

Quarterly Report

Fortifying a fragile economy



1 MARCH 2016

READ FIRST THE DISCLOSURES SECTION FOR IMPORTANT DISCLOSURES AND ANALYST CERTIFICATION

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Executive summary

This is a summary of our macro view for the next three-year period of 2016-18.

Recent economic performance: Out of recession and resuming recovery.

On February 15th, official statistics confirmed our own view that after an 0.5% real GDP increase in 3Q15 in seasonally adjusted quarter-on-quarter terms (QoQ SA), there was another quarter of real GDP increase in 4Q15. It turned out at +1.5% QoQ SA, while our estimates were in the range of 0.5-1.0% QoQ SA. Hence, Ukraine's economy, after the severe contraction of 2014 and early 2015, emerged from recession in the third quarter of 2015. It is likely to resume its fragile slow-paced recovery in 2016, given our base-case scenario assumptions. In total, our estimates yield a 2.6% increase in real GDP for this year, followed by 2.4% and 2.6% in the following years of 2017-18, respectively.

More details are to be found in the section of the report entitled, "Recent macro performance and short-term outlook" on pp.19.

Ukraine's politics: New government and coalition, no snap elections.

We tend to believe that local politicians are finding a way out of the current political crisis, which happened recently, after the departure of the minister of the economy, who was allegedly accused of corruption by the authorities. Some politicians—such as Ms Tymoshenko's faction and the Self-Help faction, which are minor members of the coalition—have left the ruling coalition, as they are eager for snap elections to take place, and expect that their recent success in the public surveys will translate into bigger factions in the next parliament. However, the major factions of the ruling coalition—such as that of President Poroshenko and PM Yatsenyuk—have a more complicated *modus operandi*. In our base-case scenario, they refuse to promote snap elections, as this would almost certainly result in protest vote and subsequently damage rather than improve their standings. Hence, our base-case scenario envisions the following development to take place over the next few weeks: a new coalition to be confirmed along with a government reshuffling. Then, the government spends the next half-year in sustaining the economic recovery—which emerged in 2H15, and is still fragile—to prove the new government is capable before a no-confidence vote is attempted this fall.

A more detailed rationale for the above can be found in the section entitled "Ukraine's domestic politics: No snap elections this year is our base-case scenario," found on pp.8.

Geopolitics: Still complicated.

Our base-case view in the geopolitical realm is that the Minsk agreements serve as a smokescreen for the Kremlin's quite complex geopolitical game, which is aimed primarily, first, at sustaining the Kremlin's high approval ratings from the Russian public; and second, at securing a smooth transition of power during the next presidential elections, which are currently scheduled for 2018. Furthermore, over the course of 2016-18, we do not expect that Ukraine's government will take over the now-occupied parts of Donbas and Crimea. Hence, we do not account for a boost to GDP for Ukraine from these territories.

More of this view can be found in the section "Russian aggression: No sign of ease; Minsk agreements a sham," on pp.6.

Global economy: A slowdown is our base case. Recent turbulence in the global financial markets has given birth to widespread discussion over the health of the developed market economies, which were believed to have seen renewed growth (albeit quite sluggish one) as early as a few months ago. In our view, this perception of heightened risk among the financial market players over macro developments is somewhat exaggerated. The US economy slowdown in 4Q15 in part provided proof of this market perception. Our past view, which we retained as late as last fall, was that due to financial market conditions in the US dollar foreign-exchange and debt markets which had tightened substantially over 2014-15., we thought the Fed's key rate increases would take place through the summer of 2016, then pause. Now we have adjusted our view bringing it closer to currently prevailing consensus in the markets: in 1H16, there will be another 25bp Fed Funds rate increase, then a pause in rate hikes through 2017. Thus, US dollar market conditions should ease somewhat— indeed, the US dollar index (DXY) has been on a downward trend recently.

In China, there is macroeconomic adjustment taking place, which is an extension of the developments of the past several years since 2012. A key element of this development is the CNY weakening, which is managed, in our view, and likely to extend inside the 6.5-7.0/USD range in 2016-17. Thus, economic growth is to slow further and gradually.

In the Eurozone, there is a sense that the past model of growth as practiced by Germany, the region's leading economy, cannot work in the same way it has. The country's current account surplus hit another historical record in 2015, exceeding its pre-2008 crisis peak. This year is going to be different from 2015, however, and again, a slowdown is our base case here, too, requiring another supportive effort by the ECB, as EU mainstream thinking is wary of fiscal stimulus.

More details are to be found in the section entitled, "Global economy," on pp.10-12.

Commodities: Stabilisation eyed. In the section "Key indicators vital for Ukraine's economy" on pp.17, we explain our view on the future path of the commodities prices. We believe there is a strong correlation between these prices and the US dollar, and in fact, that they are inversely correlated. With a firmer dollar, commodities prices trend lower, and *vice versa*. As explained in our "Global economy" section on pp.10-12, our base-case scenario assumes that the US dollar's 1.5-year-long appreciation is reversing in 2016: it has stabilised versus the currencies of developed-market economies, and is likely to do the same versus most emerging-market economy currencies (except China's, which is forecast to weaken gradually over 2016-17). Hence, this new trend (dollar's past appreciation turning into stabilisation and some mild weakening) should impact commodities' prices, and our view on these prices for 2016-18 is for stabilisation this year and some mild recovery in the following years. This said, however, we caution that FX market developments in China might create additional disturbances in the financial markets, and hence in commodities, although these will be temporary, and not affect the general trend.

Ukraine's macro stabilisation: Should be phased out over 2016; pro-growth macro push is new theme. Indeed, Ukraine's authorities—the government and central bank—were successful in achieving macro stabilisation over 2015. By official statistical data, the outcome of the past year was better than expected by several measures. One is public debt level that in December 2015 turned out to be at 81% of GDP by our estimates (79% by the estimates of the Ministry of Finance). This is far less, however, than the approximately 94% estimated for last year by the IMF (our estimates last year tended to be in the range of 95-100%). Another is the state budget balance was maintained with the help of a cushion in the form of a primary surplus, which reached a historical high in November 2015 of 3.8% of GDP. These data underline how the

government was working toward cementing a macro stabilisation of the economy, which just one year ago was experiencing acute financial distress in the form of run on the currency. Suppressing domestic liquidity to eliminate future runs on the currency was a key theme, not only for the government, but for the central bank as well. Its high interest rate policy contributed to that development. This approach had its benefits as well as costs, the latter of which were contributing to suppressed demand. In 2016, we expect a reversal of this development. This means that the government budget will run with an IMF-allowed deficit (yielding a quite small primary surplus; no more record-breaking primary surpluses) of 3.7% of GDP. At the same time, authorities would encourage banks to lend and businesses to borrow. The key policy rate should subside from the current 22% to 16.0% at the year-end 2016, despite the forecasted currency weakness. Positive bank credit flow is one of the key elements of our base-case scenario, which assumes a growing economy of more than 2% this year.

External balance: FX reserves build-up resumed. Our estimates of the balance of payments are based on the key assumption that the flow of external funding from the IMF and other donors is resumed in 2016, albeit not executed at the scheduled pace, as defined by the first review of the EFF last summer. Also, it is assumed that the controversial US\$3bn debt to Russia is being restructured (its repayment is assumed to be shifting beyond 2018). Our assumption for official borrowing in 2016 is US\$5.0bn, followed by US\$1.8bn and US\$1.8bn in 2017-18, respectively. This, together with expected current account balances for 2016-18 and private sector rollover ratios, yields for us a further build-up of FX reserves towards US\$20.5bn as of year-end 2016. In 2017-18, a reduction of FX reserves is forecasted on the back of a recovery in domestic demand yielding to wider current account deficits than in the 2015-16 period.

More details on the calculation results are found in the section, “External balance: Recovering domestic demand requires more flexible FX rate” on pp.40.

UAH: Mix of domestic inflation and fluctuating dollar still spells weakness. In our view, still double-digit domestic inflation, which is by far higher than inflation rates in Ukraine’s main trading partner economies, has a negative impact on hryvnia valuations. This inflation impact cannot be counterweighted by the positive factor of changing prospects for the US dollar, which is forecast to reverse partially its past appreciation versus major global currencies as seen over 2014-15. That is why we retain our past year’s view on hryvnia valuation, albeit with some corrections. The latter are due to our revised forecast over, first, inflation in Ukraine and in its main trading partners; and second, projected FX rates of the currencies of the main trading partners such as the Eurozone, Turkey, China, and Russia, to name just few. In the end, our forecast eyes the UAH’s average FX rate at 29.25/USD this year (a slight revision from the 30.75 cited in our previous *Quarterly Report* dated 1 October, 2015¹) and 33.75/USD, 34.00/USD in 2017-18.

¹ See pp.34-35, <https://www.icu.ua/download/1370/ICUQtlyReport-20151001.pdf>

Geopolitics & domestic politics

In our base-case scenario, there are two key assumptions in the area of Ukraine's domestic politics and geopolitics. First, the current "political crisis" is resolved within the next couple of weeks, and with a 60% probability, government and coalition reshufflings are to take place, avoiding snap parliamentary elections in 2016. Hence, the IMF programme is resumed. Second, our more-than-a-year-old scepticism over the Minsk agreements allows us to assume that the eastern part of Donbas and the border are to remain out of the control of Ukraine's government. The Russian military is not withdrawing.

Russian aggression: No sign of ease; Minsk agreements a sham

In our view, the Kremlin-led military aggression toward Ukraine has not revealed any sign of easing (although there is a fragile ceasefire on the front line) and it is likely to remain. The Minsk agreements, despite being negotiated with the participation of leaders of key developed nations, proved to be ineffective—we expressed our scepticism, backed with reasoning, in our short report on Minsk 2 published a year ago².

The key obstacle toward progress is the Kremlin's deeply ingrained refusal to backpedal from its military intervention in Ukraine. This Kremlin's behaviour is organic in nature. In short, since very early 2014, Mr Putin's popularity among Russia's public has been propped by his very military interventions abroad (Ukraine, Syria). The whole political narrative as defined and communicated to the public by the Kremlin was shifted from 'domestic stability' (in effect since the early 2000s through 2013) toward 'foreign instability' (enacted since very early 2014³). A ruthless Kremlin proved caring little toward casualties among its own military personnel, while its key aim has been to create a belt of foreign instability and put blame on outsiders for the country's poor economic performance—which was anticipated by Kremlin well back in 2012—and prepare for Putin's re-election as president in the next presidential elections (now scheduled for 2018) with a solid foundation of public backing. The foreign scare has been a big element of the Kremlin's plan, while domestic economic well-being has been abandoned, as the previous oil-run model of the economy wore out as early as 2012, and switching to a new model (yet untested and unknown) over such a short period of time was impossible.

Charts on next page capably depict the above. The Kremlin is very guarded about its standing in the public eye. Hence, it has been engaged in a PR spin of grandiose and unprecedented scale. Putin's popularity spiked from the lows of 2012-13 very rapidly

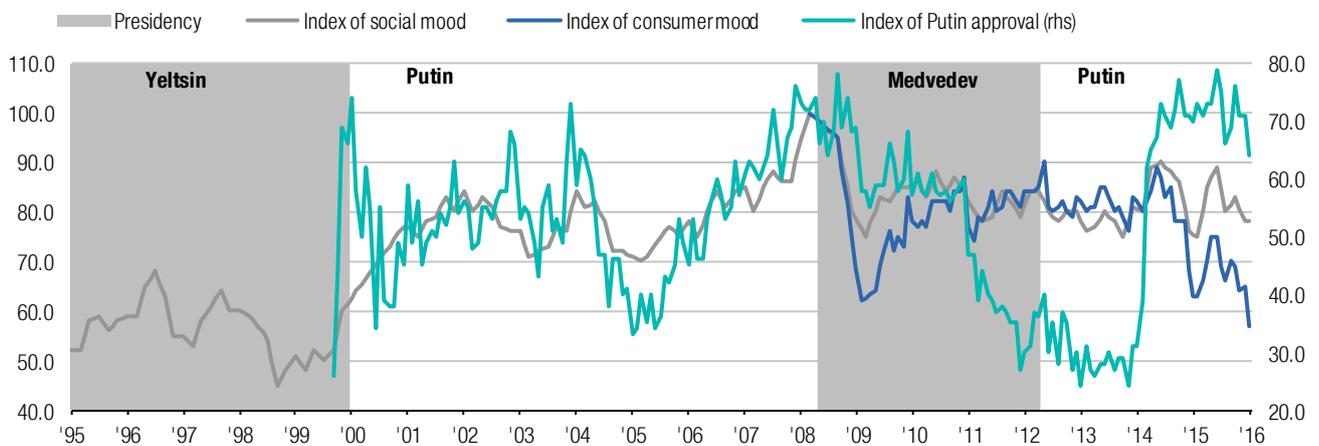
² *Economic Insight* "Minsk 2: Macroeconomic background," 13 February, 2015
<https://www.icu.ua/download/1126/ICUMacroInsight-20150213.pdf>

³ To be precise, the Kremlin enacted this policy and carried it out at an accelerating pace in 2H13. Then, it engaged in a trade war with Ukraine, banning some trade flows between Ukraine and Russia that would harm the food-producing sector of Ukraine, which employs quite a sizable labour force. Subsequently, it was active in pressing Ukraine's authorities to withdraw from its association agreement with the EU (November 2015), and then, when public protests erupted right after Ukraine authorities' rejection of the EU agreement, it advised then-President Yanukovich to crack down on protesters with physical force and introduce laws that ban the basic rights of a democratic society.

towards historical highs on its fabricated ‘Ukraine crisis’ story that helped it in annexing Crimea. Since then, it has held steady in the 70-80 points range, despite the fact that both the social mood index and consumer mood index have drifted lower. With oil in the US\$30-40/bbl range, the Russian economy has adjusted, massively impacting consumers as a result russian households of middle- and below-middle income have suffered. Nevertheless, there is little incentive for the Kremlin to reverse its ‘foreign instability’ narrative and take other measures to correct the problem, especially with Western powers attempting to persuade a resolution via ongoing negotiations. The negotiations are largely fruitless, however, as the Kremlin is unlikely to adhere to the Minsk 2 agreement by withdrawing its troops from Ukraine’s eastern territories (Donbass). As such, the Minsk agreements deserve scepticism; our base-case scenario envisages that the eastern parts of Donbas as well as Crimea are still not under the control of Ukraine’s government during the period of forecasted of 2016-18.

Chart 1. Putin approval index* versus indices of social mood and consumer mood

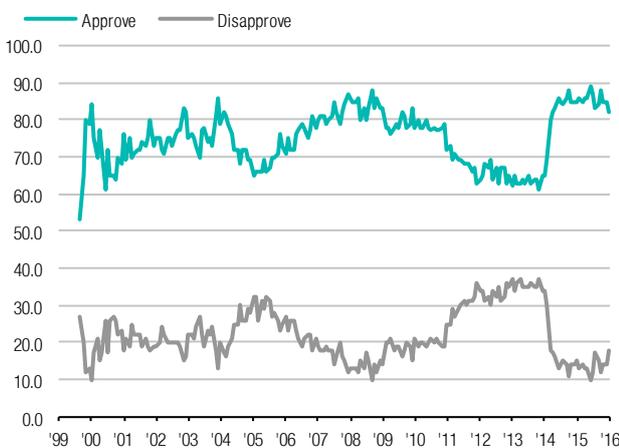
Monthly history from January 1995 through January 2016



* we use Levada’s methodology of calculating this index (see Chart 2), whose publication was discontinued by Levada in 2014. Source: Levada, ICU.

Chart 2. How is Putin’s approval index derived? It is the difference between those who disapprove him from those who approve

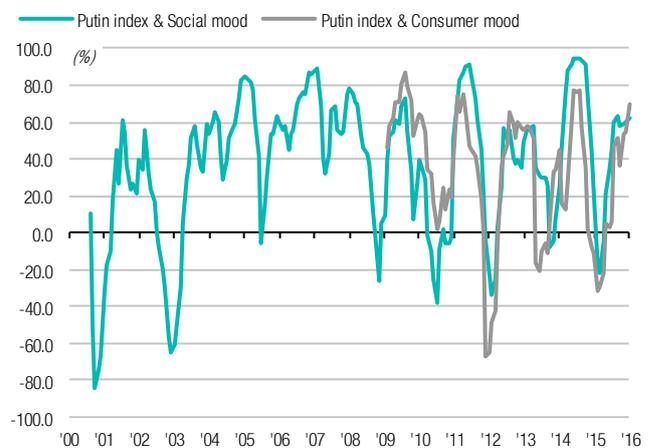
Monthly history from January 1999 through January 2016



Source: Levada, ICU.

Chart 3. Correlation between Putin’s approval index and: 1) index of consumer mood; and 2) index of social mood

Monthly history from January 1999 through January 2016



Source: Levada, ICU.

Ukraine's domestic politics: No snap elections this year is our base-case scenario

Ukraine politics have always existed as an arena of cut-throat competition. This atmosphere of extreme competitiveness is likely to remain so before it improves and matures into a more stable ecosystem.

One of the striking differences between the current state of politics and their state two years ago is the significant involvement of NGOs, which are referred to as civil society movements. While politicians are competing between each other, civil society's most vocal activists provide corrective impulses to the political competition. In our view, some of these impulses have been progressive and some destructive as to the future path of the economy. One such destructive impulse has been the issue of taxation and "big government". Over 2015, a destructive political campaign, in our view, was introduced into the public debate on cutting taxation as a means of overcoming the perceived "ineffectual big government". This became a mainstream idea. And, it contributed to the slowly unfolding political crisis that now reached its peak.

The government, rightfully opposed to these counterproductive policy recommendations, became a convenient target on which to place blame for consequences of the macroeconomic adjustment that took place in 2014-15. The accusations were fueled by a recent survey of public opinion in which the public approval rating of PM Yatsenyuk was again reconfirmed in the extreme low single-digit area. In our view, this act of blaming the government is partially misguided, as the economy has been in a tough environment for quite some time, and in many cases, the government has not been able to control the forces that have shaped this environment (such as foreign markets). In our view (as we explain in the section of this report entitled, "Ukraine's economy current shape & outlook" on pp.19), the authorities (the government and central bank) have managed to stabilise the economy, and the so-called macro stabilisation was achieved, albeit via painful social measures.

A parallel movement⁴ took on the issue of corruption, an issue that became a common scapegoat to blame for the poor economic performance of the recent past. It is now headed by the ex-president of Georgia, Mikheil Saakashvili, who is now a governor of the Odessa oblast and part of President Poroshenko's team. The issue of fighting corruption is highly popular among the public; hence, Mr Saakashvili's public standing was on the rise recently, as he proved to be most vocal and PR-savvy in this field. For Mr Poroshenko, Mr Saakashvili's relative success is a boon to his future political competition.

On snap parliamentary elections

Regarding the possibility of early elections in 2016, in our view, we see the probability of it at 30%. A rather smooth exit from the current political crisis within the next few weeks is likely (70% probability) where the coalition of the same parties remains in place. This is our base-case view.

In a worst-case scenario, if snap elections are called for this fall, the IMF programme is likely to be suspended, along with other donor funding. The uncertainty over a future coalition, whether it will resume IMF funding or not, would likely force another FX adjustment. This would take place on the assumption that there would be no return to the IMF funding programme in the near future (1.5-2 years). Hence, this likely assumption

⁴ To the one who took over the fight with 'big government.'

would entail an economy with current account surpluses to balance the capital outflows, as authorities would already be defending a relatively scant level of FX reserves. This adjustment would happen rather quickly, before this fall, further damaging consumer sentiment, and most likely, the outcome of the snap elections would be a protest vote by much of the public. Hence, the incumbent political parties at the core of the current parliament coalition would not gain more seats in the parliament.

On coalition and Yatsenyuk-led government

A recent corruption scandal, which cost the government the departure of economy minister Aivarus Abramavichus, injected additional impetus to the public debate on the government reshuffling. Hence, in our view, the society has seemingly passed a point of no return on the issue of installing a new government. There has been sizable accumulation of dissatisfaction with economy (high inflation, increased unemployment) and hence collapse of public approval of PM Yatsenyuk.

On February 16th, the parliament failed to gather a required majority of 226 MPs to pass a no-confidence vote. By constitution, a confidence vote in the government may not take place again until the next session of the parliament (approximately late summer-early fall this year).

However, the issue of a new coalition, which will be necessary for the launching of the new government has arisen as the recent departures from older government coalitions have put it at risk of survival.

Two minor factions (of Yulia Tymoshenko's bloc, with 19 MPs, and Self-Help, with 26 MPs) withdrew from the coalition, forcing the two major factions of President Poroshenko (136 MPs) and PM Yatsenyuk (81 MPs) to renegotiate the whole structure of the government. There is news that the 21 PMS-strong faction of Radical Party is eager to join the fray, eyeing a position in the government. To prevent the departures of liberal-reform-minded MPs, Mr Poroshenko's faction is required to strike a balanced deal with the rest of the coalition members, which would prioritise further reforms under the IMF umbrella, and take the most aggressive pro-reform stance of all other factions in the coalition. This approach will be made in order to counterweight, for example, Mr Yatsenyuk's less radical approach toward reforms, and to sideline possible attempts by the Radical Party for anti-austerity measures. Still this mixture of political views within the possible new coalition is more likely to be cohesive than to fall apart; the glue that will keep the new coalition together will be that these factions will be less willing to go into snap elections than the smaller factions that have left, as they are intent on performing well in the elections if they are held.

Prospects for PM Yatsenyuk's future as head of government have narrowed recently. He is well aware of this; hence should be very much focused on reviving the economic growth that appeared in the 2H15. If he is successful, then he could count on enjoying an approval rally in the political arena. Hence, the very fact that PM Yatsenyuk's has resumed his job is not a totally negative development in the bigger picture.

Global economy

Our base-case scenario assumes no new global crisis resurfacing in 2016. Rather, a global slowdown from the previous meagre growth rate in 2015 is seen in 2016, with a subsequent (but still anaemic) recovery in 2017-18.

Given the current turbulence in the global economy caused by continued geopolitical complications, the galvanised retreat in commodity prices, and worries over China's growth, we are leaning toward a contrarian view that arrives to the following conclusions.

First, US monetary policymakers should take a pause in rate-hiking this summer due to economic underperformance. The USD rally last year reached its ceiling in 2H15, and its trade-weighted index (DXY) should flat line or even subside this year.

Second, the Eurozone's recovery should decelerate, as the export-led model followed by Germany, the EU's largest economy, will be unable to function smoothly going forward, as EM economies have hit a major cyclical slowdown.

Third, China's macroeconomic adjustment should extend into this year, and the authorities should be able to manage this adjustment. This entails a further weakening of the currency, which in itself limits the recovery of commodity prices.

On balance, the global macroeconomic picture should evolve and avoid an outright crisis. Our base-case scenario calls for a global economic slowdown in 2016.

Outlook for the US currency and economy

After December's inevitable decision by the Federal Reserve Bank to start a gradual tightening of the Fed Funds rate, the December 2015 and January 2016 job reports on Non-Farm Payrolls kept the unemployment rate in a downward trend, to 5% and to 4.9%.

However, the last jobs report (for January 2016) and the reported real GDP for 4Q15 both came in as weak figures, with the latter at 0.7%, or just very close to the figure as measured by the *GDPNow* model of the Atlanta Fed;⁵ for the quarter, the expectation changed from an initial estimate of nearly 3% in October to 0.8% as of mid-January 2016, or just before the publication of the actual figure. This suggests that the US economy has been on a slowing path. Now, the *GDPNow* model that tracks 1Q16 growth rate yields a figure inside of 2.5-3.0% range. Still, the current figure, as it looks strong, does help to ease the market fears that the 4Q's weakness was not just a one-off event, and that the slowdown embraces the current year.

As an example, the continued weak reading of economic activity in the industrial sector as of January 15th showed that factory production once again fell 0.1% in December after contracting in November. The Producer Price Index (PPI) for December was negative, at (0.7)% MoM, while the on-year index was in the deflation territory for more than a year. This suggests that the industrial sector of the economy has been stagnating, moreover, as the market has observed the negative factor of recent dollar appreciation.

⁵ See <https://www.frbatlanta.org/cqer/research/gdpnow.aspx?panel=1>

Indeed, dollar appreciation has been substantial since mid-2014, as our own trade-weighted analysis suggest that the dollar is currently 13-17% overpriced, depending on which price deflator is used, CPI or PPI, respectively (see Chart 9, Chart 10 and Table 1 on pp.16). This observation brings us to another conclusion, which was confirmed by the Fed's recent decision to postpone its planned Fed Funds rate increase in late January 2016, that the future path of key interest rate increases in the US is likely to be one that is characterised by only very gradual moves. While many in the financial markets now expect no further rate increase in 2016, we retain the view, however, that one such move will take place before mid-summer this year, and then the Fed will pause hikes for some time to allow the US presidential election to unfold.

Hence, our snap analysis of the behaviour of the USD FX market in recent periods of monetary policy tightening (see Chart 4-Chart 6 on pp.14), lend support to our above-mentioned belief that future dollar valuation should help avoid steep appreciation.

