     |                    |           |       |       |          |       |       |        |       |       |         |                 |
| TMM                          | TR61 GF          | Frankfurt   | 0.01 EUR                           | +0.0  | +0.0   | -85.7  | -16.7            | 0.01       | 0.6            | 55.6                        | 13.1   | 0.1                | 0.0                          | 0.0                         | 0.01                | 7,142              | Neg.      | N/A   | N/A   | Neg.     | N/A   | N/A   | 6.2    | N/A   | N/A   | 0.0     | 44.0            |
| <b>FINANCIAL SERVICES</b>    |                  |             |                                    |       |        |        |                  |            |                |                             |        |                    |                              |                             |                     |                    |           |       |       |          |       |       |        |       |       |         |                 |
| Raiffeisen Ban...            | BAVL UK          | Kiev, UX    | 0.13 UAH                           | -0.5  | +11.9  | +66.4  | +58.6            | 0.00       | 297.3          | N/A                         | 3.8    | 11.4               | 10.4                         | 4.8                         | 0.06                | 1,623              | Neg.      | 5.0   | 5.9   | N/A      | N/A   | N/A   | N/A    | N/A   | N/A   | 1.1     | 14.4            |
| Ukrsotsbank                  | USCB UK          | Kiev, UX    | 0.10 UAH                           | -0.4  | +44.1  | -3.8   | +4.5             | 0.00       | 423.4          | N/A                         | 4.5    | 19.0               | 0.1                          | 0.3                         | 0.00                | 88,408             | Neg.      | N/A   | N/A   | N/A      | N/A   | N/A   | N/A    | N/A   | N/A   | 0.5     | 24.3            |

Notes: mln - millions; FF - free float; n/a - not available; neg. - negative; a company name (the left column of the table) is shortened to fit the column and hence in some cases is not displayed in full; \*\*\* - P/E is above 10,000x. Sources: Bloomberg, ICU.

# FX: News & Comments

## ICU's UAH trade-weighted indices

(Last 12-month history to 12 Oct 2016)



Source: Investment Capital Ukraine LLC.

## FX market indicators (as of 11 Oct 2016)

|   | Last      | Daily   | Weekly  | MoM     | YTD     |
|---|-----------|---------|---------|---------|---------|
|   | chg (%)   | chg (%) | chg (%) | chg (%) | chg (%) |
| <b>USD/UAH MARKET (HRYVNIA per US DOLLAR)</b>           |           |         |         |         |         |
| Spot mkt  | 25.8000   | -0.06   | -0.10   | -3.32   | +7.37   |
| NBU avg   | 25.8517   | +0.10   | -0.05   | -3.09   | +8.66   |
| Ttl vlm <sup>1</sup>                                    | 290.94    | +24.86  | +4.52   | -3.62   | -19.91  |
| \$ volume <sup>2</sup>                                  | 186.70    | +36.70  | +3.59   | -13.32  | -25.63  |
| NDF 3M  | 27.0585   | -0.06   | +0.37   | -3.18   | +0.00   |
| NDF 6M  | 28.3500   | -0.05   | -0.09   | -2.99   | +2.99   |
| NDF 1Y  | 29.8500   | -0.05   | -0.08   | -2.85   | +17.08  |
| <b>TRADE-WEIGHTED INDICES (TWIs, points)</b>            |           |         |         |         |         |
| UAH nom'l   | 25.824    | +0.67   | +0.58   | +3.24   | -9.69   |
| UAH real CPI  | 88.886    | +0.67   | +0.58   | +3.24   | -9.28   |
| UAH real PPI  | 119.891   | +0.67   | +0.58   | +3.24   | -8.05   |
| USD nom'l   | 97.690    | +0.79   | +1.58   | +2.47   | -0.95   |
| <b>FX RATES OF KEY CURRENCIES THAT SHAPE UAH's TWIs</b> |           |         |         |         |         |
| USD/RUB   | 62.6900   | +1.24   | -0.07   | -3.30   | -13.56  |
| EUR/USD   | 1.1054    | -0.76   | -1.34   | -1.59   | +1.77   |
| USD/CNY   | 6.7220    | +0.22   | +0.75   | +0.55   | +3.52   |
| USD/PLN   | 3.8756    | +1.22   | +0.81   | +0.29   | -1.21   |
| USD/TRY   | 3.0839    | +0.38   | +0.82   | +3.88   | +5.71   |
| USD/BYR   | 19,125.00 | -0.08   | -0.31   | -1.77   | +2.67   |
| USD/KZT   | 330.6800  | -0.48   | -1.03   | -2.12   | -2.91   |
| <b>OTHER MAJOR CURRENCIES</b>                           |           |         |         |         |         |
| USD/JPY   | 103.5100  | -0.10   | +0.59   | +0.80   | -13.90  |
| GBP/USD   | 1.2123    | -1.93   | -4.75   | -8.62   | -17.73  |
| USD/CHF   | 0.9888    | +0.64   | +1.00   | +1.35   | -1.33   |
| AUD/USD   | 0.7539    | -0.89   | -1.06   | -0.03   | +3.47   |
| USD/CAD   | 1.3265    | +0.68   | +0.55   | +1.66   | -4.15   |
| USD/BRL   | 3.1954    | -0.35   | -1.92   | -2.40   | -19.32  |
| USD/KRW   | 1,120.39  | +1.07   | +1.14   | +2.01   | -4.65   |
| <b>COMMODITIES</b>                                      |           |         |         |         |         |
| Gold(\$/oz)   | 1,252.73  | -0.55   | -1.25   | -5.66   | +18.02  |
| WTI crude <sup>3</sup>                                  | 50.79     | -1.09   | +4.31   | +10.70  | +37.12  |
| Brent crd <sup>3</sup>                                  | 51.11     | -0.87   | +2.36   | +8.84   | +42.97  |
| Urals crd <sup>3</sup>                                  | N/A       | +0.00   | +0.00   | +0.00   | +0.00   |
| TR/J CRB <sup>4</sup>                                   | 189.16    | -0.59   | +0.99   | +3.63   | +7.39   |

