



Focus  
**Ukraine**

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

Research team  
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# Daily Insight

## Liquidity down

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THURSDAY, 28 APRIL 2016

UX Index (3 months to 28 Apr 2016)



Source: UX.

Key market indicators (as of 27 Apr 2016)

	Last	Daily chg (%)	YTD chg (%)
<b>FX &amp; MONEY RATES</b>			
USD/UAH	25.1250	-0.20	+4.57
USD/UAH (1Y NDF)	29.1750	+0.60	+14.43
EUR/USD	1.1322	+0.22	+4.23
USD/RUB	65.1250	-0.47	-10.20
KievPRIME O/N (%)	18.00	+0bp	-106bp
KievPRIME 1M (%)	21.00	+0bp	-125bp
<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	N/A		
<b>EQUITIES</b>			
<b>Stock market indices</b>			
UX (Ukraine)	643.67	+3.51	-6.15
MSCI World	406.77	+0.02	+1.86
MSCI EM	843.17	+0.06	+6.17
RTS (Russia)	927.09	-0.44	+22.46
WIG-20 (Poland)	1,892.48	-1.25	+1.79
S&P 500 (USA)	2,095.15	+0.16	+2.51

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 down

Banks' correspondent accounts with the NBU fell UAH4.17bn to UAH39.35bn yesterday, causing banking sector liquidity to decline UAH2.69bn to UAH101.29bn as UAH1.49bn of funds were reallocated to CDs, increasing total CDs outstanding to UAH61.95bn that day.

**Investment implications:** Despite the NBU's injections via the FX market, liquidity declined due to month-end tax payments and should continue to fall as they continue. Liquidity could continue to fall significantly due to recent bond purchases at primary auctions, particularly as the MoF sold UAH5.6bn of bonds on Tuesday and Wednesday, raising more than UAH5.8bn. If the MoF does not accelerate its expenditures, liquidity should decline significantly below UAH100bn this week.

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## Under pressure of anticipations

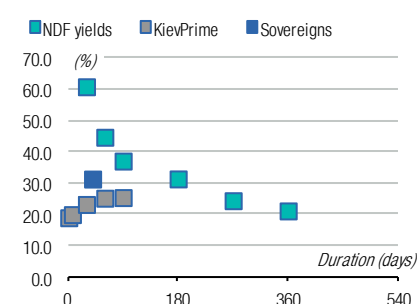
After receiving five bids for a total of UAH3.06bn at interest rates of up to 19.50%, the MoF rejected bids above Tuesday's cut-off interest rate and accepted two bids at 18.45% to raise UAH2.76bn in proceeds.

**Investment implications:** The significant increase in demand and high resulting sales could be the result of market anticipations of interest rates declining further. The NBU decreased its key rate by 3pp while interest rates on certificates of deposit were cut by only 100bp. It could decrease interest rates further. Meanwhile, MoF will hold a new auction in two weeks on 10 May, while it offers 3-year bonds on 17 May. Local currency could strengthen during the break until the next auctions, and this could cause an additional decline in market interest rates, for which the MoF could take full advantage over the next few auctions.

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## Yield curve of the local bond market

(as of market close on 27 Apr 2016)



Sources: Bloomberg, Investment Capital Ukraine LLC.