However, in the event of global economic shock, which may arise from China's surprise FX market move to allow CNY devaluation (which is not our base-case scenario), the dollar may react by steep appreciation as a flight to safety of US financial assets would be a prevailing investment theme. In this extreme development, the likely response from the Fed would be the introduction of a lower Fed Funds rate to zero, or an introduction of a negative rate, as a recent *Financial Times*' column was touting as a possibility.⁶ Then, a subsequent swing in the FX markets is likely to take the form of a declining dollar. That is a worst-case scenario, however. In our base-case scenario, we expect that the global economy will be able to avoid shocks, albeit undergoing a global slowdown.

Eurozone: Its growth engine is vulnerable

In our view, despite a continued flow of relative upbeat news from the EU's economic field, there is a risk that the export-led growth model of Germany is not capable of surviving the current, and likely future, global economic environment, where emerging-market economies (except India) have been in either in recession or in protracted slowdown. Germany's current account surplus, which by the most recent data by Bloomberg for 2015 amounted to 8.4% of GDP—the record high level since the 1970s—is a reflection of the issue.

The problem is that Germany's economy obviously has been relying on external demand. Since 2015, commodity-reliant EM economies were brutally exposed to commodities' weakness as they collapsed. At the same time, China and the US have also been experiencing slowing economies. A chain of events similar to this across Latin America as well as Asia suggests that Germany's export-led growth model should adjust in the face of these developments. Inside the EU, German politicians have been the predominant policymakers who have shaped a way out of the Eurozone debt crisis for weak member states via a policy of strict state budget discipline. Hence, the EU's domestic demand is not a saviour for Germany's model, too. Hence, our point is that macroeconomic momentum in the EU and its main trading partners is negative to the EU's model, which naturally mimics Germany's, albeit on a much smaller scale and without the benefit of Germany's near full employment (with its most recent unemployment rate reported at 4%).

It should be noted as well that Germany's record current account surplus exceeds the previous record of 7.3% of GDP seen in mid-2008, ie, right before the global financial crisis

⁶ Gillian Tett, "Negative US interest rates take banks through the looking glass," 11 February, 2016, <http://on.ft.com/1Ke5dyG>

of that year. We are not saying that Germany's record external surpluses are harbingers of soon-to-come financial crises; rather, the global economy is to avoid another one in the near future. This just indicates that Germany's model has peaked at its limit and is logically going to reverse. In our view, weaker global demand would result in declining Germany exports and in smaller future surpluses. This, however, means that the Eurozone and EU are likely to be bracing for a slowdown alongside the US in 2016.

Going forward, in our view, the current FX rate of the euro at 1.13 is a challenge for the parts of the Eurozone that are highly indebted and struggling to grow. Hence, in 1H16, there is a high likelihood that the ECB will attempt yet another intervention with a bit more aggressive QE, which as a by-product, would correct the EUR's rate lower into the range of 1.05-1.1, which is our base-case scenario.

China: A soft landing is our base-case scenario

Since August last year, the FX rate issue among the Chinese authorities has received wide spread attention, including the attention of the most aggressive hedge funds. If a recent article⁷ in the *Financial Times* is correct, they are betting now on the CNY dropping as low as 8/USD, although there was no indication over when this would happen. Indeed, renminbi FX markets—both onshore and off-shore ones—have been rather nervous since last August, when a mini-correction of the USD/CNY rate was allowed by China's central bank.

The accelerated rate of the US' FX reserves decline, which contracted from US\$3.8trn to US\$3.3trn in 2015, and declined a further US\$0.1trn in January 2016,⁸ add fuel to bets on the future decline of China's currency. The market indicator of the ratio between the offshore market rate of the yuan (CNH) to the onshore market rate (CNY) has seen its largest diversions from 1.0x (representing a stasis, or zero nervousness) when the market's perception was focused on a future move in FX policy by China's central bank. Thus, in 2010 and 2011, there were false spikes in this ratio that did not follow with FX policy changes (see Chart 7, pp.15). However, in 2H15, the spikes in the ratio proved to be useful predictors of future FX policy changes.

Moreover, the divergence between the CNH and CNY has become more lasting and with nearly equal swings into both directions. This does not suggest that this ratio (with its swing in both directions summed to yield a near 1.0x ratio) has narrowed its power of predictability. Contrarily, its swings suggest that there is still a great deal of uncertainty in the markets. There are a number of indicators that the CNY has to adjust lower versus the US dollar. One such indicator is the BIS's calculation of the yuan's trade-weighted index in real terms. It says that despite the FX correction in August and over the fall of 2015, the real trade-weighted value of CNY is still dear.

Our own view is that the CNY is to continue weakening, and that Chinese authorities would not resist this trend. This said, however, they are equally likely to fight an abrupt run on the currency, resulting in a steep drop in the FX rate, like that mentioned at the beginning of this section on China, where hedge fund traders were allegedly betting on an 8/USD rate in the near future. In our view, this is a big adjustment for the CNY, if made over a short period of time. Our base-case scenario is that the CNY is allowed by China's central bank a

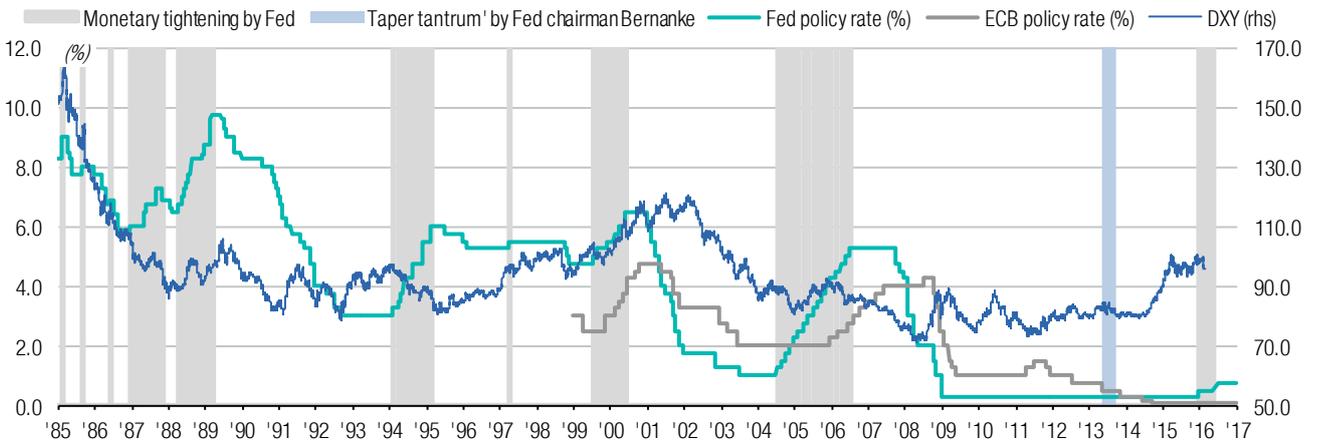
⁷ FT "Timing matters for investors betting against the currency and China's central bank," 9 February, 2016. <http://on.ft.com/1nUDd8N>

⁸ In total, China's FX reserves declined by a total of US\$0.6trn or US\$612bn during 2015 and in January 2016.

gradual weakening towards the 6.5-7.0/USD range over next 1-2 years. Undesired and disruptive FX market moves are likely to be resisted by China's central bank via a mix of higher interest rate policies, a higher reserve requirement ratio, and in an extreme case, by a tighter capital controls. This would be in line with the expected slowdown of the China's economy. No slide to a recession-type economy is likely to be seen in China in 2016 (or in 2017-18).

Chart 4. History of monetary tightening by the Federal Reserve from 1985 through 2015

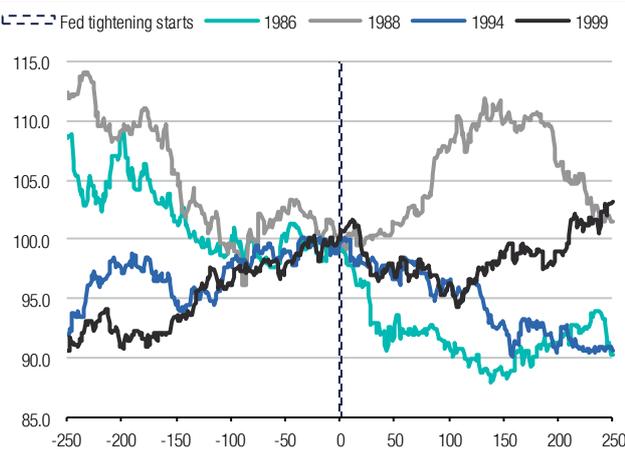
The Fed's key policy rate path versus ECB's key policy rate and the US dollar trade-weighted index (DXY)



Source: Bloomberg, ICU.

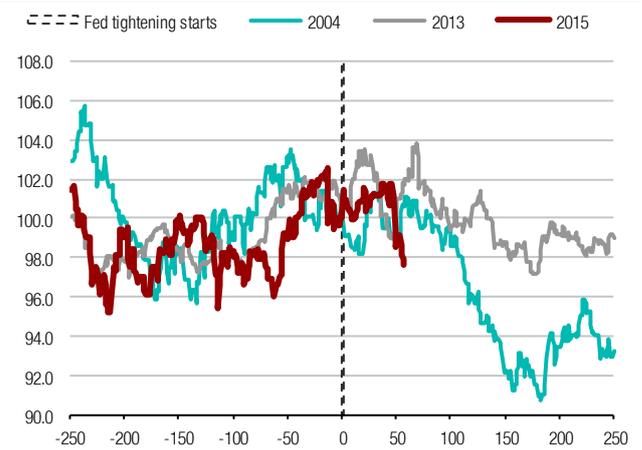
Chart 5. US dollar behaviour (via DXY) before and after the Fed tightening decision (the day when the decision on the first rate hike was made)

Four episodes of monetary tightening in 1980s and 1990s



Source: Bloomberg, ICU.

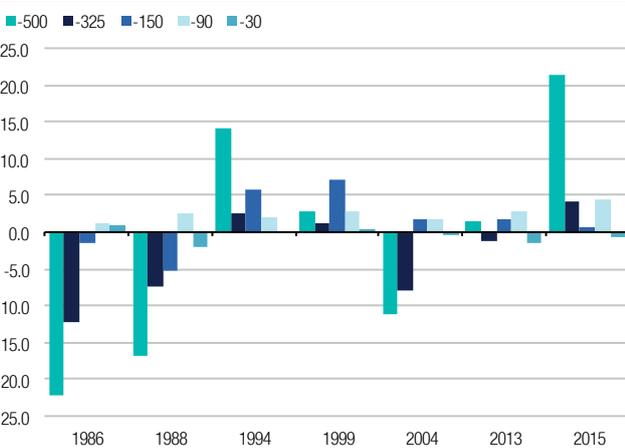
Three last episodes of monetary tightening since 2000s



Source: Bloomberg, ICU.

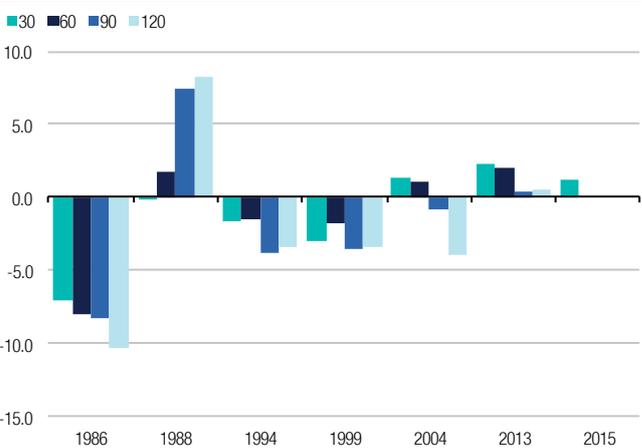
Chart 6. US dollar behaviour (via DXY) before and after the Fed tightening decision (the day when the decision on the first rate hike was made)

Days before the Fed decision. Percentage change of DXY between a certain number of days before the decision date and the decision date



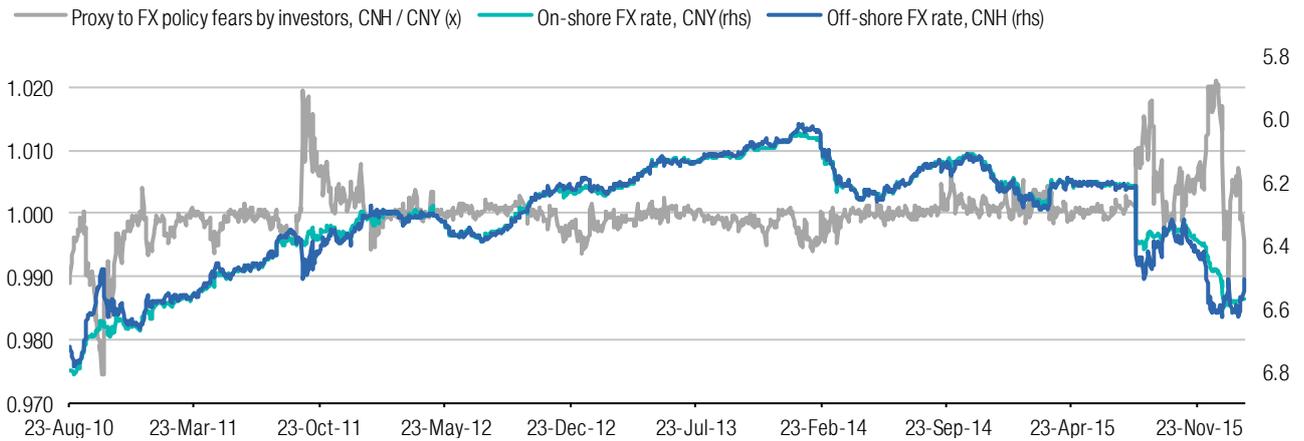
Source: Bloomberg, ICU.

Days after the Fed decision. Percentage change of DXY between the decision date and certain number of days after the decision date



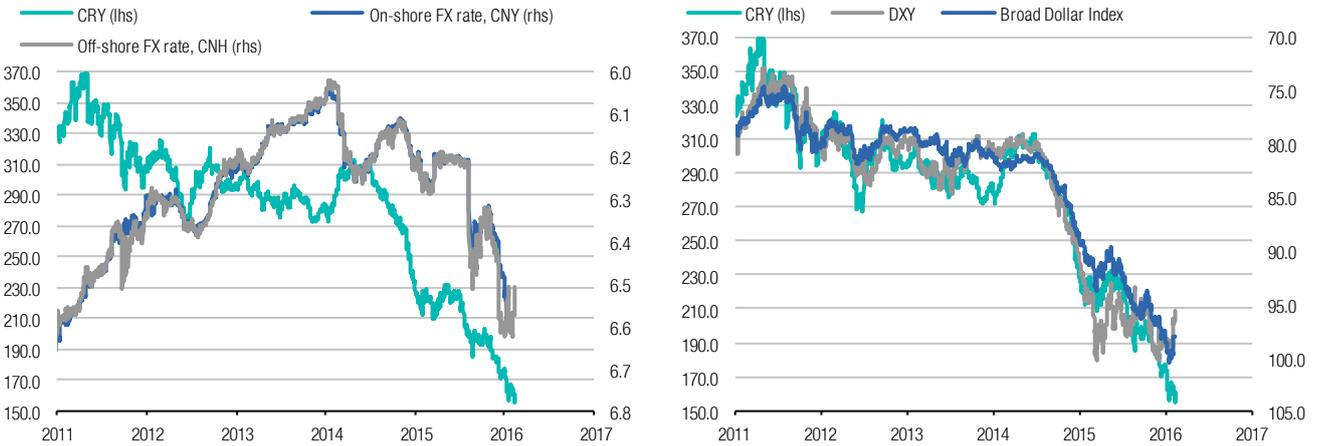
Source: Bloomberg, ICU.

Chart 7. China's yuan FX markets: on-shore market (CNY) versus offshore (CNH)



Source: Bloomberg, ICU.

Chart 8. Which economy—the US or China—shapes commodities markets? Thomson-Reuters commodities index (CRY) versus China's FX markets, left-hand chart, and versus the US dollar value as measured by narrow and broad indices, right-hand chart.

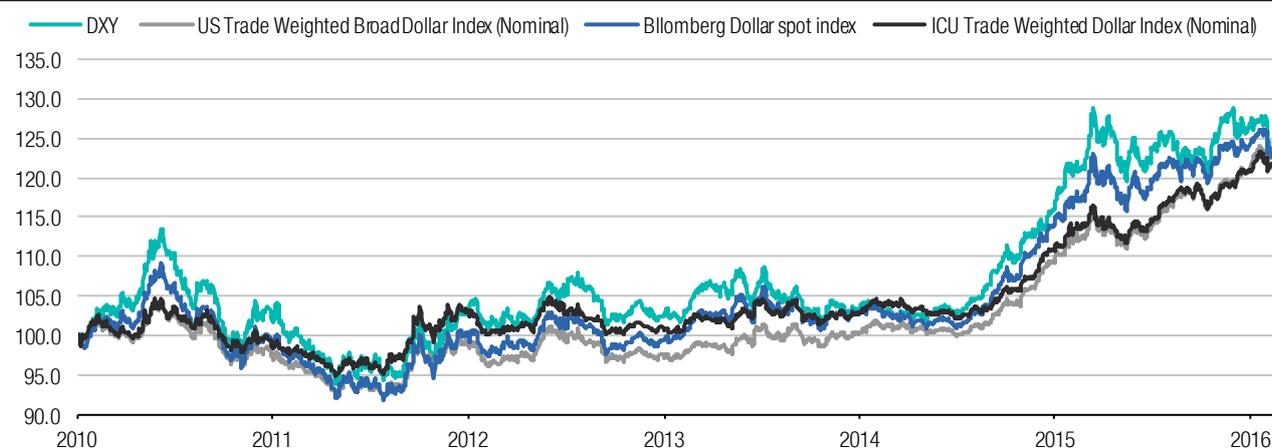


Source: Bloomberg, ICU.

Source: Bloomberg, ICU.

Chart 9. US dollar nominal trade-weighted indices: Narrow DXY, broad DXY, Bloomberg, ICU

Daily history of the indices since 1 January 2010 through 11 February 2016. Rebased at 100 points as of 1 January 2010.



Source: Bloomberg, ICU.

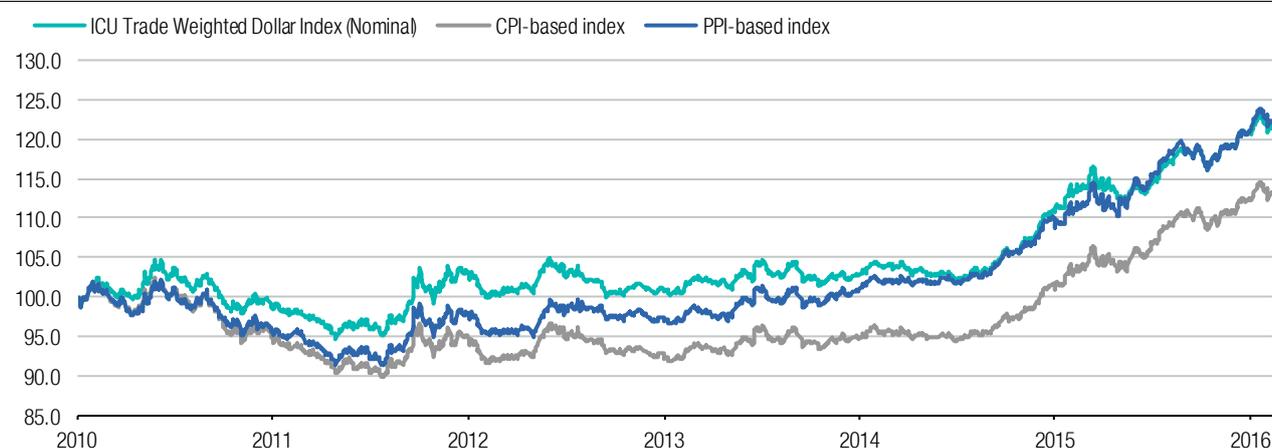
Table 1. Correlation ratio between ICU's nominal trade-weighted index of the US dollar to the nominal dollar indices, provided by Bloomberg (daily history of the indices since 1 January, 2010 through 11 February, 2016)

	Trade Weighted Narrow Dollar Index (DXY)	Trade Weighted Broad Dollar Index*	Bloomberg Dollar Spot Index	ICU Trade Weighted Dollar Index
ICU Trade Weighted Dollar Index (Nominal)	96.54	98.92	98.19	100.00

Note: * USTWBROA Index. Sources: Bloomberg.

Chart 10. ICU's nominal and real trade-weighted indices

Daily history of the indices since 1 January 2010 through 11 February 2016. Rebased at 100 points as of 1 January 2010.



Source: Bloomberg.

Key indicators vital for Ukraine's economy

Growth assumptions

Our base-case scenario envisages a real GDP growth rate of the global economy at 3.2% in 2016 (instead of the 3.8% predicted in our previous report dated October 2015). This expectation rests on the fact that the IMF recorded a 3.1% YoY global rate in 2015; hence, this year's growth rate is going to be only marginally higher than that of the previous year. In 2017-18, we stick with the current IMF view of 3.6% for 2017, which is assumed by us to be maintained in the following year, too. For the Russian economy, we assume an extension of the recession and full-year growth rate of minus (2.0)% in 2016 and then a recovery in 2017-18 to the tune of 1.5-2.0%.

Commodities

The table and charts below depict our base-case scenario on the key commodities that are vital for Ukraine: crude oil and steel. The recent decline in commodities prices was both profound and mostly unanticipated only a year ago.

The question is: Is there any floor under the key commodities? Chart 8 on p.15 attempts to portray an answer to this. This chart depicts two economies—the US and China—and how commodities prices (expressed by the CRY index⁹, which is used as proxy to whole universe of commodities) are dependent on them.

Both economies are now the largest globally by size. But, their impact on commodities is rather different. However, the US' impact on the prices of commodities is driven via domestic innovation and, to more of an extent via monetary policy—as commodities are priced in US dollars and fixed investments¹⁰ by commodity exporters are made largely via global financial markets' borrowings in the US dollar, as well.

China's economic impact on commodities, on the other hand, is only expressed in terms of it being a large consumer, prone to absorbing all different types of commodities from the producers. The recent series of indications of overcapacity in China and a general slowdown of its economy have put downward pressure on commodities. With an expected further slowdown in China, this factor will stay in play.

The impact of the US economy on commodities is more complex, and ultimately, tied to US dollar valuation. Thus, tighter monetary conditions have not only resulted in USD appreciation, and hence lower commodities prices, but have also brought up borrowing costs in the US dollars for the commodities producers. In the recent past, when USD funding rates were favourable, these producers leveraged themselves to spend more on capital expenditures in order to produce more output in the future. Now, as borrowing costs head up, the risk of refinancing is rising, too, and this, together with lower prices and bigger output (financed by USD debt) is now pressuring the oil producers, as creditors assess reduced credit quality of these borrowers. Hence, the correlation between the CRY index and USD trade-weighted indices is inverted, and pretty much greater than 96%. The correlation between the CRY and CNY is much lower.

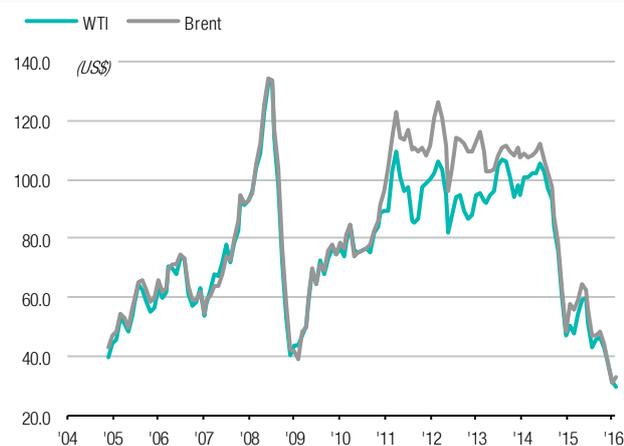
⁹ Thomson Reuters/CoreCommodity CRB Commodity Index
<http://www.bloomberg.com/quote/CRY:IND>

¹⁰ Capital expenditures (CAPEX).

Hence, as our base-case scenario assumes that the US Fed will be very cautious going forward, and markets are beginning to acknowledge this, as trading in the DXY index away from the 100-point threshold suggests that the CRY index is likely to correct as well (It was up nearly 5% on Friday, 12 February, 2016).

Chart 11. Crude oil price (US\$ per barrel)

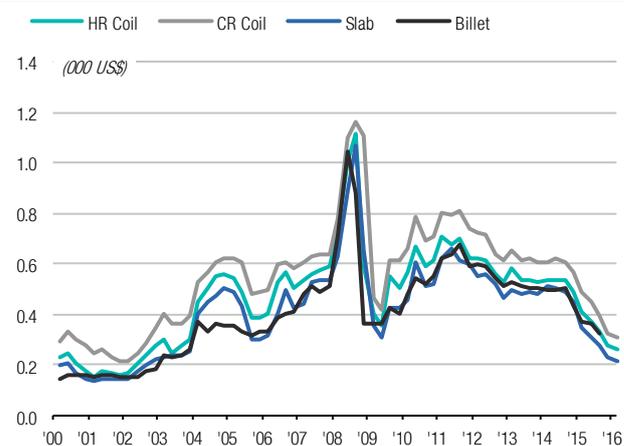
Monthly averages



Sources: Bloomberg, ICU.

