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Quarterly Report

Debt deflation Я Us



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Executive rundown

Below is a brief, broad overview of Ukraine's economy as of year-end 2017, and our rationale for the base-case economic projections for 2018–2020.

Economic growth accelerates, but still is under restraint of ongoing debt deflation. Over the course of 2017, Ukraine's GDP growth has gradually decelerated, and we estimate it come in at 2.0% for the whole year. Strong consumer demand, higher fixed asset investment, and stable government consumption were the main driving forces, and they countervailed the negative impact of foreign trade. In 2018, thanks to a better external environment, our projection is now in line with consensus, which is for a +3% real GDP increase for 2018, followed by weak growth of +1.9% in 2019. We argue that Ukraine's economic recovery is restrained by a process of ongoing debt deflation, where sizable defaults are due to past outsized FX lending.

Foreign trade: world commodity markets are changing to less favourable, as we expect oil price growth to accelerate to 17% YoY, while steel and iron ore prices to decline 8-16% YoY in 2018. This puts additional pressure on Ukraine's trade balance, as oil and gas energy resources account for about 25% of Ukraine's imports, while metals and ores still comprise ~30% of Ukraine's exports. Ukraine has already started increasing its energy independence and growing export potential this year, but faces likely shortfalls and delays. We see Ukraine's trade deficit to widen 11% to \$7bn in 2018, with significant upside risks.

Sovereign debt: government supply of yield-earning assets widens. For 2018 main debt burden for state budget is amounted to about US\$10.4bn, mostly denominated in FX, including US\$3.21bn in domestic debt denominated in FX. So, 2018 will be one of decisions on how to navigate the peak in external debt repayments scheduled for 2019–2020, which amount to around US\$4.5bn each year. The MoF will try to increase its market presence this year, and will make attempts to issue new Eurobonds or tap UKRAIN 7.375% '32, which was issued in September 2017.

Bank lending: competition for solvent borrowers is heightening. Long-awaited bank lending started to spring out. In 2017, retail loans, mainly credit card and auto loans, demonstrated 30% YoY growth driven by low comparison base and better consumer expectations. This segment will remain the most vibrant alongside the SME lending, as more banks turn into that niche. Mortgages are yet to pick up but we do not expect this to happen until the inflation abates. Corporate lending is growing due to the short-term loans issued by banks with European capital. NPL remain extremely high 54.9%, mainly due to Privatbank's loan portfolio shenanigans and dubious "administrative" lending from state banks. The Ukrainian parliament is about to fully address NPLs problem with a respective new law.

External macroeconomic and financial markets environment appears supportive of Ukraine's economy for now and for the next 12-month period. Despite the fact that the US Fed appears committed to a series of steady interest rate increases, the US dollar has been weakening since early 2017. This trend is projected to extend well into 2018.

UAH's adjustment will take place gradually over 2018. We reiterate our forecast of hryvnia depreciating gradually from average 26.66/USD in 2017 to 28.5/USD in 2018. The key factors influencing hryvnia's soft depreciation are still mostly favourable external financial markets, defensive tactics of Ukrainian authorities in the monetary sphere during the preelection year, and hryvnia being overvalued according to the real TWI-implied rates.



Ukraine's economy

Over the course of the past year, Ukraine's economic growth has gradually decelerated, and came in at 2.1% for full-year 2017. Strong consumer demand, higher fixed investments, and stable government consumption were the main driving forces, which countervailed the negative impact of foreign trade. In this section, we argue that Ukraine's economic recovery is restrained by ongoing debt deflation, where a sizable portion of defaults are due to past outsized FX lending.

Escaping another great debt deflation

Today's economy is plagued by mass defaults and low wages

Over 2017, Ukraine's economy continued to recover from the 2014-15 recession caused by the crisis created by Russia's military invasion and annexation of Crimea. This serious of events dragged most of the region into recession

There are at least two major casualties from the recent crisis:

- (1) the domestic credit market, and
- (2) households that are dependent on wage and related compensation payments.

Ratio of non-performing loans in the banking sector is more than 50% The domestic credit market experienced a wave of massive credit defaults over this period. By year-end 2017, the domestic banking sector reported a ratio of NPLs at more than 50%. This ratio was as high as 58% in August 2017, and declined to 54.9% as of end-November 2017. The largest part, an 85% share, is bank credit to nonfinancial businesses. The currency structure of NPLs is nearly an equal split between local-currency and foreign-currency loans.. In our view, this represents a debt deflation process, and is a product of previously accelerated debt creation, a sizable part of which was made in foreign currency.