## Bond market indicators (as of 27 Apr 2016)

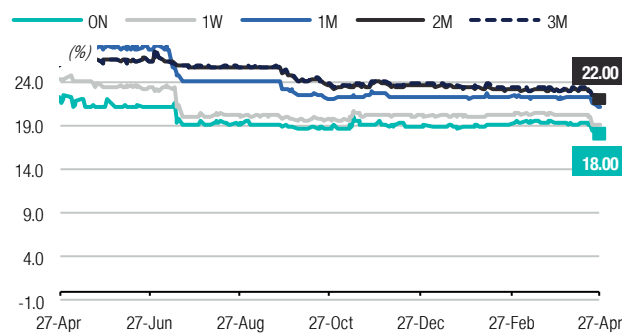
	Last	Daily	Weekly	MoM	YTD
	chg (%)	chg (%)	chg (%)	chg (%)	chg (%)
<b>MONEY MARKET KIEV PRIME RATES (%)</b>					
O/n	18.00	+0bp	-100bp	-138bp	-106bp
1wk	19.00	+0bp	-100bp	-131bp	-100bp
1m	21.00	+0bp	-117bp	-125bp	-125bp
2m	22.00	+33bp	-100bp	-113bp	-150bp
3m	22.00	+33bp	-100bp	-125bp	-175bp
<b>LIQUIDITY WIDE MEASUREMENT (UAHm)</b>					
CB acc's <sup>1</sup>	39,348	-9.59	-9.06	+8.93	+2.31
CDs <sup>2</sup>	61,945	+2.46	+3.87	+0.72	-28.63
Sovgns <sup>3</sup>	7,900	-26.30	-20.71	-9.53	+66.92
<b>Total</b>	<b>109,194</b>	<b>-4.80</b>	<b>-3.26</b>	<b>+2.67</b>	<b>-16.00</b>
<b>HOLDERS OF UAH SOVEREIGN BONDS (UAHm)</b>					
C.bank	385,399	+0.00	+0.00	-0.49	+1.47
Banks	120,369	-0.09	+0.38	+11.90	+47.57
Resid's <sup>4</sup>	13,949	+0.04	+4.04	+24.84	-33.57
Non-res <sup>5</sup>	22,646	-0.10	-0.96	-4.01	+1.52
<b>Total</b>	<b>542,363</b>	<b>-0.02</b>	<b>+0.14</b>	<b>+2.40</b>	<b>+7.47</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	N/A	N/A	N/A	N/A	N/A
Jun '16	67.67	+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.

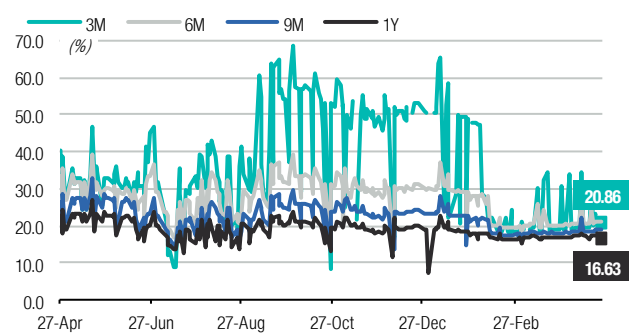
Chart page: Local bond market & Eurobond markets

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



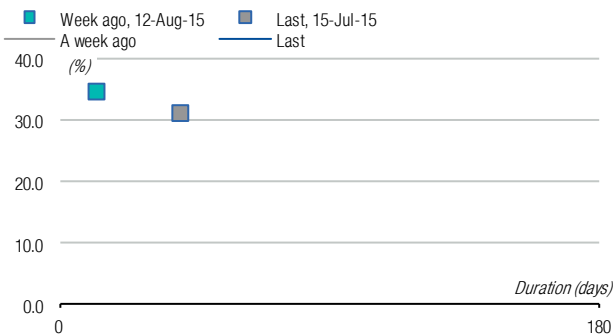
Sources: Bloomberg, Investment Capital Ukraine LLC.

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



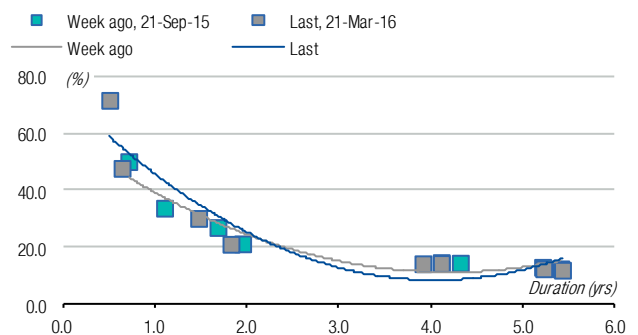
Sources: Bloomberg, Investment Capital Ukraine LLC.

Chart 3. UAH sovereign yield curve (%) as of 27 Apr 2016



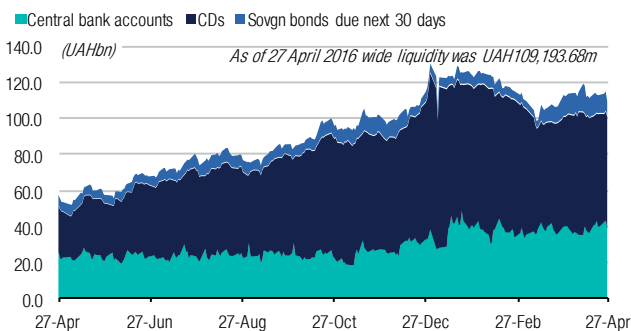
Sources: Bloomberg, Investment Capital Ukraine LLC.