Chart 12. CIS export steel prices (US\$ 000s per tonne)

Quarterly averages



Sources: Bloomberg, ICU.

Table 2. ICU's 3-year quarterly and yearly forecast for the global economy's key indicators vital to Ukraine's economy, according to our base-case scenario for 2016-18

	Quarterly forecast												Annual forecast		
	1Q16F	2Q16F	3Q16F	4Q16F	1Q17F	2Q17F	3Q17F	4Q17F	1Q18F	2Q18F	3Q18F	4Q18F	2016F	2017F	2018F
World real GDP (%YoY)	3.2	3.2	3.2	3.2	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.2	3.6	3.6
Russia real GDP (%YoY)	-2.0	-2.0	-2.0	-2.0	1.5	1.5	1.5	1.5	2.0	2.0	2.0	2.0	-2.0	1.5	2.0
Crude oil (US\$/bbl, avg)	31.5	32.0	32.5	33.0	33.4	33.8	34.2	35.0	36.0	37.0	38.0	40.0	32.3	34.1	37.8
Steel (US\$/tonne, avg)	256.0	232.0	237.0	242.0	250.0	257.0	265.0	272.0	272.0	272.0	272.0	272.0	241.8	261.0	272.0
EUR in US\$ (eop)	1.12	1.10	1.09	1.08	1.08	1.10	1.10	1.10	1.11	1.12	1.13	1.13	1.08	1.10	1.13
US\$ in RUB (eop)	80.00	82.00	78.00	79.00	80.00	80.00	82.00	84.00	84.00	84.00	84.00	84.00	79.00	84.00	84.00

Notes: [1] real GDP growth rate to previous year; [2] crude oil price is WTI crude and priced as per barrel; [3] steel price is HR coil price and priced as per tonne; [4] crude oil and steel prices are the average for the period.

Source: ICU.

Ukraine's economy current shape & outlook

In our view, Ukraine's economy has come out of recession in 2H15, and has fair chances for a slow-paced recovery of within 2-3% YoY in 2016-18, as the past two-year period of deep recession and steep debt deflation of the private sector economy is likely behind us. However, this reverse process will not yield a fast-paced economic recovery.

Recent macro performance and short-term outlook

Over 2H15, Ukraine's economy has emerged from a six-quarter-long recession, according to the official statistical data for the 3Q and 4Q.

Thus, official statistics for real GDP's change in 3Q revealed that the economy increased by 0.5% QoQ in seasonally adjusted terms. This still corresponded to a 7.2% decline in year-on-year terms in the period. This data led us to declare that Ukraine's economy had finally come out of the recession that started in the first quarter of 2014 by the third quarter of 2015.

The monthly statistical data on key sectors of the economy for October-December 2015 (see Chart 13-Chart 18 on pp.20 and Table 3 on 21) suggest that the economy expanded over the last quarter of 2015 in seasonally adjusted quarter-on-quarter terms. Out of all sectors, all but cargo transportation and agriculture showed growth.

In agriculture, there was a contraction of merely 0.02% QoQ in the seasonally adjusted index of output, which was likely a reflection of the fact that past year's harvest came in a bit short of the record one seen in 2014. Cargo transportation was in retreat over the 2H after the relatively strong recover seen over the 1H. At the same time, retail trade, passenger transportation, and construction posted quarterly recoveries of more than 4% each. In particular, the construction sector saw a kind of mini-recovery after a months-long stagnation by delivering a 7.3% QoQ increase (albeit from a low base). All in all, our composite index, which tracks economic activity in key sectors and is used as a kind of proxy to GDP, recorded a 0.9% increase QoQ.

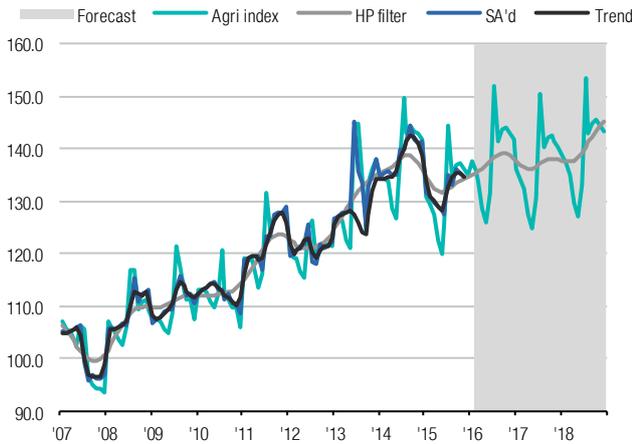
Based on the above-mentioned information, our estimate of the 2015 full-year real GDP change amounts to 10.2% YoY, implying that in 4Q15, real GDP was still in decline by a 1.0% rate¹¹. This is better than we had previously forecast in our previous *Quarterly Report*¹² – then, our view on 3Q and 4Q was -10.7% and -9.7% year-on-year, respectively, while 3Q turned out to be -7.2%, and our own calculation method for 4Q was enhanced to include a base period adjustment for territories under occupation by Russia's military (Crimea and parts of Donbas).

¹¹ Official statistics revealed minus 1.2% YoY in 4Q15, or +1.5% QoQ SA.

¹² *Quarterly Report* "Militarism fronts economic faults", 1 October 2015.
<https://www.icu.ua/download/1370/ICUQlyReport-20151001.pdf>

Chart 13. Agriculture production index

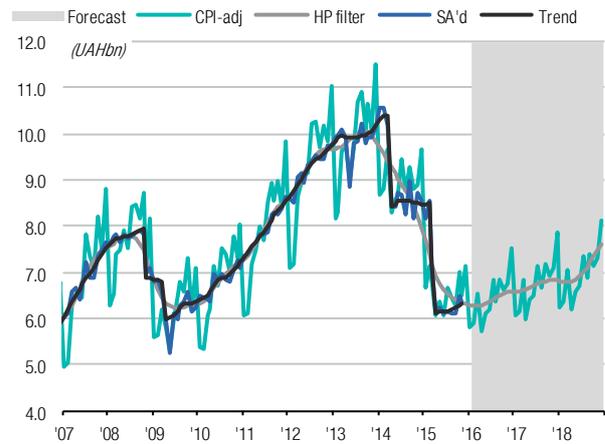
History (from January 2007 through August 2015), forecast for the rest of 2015 and 2016-18



Source: State Statistics Service of Ukraine, ICU.

Chart 14. Retail trade (UAHbn, at constant prices of Dec-1999)

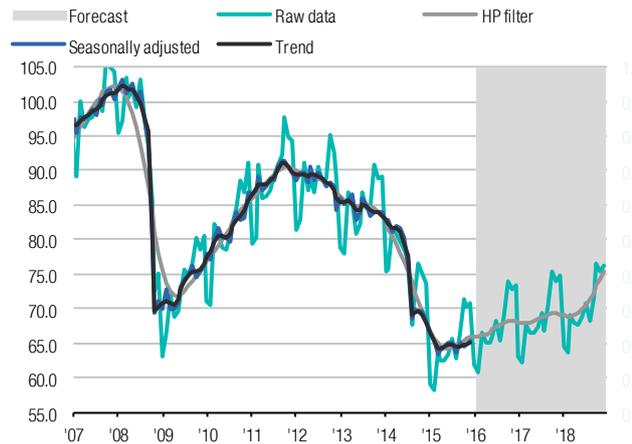
History (from January 2007 through August 2015), forecast for the rest of 2015 and 2016-18



Source: State Statistics Service of Ukraine, ICU.

Chart 15. Industrial production index

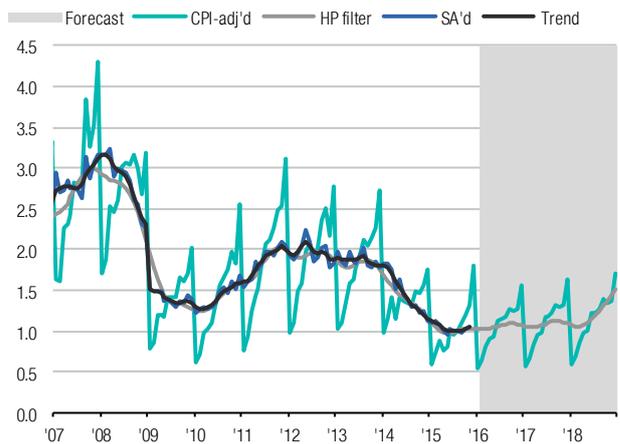
History (from January 2007 through August 2015), forecast for the rest of 2015 and 2016-18



Source: State Statistics Service of Ukraine, ICU.

Chart 16. Construction (UAHbn, at constant prices of Dec-2001)

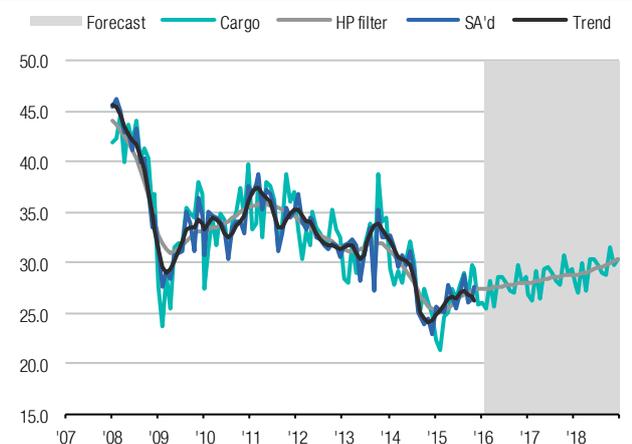
History (from January 2007 through August 2015), forecast for the rest of 2015 and 2016-18



Source: State Statistics Service of Ukraine, ICU.

Chart 17. Cargo transportation turnover (m tonne * km)

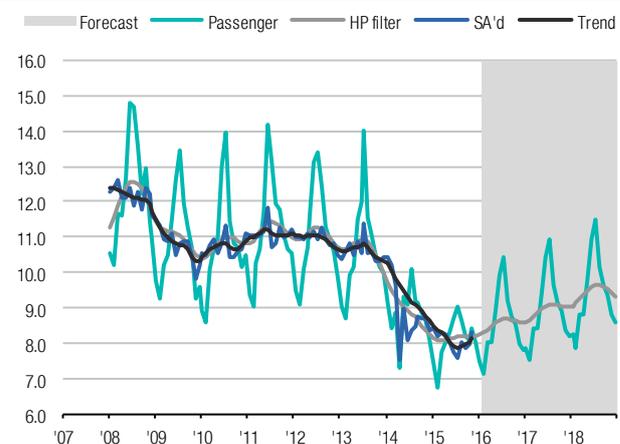
History (from January 2007 through August 2015), forecast for the rest of 2015 and 2016-18



Source: State Statistics Service of Ukraine, ICU.

Chart 18. Passenger transportation turnover (m * km)

History (from January 2007 through August 2015), forecast for the rest of 2015 and 2016-18



Source: State Statistics Service of Ukraine, ICU.

As for the period of forecast, ie, the next three-year period of 2016-18, our previous forecast for 2016 of real GDP increase by 2.7% YoY was just slightly revised downward to +2.6% YoY currently. In the next two years of 2017 and 2018, our forecast was revised upward from +2.0% YoY each year towards +2.4% and 2.6%, respectively, in year-on-year terms.

We upgraded our view on the future contribution of domestic bank lending to economic activity, ie, this positive contribution is expected because the past impact from banks was quite negative (domestic credit contraction at current prices was a record one in 2015,) and it did contribute to double-digit real GDP contraction last year. Hence, we tend towards a view that it is in the hands of Ukraine's authorities to revive bank lending, which would support real GDP growth, while Ukraine's authorities are much less capable of impacting foreign demand for domestic produce.

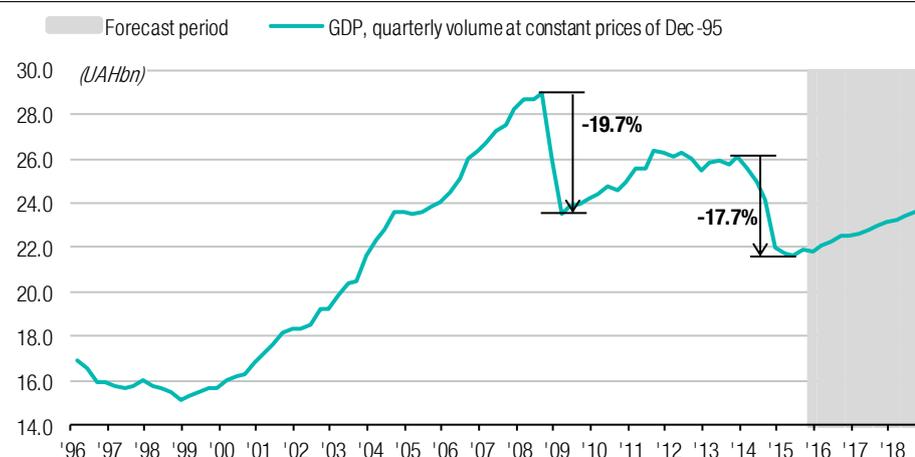
Table 3. Performance of key sectors of Ukraine's economy in December and October-December

Sector's Indicator	Seasonally adjusted*			Trend*		
	Change ¹ (%MoM)	Change ² (%QoQ)	Change ³ (%YoY)	Change ¹ (%MoM)	Change ² (%QoQ)	Change ³ (%YoY)
Agriculture index	+0.04	-0.02	-4.8	+0.1	+0.7	-2.7
Retail trade, retailers (UAHm, CPI-adj)	-0.5	+4.5	-26.0	+0.3	+2.3	-25.1
Transport turnover, cargo (tonne*km)	-12.9	-4.5	+4.9	-3.4	-3.8	+4.4
Transport turnover, passenger (passenger*km)	-0.9	+4.4	-1.4	+0.3	+2.4	-5.5
Industrial production index	+0.9	+0.2	-4.4	+0.3	+0.3	-4.5
Construction (UAHm, CPI-adj)	+7.4	+7.3	+0.5	+2.7	+5.6	-5.6
Composite index	-1.1	+0.9	-10.0	-0.1	+0.6	-9.5

Notes: * adjusted by Demetra using adjustment method of Tramo-Seats; [1] month-on-month change of December of 2015 to November 2015; [2] quarter-on-quarter change of October-December of 2015 to July-September of 2015; [3] year-on-year change of December of 2015 to December of 2014.

Source: State Statistics Service of Ukraine, ICU.

Our positive revision to the real GDP forecast for 2016-18 is, in fact, pondering a marginal economic recovery. The chart below depicts future expected expansion of GDP, and shows that the size of Ukraine's economy at the end of 2018 is going to be still short of the pre-2014 crisis peak by 10.5%, according to our forecast. This forecast recovery is quite modest, not only versus the 2014-15 recession, but even much more versus the 2008-09 recession.

Chart 19. Size of Ukraine's economy: history of 1996-2015 and forecast for 2016-18 (UAHbn)*At constant prices of December 1995, seasonally adjusted data*

Source: State Statistics Service of Ukraine, ICU.

What structural macro changes took place in 2015, what to expect next

Over 2014-15, there has been a tendency towards structural changes in the economy, especially in the way in which incomes generated by whole range of economic activities were redistributed. The charts below (see Chart 20-Chart 23 on p.24) reveal how quickly the position of wage earners (as measured by share of wages in GDP) declined in 3Q15 to an all-time low of 35%, implying a 41% ratio on the last-12-month rolling basis that is also an all-time historical low.

Such a reduction was counterweighted by two factors: 1) share of profits of economic agents (businesses) rose to 49.7% in 3Q15, up from 45.0% the same period a year ago, and 2) the share of taxes increased to 15% in 3Q15, up from 11.9% the same period a year ago.

It should be noted that the share of profits reached an all-time high for quarterly data, while on a last-12-month rolling basis, it advanced to 42.5% in 3Q15, a bit short of the all-time high of 44% seen throughout 2002-04 (Chart 22, pp.24). At the same time, the share of taxes on a 12-month rolling basis advanced to 16.4% in 3Q15, while still below the historical high of 21% in the late 1990s.

This recent trend, which has been seen through the third quarter of 2015, is likely to extend into 4Q15, while starting in 2016, in our view, it will head in reverse. The wage share is to recover towards, 50% while the profits share is pared down to its normal of 36-38% range and taxes remain at the relatively elevated level of 12-16% (but still substantially lower than the 20% of the late 1990s).

These structural changes in GDP structure by type of income helps us draw the following conclusions:

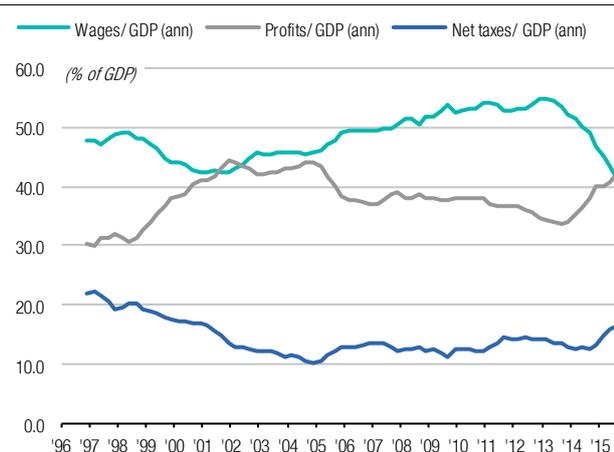
- First, authorities are to support wage earners by supporting public wages via nominal wage increases as prescribed by state budget law (for 2016 as well as for future state budget laws). Another way to support them is via encouraging non-state businesses to review their wage policies towards nominal wage increases. President Poroshenko,

during one of his press conferences, recently touched on that issue (wages in private sector businesses).

- Second, those tax legislation initiatives on reducing wage earners' tax burden are to stay,¹³ while all the talks and lobbying on reducing tax burden on businesses is likely to be toned down as such that does not correlate with reality and true economic needs.
- Third, politically it will be quite challenging to keep wage earnings restrained. It should be noted that over 2015, not only did wage share drop to a historical low; our calculations on the average hourly wage in US dollar equivalent dropped to US\$1.3/hour¹⁴ in 1Q15 (in percentage terms, it declined 53.2% YoY) and stayed at that level through 3Q15. The last time the average hourly wage was at this level (in nominal terms) was back in 2006. To conclude, authorities are likely to be careful to mitigate social discontent with the lower purchasing power of their basic incomes (wages and social payments they get from government) via encouraging broad wage increases. This should keep domestic demand a bit more lively than in the depressed 2015 year, and hence this should keep upward pressure on consumer inflation, which is set to decline over 2016 from the 45% level seen at the end of 2015.

Chart 20. Breakdown of GDP by incomes: wages, profits and taxes (% of total)

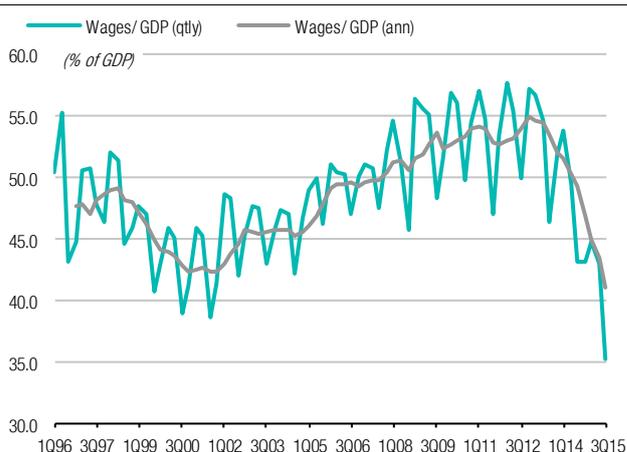
Last 12-month rolling volumes. History from 1Q of 1996 through 3Q of 2015



Source: State Statistics Service of Ukraine, ICU.

Chart 21. Share of wages: quarterly and annual volumes (% of GDP)

History from 1Q of 1996 through 3Q of 2015



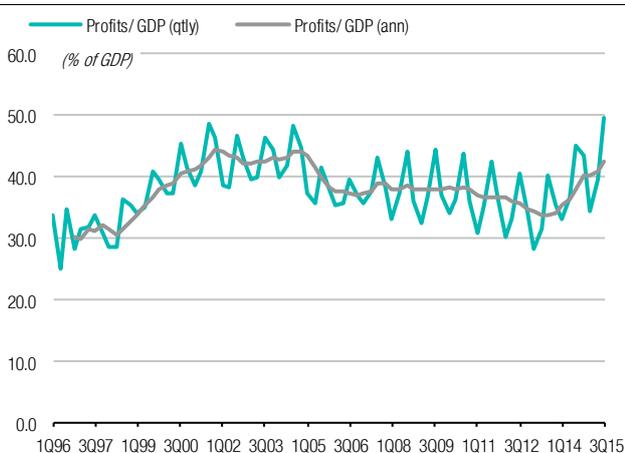
Source: State Statistics Service of Ukraine, ICU.

¹³ Country's tax code was amended by lawmakers on the eve of 2016 by way of reducing the tax burden on wage earners (social contribution tax was reduced to 22% from the 36-49% applied previously; income tax was reduced to 18% from the 15-20% range applied through 2015).

¹⁴ This figure is obtained from last-12-month volume of wages as reported in quarterly GDP reports (UAH729.3bn), divided by the number of employed in the economy (16.3m) and then divided by the number of hours worked in the corresponding 12-month period (1,642 hours). Then, the hryvnia-based figure is divided by the average FX rate for the period to arrive at the US dollar equivalent.

Chart 22. Share of profits: quarterly and annual volumes (% of GDP)

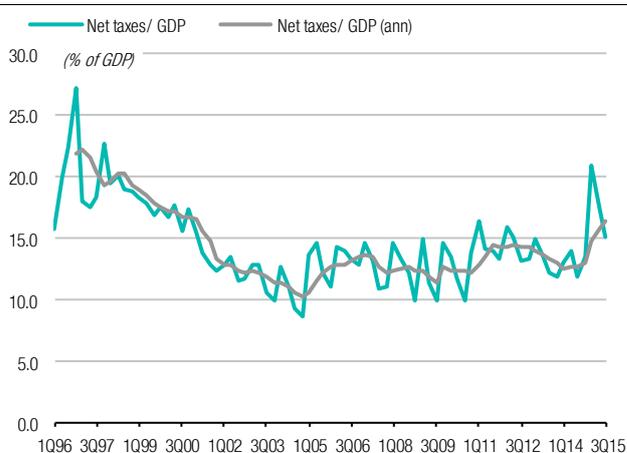
History from 1Q of 1996 through 3Q of 2015



Source: State Statistics Service of Ukraine, ICU.

Chart 23. Share of taxes: quarterly and annual volumes (% of GDP)

History from 1Q of 1996 through 3Q of 2015



Source: State Statistics Service of Ukraine, ICU.

What the industrial activity gauge tells us

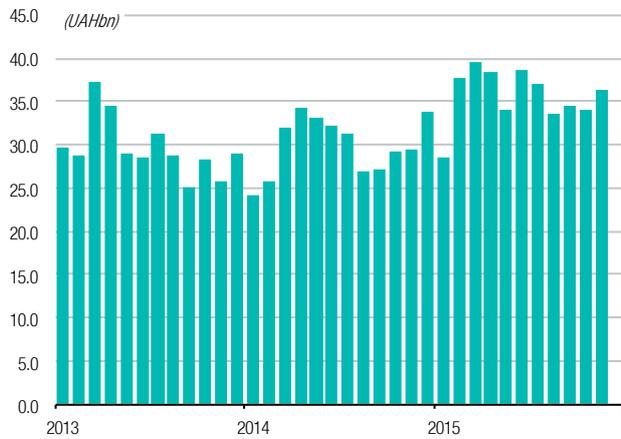
Industrial production has finally stabilised and started a gradual recovery from a sizable slump related to the Donbas war and Crimea's annexation by Russia (see Chart 15, p.20). Commodities prices are under downward pressure, though they at least have a somewhat of a natural support level, which is provided jointly by US monetary policy stance (cautious, measured, or quite gradual tightening) and China economic policies that have been effectively engendering a slow contraction of global demand for commodities. This keeps the future path of Ukraine's industrial production activity away from a fast recovery and return to its previous output level seen back in 2011-12. On the other hand, domestic demand as well as foreign demand for non-commodities industrial produce is also to underperform.

There is a useful gauge on Ukraine's industrial sector: data on new industrial orders, which has been published since 2013 on a monthly basis. The history of the data is depicted on Chart 24-Chart 27 on pp.25. It shows that over 2015 (through November), new orders have been mostly stagnating if viewed through the prism of inflation-adjusted data. However, the last reported period (November 2015) saw an inflation-adjusted increase of 4% to the previous month of monthly volume of orders, with both domestic and foreign orders increased on the previous month by 2.7% and 6.3%, respectively. Despite such an increase, it is too early to say whether it may constitute a new upward trend.

Hence, in our view, future industrial production activity is going to be quite muted, although it is projected to resume the recovery seen in 2H15 (as depicted by Chart 15 on pp.20).