Aggregate employees' compensation declined by nearly 30% during the last crisis, recovering somewhat in 2017

There has been a striking shrinkage in both the number of economically active people and the wage level. Labour market indicators such as the unemployment rate and the ratio of economically active people has deteriorated. As of the end of the 3Q17, these ratios were 9.4% and 62.2%, respectively, while at the end of 2015, they were 7.2% and 65%. Due to the loss of control of Crimea and parts of Donbas, the total number of economically active people dropped from nearly 22m to 17.9m over the four-year period of 2014–17. Another contributing factor is labour migration to EU member states from Ukraine, although there are no official labour market data on this phenomenon. However, casual observation can't miss anecdotal evidence such as advertisements in various parts of the country for employment in Hungary and Poland. Another headline indicator, the aggregate wage size and level (as measured by a component of GDP called employees' compensation), declined in this crisis much more than in the previous ones (as depicted on Chart 1 on p. 7), Wage contraction reached nearly 30% in early 2015. It didn't start to recover until 2017, when the government pushed for a minimum wage increase.

Debt crisis is the heart of the problem

Out of these major crises, debt deflation is at the heart of the problem, with wage deflation an extension.

Escaping debt deflation of this magnitude is proving lengthy and painful for the entire economy. Economic activity is recovering only gradually, and it is well below the 7% growth desired by some officials, economists, and commentators.



Meanwhile, aggregate gross profits of businesses were rather stable in the 2014–15 recession...

...thanks to price inflation running above wage inflation (through 2016), government was forced to intervention into Naftogaz—turning it profitable—and banks—supporting guaranteed deposits and the systemic banks

Despite sizeable, excess local-currency reserves in commercial banks' accounts with the NBU, bank lending has been slow. In our view, this is precisely because of the nature of the ongoing domestic debt deflation: non-financial businesses borrowed extensively in foreign currencies. Mass corporate defaults and high NPLs have to be viewed through the prism of corporate profitability and the possibility of improvement in creditworthiness. This issue, according to the mainstream interpretation, is exacerbated by a weak, unreformed, and presumably highly corrupt legal system, which does not allow creditors to recoup losses on defaulted debts through confiscation of collateral of defaulted borrowers. We agree as far as it goes, but we also see another side of the issue. Businesses have to regain profitability to produce income streams sufficient to pay off past debts. Interestingly, as the chart below shows, gross profits of the business sector (including the banking sector as well as stateowned businesses) did not contract much in the 2014-15 recession compared with the 2008-09 recession. The growth rate of business profits did drop below zero, however, although only for two quarters when it declined by 1% in 2Q15, and 0.2% in 3Q15. This is in sharp contrast with the performance of employees' compensation, which fell into the longest and largest decline in history. Quite remarkably, gross profits have experienced three sizable declines since the mid-2000s, suggesting that business profits were due to business/economic cycles.

There appears to be an anomaly in that business profits have been nearly flat, yet the number and size of corporate defaults increased when compared with the crises of the late 1990s and 2008–09. In our view, this was due to the sizable adjustment in the profitability of state-owned, natural-gas-monopoly Naftogaz, which previously was loss-making and was a major drain on official FX reserves. Given its size, Naftogaz's new-found profitability could be the one factor that propped up profits on the aggregate level. However, this one factor has had accompanying factors:

- (1) the devaluation of the national currency (in trade-weighted terms) has been sizable; in nominal terms, it was larger than in the 2008-09 and 1998-2000 crises, while in real terms, it was at a similar level as in 2008-09 crisis (see Chart 21, p. 17),
- (2) the sizable deficits of the state budget and the recapitalization of balance sheets of stateowned banks (including failed privately-owned banks). This move has effectively injected default-free, long-term, income-yielding financial assets (local-currency bonds) into balance sheets of the banks, effectively supporting banks' liabilities, which generate income flow to the non-banking sector (businesses, households).

Hence, the business sector, in aggregate, was quick to pass on the FX-rate impact to costs of their products, while restraining what they paid out in wages. The government was forced to intervene in the currency and banking crisis by substituting private business IOUs (defaulted loans) on the banks' balance sheets with default-free, long-term, income-yielding UAH government bonds. The key mismatch here was currency related: banks had defaulted loans (private business IOUs) not only in UAH, but also in foreign currency. The shortcoming is the central government is able to create its own IOUs (via recapitalizing business entities like previously Naftogaz and, more recently, state banks), which are default-free and income-yielding, but only in UAH. It cannot do the same in FX. Indeed, it can't create a foreign-currency IOU that is default-free, as it has to deliver foreign currency when IOU is due.

Prior to the 2014–15 crisis (and especially prior the 2008–09 crisis), the non-government sectors—including banks and non-financial businesses as well as households—were quite active in creating foreign-currency debts. While during 2005–08 (or prior 2008–09 crisis), FX debt creation was quite evident (as Chart 10, p 13 shows), it was not during the period of

Central government injects local-currency, default-free, income-yielding assets into balance sheets of the non-government sector's entities (banks, businesses, households)



growth in 2010–13. This chart provides aggregate data, but it misses details of what happened inside the balance sheets of some key players of the economy.