Chart 4. USD sovereign yield curve (%) as of 27 Apr 2016



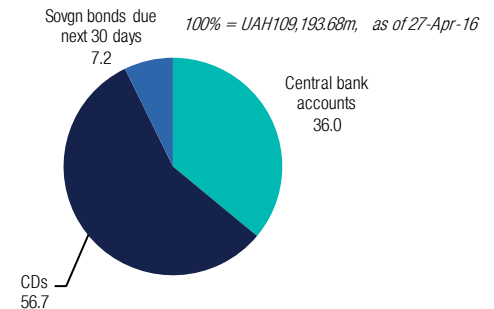
Sources: Bloomberg, Investment Capital Ukraine LLC.

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



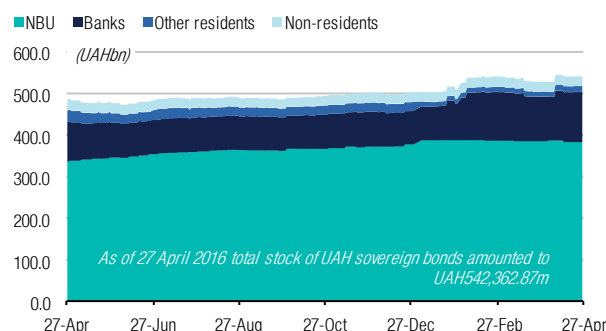
Sources: National Bank of Ukraine, Ministry of Finance of Ukraine, ICU.

Chart 6. Breakdown of liquidity pool (%) as of 27 Apr 2016



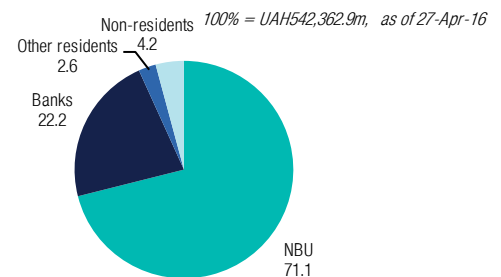
Sources: National Bank of Ukraine, Ministry of Finance of Ukraine, ICU.