Chart 24. New industrial orders, monthly volumes at current prices

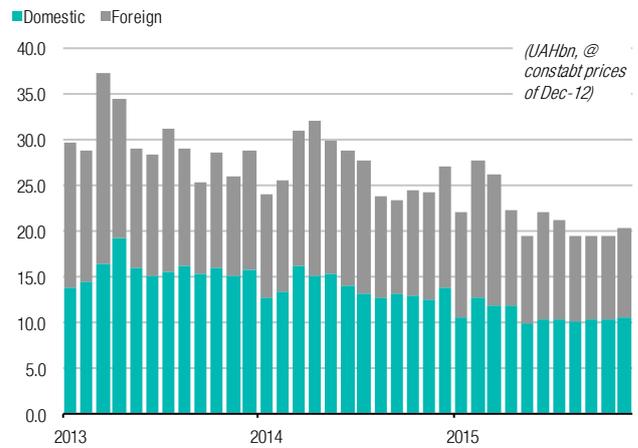
Monthly history from January 2013 through November 2015



Source: State Statistics Service of Ukraine, ICU.

Chart 25. New industrial orders, monthly volumes at constant prices of December 2012*

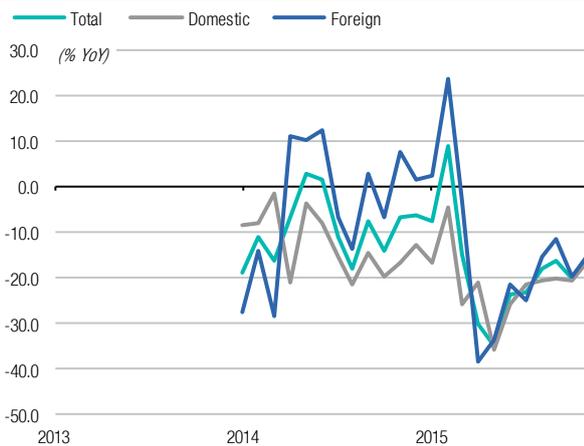
Monthly history from January 2013 through November 2015



* adjusted by CPI. Source: State Statistics Service of Ukraine, ICU.

Chart 26. On-year percentage change in new industrial orders: Total orders, domestic and foreign

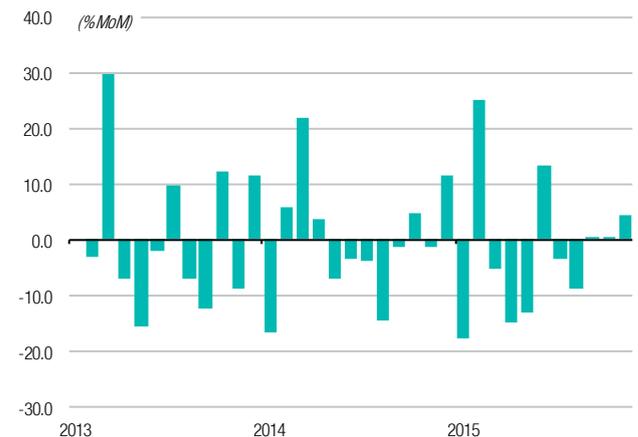
Monthly history from January 2013 through November 2015



Source: State Statistics Service of Ukraine, ICU.

Chart 27. On-month percentage change in new industrial orders

Monthly history from January 2013 through November 2015



Source: State Statistics Service of Ukraine, ICU.

Protracted sluggishness in fixed investments

By many measures, fixed investments have collapsed over the course of the very recent recession.¹⁵ In fact, in real terms, the year-on-year contraction of fixed investments started in 3Q12, has been in a YoY decline through 3Q15, and is likely to post another quarter of YoY decline in 4Q15.

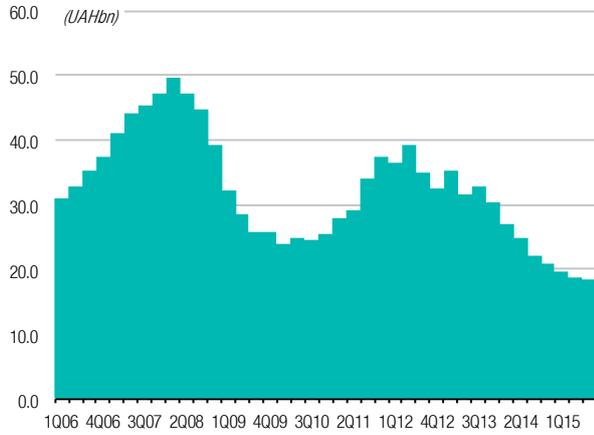
As a share of GDP, according to our calculations, fixed investments were at 19% in mid-2012, when they started to decline, reaching a low of 11.3% in 2Q15, albeit recovering just slightly in 3Q15 to 12% (see Chart 30, pp.26). By source of financing, own resources of businesses have gained even more weight, towards 68.7% from about 60% in the pre-2008

¹⁵ We regard the 2014-15 recession as being very recent, as we conclude in this chapter (at the very beginning) that it started in 1Q14 and ended in 2Q15.???

recession period. At the same time, the share of bank lending dropped to 7.9% from the previously norm of 14-15% (Chart 31, pp.26).

Chart 28. Quarterly volume of investments in the economy*

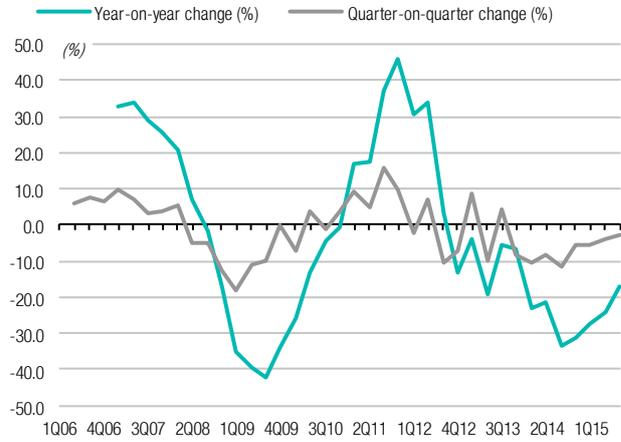
Seasonally adjusted data, history from 1Q of 2006 through 3Q of 2015



Note: * at constant prices of December 2005, adjusted by CPI. Source: State Statistics Service of Ukraine, ICU.

Chart 29. Growth rates of investments (% YoY)

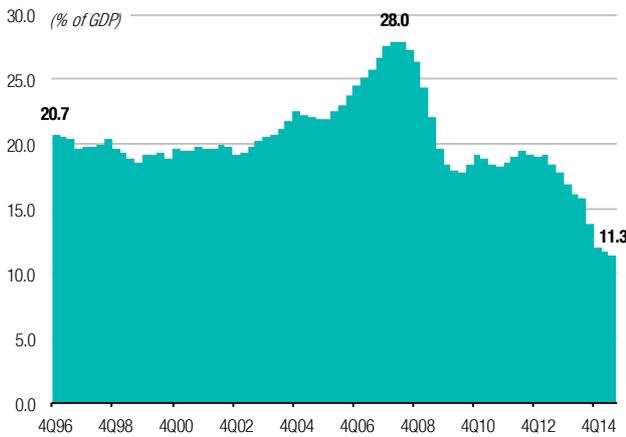
Seasonally & price-adjusted adjusted data, history from 2Q06 through 1Q15



Source: State Statistics Service of Ukraine, ICU.

Chart 30. Level of fixed investments in the economy (% of GDP)

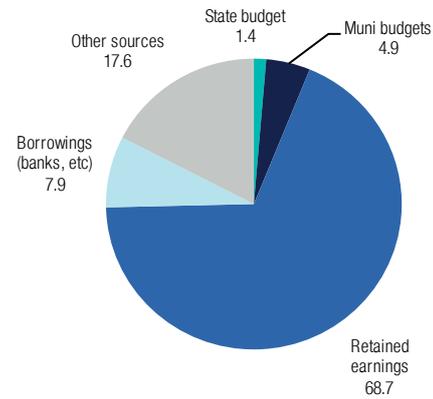
History from 1Q of 1996 through 2Q of 2015



Source: State Statistics Service of Ukraine, ICU.

Chart 31. Fixed-interments spending by source of financing (%)

Data for 2Q of 2015. 100% = UAH54.0bn



Source: State Statistics Service of Ukraine, ICU.

Sluggishness of the fixed investments has been particularly visible in business spending on machinery and equipment, as well as in the construction of non-residential buildings, while residential housing has been relatively stable. In year-on-year terms, spending on machinery and equipment since the end of 2013 has collapsed 42.5% (although it rose 1.3% YoY in 3Q15).

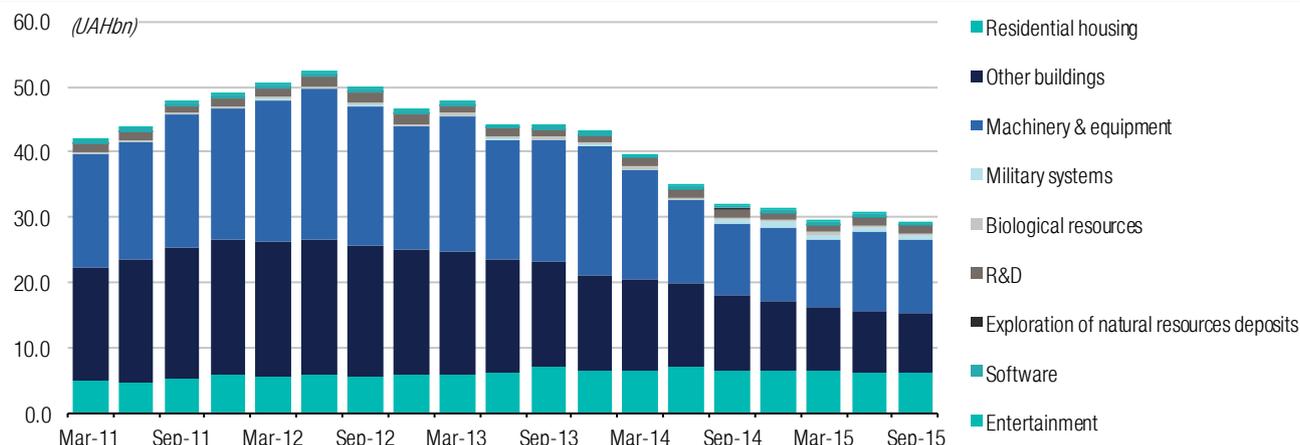
At the same time, spending on non-residential buildings dropped 38.5% over the same time period. This development underlines how dramatically businesses have cut back on fixed investments on the back of military aggression exerted by Russia on Ukraine, as resulted in the annexation of Crimea and *de-facto* military occupation of part of eastern Donbas (see Chart 34 on pp.28).

However, these two destinations of fixed-investments—machinery and equipment, non-residential buildings—have stabilised somewhat in 3Q15. Our estimate is that in 4Q15,

fixed investments are likely to post a rebound (albeit of small magnitude). As for the 2016-18 period here, again, the money flow issue is important. Our base-case scenario envisages a recovery of domestic credit to non-government entities¹⁶. This easier access to bank credit would spur fixed-investments, albeit not directly, but rather as a by-product of revived bank credit flow.

Chart 32. Breakdown of final expenditures on gross capital formation (UAHbn, constant prices)

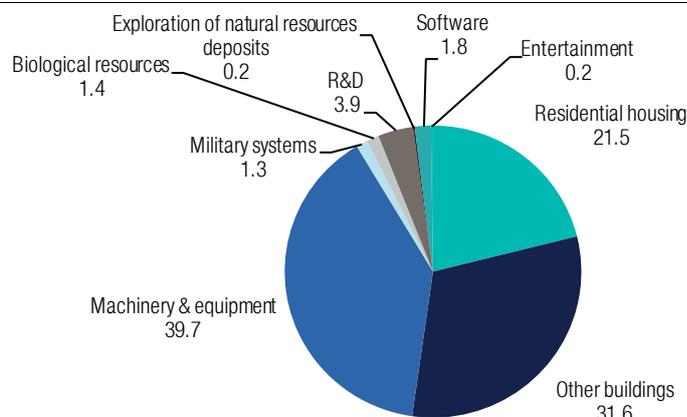
Quarterly seasonally adjusted data. At constant prices of December 2009. Adjusted by reported deflators. History from 1Q of 2011 through 3Q of 2015



Source: State Statistics Service of Ukraine, ICU.

Chart 33. Breakdown of final expenditures on gross capital formation in 3Q of 2015 (UAHbn, constant prices)

Quarterly seasonally adjusted data. At constant prices of December 2009. Adjusted by reported deflators.

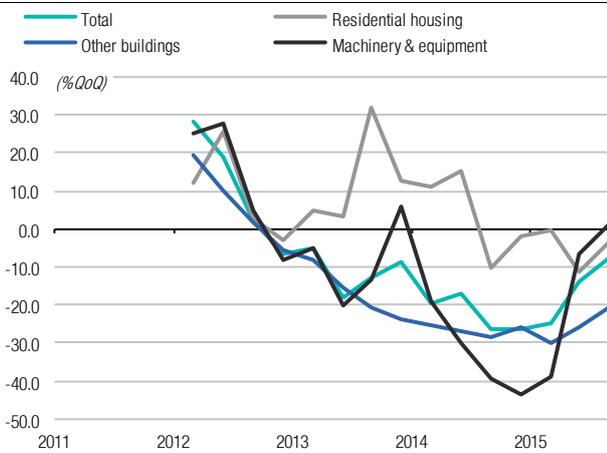


Source: State Statistics Service of Ukraine, ICU.

¹⁶ Predominantly in local currency hryvnia (UAH).

Chart 34. Growth rates of key components of gross capital formation (% YoY, in real terms)

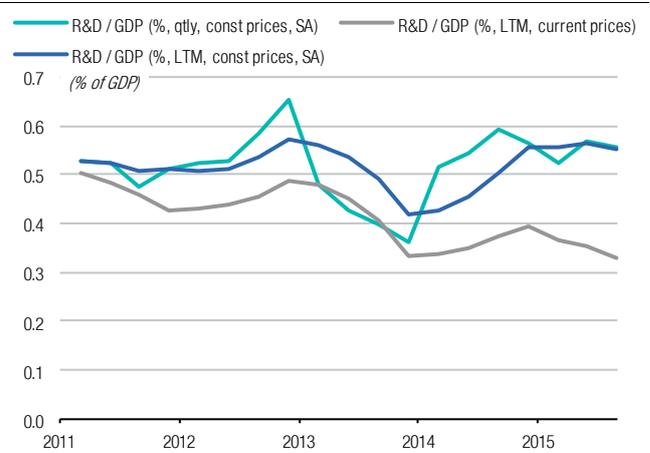
Quarterly seasonally adjusted data. At constant prices of December 2009. Adjusted by reported deflators. History from 1Q of 2010 through 3Q of 2015



Source: State Statistics Service of Ukraine, ICU.

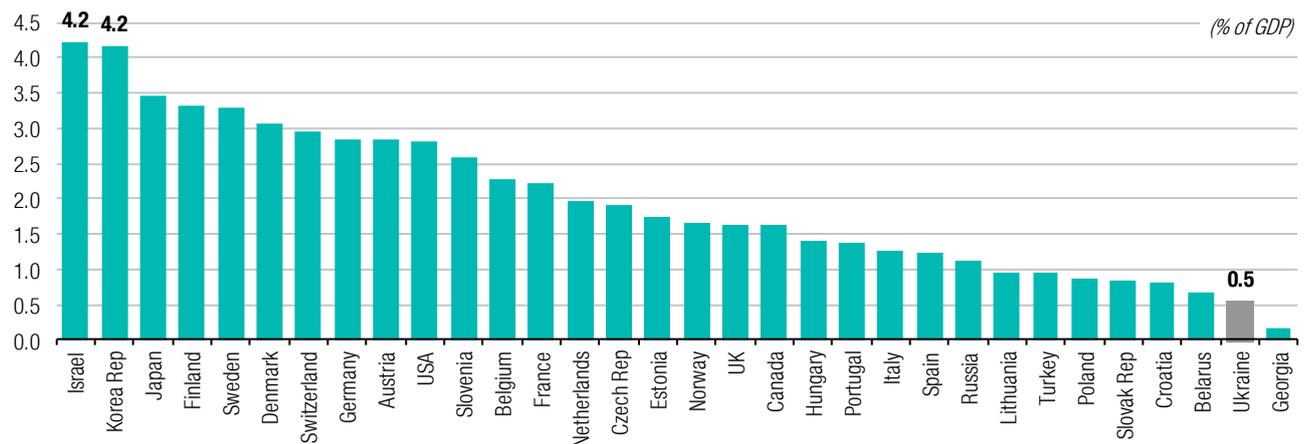
Chart 35. History of R&D as a component of gross capital formation in relation to size of GDP (%)

History from 1Q of 2010 through 3Q of 2015



Source: State Statistics Service of Ukraine, ICU.

Chart 36. Ukraine versus selected countries by ratio of R&D-to-GDP (%)



Source: World Bank, State Statistics Service of Ukraine, ICU.

Also, a minor factor that both explains and contributes to the sluggishness of fixed investments is that its so-called 'soft' component—spending on scientific research and development (R&D), software, and databases development—is quite mediocre.

The latter component of these two (software and databases) has the potential for an increase, as Ukraine's IT sector has been expanding into outsourcing to foreign contractors, likely pointing to the fact that the domestic economy does not pay due attention to these kinds of investments (into software and databases).

As far as R&D is concerned, there is the issue of under financing by the state as well as by private businesses. While it is mostly unheard of that Ukraine's private businesses spend on R&D, it leaves the government as the primary source of spending on R&D. As Chart 36 above shows Ukraine's expenditure on R&D as quite low, it should pick up in order to produce innovative solutions, which will in turn be realised as higher value-added goods and services sold.

Labour market conditions as an indication of political impetus for economic turnaround

Labour market data is a telling indicator on how severe the very recent recession has been versus the previous one seen in 2008-09. Despite the fact that the previous recession shaved off nearly 20% of GDP versus nearly 18% lost in the 2014-15 recession (see Chart 19 on pp.22), the labour market deterioration was much bigger recently than in the previous recession (see Chart 63 and Chart 64 on pp.54).

This was mainly due to the devastation to the economy caused by Russia's military aggression in Ukraine via the annexation of Crimea and *de facto* military occupation of parts of eastern Donbass.

Thus, while the population in the territories under control of the central government due to their annexation and occupation fell to 42.8m as of 3Q15 from 45.3m as of end of 2013, the number of economically active inhabitants fell from 20.1m to 18.2m. In relative terms, the level of economically active inhabitants in the region dropped from 48% pre-2014 crisis to 42% now.

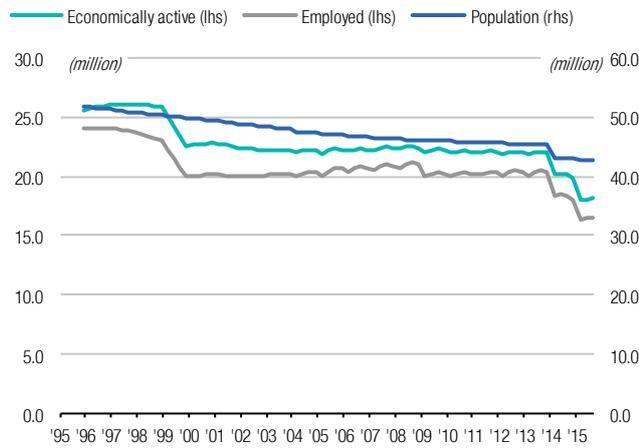
At the same time, worsening of the unemployment rate in the 2014-15 recession amounted 2.6ppt (the unemployment rate increased from a pre-recession low of 7.0% in 3Q13 towards a peak of 9.6% in 1Q15). In the 2008-09 recession, the unemployment swing was bigger, amounting to 3.5ppt, jumping from a pre-recession low of 6.0% in 3Q08 to a peak of 9.5% in 1Q09. The latest data on unemployment indicates the unemployment rate declined to 9.0% as of end of 3Q15.

This labour market situation brings us to the following conclusions:

- Given the steep reduction in the level of the economically active (42%, down 6ppt from pre-recession level) and still depressed level of real wages of those who retained jobs after the collapse in purchasing power (see Chart 39-Chart 40, pp.30), there is political pressure on the authorities to abandon fiscal austerity and find other ways to revive wage growth and employment prospects.
- As stated above, the only available tools in the hands of Ukraine's authorities to escape social backlash is to stimulate domestic economy via a combination of: 1) fiscal deficit allowed by the IMF programme (it is vital not to carry out a tighter fiscal policy than allowed by this programme); and 2) spur bank lending that would revive private sector spending in the economy.
- Incentives for authorities to revive the economy are rife as, they are trying to escape the fate of the Yanukovich administration, which also depleted itself by economic stagnation (which was exacerbated by rampant preferences to favoured businesses).

Chart 37. Labour market basic figures

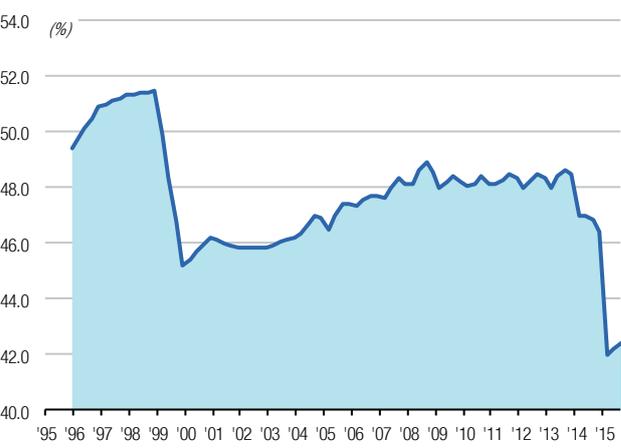
History from 1Q of 1995 through 3Q of 2015



Source: State Statistics Service of Ukraine, ICU.

Chart 38. Share of economically active to total population (%)

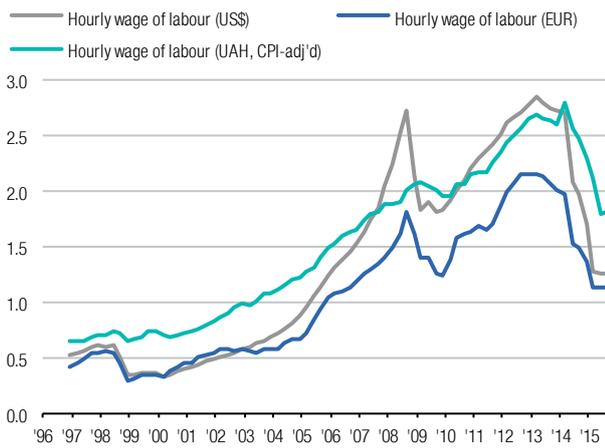
History from 1Q of 1995 through 3Q of 2015



Source: State Statistics Service of Ukraine, ICU.

Chart 39. Average hourly wage of an employee: in prices of December 1996 and in USD, EUR equivalents

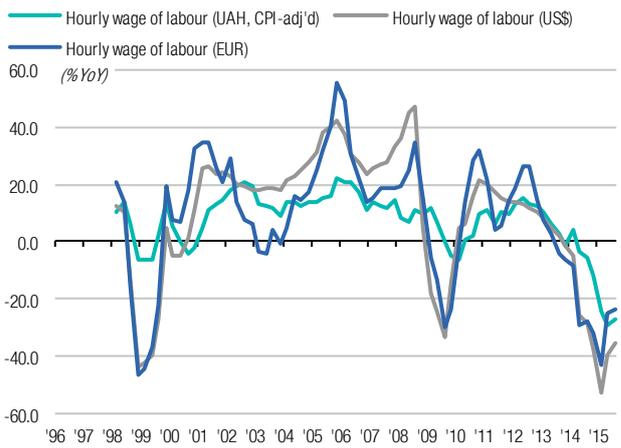
History from 1Q of 1997 through 3Q of 2015



Source: State Statistics Service of Ukraine, ICU.

Chart 40. On-year percentage change of average hourly wage of an employee (% YoY)

History from 1Q of 1997 through 3Q of 2015



Source: State Statistics Service of Ukraine, ICU.

Macro stabilisation efforts: A lengthy and tough response to currency run risk

As we noted in our *Quarterly Report* published last June,¹⁷ Ukraine's authorities have enacted a very tough (and equally painful) response to the financial crisis in late February of 2015 by raising the central bank's key policy rate, toughening capital controls, and tightening the government's budget balance. This policy stance has been kept in place to date without any grand concession to the businesses who tried to lobby for at least a partial elimination of the restrictions, and politicians who usually advocated for looser fiscal spending. Not surprisingly, all their efforts were in vain.

¹⁷ *Quarterly Report* " Since the storm last February," 17 June, 2015
<https://www.icu.ua/download/1245/ICUQtlyReport-20150617.pdf>

Risk of a renewed run on the currency has increased over the past couple of months, on the back of the US monetary policy decision to start raising the Fed Funds rate (last December), ongoing macroeconomic adjustment in China's economy, and recession now engulfing most of the economies of the ex-Soviet republics (after Russia, there is a sizable adjustment taking place in Kazakhstan, Azerbaijan, Belarus). Hence, Ukraine's authorities are largely to stay on the same course, ie, sticking to the macro stabilisation policies enacted in late February 2015.