Notes: [1] trading volume in all foreign currencies (US\$m); [2] trading volume in the pair USD/UAH (US\$m); [3] crude oil price (USD per barrel); [4] the Thomson Reuters/Jefferies CRB Index. A green-/red-shaded box means gain or loss, respectively, of the investment into the asset. Currencies are gaining when their exchange rates strengthen versus USD.

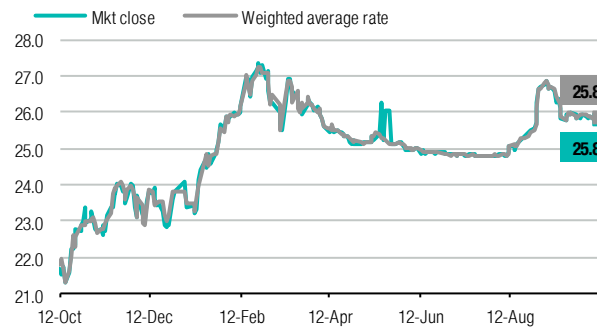
Sources: Bloomberg, Investment Capital Ukraine LLC.

Readers may follow the ICU trade-weighted indices of the local-currency, the hryvnia (UAH), on the ICU [website](#) and Bloomberg (type: ALLX UTWI <GO>).

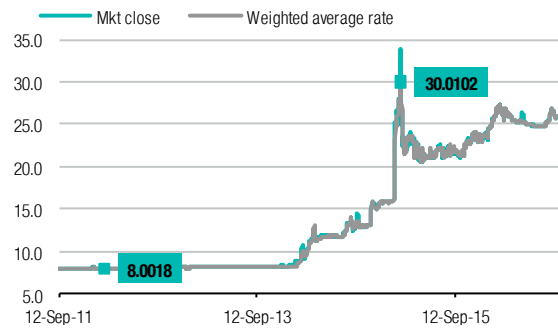
Section on FX market is continued on next page.

### Chart page #1: Foreign-exchange market

**Chart 9. Spot market rates USD/UAH: last 12-month and 5-year periods (UAH per USD, left and right respectively)**

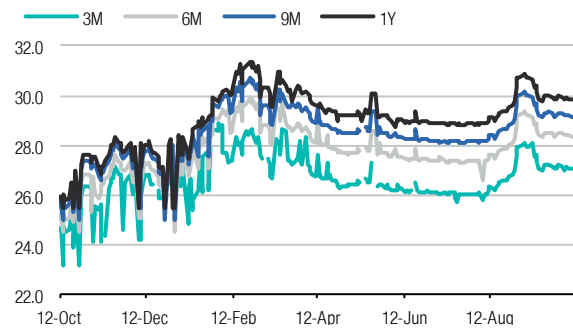


Sources: National Bank of Ukraine, Bloomberg, Investment Capital Ukraine LLC.