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 27 Apr 2016



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

Table 1. Ukrainian stocks (closing prices as of 27-Apr-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	9.63 GBp	+0.0	-1.3	+18.5	+10.0	0.14	32.4	-16.7	40.2	13.0	0.0	15.2	0.27	365	Neg.	12.0	13.0	2.4	Neg.	Neg.	Neg.	Neg.	Neg.	0.4	15.3
Centrenerg	CEEN UK	Kiev, UX	6.79 UAH	+7.4	+41.1	+48.8	-17.7	0.27	99.6	87.9	21.7	21.6	34.1	16.7	0.08	1,255	35.5	Neg.	7.3	0.3	Neg.	2.5	0.3	0.3	0.2	1.0	4.2
Coal Energy	CLE PW	Warsaw	0.57 PLN	+1.8	-8.1	+7.5	-8.1	0.15	6.6	78.7	25.0	1.7	1.2	1.6	0.04	2,361	Neg.	N/A	N/A	10.8	N/A	N/A	0.7	N/A	N/A	0.2	56.9
Donbasenergo	DOEN UK	Kiev, UX	12.95 UAH	+7.4	-5.9	-17.8	-44.2	0.51	12.2	18.0	14.2	1.7	1.5	1.5	0.13	744	3.0	N/A	N/A	0.0	N/A	N/A	0.1	N/A	N/A	0.2	13.6
JKX Oil & Gas	JKX LN	London	21.00 GBp	+0.0	-14.3	-22.9	-29.4	0.31	52.5	61.0	47.2	24.8	0.1	12.9	0.07	1,377	Neg.	Neg.	Neg.	Neg.	2.4	N/A	0.7	0.8	1.0	0.3	13.0
Regal Petroleum	RPT LN	London	2.43 GBp	+5.4	-5.8	-35.3	-48.9	0.04	11.3	-22.1	80.9	9.2	1.4	2.5	0.01	7,486	2.0	N/A	N/A	Neg.	N/A	N/A	Neg.	N/A	N/A	0.2	0.0
Sadova Group	SGR PW	Warsaw	0.20 PLN	+0.0	-20.0	-33.3	-31.0	0.05	2.2	43.6	25.0	0.6	0.5	0.7	0.06	1,651	Neg.	N/A	N/A	Neg.	N/A	N/A	17.2	N/A	N/A	N/A	137.6
Zakhidenergo	ZAEN UK	Kiev, PFTS	49.10 UAH	+0.2	-19.5	-41.5	-67.3	1.95	24.9	55.8	5.0	1.2	0.7	0.4	0.03	3,101	Neg.	N/A	N/A	0.1	N/A	N/A	0.1	N/A	N/A	0.3	11.6
<b>METALLURGY</b>																											
Alchevsky Meta...	ALMK UK	Kiev, UX	0.01 UAH	+15.1	+1.7	-45.2	-60.6	0.00	6.2	1,636.6	3.9	0.2	0.2	0.1	0.06	1,758	Neg.	Neg.	N/A	0.6	Neg.	N/A	2.8	5.5	N/A	N/A	145.5
Avdiyivsky Cok...	AVDK UK	Kiev, UX	0.84 UAH	-15.2	-21.5	-23.9	-39.5	0.03	6.5	5.6	4.0	0.3	0.2	0.6	0.48	210	Neg.	N/A	N/A	Neg.	N/A	N/A	0.0	N/A	N/A	0.0	0.0
Azovstal	AZST UK	Kiev, UX	0.25 UAH	-1.2	+17.1	-36.5	-69.8	0.01	42.4	-12.8	4.1	1.7	3.8	1.6	0.11	901	1.2	N/A	N/A	Neg.	N/A	N/A	Neg.	N/A	N/A	0.0	0.0
Ferrexpo PLC	FXPO LN	London	35.75 GBp	+0.0	+27.7	+66.3	-54.9	0.52	306.6	1,174.2	22.4	68.7	195.1	600.7	0.97	103	9.3	3.7	4.9	8.5	5.0	5.7	1.2	1.3	1.4	1.3	73.7
Yasynivsky Cok...	YASK UK	Kiev, UX	0.13 UAH	-7.1	-35.0	-43.5	-56.7	0.01	1.4	2.0	9.0	0.1	0.1	0.9	0.03	3,761	Neg.	N/A	N/A	Neg.	N/A	N/A	0.0	N/A	N/A	0.0	0.0
Yenakievo Steel	ENMZ UK	Kiev, UX	6.35 UAH	+2.6	-14.8	-54.6	-63.7	0.25	2.7	-11.0	9.4	0.2	0.0	0.2	0.05	2,167	Neg.	Neg.	N/A	Neg.	Neg.	N/A	Neg.	Neg.	N/A	0.1	0.0
<b>FOOD AND AGRIBUSINESS</b>																											
AgroGeneration	ALAGR FP	EN Paris	0.36 EUR	+0.0	+9.1	-10.0	-28.0	0.41	40.2	97.2	34.0	13.7	84.4	27.3	0.57	175	Neg.	Neg.	2.4	4.8	4.3	4.4	1.3	1.5	1.5	0.6	83.5
Agroliga	AGL PW	Warsaw	15.50 PLN	-1.3	+18.3	+36.2	+82.4	4.00	6.2	7.4	16.7	1.0	0.9	3.9	0.52	191	2.0	N/A	N/A	2.0	N/A	N/A	0.4	N/A	N/A	0.6	10.7
Agroton	AGT PW	Warsaw	1.22 PLN	+1.7	+8.9	+20.8	+9.9	0.32	6.8	33.5	26.2	1.8	1.1	13.5	0.75	134	Neg.	N/A	N/A	1.5	N/A	N/A	0.8	N/A	N/A	0.2	33.4
Astarta Holdin...	AST PW	Warsaw	49.00 PLN	+0.4	+29.2	+42.0	+101.6	12.66	316.4	512.4	31.0	98.1	69.8	86.7	0.18	565	17.5	5.6	4.9	3.9	4.4	4.4	1.4	1.4	1.2	1.2	41.5
Avangard	AVGR LI	London Intl	1.00 USD	+0.0	-25.9	-20.0	-59.3	1.00	63.9	382.8	21.7	13.9	0.0	2.5	0.02	5,993	Neg.	5.8	N/A	Neg.	7.8	N/A	1.7	1.4	N/A	0.3	53.9
IMC	IMC PW	Warsaw	7.13 PLN	+1.9	+1.9	+19.4	+27.3	1.84	57.6	149.6	23.9	13.8	92.6	22.0	0.23	432	3.9	2.4	2.6	2.2	3.0	3.2	1.1	1.0	0.9	1.0	56.8
Kernel Holding...	KER PW	Warsaw	51.70 PLN	+0.7	-8.5	+7.5	+45.9	13.35	1,064.0	1,526.3	58.8	625.3	383.2	1,322.4	0.17	605	10.0	4.9	4.5	3.8	4.2	4.1	0.7	0.7	0.6	1.2	32.0
KSG Agro	KSG PW	Warsaw	1.40 PLN	-4.8	+34.6	+50.5	+75.0	0.36	5.4	68.7	34.4	1.9	3.7	11.3	1.21	82	Neg.	N/A	N/A	6.8	N/A	N/A	2.1	N/A	N/A	N/A	67.4
MHP	MHPC LI	London Intl	9.02 USD	+0.2	+14.2	-3.0	-19.5	9.02	953.1	2,201.2	22.3	212.7	147.4	462.4	0.23	427	Neg.	5.0	3.9	4.8	4.9	4.8	1.9	1.7	1.6	1.5	61.6
Milkiland	MLK PW	Warsaw	1.83 PLN	+0.0	+15.8	+28.9	-33.9	0.47	14.8	134.5	20.0	3.0	10.1	21.9	0.83	121	Neg.	Neg.	Neg.	9.8	27.0	15.0	0.4	0.6	0.7	0.1	42.5
Ovostar Union	OVO PW	Warsaw	94.50 PLN	+0.4	+1.6	+4.4	+26.0	24.41	146.4	154.9	25.0	36.6	0.3	12.1	0.01	11,006	4.7	5.4	6.8	4.5	4.8	5.8	2.0	1.6	1.5	1.9	16.9
<b>TRANSPORTATION</b>																											
KDM Shipping	KDM PW	Warsaw	2.95 PLN	-1.3	-20.1	-35.6	-29.4	0.76	7.1	-7.5	10.9	0.8	0.8	0.0	0.01	12,055	Neg.	N/A	N/A	14.6	N/A	N/A	Neg.	N/A	N/A	0.2	7.9
<b>CONSTRUCTION</b>																											
TMM	TR61 GF	Frankfurt	0.01 EUR	+0.0	-9.1	-85.7	-33.3	0.01	0.6	93.5	13.1	0.1	0.0	0.3	0.18	543	Neg.	N/A	N/A	Neg.	N/A	N/A	3.6	N/A	N/A	0.0	41.9
<b>FINANCIAL SERVICES</b>																											
Raiffeisen Ban...	BAVL UK	Kiev, UX	0.08 UAH	+4.4	+27.0	+2.9	-20.5	0.00	189.2	N/A	3.8	7.2	7.6	4.9	0.06	1,570	N/A	Neg.	7.6	N/A	N/A	N/A	N/A	N/A	N/A	0.6	N/A