In our view, this year there is a possibility for some relaxation of the now tight stance from policymakers, and this possibility is likely to materialise now sooner than in the second half of 2016. Why is that? As described above, our base-case scenario envisages that monetary policy-makers in the US are to signal a pause in their interest rate increase, and global financial markets are to start taking appropriate positions, ie, eliminating previous skewed positioning for further USD appreciation versus major global currencies. Also, it is quite important that Chinese authorities will effectively regain confidence over the course of 1H16 in their efforts to manage their economic transition towards consumption-led growth. Along the way, they will allow the Chinese currency (CNY) to weaken further—in our view, the 6.7-7.0/USD range is the area where the renminbi will stabilise in the future—in order to eliminate past appreciation in trade-weighted terms.

Hence, once US and China authorities have made their expected macroeconomic decisions and global financial markets become less volatile, then Ukraine's authorities are likely to start a (gradual) phasing out of their tight control over local-currency and foreign-currency liquidity pools (reserves held by commercial banks and the central bank).

Government's tight stance: Tighter budget balance brings lower debt level

The government's focus over 2015 was, first, on retaining a tight central government budget balance; and second, on the restructuring of external private sector debt. Both tasks were rather successfully implemented in terms of containing the deterioration of domestic financial conditions.

First, the government reduced the budget deficit from 5.4% of GDP as of the end of January 2015 (on a last 12-month rolling basis) towards as low as 1.1% as of the end of November, although in December it somewhat relaxed its stance and allowed spending to increase, resulting in a widening of the deficit towards 2.3% of GDP. However, it should be noted that public debt was increasing, and there has been a sizable portion of debt issued in the foreign currencies, which were appreciating versus the UAH. This eventually resulted in the debt service expenditure increasing from 2.0% of GDP as of the end of 2013 towards 4.5% as of November 2015 (see Chart 42, pp.34). This debt service data explains how severely the government turned the primary balance (budget balance without debt service expenditure) from a deficit of 2% as of early 2015 towards near a 4% surplus as of November 2015. Hence, if one considers such a shift in primary expenditures (total expenditures less debt service expenditure), the government's spending stance had quite a contractionary effect on economic activity, the price paid to contain the currency run and future risk of one.

Second, the government carried out an external debt restructuring in line with the IMF requirement as laid down in the EFF programme. This effectively revived the balance of payments in the economy for the next several years, moving away from running a heavy refinancing risk. In effect, the restructuring move cut the volume of external debt due over the

next 12 months from US\$6.5bn as of January 2015 towards US\$2.4bn as of December 2015.¹⁸

Overall, judging the performance of Ukraine's different governments since 2002 by the measure of change of external debt due over the next 12 months, in effect, the PM Yatsenyuk government economised¹⁹ a total of US\$4.1bn from early 2014 through December 2015, or the most if compared to previous governments (see Chart 48 on p.35).

Also, thanks to external debt restructuring, Ukraine's government had been accumulating FX funds in its account at the NBU over the course of 2015 (see Chart 46 and Chart 47 on pp.35). The FX balance of that account increased from US\$0.028bn as of the end of February 2015 to US\$2.1bn²⁰ as of end-2015. This, together with the reduced volume of external debt due over the next 12 months, helped to restore the ratio of the government's FX balance to sovereign debt due from a low of 1% as of February 2015 towards a more sound figure of 87%, the ratio's highest level since November 2009.²¹

And lastly, it appears that the government's sharp turn towards austerity last year²² and the postponement of the recapitalisation of major two state-owned banks²³ was quite a concentrated effort on its part to limit an increase in the public debt level, which was at risk of quickly exploding if the run on the currency would not had contained. Thus, the public debt-to-GDP ratio was projected by the IMF last July²⁴ to reach 94.4% at the end of 2015 and 92.1% at the end of 2016. Instead, the proactive macro stabilisation measured out by the authorities brought that ratio down to 80.6% as of end-2015, or 11.7% better than expected by the IMF and well ahead of our own projection for this year.²⁵

With a return to real GDP growth in 2016, inflation within the double-digit territory, and weakness in the FX rate (albeit no currency run leading to massive FX rate overshooting), there is a reasonable probability of a gradual decrease in the public debt level over 2016, to 80% as of year-end 2016 and further down to 76% as of year-end of 2018. This stance by

¹⁸ This assertion, however, assumes that Ukraine is to renegotiate the repayment of the 'Russian' US\$3bn Eurobond, which was due in December 2015, with new terms that are no better than those accepted by private investors, who agreed to a restructuring of a total of US\$16bn debt.

¹⁹ Via debt restructuring.

²⁰ Estimated by ICU on the basis of the reported balance for the end of November 2015 of US\$2.0bn, plus an estimated net accumulation of FX funds over December 2015 totaling US\$0.1bn.

²¹ If one assumes that Ukraine would be forced by an international court ruling to repay the Russian government the US\$3bn Eurobond in 2015, then this ratio amounted to 39%, which is still the highest level since June 2014.

²² In primary terms, ie, debt service expenditure excluded from total expenditures, the state budget balance turned from a near 2% deficit to a 2% surplus, amounting to a full-year shift of about 4% of GDP. Such an austerity shift amid economic recession was never made by any previous governments. A similar-sized shift (of about 4% of GDP) was achieved by the government led by PM Azarov in 1H11. However, it was done amid an economic recovery; hence, it was much less painful and nearly unnoticed by the public.

²³ According to our observations, the government decided to postpone the recapitalisation of major, state-run Oschadbank and Ukreximbank in 2015. It just did recapitalise a smaller state-run bank, Ukgazbank, to the tune of UAH3.8bn.

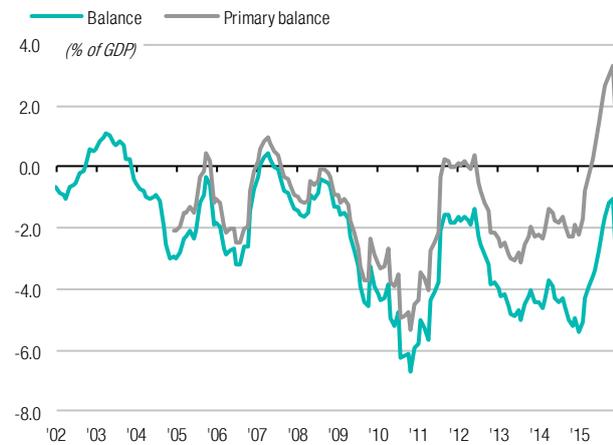
²⁴ See "First Review Under the Extended Arrangement," IMF, 22 July, 2015
<http://www.imf.org/external/pubs/ft/scr/2015/cr15218.pdf>

²⁵ Our forecast was 97%. It was published in our *Quarterly Report* published on 1 October, 2015
<https://www.icu.ua/download/1370/ICUQtlyReport-20151001.pdf>

the government to restrain an increase in public debt level suggests that it eyes to improve its credit metrics in order to regain access to the Eurobond market to refinance external debt before IMF's EFF expires.

Chart 41. Central government budget balance (% of GDP)

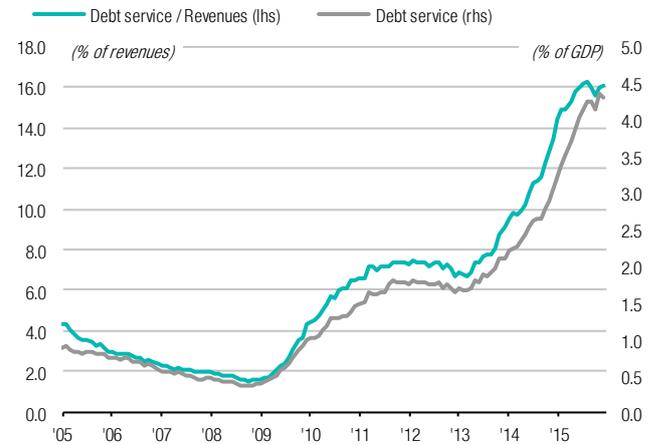
Monthly history from January 2002 through November 2015



Source: Ministry of Finance of Ukraine, ICU.

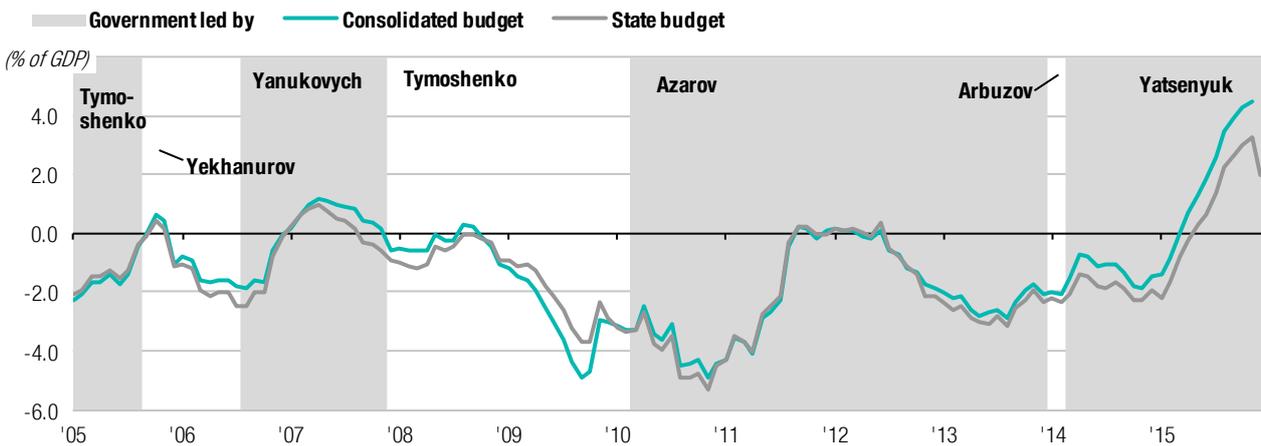
Chart 42. Debt service expenditure as share of budget revenues and GDP size (%)

Monthly history from January 2005 through November 2015



Source: Ministry of Finance of Ukraine, ICU.

Chart 43. Primary balance of the state budget: consolidated state budget and central government budget (% of GDP)



Source: Ministry of Finance of Ukraine, ICU.

Chart 44. Pace of public debt level change (% of GDP)

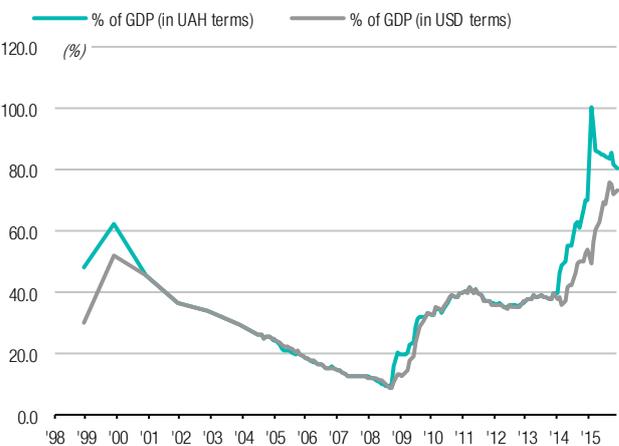
History from January 2005 through December 2015



Source: Ministry of Finance of Ukraine, ICU.

Chart 45. Public debt level* (% of GDP)

History from January 1998 through December 2015



Source: Ministry of Finance of Ukraine, ICU.

Chart 46. Volume of FX currency funds at the government account at NBU (US\$bn)

Monthly history from January 2003 through December 2015



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

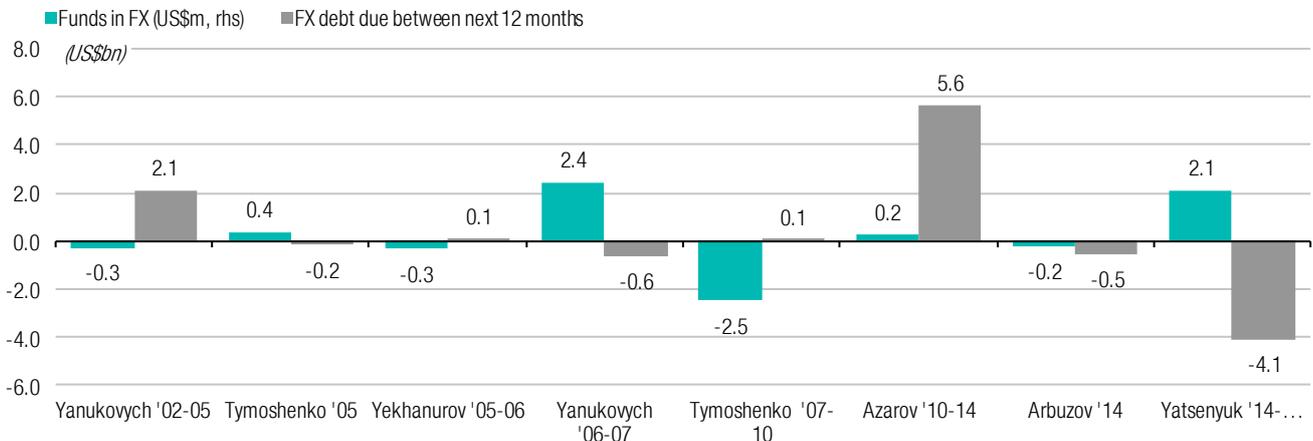
Chart 47. Ratio of government's FX funds at NBU to total external debt due next 12 months* (%)

Monthly history from January 2003 through December 2015



* data for December 2015 assumes that US\$3bn is to be restructured. Source: Ministry of Finance of Ukraine, National Bank of Ukraine, ICU.

Chart 48. Performance of the different governments since 2002 by two indicators: 1) change in the balance of FX funds at government account with NBU (US\$bn); 2) change in the external debt due over next 12 months (US\$bn)



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

Central bank's tight stance: No more currency runs

Over most of the past year and through November 2015, the latest month for which statistical data is available, there was still a trend, which we call a second wave of debt deflation that started in the very beginning of 2014. This trend is illustrated by Chart 52 and Chart 54 on pp.39. These charts depict the inflation-adjusted stocks of loans in the commercial banks' portfolios, which are broken down into local-currency and foreign-currency portfolios. Both portfolios have been sliding over 2014-15 in real (price-adjusted) terms.

While the foreign-currency loan portfolio of the banks as a whole has been in a decline (ie, becoming deflated) from the deep recession of 2008-09, it is referred to as the first wave of debt deflation that has engulfed Ukraine's banking sector. At the same time, while this 1st debt deflation wave was in place, it was counterbalanced from early 2009 through early 2014 by an increase of the local-currency loan book (in price-adjusted terms) of the banking sector.

However, since January 2014, as was stated above, the local-currency loan book of the banks started to contract as well alongside the FX one, in what has become Ukraine's second debt deflation wave.

These overlapping waves, which in fact reflect a hugely stagnant bank market, were a drag on the economy, along with other factors such as Russian military aggression and the destruction of productive assets in the eastern parts of the Donbas region.

This happened due a plethora of factors, in our view, specifically:

- Because of borrowers' deteriorated capacity to take on new loans (their credit metrics collapsed on FX devaluation and a sizable portion of FX debt in their whole financial liabilities). This apparently concerns large corporate borrowers, while SMEs have fared a bit better, thanks to their inability to take part in the FX borrowing spree, when conditions were more "stable."
- Due to the zealous stance by the central bank towards related party lending by banks, which flourished in the sector for quite a long time before the 2014-15 recession struck. Hence, this put a halt to related party lending practices to businesses owned by the same shareholders.
- All in all, bank lending in gross terms was sluggish, with monthly flows (in net terms) in the banks' loan portfolio being negative most of the year of 2015, as well as in the preceding year of 2014 (see Chart 53 on pp.39). Although during just over four months of July-October 2015, the net flows of bank loans extended to state-owned non-financial corporations was positive, amounting to UAH2bn. Over 11M15, from January through November, bank credit flow to state-owned non-financial corporations was nearly zero in net terms, while private, non-financial corporations were net redeeming credit of UAH117bn, and other residents as well repaying debt in net terms totalling UAH75bn. This breakdown of banks' credit flow reveals how diverse credit flows were among different types of borrowers. For non-state borrowers, the bank credit flows were negative, ie, indicating contractionary economic conditions.
- Also, quite importantly, it was the very tight stance by the NBU on the bank liquidity (banks' reserves at the central bank) that was taken in an attempt to restrain demand for FX that would otherwise push the UAH rate lower versus the US dollar. In effect, over the whole year, base money growth was +0.8% YoY, or near zero, ie, flat (see

Chart 49-Chart 50 on pp.39). And, this was well behind the growth rate +27.3% YoY allowed by the IMF's EFF programme for 2015. This reflects the gap between the IMF's projected path of the economy and its real-life developments, where the run on the currency was significant and unanticipated, and then required a much tighter stance from the authorities to counter. Additionally, these counter measures—made by the government in its fiscal policy response and by central bank in its monetary policy response—were much more restrictive than what was considered as likely policy measures.

Going forward, the economy, which has been growing in real quarter-on-quarter and seasonally adjusted terms in 2H15, will require additional support, because it may slip back into recession again in 2016. Our base-case scenario is that authorities, despite political quarrels and the current political crisis, are to produce a nominally possible (under the IMF programme) stimulus. In its realisation of monetary policy over 2016, the NBU is to stick to an inflation-targeting regime by very gradually reducing its policy rate and not expediting the issue of relaxation of capital controls. However, a more visible policy push of controls on commercial banks will encourage them eventually to turn towards lending in local currency in the real economy. This is a more likely form of monetary stimulus to the economy. Hence, our base-case scenario envisages that the net flow of bank lending will start growing in 2016 and extend into 2017-18 after its contraction in 2014-15.

Inflation: Heading down, thanks to tight policies

The above-mentioned factors—a tighter fiscal balance implemented by the central government (pp.31-35), tighter monetary stance by the central bank (as discussed in the section above), and a sizable deterioration of the labour market conditions (pp.29-30)—are effectively fertile soil for low month-on-month inflation rates that eventually should allow for a disinflation trend of declining year-on-year inflation rate.

However, there is still an upward trend in consumer inflation in on-month terms, as FX rate risk heightened in the end of December 2015, and especially in January 2016. Thus, our monthly observation of consumer prices in a basket of goods for January 2016 suggests that total prices in the basket rose 1.95% MoM, or 38.7% YoY (see "ICU consumer basket: Observation of Kyiv, New-York and Moscow prices" on pp.56).

This gauge of the consumer inflation suggests that fast disinflation of the officially reported headline CPI, which embraces a much wider range of goods than ICU's consumer basket), is not going to occur soon (ie, over 1Q16). However, due to a base effect, the on-year headline CPI is now seen at very near the NBU's 12% target level for the 2016 year-end. Then, over 2H16, on the back of currency weakness and possible increase of political risk on the eve of the fall, a regular occurrence in the country, headline CPI is to change course, heading up in year-on-year terms to end the year towards 14.4% YoY.

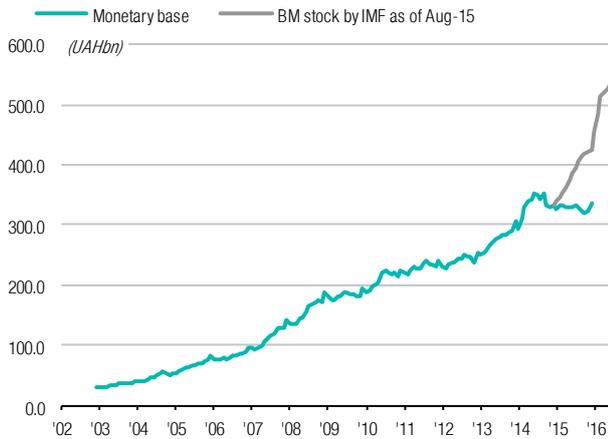
That is our base-case scenario. It envisages that at the end of 2017 and 2018, headline CPI is forecast to be at 7.6% and 8.0%, respectively. In yearly average terms, headline CPI is to be 19%, 11%, and 8%, respectively in the three-year period from 2016 through 2018. This inflation forecast contrasts with our previous view,²⁶ when we made a forecast of yearly average CPI for the same three years of 2016-18 at 29%, 19%, and 8%. The key factor that helps to explain such a downward revision is a contractionary effect on domestic demand

²⁶ As published in the *Quarterly Report* "Militarism fronts economic faults," 1 October, 2015
<https://www.icu.ua/download/1370/ICUQtlyReport-20151001.pdf>

by tight policies of the government and central bank, as described above, that were implemented for the sake of macro stabilisation after the run on the currency in February 2015.

Chart 49. Base money history and IMF's ceiling (UAHbn)

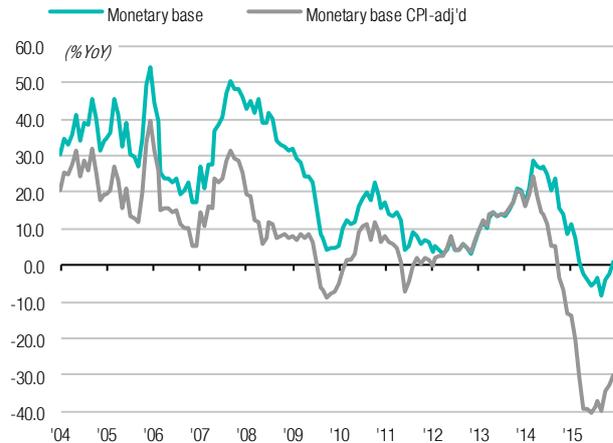
Nominal volumes. History from December 2003 through November 2015



Source: National Bank of Ukraine, ICU.

Chart 50. Percentage change in base money (% YoY)

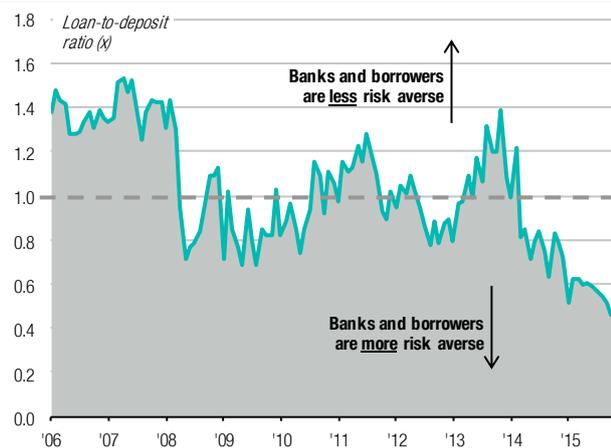
In nominal and price-adjusted terms



Source: National Bank of Ukraine, ICU.

Chart 51. Flow-based ratio of loans to deposits (x)

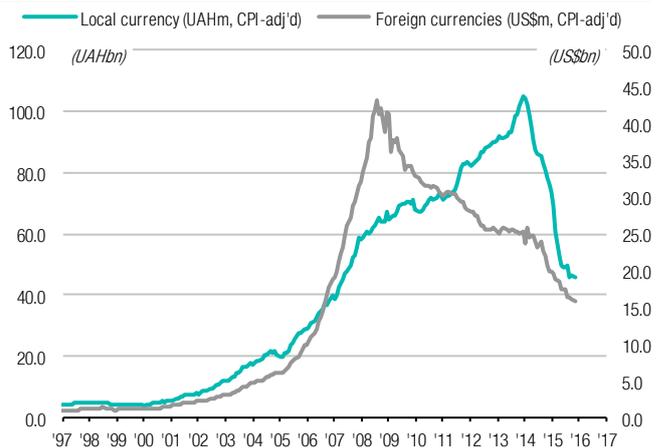
Monthly history from January 2006 through November 2015



Source: National Bank of Ukraine, ICU.

Chart 52. Debt deflation 2- wave in the banking sector

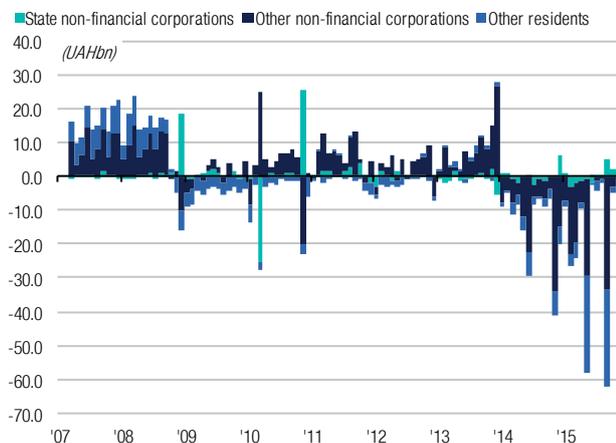
Inflation-adjusted stock-based volumes of banks' loan portfolios in local and foreign currencies



Source: National Bank of Ukraine, ICU.