There are many examples of local commercial banks that expanded FX debt and then were caught in the FX debt deflation

The balance sheet of Sberbank Ukraine¹, one of the largest commercial banks in the country by assets, is a good example. Over the 2010–17 period, it recorded active debt expansion in 2010–13, followed by lengthy debt deflation in 2014–17. The bank's loans on the asset side of its balance sheet are liabilities of its clients, mainly businesses and, to a lesser extent, households. What is remarkable is that most of the bank's credit-portfolio expansion was in foreign-currency loans, and most of that in US dollars. Overall, during the credit expansion phase of 2010-2013, the total increase of the loan book adjusted for loan-loss provisions was a US dollar equivalent of US\$2.8bn, of which UAH-denominated loans accounted for an equivalent of US\$0.5bn or 17.6%. At the same time, the increase of US dollar loans amounted to US\$1.8bn or 62% of total loan-book expansion; euro loans accounted for US\$0.4bn or a 15.3% share, and ruble (and other currencies) loans were the equivalent of US\$0.2bn or 5.2%.

These banks usually relied on FX lending as a key line of business...

All in all, foreign-currency loan creation accounted for 82.4% of total loans in net terms created by Sberbank Ukraine over the 2010-13 period. Given that it takes two to tango, on the other side of the Sberbank's lending activity were domestic non-financial businesses that willingly loaded their balance sheets with foreign-currency credit, and, hence, exposed themselves to FX, refinancing, and credit risks.

Credit expansion in different currencies underlies our analysis that Ukraine's economy operates under an endogenous money approach, and this is outside of the authorities' control. What governs this activity are the business interests between a willing lender and an eager borrower. Banks create both loans and deposits, and then use monetary reserves to make payments on behalf of the client as they draw down the newly-created deposit. If a UAH loan was created, then UAH monetary reserves are obtained locally. If a USD loan was created, then, in the case of Sberbank, the US dollar monetary reserves were largely supplied by a parent foreign bank with a much higher credit rating, one that had easier access to demand deposits from US banks. The reason why FX credit creation prevailed on the books of Sberbank Ukraine to the extent that it did was because Sberbank had a foreign parent to use as a lender of last resort. Ukraine's central bank was a bystander when this was taking place.

...when the cycle turned, the ratio of past-due loans skyrocketed When the crisis hit in 2014, Sberbank Ukraine saw a steep increase in bad loans, as the number of corporate defaults among its clients that were struggling to service FX loans soared. The ratio of past-due loans to gross loans moved decisively up to 35.5% in 2014 from 11.5% in 2013. This ratio extended further in 2015 and 2016, reaching 53.5% by end of 3Q17. See Chart 3, p. 8.

Remarkably, the balance sheet of this bank had experienced serious debt deflation in the wake of the 2008–09 crisis. FX-denominated credit creation had been the main component of Sberbank's business since the early 2000s. At that time, this bank was named NRB-Ukraine, and it was owned by Alexander Lebedev, a Russian businessman. During the 2008–09 crisis, its clients began defaulting, and the ratio of past-due loans jumped to 40% in 2009 from zero in 2004. NRB-Ukraine was sold to Sberbank of Russia, which resolved the situation via a number of measures, including more aggressive lending to a growing base of clients as the Ukraine economy recovered, and supplying FX loans in even greater volumes than previously.

¹ See https://www.sberbank.ua/fin_rep_ifrs/

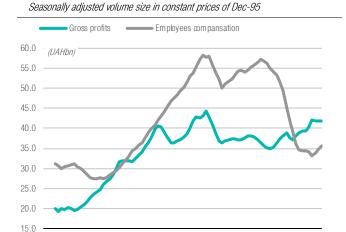


This saga provides a possible clue on how the current debt deflation story may unfold. In the past, it required a white knight in the form of a new owner—Sberbank of Russia bailing out oligarch Lebedev—to turn around the bank and save it from debt deflation. It accomplished this via accelerated FX lending. Hence, past FX debts were resolved via more FX debt. A similar turnaround was undertaken back in 2009 by Russian VEB with privately owned Prominvestbank. Now, this bank is battling with debt deflation, too. This time around, we do not see a savior coming to the rescue that will turnaround debt deflation via a new wave of accelerated FX lending. It also calls into question the logic of Russian financial institutions that entered Ukraine's banking sector in the wake of the 2008–2009 crisis. Their aggressive FX lending, which is, by definition, a high-risk development for the economy, may have only forestalled massive FX debt deflation.

All in all, given today's debt deflation and that the most sizable portion of defaulted debt is FX-denominated liabilities, resolution will be a lengthy process. There are attempts to create another breakthrough such as land reform that would open a flood of FX capital into country. However, more likely this strategy would be a repeat of previous episodes of FX debt creation and lead to another FX and debt crisis.