Table 1. Ukrainian stocks (closing prices as of 27-Apr-2016)

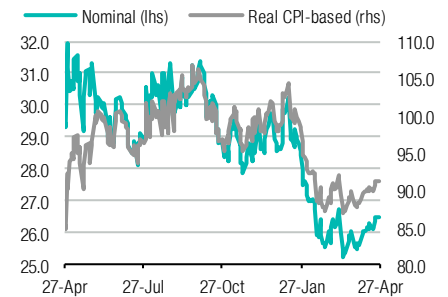
Company	Bloomberg Ticker	Listing	Share price performance (% change)				Valuation (US\$)			Free float (FF) & Liquidity						P/E			EV/EBITDA			EV/Sales			Ratios			
			Last price	Daily	MoM	YTD	YoY	Last price	Market cap (m)	EV (m)	FF (%)	FF mkt cap (US\$m)	Last day turnover (US\$ 000)	3M avg. turnover (US\$ 000)	FF share traded (%)	FF turnover (days)	2014	2015E	2016E	2014	2015E	2016E	2014	2015E	2016E	P/B	Debt/(x) Assets	
Ukrsotsbank	USCB UK	Kiev, UX	0.08 UAH	+0.0	+15.4	-24.1	-33.6	0.00	230.5	N/A	4.5	10.3	0.0	1.4	0.02	6,287	Neg.	Neg.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.3	38.2

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 28 Apr 2016)



Source: Investment Capital Ukraine LLC.