Chart 53. Flow-based monthly data on loans by banks (UAHbn)

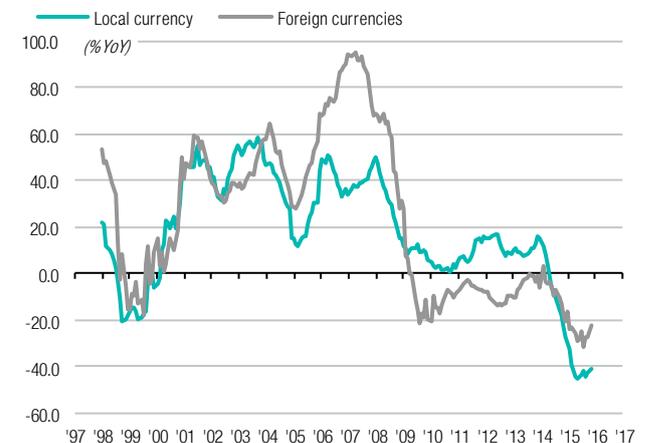
In net terms. Inflation-adjusted, stock-based volumes of banks' loan portfolios in local and foreign currencies



Source: National Bank of Ukraine, ICU.

Chart 54. Percentage change of banks' loan portfolios (% YoY)

Inflation-adjusted stock-based volumes of banks' loan portfolios in local and foreign currencies



Source: National Bank of Ukraine, ICU.

External balance: Recovering domestic demand requires more flexible FX rate

In 2015, the current account deficit amounted to a mere US\$0.2bn (or 0.2% of GDP), which represents a strikingly different state of the economy when compared with the US\$4.6bn (3.5%) deficit of 2014, and more so with the US\$16.5bn (9.2%) seen in 2013.

That contraction of the external balance (in the current account deficit) was mainly due to a collapse in domestic demand, which took place in the 1H015 (when steep devaluation and an inflation spike occurred). The severity of this adjustment was compounded by the deterioration of the exports side of the current account, where exports of steel were down due to a general stagnation of the commodities markets. If export markets would have become firmer, then Ukraine's current account balance would have turned into surplus, a positive environment for the future FX rate of the local currency (UAH). In reality, there is a less supportive environment ahead for the hryvnia, as the current account balance, after such a severe macroeconomic adjustment, has remained in deficit, albeit a slight one. It might increase if Ukraine's authorities would resist FX market forces (over January-February, central bank proved its commitment to flexible FX regime). The matter is the hryvnia has become much less competitive over 2H15 than it was back in 2Q15, according to our FX valuation (see "View on UAH: Mix of domestic inflation and fading dollar strength", pp.48).

On the imports side of Ukraine's foreign trade, there are signs of recovering domestic demand following the 2014-15 deep recession. Thus, Chart 55 and Chart 56 on p.42 indicate that imports of cars have been increasing, albeit from quite a low base level—with demand shifting towards the less expensive models—than during the booming imports seen in 2007-08 and 2011-12. This trend has been developing at the near bottom of the car lending market. Hence, under our base-case scenario, which envisages that bank credit flows will revive (ie, the banking system as a whole will renew its normal practice of extending loans to the non-government borrowers such as corporations and households) after a two-year period of 2014-15, when bank credit flow to non-government borrowers reversed, ie, was negative, indicating a second wave of debt deflation.

Hence, given this basic assumption, in our view, domestic demand will be supported, partially pushing up demand for imports. Hence, the FX market is likely to see a step-up in FX demand. This, together with the central bank's pledge to maintain a flexible FX rate regime, will result in shifts in the nominal FX rate of UAH versus the USD which is a part of our base-case scenario (see "View on UAH: Mix of domestic inflation and fading dollar strength" on p.48 and appendix "Forecast for 2016-18" on pp.50-52).

As far as IMF funding is concerned, we believe that Ukraine's authorities will only partially adhere to the EFF schedule;²⁷ instead of 100% adherence, they will abide only by 50% of the schedule, implying that in 2016, the IMF will provide US\$2.9bn (half of the scheduled US\$5.8bn). Other donors will provide US\$2.1bn instead of the planned US\$4.2bn (see Table 5 on pp.45).

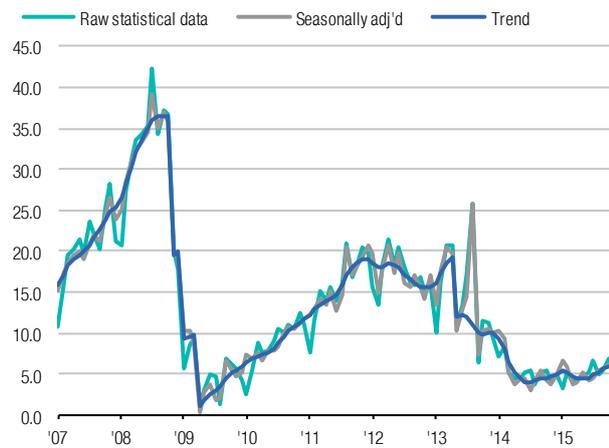
The authorities' underperformance with regard to the EFF will add fuel to the private businesses' concerns over the UAH's value. All said, in our view, this year's current account balance is likely to be at a small surplus of 1.4% of GDP (nearly US\$1bn). With external funding from official lenders, FX reserves are to increase by US\$12bn in 2016 after a

²⁷ See first review of the Ukraine's EFF programme, pp.41.
<http://www.imf.org/external/pubs/ft/scr/2015/cr15218.pdf>

US\$7bn addition in 2015. However, in 2017-18, FX reserves are likely to decline due to economic growth fueled by domestic demand (see Chart 57 on pp.42).

Chart 55. Monthly quantity of imported cars (000s units)

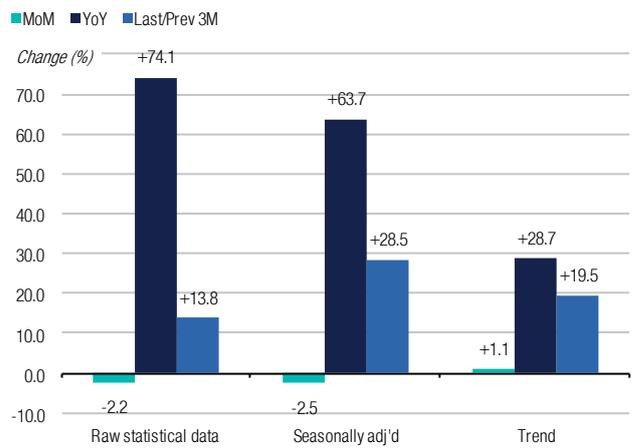
Monthly seasonally adjusted data. History from Jan 2007 through Nov 2015



Source: State Statistics Service of Ukraine, ICU.

Chart 56. Percentage change of quantity of imported cars in Nov-15 (%)

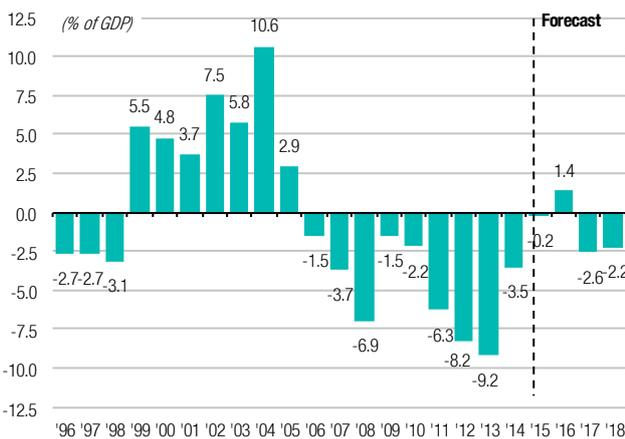
On-month, on-year and last three-month on-quarter change



Source: State Statistics Service of Ukraine, ICU.

Chart 57. Current account balance (% of GDP)

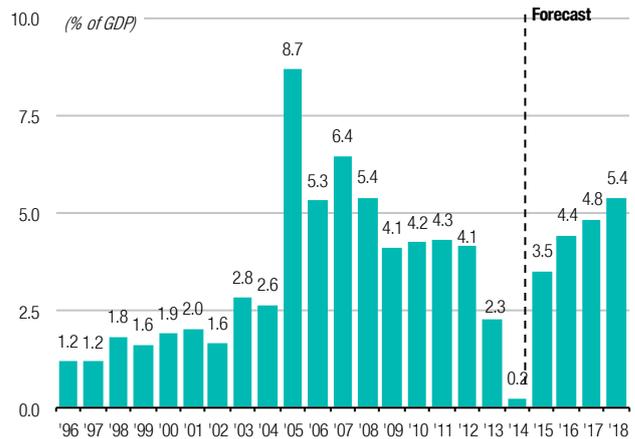
Yearly history 1996-2015, forecast for 2016-18



Source: National Bank of Ukraine, ICU.

Chart 58. Net FDI inflows (% of GDP)

Yearly history 1996-2015, forecast for 2016-18



Source: National Bank of Ukraine, ICU.

Chart 59. Volume of FX reserves (US\$bn)

History from January 1997 through December 2015 and forecast for the 2016-18 period



Source: National Bank of Ukraine, ICU.

Table 4. Balance of payments forecast for 2016-18 (US\$m)

Base-case scenario with key assumption that IMF's programme is fully implemented according to schedule (probability = 40%)

This assumes that over 2016-18, Ukraine authorities would use IMF funds under US\$17bn EFF programme by full extent (see row "Borrowing" under the subsection "D2. Official lending from IMF, net" for 2015 and forecast period of 2016-18.

Balance of payments		2012	2013	2014	2015	Forecast		
						2016	2017	2018
A. Current account, net		-14,335	-16,518	-4,596	-204	+961	-1,803	-1,578
B. Capital account, net		40	-60	400	565	236	236	236
Net lending (+) / borrowing (-)	[=A+B]	-14,295	-16,578	-4,196	+361	+1,197	-1,567	-1,342
C. Financial account, net	[=C1+C2+C3]	+7,334	+15,802	-10,476	+700	+5,174	+858	+1,798
C1. Short-term debt due next 12-month period by		-51,890	-52,188	-51,281	-45,536	-35,732	-29,521	-24,365
Government								
Russian banks (VTB)		-2,000	-750	0	0	0	0	0
Eurobonds		-500	-1,000	-1,000	0	0	0	0
Other		-831	-9	-466	-131	0	0	0
Central bank								
Other		0	0	0	-101	-3,100	-3,100	-2,325
Banks								
Eurobonds		-1,065	0	-736	0	0	0	-485
Loans		-709	-395	-876	-1,850	-509	-732	-736
Cash & deposits		-12,195	-10,178	-9,431	-9,078	-8,739	-8,412	-8,097
Other		-113	-859	-682	-752	-329	-474	-476
Corporations								
Eurobonds		-225	0	-1,645	0	0	0	0
Loans		-16,502	-17,960	-11,877	-17,859	-10,401	-7,580	-5,525
Trade loans		-17,086	-20,560	-24,017	-14,643	-12,191	-8,885	-6,475
Other		-665	-478	-551	-1,123	-463	-338	-246
C2. Financing	[=F1+F2+F3+F4]	60,617	67,350	41,338	44,601	40,818	30,292	26,076
FDI, net inflows¹		7,195	4,079	299	3,058	3,100	3,375	3,787
Banks		475	469	499	2,333	1,550	2,532	2,841
Corporations		6,720	3,610	-200	725	1,550	844	947
Financing by sector								
F1. Government		5,754	6,511	4,763	3,218	4,200	1,000	2,000
F2. Central bank		291	137	361	1,633	3,100	2,325	1,744
F3. Banks		9,115	15,468	11,916	6,400	9,212	9,252	9,421
F4. Corporations		45,458	45,235	24,298	33,350	24,306	17,715	12,911
C3. Errors & omissions		-1,393	640	-533	1,635	87	87	87
E. Aggregated balance	[=A+B+C]	-6,961	-776	-14,672	+1,061	+6,371	-708	+456
D. Reserves and associated funding	[=E; =D1-D2]	-6,961	-776	-14,672	+1,061	+6,371	-708	+456
D1. Use of reserves		-10,395	-6,611	-13,741	+6,847	+12,179	+901	+879
D2. Official lending from IMF, net		-3,434	-5,835	+931	+5,786	+5,809	+1,610	+423
Redemptions		-3,434	-5,835	-3,657	-1,135	0	-882	-2,085
Government		-769	-2,600	-2,594	-692	0	-567	-1,363
Central bank		-2,665	-3,235	-1,062	-443	0	-315	-722
Borrowings		0	0	4,588	6,922	5,809	2,492	2,508
Government		0	0	2,997	2,625	2,904	1,246	1,254
Central bank		0	0	1,591	4,296	2,904	1,246	1,254
FX reserves								
At the start of year		31,795	24,546	20,416	7,533	13,300	25,479	26,381
At the end of year		24,546	20,416	7,533	13,300	25,479	26,381	27,260
Change (US\$m)		-7,248	-4,131	-12,883	5,767	12,179	901	879
Change (%YoY)		-22.8	-16.8	-63.1	76.6	91.6	3.5	3.3

Table 4. Balance of payments forecast for 2016-18 (US\$m)

Base-case scenario with key assumption that IMF's programme is fully implemented according to schedule (probability = 40%)

This assumes that over 2016-18, Ukraine authorities would use IMF funds under US\$17bn EFF programme by full extent (see row "Borrowing" under the subsection "D2. Official lending from IMF, net" for 2015 and forecast period of 2016-18).

Balance of payments	2012	2013	2014	2015	Forecast		
					2016	2017	2018
FX reserves (% of GDP)							
At the start of year	18.3	14.1	11.4	5.7	15.1	36.4	37.7
At the end of year	14.1	11.4	5.7	15.1	36.4	37.7	38.6
Change (ppt)	-4.2	-2.7	-5.6	9.4	21.3	1.4	0.9
FX reserves imports coverage (months)							
At the start of year	4.1	2.9	2.5	1.3	3.3	6.6	6.0
At the end of year	2.9	2.5	1.3	3.3	6.6	6.0	5.8
Change (months)	-1.1	-0.4	-1.2	2.0	3.3	-0.6	-0.2

Notes: [1] FDI data is provided in the table for informational purposes, they are part of the rows under "Financing by sector" subsection.

Sources: National Bank of Ukraine, ICU.

Table 5. Balance of payments forecast 2016-18 (US\$m)

Base-case scenario with an assumption that IMF's programme is implemented with delays (probability = 60%).

This assumes that over 2016-18, Ukraine authorities would use IMF funds under US\$17bn EFF programme **not** by full extent and pace of execution would amount to just 50% (see row "Borrowing" under the subsection "D2. Official lending from IMF, net" for 2015 and forecast period of 2016-18).

Balance of payments		2012	2013	2014	2015	Forecast		
						2016	2017	2018
A. Current account, net		-14,335	-16,518	-4,596	-204	+961	-1,803	-1,578
B. Capital account, net		40	-60	400	565	236	236	236
Net lending (+) / borrowing (-)	[=A+B]	-14,295	-16,578	-4,196	+361	+1,197	-1,567	-1,342
C. Financial account, net	[=C1+C2+C3]	+7,334	+15,802	-10,476	+700	+3,074	+358	+798
C1. Short-term debt due next 12-month period by		-51,890	-52,188	-51,281	-45,536	-35,732	-29,521	-24,365
Government								
Russian banks (VTB)		-2,000	-750	0	0	0	0	0
Eurobonds		-500	-1,000	-1,000	0	0	0	0
Other		-831	-9	-466	-131	0	0	0
Central bank								
Other		0	0	0	-101	-3,100	-3,100	-2,325
Banks								
Eurobonds		-1,065	0	-736	0	0	0	-485
Loans		-709	-395	-876	-1,850	-509	-732	-736
Cash & deposits		-12,195	-10,178	-9,431	-9,078	-8,739	-8,412	-8,097
Other		-113	-859	-682	-752	-329	-474	-476
Corporations								
Eurobonds		-225	0	-1,645	0	0	0	0
Loans		-16,502	-17,960	-11,877	-17,859	-10,401	-7,580	-5,525
Trade loans		-17,086	-20,560	-24,017	-14,643	-12,191	-8,885	-6,475
Other		-665	-478	-551	-1,123	-463	-338	-246
C2. Financing	[=F1+F2+F3+F4]	60,617	67,350	41,338	44,601	38,718	29,792	25,076
FDI, net inflows¹		7,195	4,079	299	3,058	3,100	3,375	3,787
Banks		475	469	499	2,333	1,550	2,532	2,841
Corporations		6,720	3,610	-200	725	1,550	844	947
Financing by sector								
F1. Government		5,754	6,511	4,763	3,218	2,100	500	1,000
F2. Central bank		291	137	361	1,633	3,100	2,325	1,744
F3. Banks		9,115	15,468	11,916	6,400	9,212	9,252	9,421
F4. Corporations		45,458	45,235	24,298	33,350	24,306	17,715	12,911
C3. Errors & omissions		-1,393	640	-533	1,635	87	87	87
E. Aggregated balance	[=A+B+C]	-6,961	-776	-14,672	+1,061	+4,271	-1,208	-544
D. Reserves and associated funding	[=E; =D1-D2]	-6,961	-776	-14,672	+1,061	+4,271	-1,208	-544
D1. Use of reserves		-10,395	-6,611	-13,741	+6,847	+7,175	-845	-1,375
D2. Official lending from IMF, net		-3,434	-5,835	+931	+5,786	2,904	364	-831
Redemptions		-3,434	-5,835	-3,657	-1,135	0	-882	-2,085
Government		-769	-2,600	-2,594	-692	0	-567	-1,363
Central bank		-2,665	-3,235	-1,062	-443	0	-315	-722
Borrowings		0	0	4,588	6,922	2,904	1,246	1,254
Government		0	0	2,997	2,625	1,452	623	627
Central bank		0	0	1,591	4,296	1,452	623	627
FX reserves								
At the start of year		31,795	24,546	20,416	7,533	13,300	20,475	19,631
At the end of year		24,546	20,416	7,533	13,300	20,475	19,631	18,256
Change (US\$m)		-7,248	-4,131	-12,883	5,767	7,175	-845	-1,375
Change (%YoY)		-22.8	-16.8	-63.1	76.6	53.9	-4.1	-7.0

Table 5. Balance of payments forecast 2016-18 (US\$m)

Base-case scenario with an assumption that IMF's programme is implemented with delays (probability = 60%).

This assumes that over 2016-18, Ukraine authorities would use IMF funds under US\$17bn EFF programme **not** by full extent and pace of execution would amount to just 50% (see row "Borrowing" under the subsection "D2. Official lending from IMF, net" for 2015 and forecast period of 2016-18).

Balance of payments	2012	2013	2014	2015	Forecast		
					2016	2017	2018
FX reserves (% of GDP)							
At the start of year	18.3	14.1	11.4	5.7	15.1	29.2	28.1
At the end of year	14.1	11.4	5.7	15.1	29.2	28.1	25.9
Change (ppt)	-4.2	-2.7	-5.6	9.4	14.1	-1.1	-2.2
FX reserves imports coverage (months)							
At the start of year	4.1	2.9	2.5	1.3	3.3	5.3	4.5
At the end of year	2.9	2.5	1.3	3.3	5.3	4.5	3.9
Change (months)	-1.1	-0.4	-1.2	2.0	2.0	-0.8	-0.6

Notes: [1] FDI data is provided in the table for informational purposes, they are part of the rows under "Financing by sector" subsection.

Sources: National Bank of Ukraine, ICU.

Table 6. Sensitivity analysis of FX reserves as of year-end for the 2016-18 period (US\$m) depending on two financial account parameters: 1) pace of IMF programme execution, 2) private sector rollover ratios

Adjustment coefficient to the private sector rollover ratios ²	Pace of IMF's US\$17bn EFF programme execution ¹ : share of funds that were actually provided by IMF versus the scheduled ones per year				
	0%	25%	50%	75%	100%
YEAR OF 2016					
-7.5%	13,024	15,526	18,028	20,530	23,032
-5.0%	13,839	16,341	18,844	21,346	23,848
-2.5%	14,655	17,157	19,659	22,162	24,664
0.0%	15,471	17,973	20,475	22,977	25,479
+2.5%	16,287	18,789	21,291	23,793	26,295
+5.0%	17,102	19,605	22,107	24,609	27,111
+7.5%	17,918	20,420	22,923	25,425	27,927
YEAR OF 2017					
-7.5%	8,451	11,827	15,202	18,577	21,952
-5.0%	9,928	13,303	16,678	20,053	23,428
-2.5%	11,404	14,779	18,154	21,529	24,905
0.0%	12,880	16,255	19,631	23,006	26,381
+2.5%	14,357	17,732	21,107	24,482	27,857
+5.0%	15,833	19,208	22,583	25,958	29,334
+7.5%	17,309	20,684	24,060	27,435	30,810
YEAR OF 2018					
-7.5%	3,169	7,672	12,174	16,676	21,178
-5.0%	5,197	9,699	14,201	18,703	23,205
-2.5%	7,224	11,726	16,228	20,731	25,233
0.0%	9,251	13,754	18,256	22,758	27,260
+2.5%	11,279	15,781	20,283	24,785	29,287
+5.0%	13,306	17,808	22,310	26,812	31,315
+7.5%	15,333	19,835	24,338	28,840	33,342

Notes:

[1] For instance a 100% share means that in 2016, 2017, 2018 Ukraine's authorities are borrowing (in gross terms) these volumes respectively US\$5.8bn, US\$2.5bn and 2.5bn. This ratio is also applied for the share of borrowings by Ukraine's government from donors and Eurobond market, hence, for a 100% share it means that government would borrow US\$4.2bn from donors in 2016, US\$1bn in 2017 and US\$2bn in 2018 from private investors of Eurobond market.

[2] This coefficient ranges from -7.5% to 0% and then up to +7.5%. It is applied to the rollover ratios of banks and corporations used for calculations of balance of payments (BoP) in 2016-18 (see Table 4-Table 5 on pp.43-45), which are 96% for banks and 105% for corporations (these are derived as average from historical data 2012-15). For example, a +2.5% adjustment coefficient means that our BoP 2016-18 forecast uses 98.5% rollover ratio for banks and 107.5% for corporations.

Source: ICU.

View on UAH: Mix of domestic inflation and fading dollar strength

In our view, there are two main factors that have been shaping the market-determined (nominal) exchange rate of the Ukraine's currency hryvnia (UAH) from late 2015 and early 2016:

- **Domestic inflation** has been in double-digit territory since 2014 and is set to remain there in 2016, and not moving into single-digit territory until late 2017 only (see the section of our report entitled, "Inflation: Heading down, thanks to tight policies" on pp.37). In part, inflation over the past two years has been fuelled by two steep currency devaluation episodes that took place in early 2014 as well as early 2015. It appeared that devaluation was feeding into future devaluation, and yet this sequence is likely to play out over 2016, as well. Domestic inflation is high not only *per se*, but also in relation to Ukraine's main trading partners like the EU economies, Russia, China, and Turkey, to name just few. This anomaly was not so acute in the aftermath of the 2008-09 recession and the subsequent FX crisis. During the current recession, inflation in many developed countries and in China has been abnormally low, while in Russia and Turkey, there has been an inflation spike, albeit largely a managed one.
- **The US dollar** is likely hitting the brakes these days from its past broad appreciation tendency, and moreover, it is reversing (see Chart 60, pp.49). The DXY index, which measures dollar value versus a basket of major developed-market economies, had struggled to break through the 100-point threshold throughout 2015 and in the very early part of 2016. With recent indications that the US Fed will remain cautious in raising the Fed Funds rate going forward, the DXY index has dropped towards 95 points. This suggests that within developed market economies, the relative position of the US economy (in terms of expectations on future performance) has weakened. There is, however, a slightly different story between the US dollar and EM currencies. The broad US dollar index, which measures dollar value versus a basket of currencies of DM and EM economies, underperformed the DXY from June 2014 through mid-2015. This indicates that EM currencies had maintained relative resilience to US dollar strength at the time. However, this index has obviously outperformed DXY since June 2015, because EM currencies have broadly been seeing fast-paced devaluation pressures.

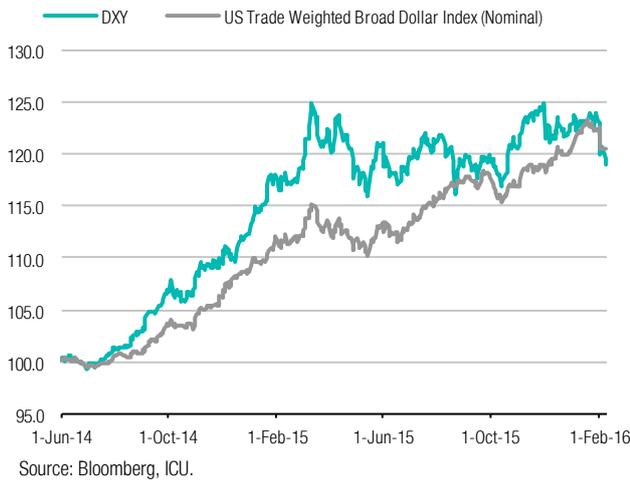
In our view, the universe of the EM currencies as a whole is likely to experience further devaluation pressures in 2016, as the macro adjustment process has embraced a wide range of EM countries, from large to small, including the BRIC economies. This said, however, we think that DXY behaviour, which is expected to trend slowly away from the 100-point threshold, will lead to a calmer adjustment in the EM FX universe. Hence, after the 2014-15 period of a one-way, directional strengthening in the USD, there will be a different macro environment emerging, characterised by stabilisation of the FX markets globally.