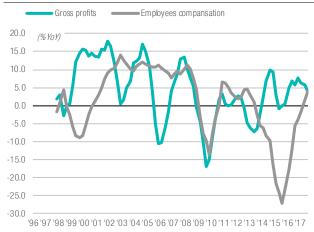
A healthier debt deflation solution that the government can control is to inject default-free and income-yielding assets ² onto balance sheets of the non-government sector via deficit spending and additional recapitalization if needed, which would generate a steady stream of income. Further, this would enhance the creditworthiness of the sector as a whole, allowing different business entities and households that previously were in default to normalise. We don't expect this logic to prevail, however. The current sentiment is to avoid large government deficits because it is feared they create the risk of FX rate weakening. And to prevent the UAH from weakening, the likely solution will be a renewed wave of accelerated FX debt creation.

Chart 1. Gross profits and employees compensation*: Quarterly history of price adjusted volumes from 1Q of 1996 through 3Q of 2017 (left) and their year-on-year percentage changes (right)



'96 '97 '98 '99 '00 '01 '02 '03 '04 '05 '06 '07 '08 '09 '10 '11 '12 '13 '14 '15 '16 '17

Note: * wages and social contributions. Source: State Statistics Service of Ukraine, ICU. Growth rates of seasonally adjusted volumes, which are in constant prices of Dec-95



Source: State Statistics Service of Ukraine, ICU.

² This includes liabilities of the central government in the form of local-currency bonds, as well as liabilities of the central bank in the form of certificates of deposit used to withdraw excess reserves from banks' accounts.



Chart 2. Loan portfolio of Sberbank Ukraine: Annual history from 2001 through 2017 (equivalent of US\$ billion)

Levels as of end of the period (year)*



Note: * Adjusted for loan-loss provisions. Other FX = mainly Russian ruble and, at less extent, other FX currencies; Data for 2017 is as of end of September Source: Sberbank Ukraine. ICU.

Flows for the period (year)*

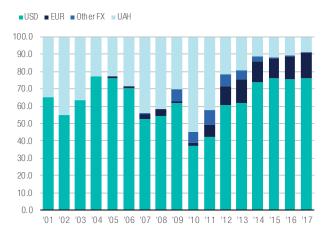


Note: * Adjusted for loan-loss provisions. Other FX = mainly Russian ruble and, at less extent, other FX currencies. Data for 2017 is for nine-month period of January-September

Source: Sberbank Ukraine, ICU.

Chart 3. Structure of the loan portfolio of Sbernank Ukraine: Annual history from 2001 through 2017 (% of total)

Currency structure of the loan book*



Note: * Adjusted for loan-loss provisions. Other FX = mainly Russian ruble and, at less extent, other FX currencies; Data for 2017 is as of end of September Source: Sberbank Ukraine, ICU.

Breakdown of the gross loan book by a past due status vs relative size of the loan book as measured by gross loans to GDP ratio



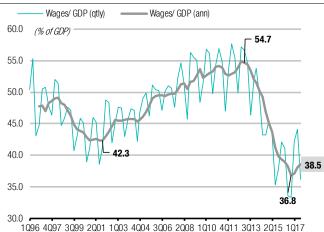
Note: * Other FX = mainly Russian ruble and, at less extent, other FX currencies; Data for 2017 is for nine-month period of January-September

Source: Sberbank Ukraine, ICU.



Chart 4. Share of employees' compensation* in GDP (% of total)

Quarterly history from 1Q of 1996 through 3Q of 2017

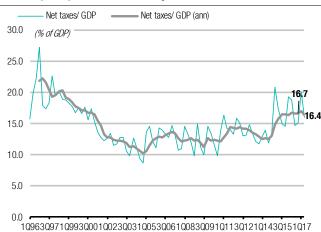


Note: * wages and social contributions

Source: State Statistics Service of Ukraine, ICU.

Chart 6. Share of the net taxes component in GDP (% of total)

Quarterly history from 1Q of 1996 through 2Q of 2017



Source: State Statistics Service of Ukraine, ICU.

Chart 8. Breakdown of GDP by production (% of total)

Quarterly history from 1Q of 1996 through 2Q of 2017

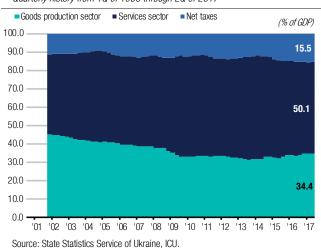
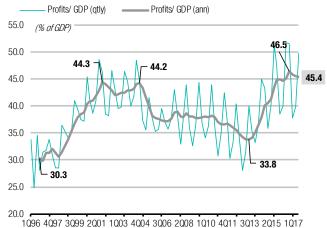


Chart 5. Share of gross profits in GDP (% of total)

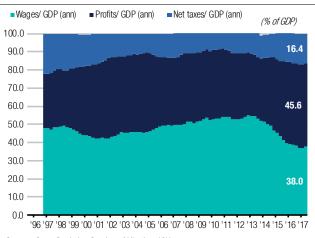
Quarterly history from 1Q of 1996 through 3Q of 2017



Source: State Statistics Service of Ukraine, ICU.