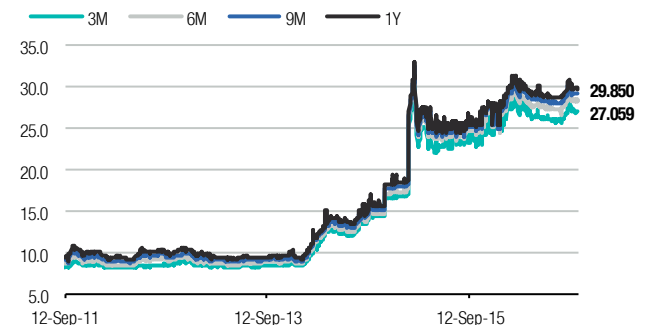


Sources: National Bank of Ukraine, Investment Capital Ukraine LLC.

**Chart 10. NDF market rates USD/UAH: last 12-month and 5-year periods (UAH per USD, left and right respectively)**

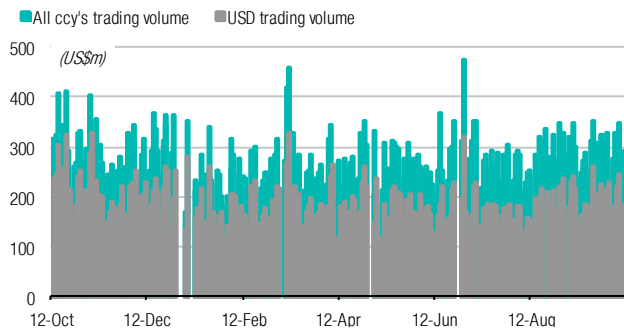


Sources: National Bank of Ukraine, Investment Capital Ukraine LLC.

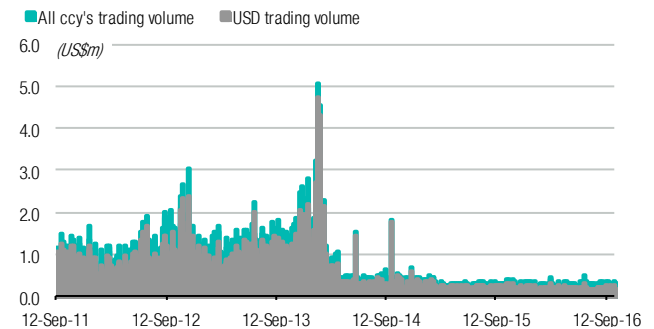


Sources: National Bank of Ukraine, Investment Capital Ukraine LLC.

**Chart 11. Trading volume: last 12-month and 5-year periods (US\$m, left and right respectively)**

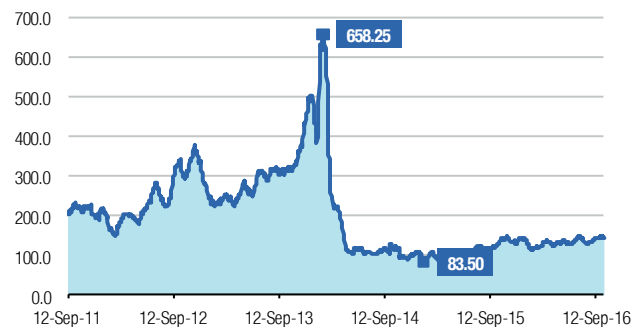


Sources: National Bank of Ukraine, Bloomberg, Investment Capital Ukraine LLC.



Sources: National Bank of Ukraine, Investment Capital Ukraine LLC.

**Chart 12. 30D MA\* ratio of FX market turnover to merchandise trade: last 12m and 5yr periods (% , left and right respectively)**

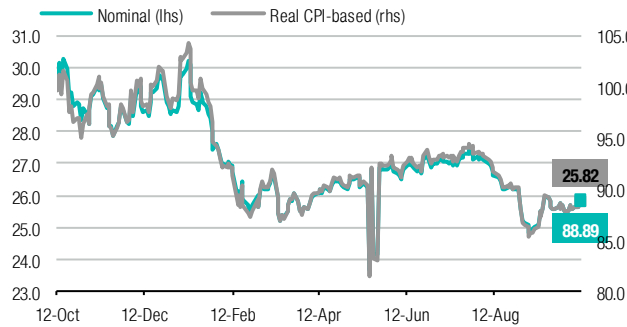


Note: \* 30-day moving average; The boxes of the right chart show high and low values. Sources: NBU, State Statistics Service of Ukraine, Bloomberg, Investment Capital Ukraine LLC.