- **Conclusion:** Summing up all of the above, our in-house method of FX valuation—via trade-weighted indices in real terms—yields a path of further weakness in the UAH from the current spot market rate of 26/USD towards closer to the 30/USD threshold at the end of 2016, and then over 2017-18, a stabilisation is likely within the 30-35/USD range. This said, however, our other method of currency valuation—via a basket of consumer goods—yields a quite different conclusion, ie, with the hryvnia at 26/USD, is

undervalued (see our appendix “ICU consumer basket: Observation of Kyiv, New-York and Moscow prices” on pp.56-59). In practice, the former method has proven to be much more accurate in predicting future FX market moves than the latter. Hence, in general, we stick with our trade-weighted analysis, while the basket-based analysis is used only for informational purposes.

Chart 60. US dollar value as measured versus: (1) a basket of currencies of major DM market economies (DXY or narrow index); and (2) a basket of currencies of DM and EM economies (broad index)

Rebased at 100 points at 1 June 2014. History through 11 February 2016



Rebased at 100 points at 1 October 2015. History through 11 February 2016

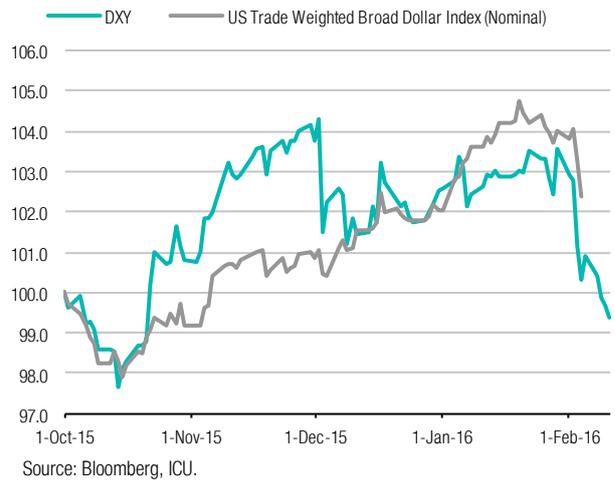


Chart 61. Misalignment of the UAH's FX rate, as implied by the UAH real trade-weighted indices

History 2000-15 and forecast for 2016-2018

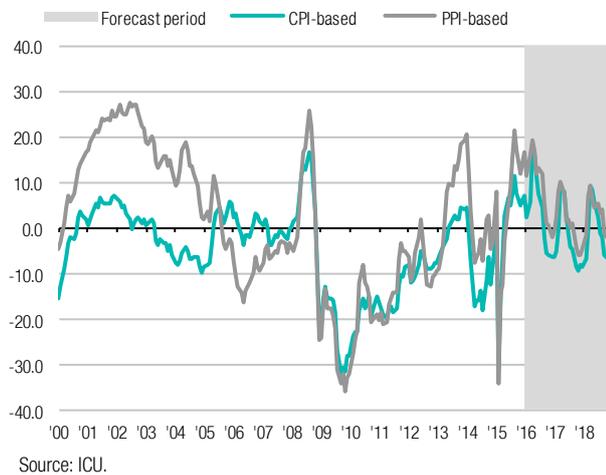
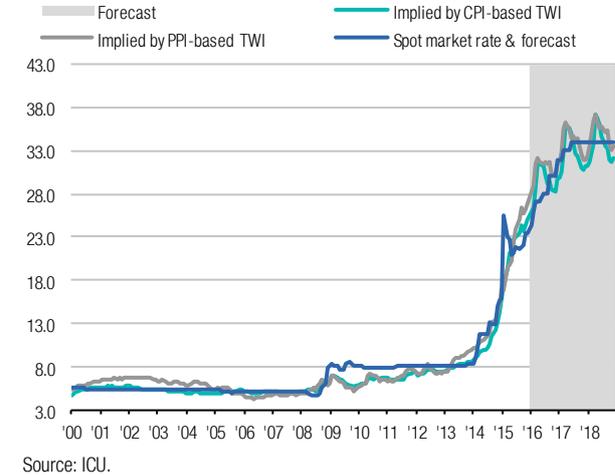


Chart 62. UAH's FX rate versus rates implied by the UAH real trade-weighted indices

History 2000-15 and forecast for 2016-2018



Forecast for 2016-18

The following two pages of statistics are our yearly and quarterly key macroeconomic indicators with forecasts through 2018.

Yearly forecast for 2016-18, base case scenario

Table 7. Forecast of key macroeconomic indicators for 2016-18 (annual)

	Historical data for 2004-15										Forecast by ICU		
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015F	2016F	2017F	2018F
Activity													
Real GDP (%YoY)	7.3	7.9	2.3	-14.8	4.1	5.2	0.2	-0.1	-6.6	-10.3	2.6	2.4	2.6
Nominal GDP (UAHbn)	544	721	948	913	1,083	1,302	1,409	1,465	1,567	1,939	2,180	2,328	2,390
Nominal GDP (US\$bn)	108	143	184	114	136	163	174	180	131	88	74	69	70
GDP per capita (US\$, ann)	2,319	3,091	3,986	2,474	2,978	3,572	3,823	3,962	3,069	2,061	1,740	1,623	1,657
Unemployment rate (%)	6.2	6.4	6.4	8.8	8.1	7.9	7.5	7.2	9.3	9.0	8.2	7.5	7.5
Prices													
CPI headline (%YoY, eop)	11.6	16.6	22.3	12.3	9.1	4.6	-0.2	0.5	24.9	41.8	17.0	7.6	7.6
CPI headline (%YoY, average)	9.1	12.8	25.3	16.0	9.4	8.0	0.6	-0.3	12.1	48.2	18.9	11.8	7.6
PPI (%YoY, eop)	15.4	23.2	21.1	15.3	18.8	17.4	0.4	1.7	31.8	24.0	19.6	5.3	5.3
PPI (%YoY, average)	9.6	20.5	33.6	7.4	21.4	19.9	6.0	-0.1	17.0	36.5	13.9	11.0	5.3
Fiscal balance													
Consolidated budget bal. (UAHbn)	-3.5	-6.1	-11.3	-34.4	-63.3	-18.3	-46.9	-63.0	-67.1	-27.8	-59.8	-57.5	-68.3
Consolidated budget bal. (% of GDP)	-0.6	-0.8	-1.2	-3.8	-5.9	-1.4	-3.3	-4.3	-4.3	-1.4	-2.7	-2.5	-2.9
Budget balance (UAHbn)	-3.8	-9.8	-12.5	-35.5	-64.3	-23.6	-53.4	-64.7	-78.1	-45.4	-78.7	-78.6	-88.7
Budget balance (% of GDP)	-0.7	-1.4	-1.3	-3.9	-5.9	-1.8	-3.8	-4.4	-5.0	-2.3	-3.6	-3.4	-3.7
External balance													
Exports (US\$bn)	50.2	64.0	85.6	54.3	69.3	88.8	90.0	85.3	68.8	47.4	45.2	49.0	52.7
Imports (US\$bn)	53.3	72.2	100.0	56.2	73.2	99.0	104.4	100.8	74.1	48.6	45.4	51.3	56.0
Trade balance (US\$bn)	-3.1	-8.2	-14.4	-2.0	-4.0	-10.2	-14.3	-15.5	-5.2	-1.2	-0.1	-2.3	-3.2
Trade balance (% of GDP)	-2.8	-5.7	-7.8	-1.7	-2.9	-6.2	-8.2	-8.6	-4.0	-1.3	-0.2	-3.4	-4.6
Current account balance (US\$bn)	-1.6	-5.3	-12.8	-1.7	-3.0	-10.2	-14.3	-16.4	-5.2	-0.2	1.0	-1.8	-1.6
Current account balance (% of GDP)	-1.5	-3.7	-6.9	-1.5	-2.2	-6.3	-8.2	-9.1	-4.0	-0.2	1.3	-2.6	-2.2
Net FDI (US\$bn)	5.7	9.2	9.9	4.7	5.8	7.0	7.2	4.1	0.3	-3.1	-3.1	-3.4	-3.8
Net FDI (% of GDP)	5.3	6.4	5.4	4.1	4.2	4.3	4.1	2.3	0.2	-3.5	-4.2	-4.9	-5.4
C/A bal. + net FDI (% of GDP)	3.8	2.8	-1.6	2.6	2.0	-2.0	-4.1	-6.8	-3.7	-3.7	-2.9	-7.5	-7.6
External debt (US\$bn, eop)	54.5	80.0	101.7	103.4	117.3	126.2	134.6	142.1	134.1	145.2	155.6	160.5	166.1
External debt (% of ann'd GDP, eop)	50.4	55.8	55.3	90.9	86.1	77.4	77.3	79.1	102.2	164.9	210.1	232.8	236.3
FX reserves (US\$bn, eop)	22.3	32.5	31.5	26.5	34.6	31.8	24.5	20.4	7.5	14.4	21.6	20.7	19.3
FX reserves (% of ann'd GDP, eop)	20.6	22.6	17.2	23.3	25.4	19.5	14.1	11.4	5.7	16.3	29.1	30.1	27.5
External debt / FX reserves (x, eop)	2.4	2.5	3.2	3.9	3.4	4.0	5.5	7.0	17.8	10.1	7.2	7.7	8.6
FX reserves imports cov (months)	5.0	5.4	3.8	5.7	5.7	3.9	2.8	2.4	1.2	3.6	5.7	4.8	4.1
Interest rates													
Central bank key rate (% eop)	8.50	8.00	12.00	10.25	7.75	7.75	7.50	6.50	14.00	22.00	18.00	15.00	10.00
3-month rate (% eop 4Q)	9.90	7.58	21.60	17.59	6.12	19.72	25.52	11.71	18.37	23.86	25.00	25.00	25.00
Exchange rates													
UAH trade-weighted index (nominal)	70.90	64.93	45.89	46.09	53.28	56.87	54.63	49.59	32.29	20.50	16.19	15.46	14.83
UAH trade-weighted index (real)	123.61	120.06	100.21	90.26	97.73	98.76	94.72	100.84	85.40	93.57	76.37	74.97	74.10
UAH/US\$ (eop)	5.05	5.05	7.80	8.00	7.94	8.00	8.05	8.24	15.82	24.03	32.00	34.00	34.00
UAH/US\$ (average)	5.03	5.03	5.25	8.03	7.94	7.99	8.08	8.16	12.01	21.96	29.25	33.75	34.00
UAH/€ (eop)	6.66	7.36	10.90	11.45	10.63	10.37	10.62	11.32	19.14	26.10	34.56	37.40	38.42
UAH/€ (average)	6.64	7.32	7.10	11.70	10.51	10.50	10.60	11.17	14.79	23.91	32.10	36.96	38.17
US\$/€ (eop)	1.32	1.46	1.40	1.43	1.34	1.30	1.32	1.37	1.21	1.09	1.08	1.10	1.13
US\$/€ (average)	1.32	1.46	1.35	1.46	1.32	1.32	1.31	1.37	1.23	1.09	1.10	1.10	1.12
Population													
Population (million, eop)	46.6	46.4	46.1	46.0	45.8	45.6	45.6	45.3	42.8	42.7	42.6	42.5	42.4
Population (%YoY)	-0.7	-0.6	-0.5	-0.4	-0.4	-0.3	-0.2	-0.5	-5.7	-0.5	-0.4	-0.2	-0.1

Notes: eop – end of period; cov – coverage; con'd – consolidated; ann – annualised. Sources: State Statistics Service of Ukraine, NBU, ICU.

Quarterly forecast for 2016-18, base case scenario

Table 8. Forecast of key macroeconomic indicators for 2016-18 (quarterly)

	Forecast by ICU													
	3Q15	4Q15E	1Q16F	2Q16F	3Q16F	4Q16F	1Q17F	2Q17F	3Q17F	4Q17F	1Q18F	2Q18F	3Q18F	4Q18F
Activity														
Real GDP (%YoY)	-7.2	-1.2	1.0	3.3	3.4	2.8	2.3	2.4	2.4	2.4	2.6	2.6	2.6	2.5
Nominal GDP (UAHbn)	555.0	566.6	435.3	485.1	614.4	645.0	491.9	526.0	646.6	663.8	505.0	540.1	663.8	681.1
Nominal GDP (US\$bn)	25.5	24.6	16.1	17.3	20.5	20.2	14.9	15.5	19.0	19.5	14.9	15.9	19.5	20.0
GDP per capita (US\$, ann)	2,195	2,057	2,036	1,956	1,840	1,737	1,709	1,667	1,634	1,620	1,619	1,629	1,642	1,654
Unemployment rate (%)	9.0	9.0	9.0	8.2	8.2	8.2	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
Prices														
CPI headline (%YoY, eop)	51.9	41.8	25.3	12.1	12.7	17.0	13.7	12.7	10.8	7.6	7.6	7.6	7.6	7.6
CPI headline (%YoY, average)	53.3	44.3	34.1	11.9	13.0	16.6	13.9	13.1	12.0	8.2	7.6	7.6	7.6	7.6
PPI (%YoY, eop)	32.5	24.0	5.3	12.8	14.7	19.6	19.5	9.2	5.8	5.3	5.3	5.3	5.3	5.3
PPI (%YoY, average)	34.2	26.5	13.4	9.9	14.2	18.2	20.3	11.6	6.5	5.5	5.3	5.3	5.3	5.3
Fiscal balance														
Consolidated budget bal. (UAHbn)	21.3	-62.6	-10.3	-29.3	5.7	-25.9	-1.1	-27.1	4.7	-34.0	-2.9	-30.0	2.6	-38.0
Consolidated budget bal. (% of GDP)	3.8	-11.0	-2.4	-6.0	0.9	-4.0	-0.2	-5.2	0.7	-5.1	-0.6	-5.6	0.4	-5.6
Budget balance (UAHbn)	10.9	-54.2	-14.1	-31.2	-2.7	-30.8	-6.9	-29.8	-3.9	-38.1	-8.5	-32.5	-6.0	-41.7
Budget balance (% of GDP)	2.0	-9.6	-3.2	-6.4	-0.4	-4.8	-1.4	-5.7	-0.6	-5.7	-1.7	-6.0	-0.9	-6.1
External balance														
Exports (US\$bn)	12.1	12.0	10.9	10.7	11.2	12.5	11.8	11.5	12.1	13.5	12.7	12.5	13.1	14.5
Imports (US\$bn)	12.4	12.5	11.3	10.6	11.9	11.7	12.2	12.7	13.6	12.9	13.3	13.5	14.4	14.7
Trade balance (US\$bn)	-0.3	-0.4	-0.5	0.1	-0.6	0.8	-0.4	-1.1	-1.4	0.6	-0.6	-1.1	-1.3	-0.2
Trade balance (% of GDP)	-1.2	-1.7	-2.8	0.6	-3.1	4.1	-2.6	-7.4	-7.6	3.3	-4.1	-6.8	-6.9	-1.0
Current account balance (US\$bn)	0.1	0.0	-0.4	0.3	-0.3	1.3	-0.2	-0.9	-1.2	0.5	-0.4	-0.8	-1.1	0.7
Current account balance (% of GDP)	0.3	0.2	-2.4	1.9	-1.6	6.6	-1.6	-5.9	-6.1	2.6	-2.8	-5.2	-5.5	3.6
Net FDI (US\$bn)	-0.9	-0.9	-0.7	-0.7	-0.7	-1.0	-0.8	-0.8	-0.8	-0.9	-0.9	-0.9	-0.9	-1.0
Net FDI (% of GDP)	-3.5	-3.7	-4.3	-4.0	-3.4	-5.0	-5.4	-5.4	-4.2	-4.8	-6.1	-6.0	-4.7	-5.1
C/A bal. + net FDI (% of GDP)	-3.2	-3.5	-6.7	-2.2	-5.0	1.7	-7.0	-11.3	-10.3	-2.3	-8.8	-11.2	-10.2	-1.4
External debt (US\$bn, eop)	142.4	145.2	147.8	150.4	153.0	155.6	160.5	142.0	142.0	142.0	140.0	140.0	140.0	140.0
External debt (% of ann'd GDP, eop)	151.4	164.9	169.7	180.0	194.8	210.1	220.2	200.0	204.2	206.0	203.3	202.1	200.6	199.2
FX reserves (US\$bn, eop)	12.7	14.4	16.2	18.0	19.8	21.6	21.3	21.1	20.9	20.7	20.4	20.0	19.7	19.3
FX reserves (% of ann'd GDP, eop)	13.5	16.3	18.6	21.5	25.2	29.1	29.3	29.8	30.1	30.1	29.6	28.9	28.2	27.5
External debt / FX reserves (x, eop)	11.2	10.1	9.1	8.4	7.7	7.2	7.5	6.7	6.8	6.9	6.9	7.0	7.1	7.2
FX reserves imports cov (months)	2.9	3.6	4.1	4.6	5.1	5.7	5.5	5.2	5.0	4.8	4.7	4.5	4.4	4.1
Interest rates														
Central bank key rate (% eop)	22.00	22.00	20.00	18.00	18.00	18.00	15.00	15.00	15.00	15.00	10.00	10.00	10.00	10.00
3-month rate (% eop 4Q)	25.80	23.86	25.00	25.00	25.00	18.00	18.00	18.00	18.00	18.00	10.00	10.00	10.00	10.00
Exchange rates														
UAH trade-weighted index (nominal)	22.96	20.50	17.62	17.11	14.89	16.19	15.68	15.68	15.70	15.46	15.53	15.59	15.16	14.83
UAH trade-weighted index (real)	105.12	93.57	88.60	93.22	76.37	76.37	81.38	88.05	82.91	74.97	82.91	90.13	82.43	74.10
UAH/US\$ (eop)	21.20	24.03	27.00	28.00	30.00	32.00	33.00	34.00	34.00	34.00	34.00	34.00	34.00	34.00
UAH/US\$ (average)	21.77	22.99	27.00	28.00	30.00	32.00	33.00	34.00	34.00	34.00	34.00	34.00	34.00	34.00
UAH/€ (eop)	23.70	26.10	30.24	30.80	32.70	34.56	35.64	37.40	37.40	37.40	37.74	38.08	38.42	38.42
UAH/€ (average)	24.47	25.04	29.78	31.08	32.85	34.72	35.64	37.06	37.40	37.40	37.57	37.91	38.25	38.42
US\$/€ (eop)	1.12	1.09	1.12	1.10	1.09	1.08	1.08	1.10	1.10	1.10	1.11	1.12	1.13	1.13
US\$/€ (average)	1.12	1.09	1.10	1.11	1.10	1.09	1.08	1.09	1.10	1.10	1.11	1.12	1.13	1.13
Population														
Population (million, eop)	42.80	42.72	42.72	42.67	42.65	42.57	42.62	42.57	42.54	42.46	42.56	42.51	42.49	42.41
Population (%YoY)	-0.4	-0.5	-0.4	-0.4	-0.4	-0.4	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1

Notes: eop – end of period; cov – coverage; con'd – consolidated; ann – annualised. Sources: State Statistics Service of Ukraine, NBU, ICU.

Appendices: Research details, thematic charts & tables

The following pages contain the data charts and tables as referenced in this report.

Quarterly GDP: Reported statistics and ICU's calculations

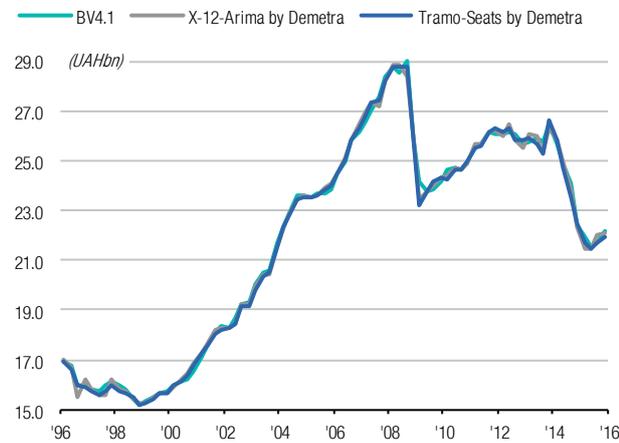
Chart 63. Ukraine's economy from the perspective of quarterly GDP volumes (left) and on-quarter growth rates (right)

1Q96-4Q15

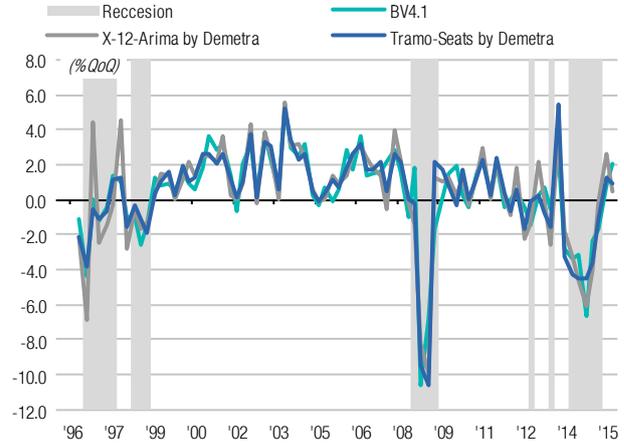
Data is adjusted for inflation and seasonal factors; seasonally adjusted by three methods BV4.1, X-12 Arima and Tramo-Seats

Quarterly GDP size in constant prices of Dec-95

Quarterly GDP growth rates (% QoQ)



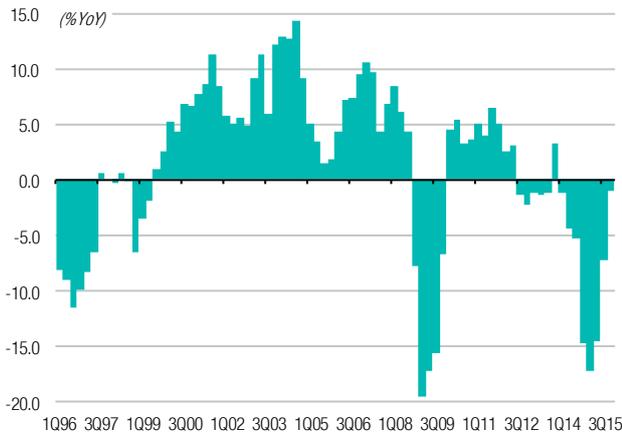
Sources: State Statistics Service of Ukraine, Investment Capital Ukraine LLC.



Sources: State Statistics Service of Ukraine, Investment Capital Ukraine LLC.

Chart 64. Reported on-year quarterly GDP growth (% YoY)

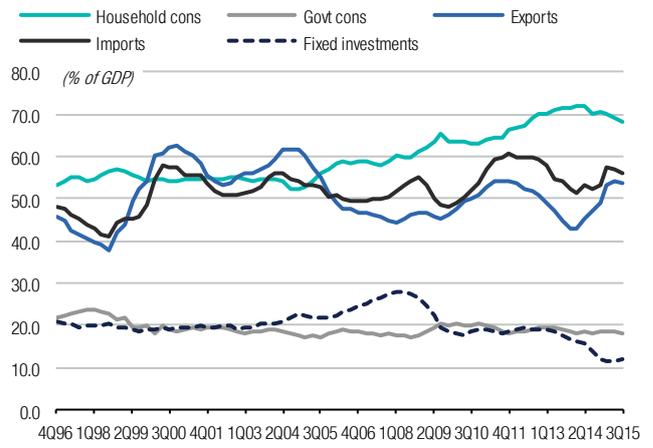
1Q96-4Q15



Source: State Statistics Service of Ukraine.

Chart 65. Demand-side components of GDP (% of total, LTM)

1Q96-3Q15



Source: State Statistics Service of Ukraine, Investment Capital Ukraine LLC.