Chart 7. Breakdown of GDP by income (% of total)

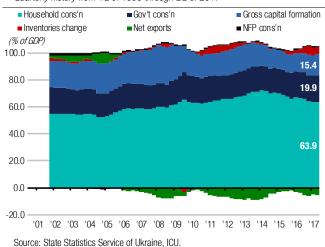
Quarterly history from 1Q of 1996 through 2Q of 2017



Source: State Statistics Service of Ukraine, ICU.

Chart 9. Breakdown of GDP by expenditures (% of total)

Quarterly history from 1Q of 1996 through 2Q of 2017





Money: Domestic and foreign flow of funds

As of year-end 2017, the current structure of the flow of funds³ of Ukraine's economy consists of the following:

There are early signs that the economy is returning to credit creation denominated in foreign currency, which is a concern...

...while at the same time UAH credit creation.

there is an extension of which is a plus

Government was running a record-breaking primary surplus of 4% of GDP in mid-2017 (1) Domestic FX credit appears to be returning: Non-government domestic flows-bank credit-is expanding in local currency (there are two sub-sectors of the economy that are active: state-run corporations and consumers), while foreign-currency credit continues to shrink. In November, the most recent month for which bank data is available, banks and their clients created net, domestic UAH credit4 of UAH3.8bn, while they together destroyed domestic FX credit in the equivalent of UAH7.7bn. Hence, overall, the economy was destroying domestic bank credit. This was contrary to October, when banks and their clients created both UAH and FX credit in the domestic economy for non-government borrowers in the tune of, respectively, UAH4.5bn and UAH6.4bn. October was unusual, as the last time Ukraine's banking sector was creating both UAH and FX credit for the non-government sector was in January 2014, which was also the month before former President Yanukovych administration's collapsed entirely in February of that year. Going forward, in our view, some tranquillity in the domestic and foreign financial markets, and past multi-year FX deleveraging of the Ukraine's nonfinancial businesses, which is usually highly dependent on FX credit, allows for a return of the past practice of FX borrowing by private businesses. Until now, the most creditworthy among them were getting FX credit from foreign entities (IFIs and private funds). Now, it appears that some slow-paced FX credit creation (in net terms) is likely to be practiced by the banking sector as a whole. In our view, short-term consumer lending in local currency that carries high interest costs for borrowers will increase in 2018, as banks regard households as the least leveraged sector of the economy. However, this introduces that much more risk into the economy, as consumers usually buy imported consumer goods. See Chart 10, p. 13.

(2) Government doubles down on adhering to primary surpluses: By mid-year 2017, Ukraine's central government achieved an extraordinary, record-breaking level of primary surplus of 4% of GDP. This was even greater than the primary surplus of 3% of GDP created by PM Yatsenyuk in the second half of 2015, which was necessary to stabilise the country when it was under invasion, and there were both bank and currency crises. See Chart 14, p. 14. This level of primary surplus was achieved last year thanks to a robust increase of nominal GDP of 23%, and to one-off revenue items, which included (i) confiscation of funds that belonged to the previous administration and were judged as having been obtained fraudulently (total of UAH29.7bn⁵), and (ii) funds transferred by state-owned enterprises from accumulated profits (total of UAH24.5bn).

³ Here we avoid using the traditional term "cash flow" because it misplaces "cash", which is paper currency or the government's IOU (abbreviation of "I owe you") in the physical form of paper or metal coin, with deposits or banks' IOUs, which are predominantly used as a means of payment by major economic units of an economy.

⁴ We use terms "created credit" and "destroyed credit" in the relation to bank lending to their nongovernment clients reflecting the endogenous money approach that we employ for our macroeconomic analysis of Ukraine's economy. It is contrary to the traditional and prevailing approach of exogenous money, where banks are considered to be intermediaries of funds between those who save and those who borrow and money supply is a function of the money multiplier and given size of base money.

⁵ For the period of January through November of 2017.



However, even if one excludes the one-off items from state budget revenues, this does not account for the entire primary surplus. Hence, there are at least two viable rationales for this budgetary outcome: (i) the macro projections when the 2017 state budget was adopted underestimated the future path of the economy, and (ii) the government ran fiscal policy with an aim to regain access to foreign-currency debt markets, primarily the Eurobond market, and, hence, the best strategy was to adhere to sustained primary fiscal surpluses, as this results in a lowering of the sovereign debt level. Indeed, over 2017, the public debt level—including direct and guaranteed debt—declined from 81% of GDP as of year-end 2016 to 72.7% as of end of November 2017. See Chart 13, p. 14. The state budget for 2018 is drawn with an assumption that the nominal rise of GDP will be about 20% and the size of expenditures will amount to UAH948bn or 27.3% of expected GDP (down from 28.9% in 2017). This must yield a deficit of 2.5% of GDP. However, with the expected size of debt servicing expenditures of more than 110bn (about 4%), there could again be a primary surplus of about 1.5-2% of GDP if growth projections turn out right. Hence, the rational of adhering to primary surpluses as a tool to win FX debt market access is a dominant one. Our own base-case scenario, too, envisages that another primary surplus will be recorded in 2018. This strategy allows support of the UAH's exchange rate in the domestic FX market as government limits net injections of UAH monetary reserves onto banks' accounts with the NBU. This induced shortage of UAH reserves by fiscal policy offers some degree of counterweight to the induced excess of UAH reserves that have been created over the past few years due to the government's support of the state-owned banks and private banks that failed.