## Chart page #2: ICU's UAH trade-weighted indices

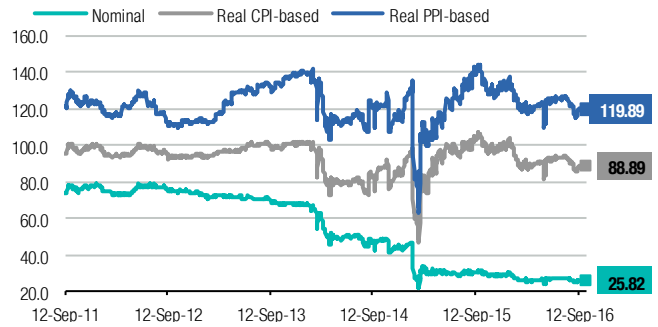
The following charts depict ICU's Ukrainian hryvnia trade-weighted indices which were calculated in accordance with methodology (for more details visit <http://www.icu.ua/en/research/currency-indices>).

**Chart 13. Nominal and CPI-based real TWIs of UAH, history of last 12-month period**



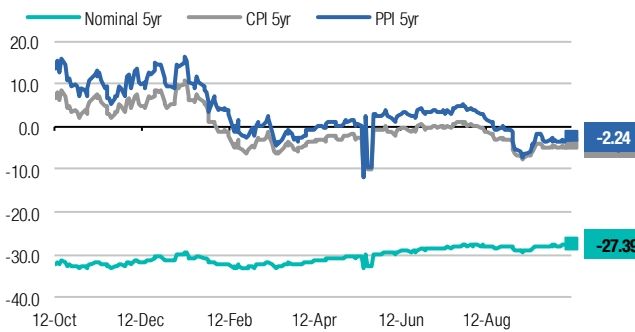
Note: The boxes indicate the last values of the depicted indicators.  
Source: Investment Capital Ukraine LLC.

**Chart 14. Nominal, CPI- and PPI-based TWIs of UAH, history of last 5-year period**

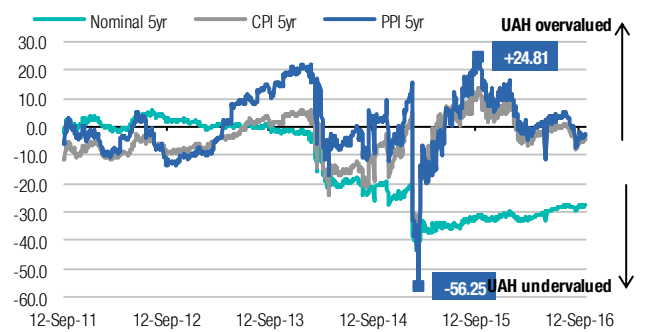


Note: The boxes indicate the last values of the depicted indicators.  
Source: Investment Capital Ukraine LLC.

**Chart 15. Deviation of UAH trade-weighted indices from their 5-year moving averages: last 12-month and 5-year periods (% , left and right respectively)**

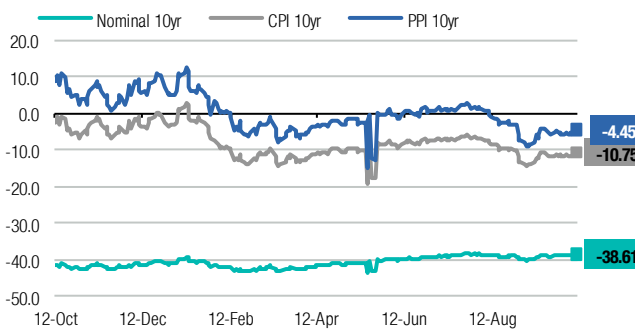


Note: The boxes indicate the last values of the depicted indicators.  
Source: Investment Capital Ukraine LLC.

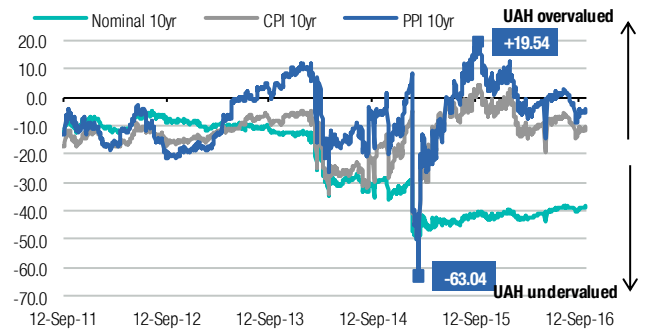


Note: the boxes indicate the high and low values of CPI-based TWI.  
Source: Investment Capital Ukraine LLC.

**Chart 16. Deviation of UAH trade-weighted indices from their 10-year moving averages: last 12-month and 5-year periods (% , left and right respectively)**



Note: The boxes indicate the last values of the depicted indicators.  
Source: Investment Capital Ukraine LLC.



Note: the boxes indicate the high and low values of CPI-based TWI.  
Source: Investment Capital Ukraine LLC.

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**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

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