Table 9. Ukraine quarterly GDP size: History from 4Q96 till 4Q15 (UAHm, if not otherwise indicated)

Reported statistics and ICU calculations of quarter-on-quarter growth in real and seasonally-adjusted terms

Period	Reported statistics on quarterly GDP				ICU calculations							
	GDP at current prices (UAHm)	Real growth (% YoY, qly)	Real growth (% QoQ, SA)	Deflator (% YoY)	Real growth (% YoY, ann'd)	GDP at cons prices ¹ (UAHm, NSA)	GDP at cons prices ¹ (UAHm, SA)			Real GDP growth (%QoQ, SA)		
							BV4.1	X-12-Arima by Demetra	Tramo-Seats by Demetra	BV4.1	X-12-Arima by Demetra	Tramo-Seats by Demetra
4Q96	24,454	-10.0		40.1	-9.7	17,404	16,075	16,228	15,824	0.8	4.6	0.8
1Q97	18,728	-8.3		22.3	-9.8	14,114	15,777	15,780	15,779	-1.9	-2.8	-0.3
2Q97	20,485	-6.6		22.7	-9.1	14,117	15,758	15,586	15,750	-0.1	-1.2	-0.2
3Q97	26,076	0.5		15.3	-6.2	17,544	16,049	15,531	15,687	1.8	-0.4	-0.4
4Q97	28,076	0.0		14.8	-3.7	17,405	16,122	16,258	15,984	0.5	4.7	1.9
1Q98	20,871	-0.3		11.8	-1.6	14,068	16,011	15,744	15,762	-0.7	-3.2	-1.4
2Q98	23,367	0.5		13.5	0.2	14,188	15,795	15,701	15,724	-1.4	-0.3	-0.2
3Q98	28,908	-0.1		10.9	0.0	17,538	15,379	15,435	15,479	-2.6	-1.7	-1.6
4Q98	29,447	-6.6		12.3	-1.7	16,256	15,177	15,236	15,165	-1.3	-1.3	-2.0
...
4Q07	214,883	6.9		26.4	7.9	29,558	28,355	28,258	28,186	2.8	4.0	2.6
1Q08	191,459	8.5		26.6	7.4	26,303	28,804	28,898	28,800	1.6	2.3	2.2
2Q08	236,033	6.2		33.2	6.5	26,824	28,525	28,852	28,818	-1.0	-0.2	0.1
3Q08	276,451	4.3		32.9	6.5	31,892	29,035	28,420	28,754	1.8	-1.5	-0.2
4Q08	244,113	-7.8		23.3	2.6	27,233	25,962	26,061	26,025	-10.6	-8.3	-9.5
1Q09	189,028	-19.6		22.8	-4.8	21,148	24,198	23,481	23,247	-6.8	-9.9	-10.7
2Q09	214,103	-17.3		9.7	-10.6	22,181	23,788	23,766	23,743	-1.7	1.2	2.1
3Q09	250,306	-15.7		7.4	-15.2	26,886	23,826	24,023	24,157	0.2	1.1	1.7
4Q09	259,908	-6.7		14.1	-15.0	25,412	24,186	24,335	24,340	1.5	1.3	0.8
1Q10	217,286	4.5	0.7	10.7	-9.2	21,959	24,643	24,384	24,257	1.9	0.2	-0.3
2Q10	256,754	5.4	1.4	15.1	-3.5	23,110	24,712	24,699	24,677	0.3	1.3	1.7
3Q10	301,251	3.3	0.4	17.5	1.5	27,539	24,604	24,610	24,672	-0.4	-0.4	0.0
4Q10	307,278	3.7	0.7	15.6	4.2	25,989	24,957	24,912	24,973	1.4	1.2	1.2
1Q11	257,682	5.1	2.0	12.9	4.4	23,066	25,556	25,645	25,528	2.4	2.9	2.2
2Q11	311,022	3.9	0.3	16.6	4.0	24,009	25,642	25,657	25,583	0.3	0.0	0.2
3Q11	369,818	6.5	2.5	15.2	4.8	29,347	26,165	26,191	26,195	2.0	2.1	2.4
4Q11	363,557	5.0	0.3	12.6	5.1	27,309	26,039	26,218	26,288	-0.5	0.1	0.4
1Q12	293,493	2.5	-0.8	11.4	4.5	23,584	26,046	25,975	26,125	0.0	-0.9	-0.6
2Q12	349,212	3.1	0.5	9.0	4.3	24,731	26,176	26,456	26,277	0.5	1.9	0.6
3Q12	387,620	-1.3	-1.5	6.2	2.3	28,963	26,051	25,850	25,835	-0.5	-2.3	-1.7
4Q12	378,564	-2.3	-0.8	6.6	0.5	26,681	25,664	25,509	25,813	-1.5	-1.3	-0.1
1Q13	303,753	-1.2	0.6	4.8	-0.4	23,301	25,733	26,052	25,887	0.3	2.1	0.3
2Q13	354,814	-1.3	0.4	3.8	-1.5	24,208	25,912	26,024	25,689	0.7	-0.1	-0.8
3Q13	398,000	-1.2	-0.1	4.0	-1.5	28,595	25,774	25,352	25,292	-0.5	-2.6	-1.5
4Q13	408,631	3.3	2.1	4.3	-0.1	27,612	26,446	26,302	26,667	2.6	3.7	5.4
1Q14	313,568	-1.2	-1.1	4.5	-0.1	23,018	25,715	25,832	25,798	-2.8	-1.8	-3.3
2Q14	375,903	-4.5	-4.4	11.1	-0.9	23,084	24,845	24,976	24,684	-3.4	-3.3	-4.3
3Q14	434,166	-5.4	-3.1	15.4	-2.0	27,031	24,054	23,827	23,559	-3.2	-4.6	-4.6
4Q14	443,091	-14.8	-3.9	27.2	-6.6	23,538	22,447	22,372	22,490	-6.7	-6.1	-4.5
1Q15	367,577	-17.2	-5.3	41.5	-10.7	19,069	21,925	21,470	21,690	-2.3	-4.0	-3.6
2Q15	449,575	-14.6	-0.5	40.1	-13.1	19,706	21,553	21,449	21,456	-1.7	-0.1	-1.1
3Q15	555,044	-7.2	0.5	37.8	-13.5	25,077	21,726	22,001	21,724	0.8	2.6	1.2
4Q15 E	577,948	-1.0	N/A	31.8	-10.2	23,303	22,160	22,109	21,919	2.0	0.5	0.9

Notes: [1] at constant prices of December 1995; SA – seasonally adjusted data; NSA --- non-seasonally adjusted data; [E] estimated by ICU.

Sources: State Statistics Service of Ukraine, Investment Capital Ukraine LLC.

ICU consumer basket: Observation of Kyiv, New-York and Moscow prices

Table 10. ICU consumer basket as of end of January 2016

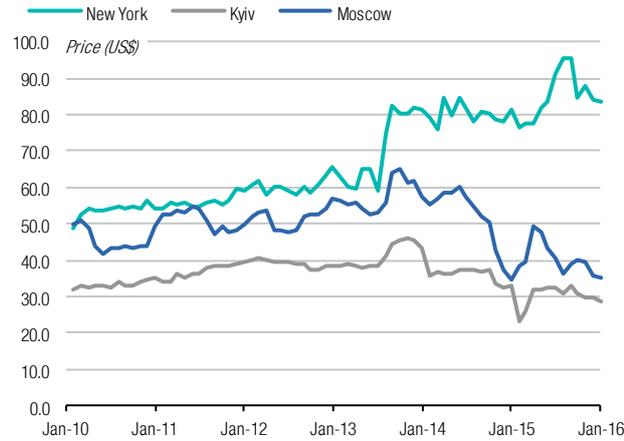
Prices of consumer goods in Kyiv, New-York, and Moscow

Item of the basket	Description	Kyiv, central district 29-Jan-16 Price (UAH)	New York metro- politan area 29-Jan-16 Price (US\$)	Moscow, central district 29-Jan-16 Price (RUB)
Consumer goods				
Coca-cola (0.5 litre, plastic bottle)	Non-alcohol beverages	9.40	2.25	48.90
Beer Corona Extra (0.33 litre, glass bottle)	Alcoholic beverages	18.25	1.83	92.50
Bunch of fresh bananas (1 kg)	From Ecuador	38.40	1.94	89.90
Pack of milk (1 litre)	Locally produced, soft package, i.e., not glass bottle	13.94	1.05	69.90
Chicken meat (1 kg pack)	Locally produced and branded package, boneless breast	71.61	10.98	169.00
Canned pineapple (0.85 kg, can)	Pineapple circles, Dole brand	68.70	2.97	237.49
Pasta (0.5 kg)	Soft package, produced in Italy	37.75	1.64	75.00
Sugar (1 kg)		20.75	2.86	49.90
Package of table salt (0.5 kg)		10.40	0.60	20.80
Chicken eggs (10 units pack)	White eggs, standard size	29.40	3.33	98.90
Chocolate (100 g)	Made by Craft Foods Corp, Milka brand	27.75	1.52	89.30
Toothpaste (100ml package)	Colgate	49.60	1.85	180.00
Shampoo (200ml package)	Head & Shoulders brand, for normal hair	52.05	2.85	220.00
Toilet paper (4 rolls package)	Kleenex Cottonelle brand, white paper, Regular toilet tissue	21.10	3.92	130.00
Magazine	Men's Health, local edition, A4 format (standard one, not a pocket book format)	33.95	4.99	140.00
Gasoline (1 litre)	Lukoil, regular	18.99	0.56	38.30
Batteries (AA x 4 pack)	A 4-pack of AA Duracell batteries, Alkaline	56.11	4.99	164.00
Coffee (250 g, vacuum pack)	Jacobs Monarch, brick-like vacuum pack	81.90	15.99	249.99
Services				
Underground commute ticket	Within the central part of the city	4.00	2.75	40.00
Cinema ticket	Thursday's night price for the seat with good location, Hollywood film	65.00	14.59	450.00
Total basket value (in local currency)		729.05	83.46	2,653.88
Exchange rate versus US dollar at spot market as of date of observation		25.650	1.000	75.547
Total basket value (in US\$)		28.42	83.46	35.13
Overvalued "+" / undervalued "-" (%)				
UAH vs. USD		-65.94		
UAH vs. RUB		-19.09		
Fair value in the long-run as of observation date				
UAH per USD		8.735		
UAH per RUB		0.275		

Source: ICU.

Chart 66. ICU consumer basket value (US\$)

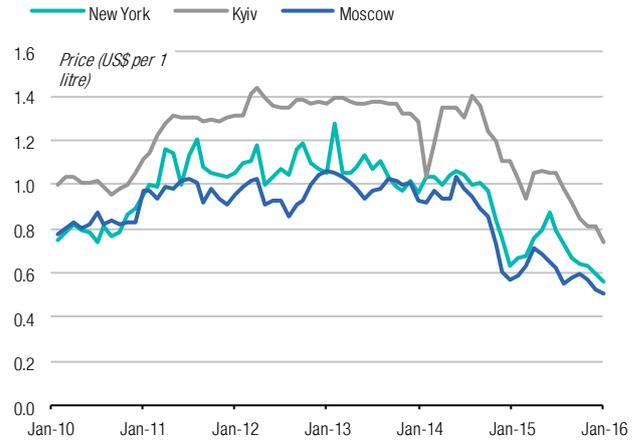
Price history February 2010 - January 2016



Source: ICU.

Chart 67. Gasoline A95 equivalent 1 litre (US\$)

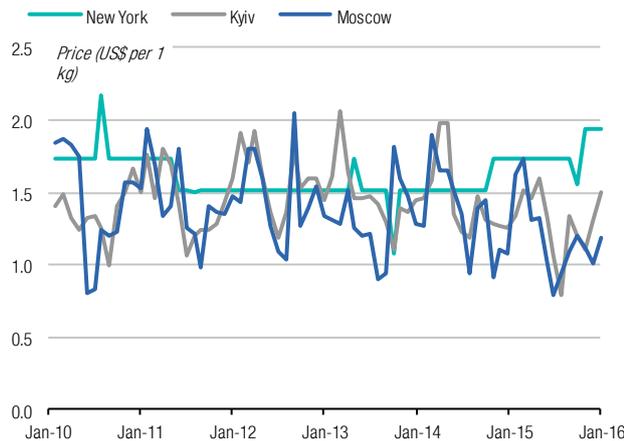
Price history February 2010 - January 2016



Source: ICU.

Chart 68. Fresh banana 1 kg bunch (US\$)

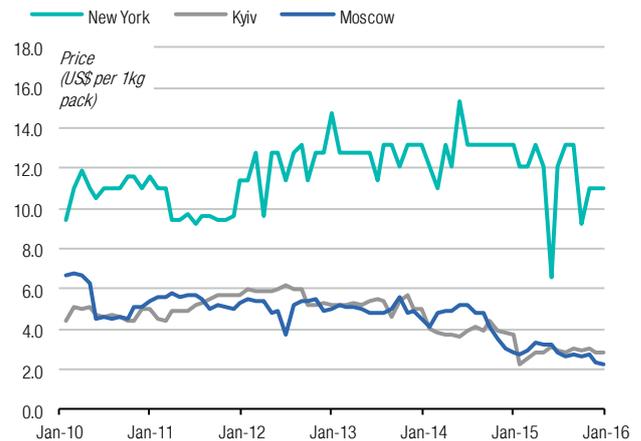
Price history February 2010 - January 2016



Source: ICU.

Chart 69. Chicken meat 1 kg pack of boneless breast (US\$)

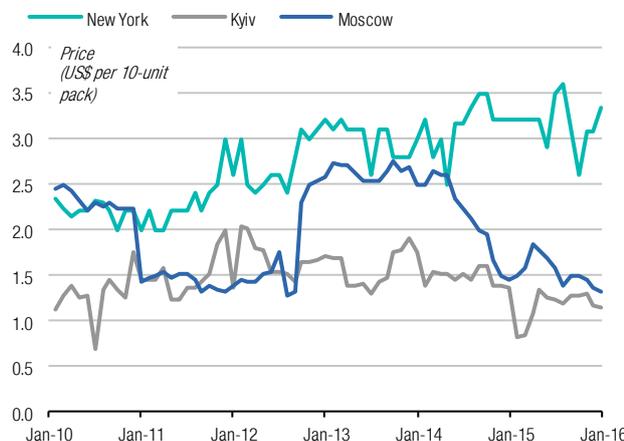
Price history February 2010 - January 2016



Source: ICU.

Chart 70. Chicken eggs 10-unit pack (US\$)

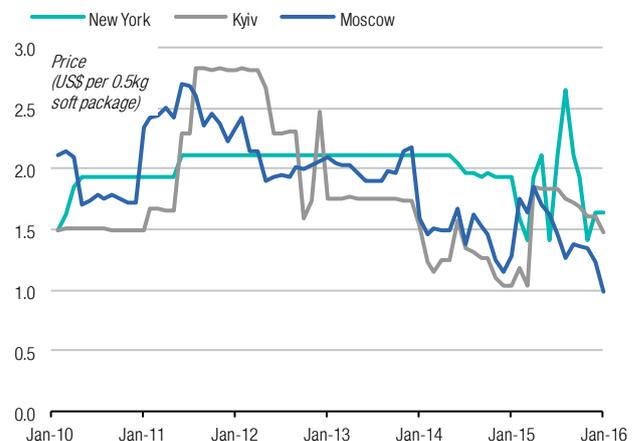
Price history February 2010 - January 2016



Source: ICU.

Chart 71. Pasta 0.5 kg soft package Italy-made (US\$)

Price history February 2010 - January 2016



Source: ICU.

Chart 72. Beer Corona Extra 0.33 litre glass bottle (US\$)

Price history February 2010 - January 2016

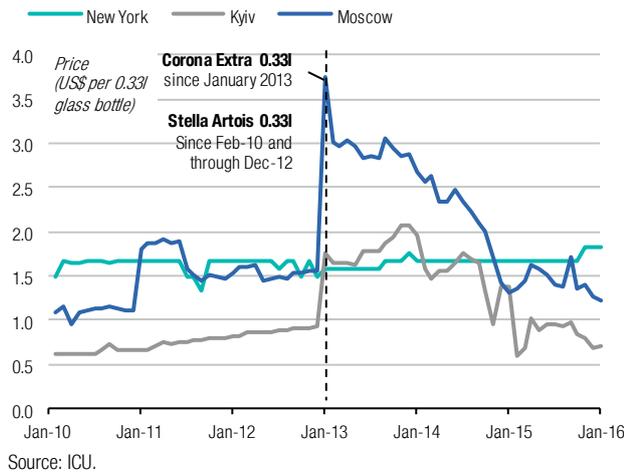


Chart 73. Coca-Cola 0.5 litre plastic bottle (US\$)

Price history February 2010 - January 2016

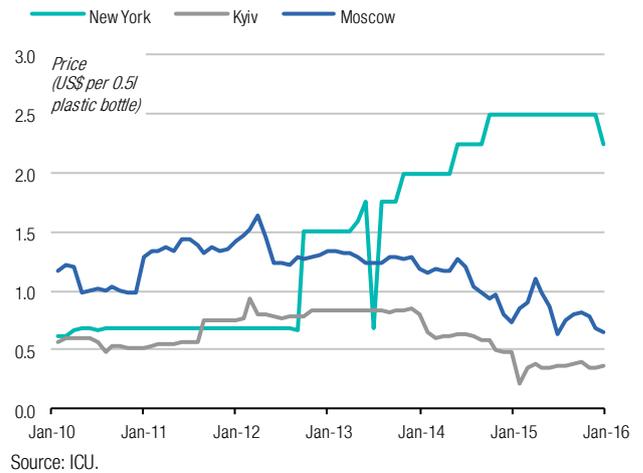


Chart 74. Shampoo 200ml bottle Head & Shoulders (US\$)

Price history February 2010 - January 2016

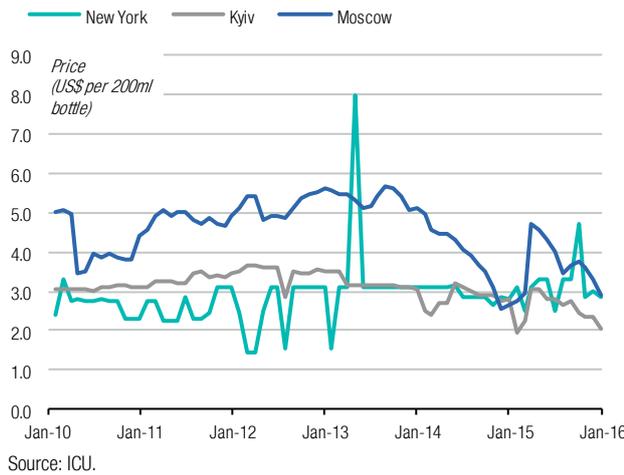


Chart 75. Magazine Men's Health, A4 format (US\$)

Price history February 2010 - January 2016

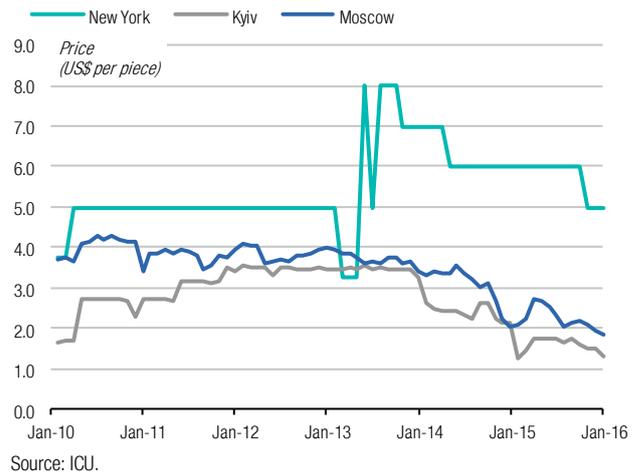


Chart 76. Duracell batteries (AA x 4 pack) (US\$)

Price history February 2010 - January 2016

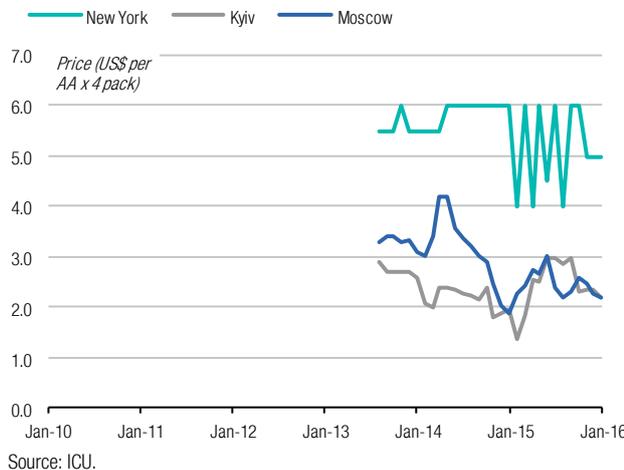


Chart 77. Jacobs Monarch coffee, 250 g vacuum pack (US\$)

Price history February 2010 - January 2016

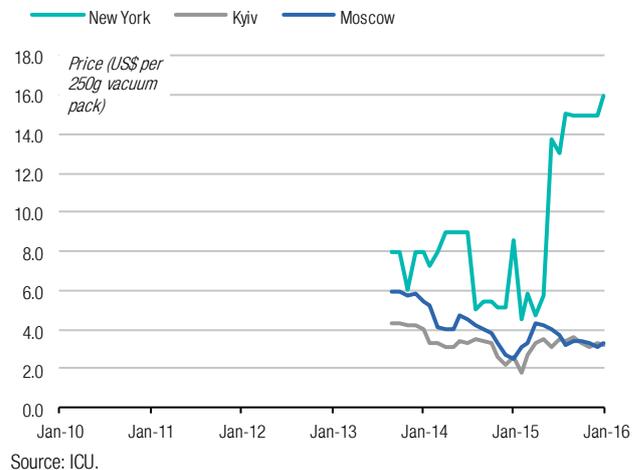
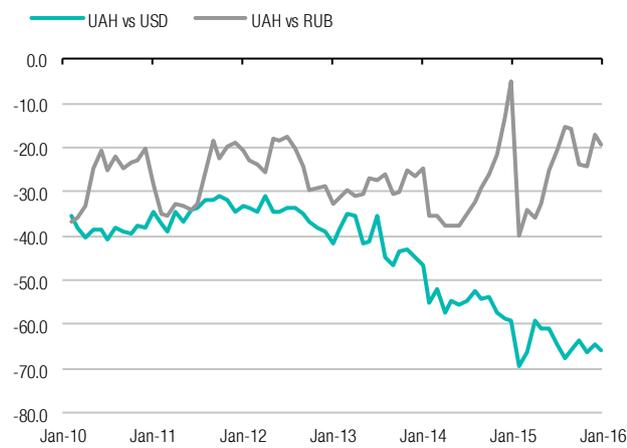


Chart 78. Value gap of ICU basket in UAH vs. USD and RUB (%)

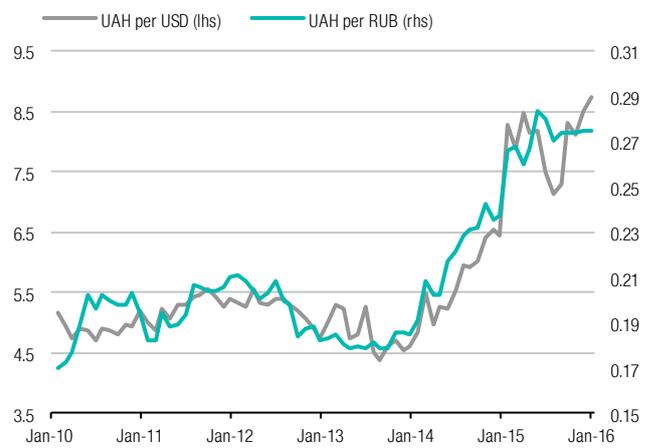
Price history February 2010 - January 2016



Source: ICU.

Chart 79. An exchange rate level of UAH per USD and UAH per RUB, which would eliminate the value gap of ICU basket

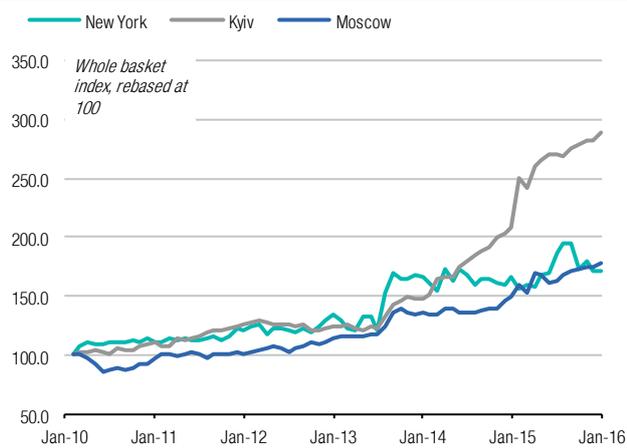
Price history February 2010 - January 2016



Source: ICU.

Chart 80. Index of the ICU consumer basket value in local currency (points, rebased at 100 as of February 2010)

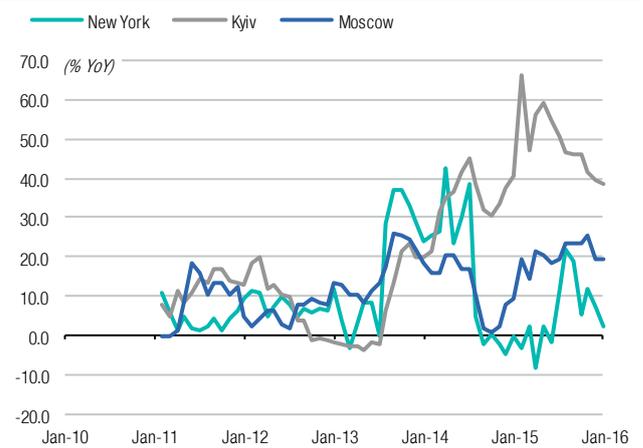
Price history February 2010 - January 2016



Source: ICU.

Chart 81. Growth rate of the index of the ICU consumer basket value in local currency (% YoY)

Price history February 2010 - January 2016



Source: ICU.

Disclosures

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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.

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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.

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

WEB www.icu.ua    [@ICU-UA](https://twitter.com/ICU-UA)

CORPORATE FINANCE

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

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

Ruslan Kilmukhametov, Director
ruslan.kilmukhametov@icu.ua

Ivan Shvydanenko, Director
ivan.shvydanenko@icu.ua

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

Ruslan Patlavsky, Director
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

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

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

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

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

RESEARCH DEPARTMENT

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

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

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

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

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

Lee Daniels, Rolfe Haas
Editors

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