## FX market indicators (as of 27 Apr 2016)

	Last	Daily	Weekly	MoM	YTD
	chg (%)	chg (%)	chg (%)	chg (%)	chg (%)
<b>USD/UAH MARKET (HRYVNIA per US DOLLAR)</b>					
Spot mkt	25.1250	-0.20	-1.18	-3.18	+4.57
NBU avg	25.2151	-0.34	-0.77	-3.28	+5.99
Ttl vlm <sup>1</sup>	N/A	N/A	N/A	N/A	N/A
\$ volume <sup>2</sup>	N/A	N/A	N/A	N/A	N/A
NDF 3M	26.3750	-0.28	-1.12	-3.21	+0.00
NDF 6M	27.6750	-0.27	-1.07	-3.23	+0.53
NDF 1Y	29.1750	+0.60	-1.02	-2.10	+14.43
<b>TRADE-WEIGHTED INDICES (TWIs, points)</b>					
UAH nom'l	26.451	+0.01	+1.35	+1.56	-7.50
UAH real CPI	91.042	+0.01	+1.35	+1.56	-7.08
UAH real PPI	122.798	+0.01	+1.35	+1.56	-5.82
USD nom'l	94.387	-0.20	-0.11	-1.96	-4.30
<b>FX RATES OF KEY CURRENCIES THAT SHAPE UAH's TWIs</b>					
USD/RUB	65.1250	-0.47	-0.07	-4.47	-10.20
EUR/USD	1.1322	+0.22	+0.22	+1.39	+4.23
USD/CNY	6.4980	+0.07	+0.46	-0.28	+0.07
USD/PLN	3.8731	+0.00	+2.47	+1.47	-1.27
USD/TRY	2.8189	-0.11	+0.21	-1.98	-3.37
USD/BYR	19,622.00	+0.04	-1.03	-2.67	+5.34
USD/KZT	331.0100	-0.69	-2.07	-3.51	-2.82
<b>OTHER MAJOR CURRENCIES</b>					
USD/JPY	111.4600	+0.13	+1.47	-1.43	-7.29
GBP/USD	1.4543	-0.27	+1.47	+2.91	-1.31
USD/CHF	0.9711	-0.25	-0.11	-0.66	-3.09
AUD/USD	0.7591	-2.04	-2.60	+1.12	+4.19
USD/CAD	1.2599	-0.04	-0.44	-5.06	-8.96
USD/BRL	3.5271	-0.07	-0.07	-4.12	-10.95
USD/KRW	1,148.29	-0.24	+1.15	-1.79	-2.28
<b>COMMODITIES</b>					
Gold(\$/oz)	1,245.83	+0.19	+0.13	+2.41	+17.37
WTI crude <sup>3</sup>	45.33	+2.93	+6.33	+0.00	+22.38
Brent crd <sup>3</sup>	45.99	+2.47	+3.58	+16.31	+28.64
Urals crd <sup>3</sup>	N/A	+0.00	+0.00	+0.00	+0.00
TR/J CRB <sup>4</sup>	182.49	+0.55	+0.58	+5.99	+3.60

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>).

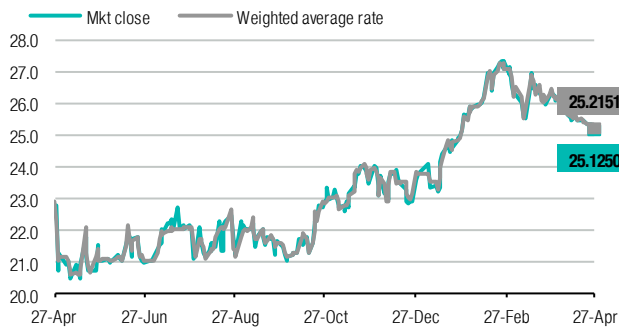
Section on FX market is continued on next page.

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.

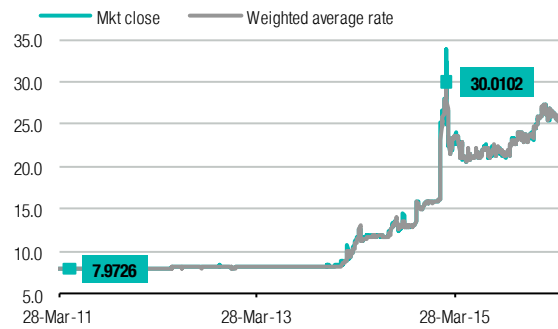
Sources: Bloomberg, Investment Capital Ukraine LLC.