Ukraine's government has a FX funds balance of US\$3bn on accounts with NBU and domestic banks...

...FX debt refinancing capability is also supported by current pro-EM sentiment in the global capital markets as well as domestic banks' pool of FX funds in foreign banks ...

...Hence, it appears unlikely that Ukraine resumes IMF programme with strings attached in the last 12-month period before presidential elections (3) Government's FX position is US\$3bn strong, covering 47% of FX debt due over the next 12 months: The above-mentioned details of the government's strategy and favourable sentiment in the global financial markets in general, and, in particular, the window that has opened to non-investment-grade EM economies due to a search for yield, allowed Ukraine's government to accumulate about US\$3bn in its accounts. This allows the country to cover about 47% of debt that falls due over the next 12 months. Hence, assuming there is no further FX borrowing, the government can pay FX debt falling due through May 2018. In addition, if conditions allow the government to enter the Eurobond market and borrow from foreign private funds, it will use the opportunity and borrow a wholesale size of at least US\$1bn to get through this last year of the current political cycle. That would allow it to avoid borrowing from the IMF and related lenders that would impose demanding conditions. In addition, the government continues borrowing FX funds from the domestic banks, placing FX-denominated bonds. There are willing buyers of this paper among state-owned entities as well as private entities, including wealthy individuals. However, the volumes in this market are much smaller than in Eurobonds; the capacity is only about US\$100-200m. Note that the overall balance of demand deposits held by Ukraine's commercial banks in foreign banks amounted to US\$3.5bn as of end of November 2017. Likely, the government will try to tap into this pool of funds to support its FX debt refinancing schedule. Hence, the key question here is whether Ukraine's authorities will resume cooperation with the IMF by fulfilling all the previous requirements, such as allowing market-driven determination of tariffs on natural gas, and fulfilling the requirements of legal and judicial reforms advancement, among others. Given the above-mentioned considerations and the upcoming presidential elections, the answer to that question is most likely no. That is our base-case scenario. This could change in light of extraordinary changes such as a collapse of the current favourable sentiment towards EM financial assets.



With above-mentioned factors in mind, we consider next year's BoP as an extension of the previous year's developments, albeit the pace of official FX reserve accumulations

- (4) BoP in 2018: smoother current-account deficit and further increase in official FX reserves. Thanks to the decline of the value of the US dollar, which subsequently provided support to commodity prices, the pace of the current-account extension slowed from our expectations. Instead of a US\$4bn full-year deficit, it now approaches the US\$3.5–3.6bn level (see Chart 17, p. 15). For 2018, too, our previous expectation of a US\$6bn full-year deficit appears too dramatic, as it overstates the increase in domestic demand for imports and understates the increase in exports volume. Hence, it is revised down to US\$5bn. Overall, the flow of funds within the financial account in net terms is projected to allow the NBU to accumulate nearly US\$20bn by year-end 2018. For 2019, we maintain our forecast that there will be some correction in the market exchange rate, which will be managed by the central bank via FX reserve sales into the market.
- (5) Despite the primary surplus, the central government continued to increase the supply of financial assets (in net terms) to the non-government sector (this comprises banks, businesses, households, and foreign entities). Over full-year 2017, domestically, the net increase of net financial assets in UAH rose by UAH25.46bn, while net financial assets denominated in foreign currencies amounted to US\$644m. In foreign markets, the government increased the supply of financial assets (via the Eurobond market) in the amount of US\$1.42bn. There were new assets provided to the nongovernment sector that were issued precisely to recapitalise state-owned commercial banks.

(6) NBU's stance: stricter stance on fighting inflation: Due to headline

consumer inflation acceleration over 2H17, the central bank turned to policy-rate

NBU proved its commitment to inflation targeting with two rate hikes for 1ppt each in 2H17...

rate ch in 17...

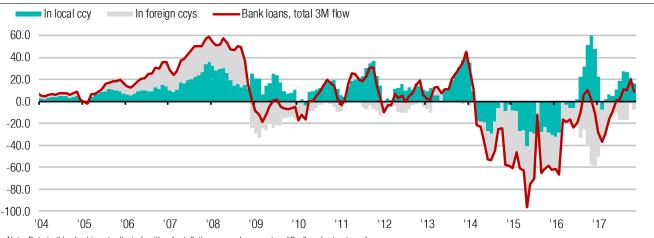
...our base-case scenario is that the future path of the inflation is one of moderation, hence, NBU's policy rate is flat in 1H18 with a possibility for a rate cut in 2H18

- The pattern of UAH monetary reserves flows seen in 2017 is likely to repeat in 2018
- increases, realizing two such increases of 1ppt each, and raising the policy rate to 14.5%, up from 12.5%. It cited the government's policy on increasing the minimum wage as one of the major risks to inflation over 2018-19, and indicated that it may even continue rate increases if inflation conditions warrant. The bank also cited higher interest rates on UAH monetary reserves as a means of supporting UAH's FX rate, which was weakening over 4Q17. As the reports claims, the government is committed to another series of minimum wage increases in 2018 after the one seen over 2017. Consumer inflation is projected to remain in the double-digit area of 12-14%. Domestic worries over the UAH's future FX rate are likely to remain elevated. Hence, the central bank is going to be very defensive this year, and the future path of the policy rate is rather flat for 1H18. It may return to rate decreases in the 2H18, if consumer inflation moderates towards the 12-13% level. Another development is NBU's creation of monetary reserves via interest payments on its short-term securities (certificates of deposits) that remove excess UAH reserves from the banks' accounts. Last year, or over 2017, NBU created about UAH6.5bn via this instrument, which was lower than the UAH10.1bn created in 2016, and the UAH7.8bn in 2015. In 2018, the volume of excess reserves is not going to decline sizably because the above-mentioned strategy with the policy rate will lead to an uptick in the reserves' creation by NBU.
- (7) Domestic monetary reserves flow: The above-mentioned reserves creation by NBU, however, has a caveat. As Chart 11, p. 13 shows, interest payments on certificates of deposits (injections to reserves) are offset by banks' payments on past debt due to the NBU (withdrawals of reserves), which resulted in a net withdrawal of UAH2.3bn in 2017. These flows of UAH monetary reserves demonstrate what kind of monetary operations were the key source of UAH monetary reserves creation (injection), and which ones were a major source of reserves destruction (withdrawal). As far as the creation is concerned, the operations under the item called "other operations" (a large part of which



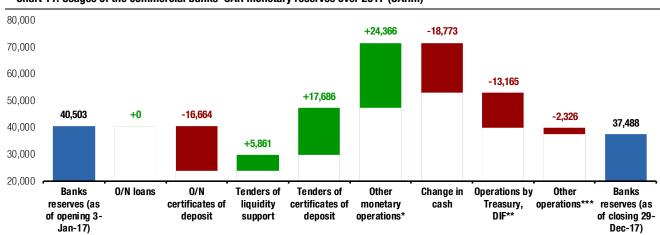
is FX market interventions) injected UAH24.3bn, and operations on banks' liquidity support in total injected UAH6.9bn. As far as withdrawals are concerned, the conversion of reserves into cash currency and government operations via Treasury and state deposit insurance fund withdrew respectively UAH18.8bn and UAH13.2bn in 2017. Looking into 2018, our prediction of the authorities behavior is that they will repeat last year's pattern, where government operations are tight in terms of the reserves injections-withdrawals balance, and there is a strong aim on further official FX reserves build up (via outright purchases of excess FX supply or via FX swaps).

Chart 10. Flow of domestic bank credit: monthly history through Nov 17 (UAHbn. three-month rolling volumes at current prices and exchange rates) Positive flows "+" means credit creation, while negative flows "-" means credit destruction



Note: Data in this chart is not adjusted neither for inflation nor exchange rates. "Ccy" = shorten term for currency. Source: National Bank of Ukraine, ICU.

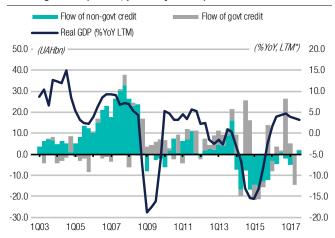
Chart 11. Usages of the commercial banks' UAH monetary reserves over 2017 (UAHm)



Notes: [1] data from the NBU's daily reporting https://bank.gov.ua/control/uk/publish/article?art_id=38643651&cat_id=40807142; *operations of repo, purchase and sale of government bonds, FX market interventions, stabilisation loans, FX swap agreements; ** DIF – deposit insurance fund; *** interest payments on NBU's loans and on NBU's certificates of deposit, other operations. Source: NBU, ICU.



Chart 12. Quarterly volumes of domestic credit flows, i.e. government deficit spending* and bank credit creation through 3Q17 (UAHbn, price adjusted**)



Notes: * positive bars mean state budget deficit, negative ones mean state budget surplus; ** adjusted for CPI, at constant prices of December 2002; record government credit flow in 3Q14 was designed to assist Ukraine's natural gas state-run company Naftogaz to repay its Eurobond in September 2014, this local currency credit flow was counterweighted by reduction of official FX reserves, the move that caused heightened devaluation expectations and eventually ended up with a wave of currency devaluation spread from 3Q14 into 1Q15. Source: National Bank of Ukraine, ICU.