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)

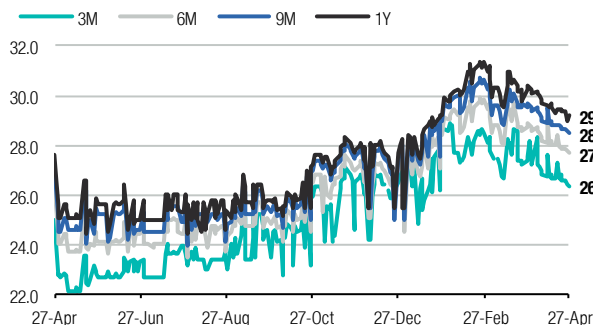


Sources: National Bank of Ukraine, Bloomberg, Investment Capital Ukraine LLC.

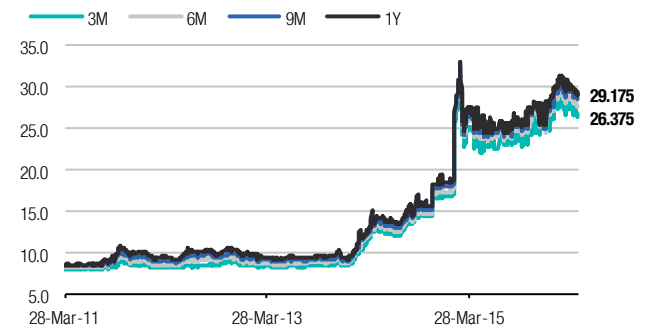


Sources: National Bank of Ukraine, Investment Capital Ukraine LLC.

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

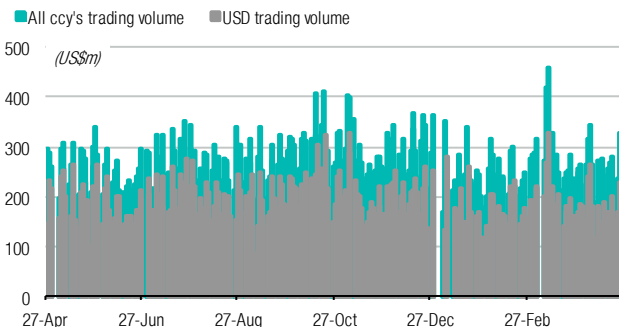


Sources: National Bank of Ukraine, Investment Capital Ukraine LLC.

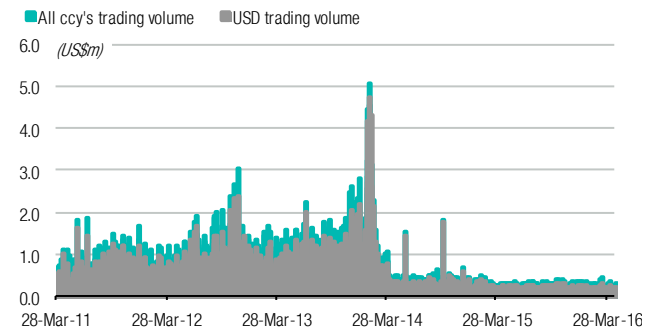


Sources: National Bank of Ukraine, Investment Capital Ukraine LLC.

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

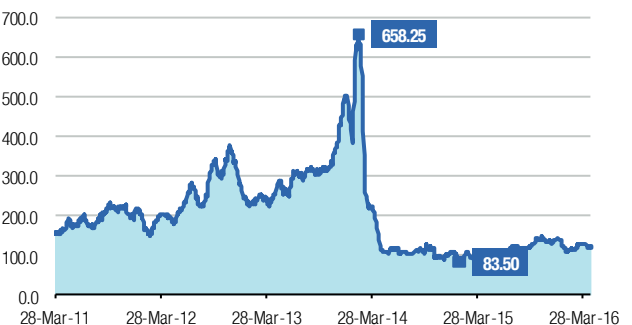


Sources: National Bank of Ukraine, Bloomberg, Investment Capital Ukraine LLC.



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)

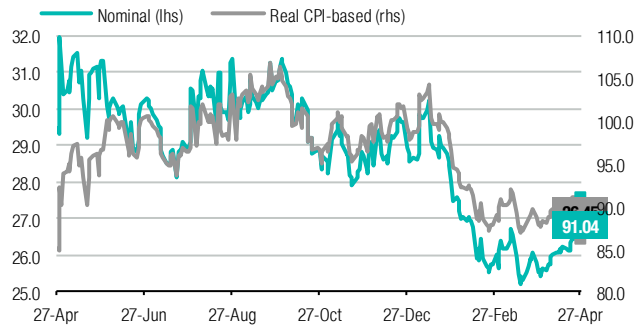


Note: \* 30-day moving average; The boxes of the right chart show high and low values. Sources: NBU, State Statistics Service of Ukraine, Bloomberg, Investment Capital Ukraine LLC.

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

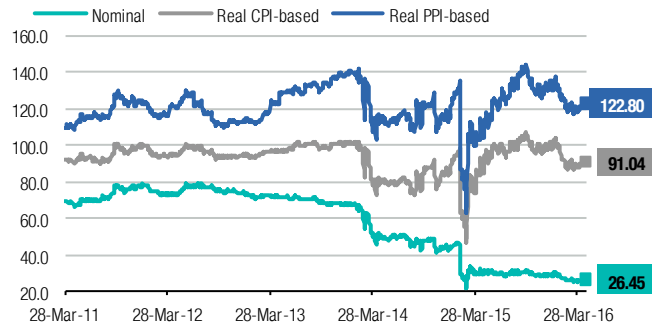
The following charts depict ICU's Ukrainian hryvnia trade-weighted indices which were calculated in accordance with methodology (for more details visit <http://www.icu.ua/en/research/currency-indices>).

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



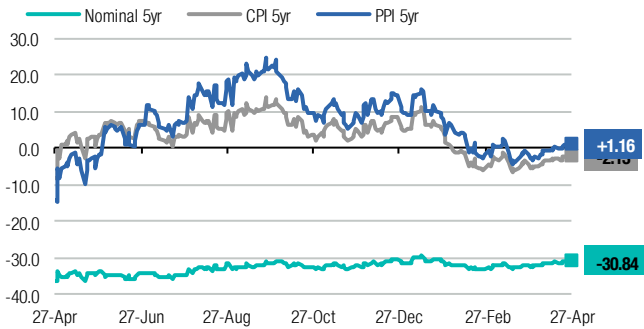
Note: The boxes indicate the last values of the depicted indicators.  
Source: Investment Capital Ukraine LLC.

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

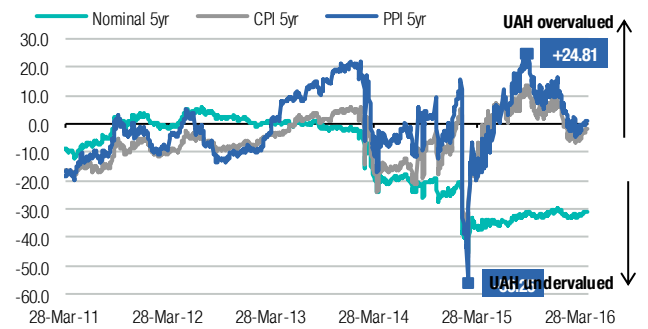


Note: The boxes indicate the last values of the depicted indicators.  
Source: Investment Capital Ukraine LLC.

**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)**

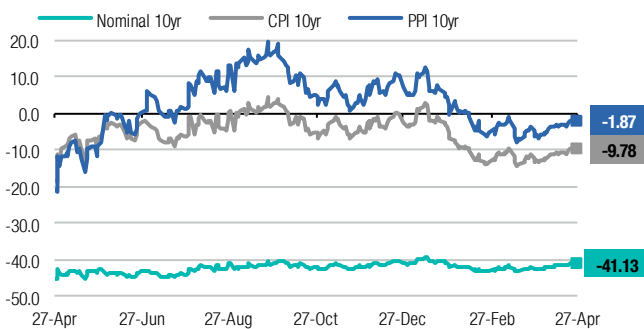


Note: The boxes indicate the last values of the depicted indicators.  
Source: Investment Capital Ukraine LLC.

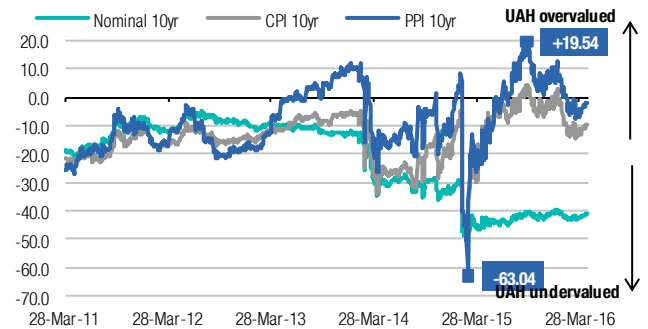


Note: the boxes indicate the high and low values of CPI-based TWI.  
Source: Investment Capital Ukraine LLC.

**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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## Disclosures

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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

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