Chart 14. Central government budget balance through Nov-17 (% of GDP)

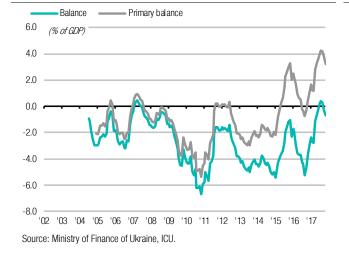
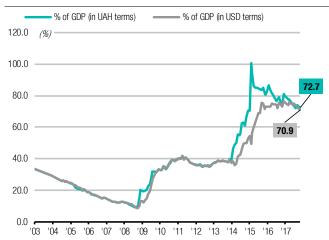
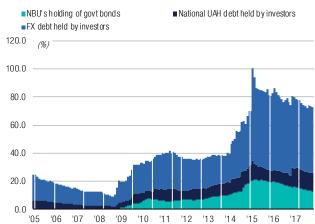


Chart 13. Ukraine's public debt size* through Nov 17 (% of GDP)



Note: * in local currency terms and in US dollar terms. Source: National Bank of Ukraine, ICU.

Chart 15. Ukraine's public debt size* through Nov 17 (% of GDP)



Note: * in local currency terms; debt held by investors = part of public debt outside of the securities holding of NBU, the central bank of Ukraine.

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



Chart 16. Change of monthly volume of exports and imports of goods and services through Nov 17 (%YoY)

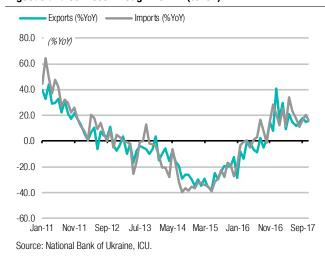


Chart 18. Government's balance of FX funds (US\$bn) US\$2.9bn as of 1 December 2017

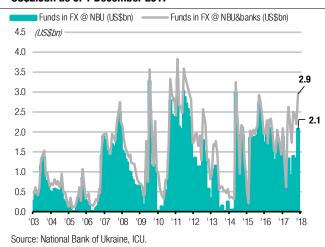


Chart 17. Current-account balance and FDI through Nov 17 (US\$bn, last 12-month rolling volumes)

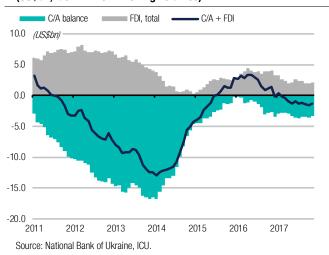
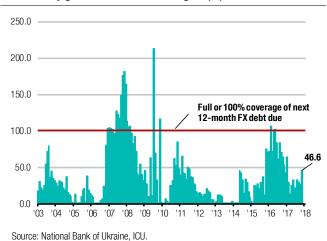


Chart 19. Coverage ratio of FX government debt due next 12 months by government's FX funds again (%)



View on UAH: On trend, our previous view extends

As of early January 2018, a re-examination our in-house currency valuation analysis, which is based on trade-weighted data for FX exchange rates as well as inflation rates (CPI and PPI), forces us to conclude that our previous view (as expressed in the *Quarterly Report* "Embracing a Goldilocks Economy?" dated 27 October 2017⁶) survives. To repeat the main points:

There is a sizable gap between UAH's market FX rate and ICU's real TWI-implied rates The gapping margin between the current market rate and real TWIimplied rates. The notional values of the UAH's rate as implied by ICU's CPI- and PPI-based real, trade-weighted indices have moved further away from the prevailing market-based USDUAH exchange rate. Thus, while the current market is about 28, the

⁶ See https://www.icu.ua/download/2442/ICUQtlyReport-20171027.pdf



TWI-implied range is 30-37/USD7 (see Chart 22 and Chart 23, pp.18). We call this current deviation a positive misalignment. It is rare for any currency, including the UAH, to be perfectly aligned according to its real TWI8, because to be misaligned is a natural state for a (any) currency. However, the size of the misalignment does matter. In UAH's case, the current misalignment appears quite sizable if compared with the past (Chart 22 is all about this). However, in our analysis, we use the general rule of financial markets: the past is not a guide for the future. Hence, this leaves us with a great deal of uncertainty. Albeit knowing that other EM currencies—examples include the Chinese yuan, Russian ruble, and Kazakhstan tenge—did survive an accumulated sizable, positive misalignment for lengthy periods of time thanks to market sentiment and a system of tight capital controls, eventually, they entered an adjustment phrase. In the yuan's case, it was managed thanks to a system of tight capital controls, while in ruble's and tenge's cases, it was abrupt, as authorities adhered to a free-market doctrine and refrained from capital controls and tightening. In all cases, the adjustment phase was via the weakening of the market FX rate of the national currency unit versus the US dollar. That is the major, if not the only way to adjustment a currency with a sizable positive misalignment. When the UAH adjusts is uncertain, but the direction of the adjustment is not.

Ukraine's economy still
has sizable debt
positions in foreign
currencies, forcing
authorities to diminish
every market move of the
FX rate...

...external environment in the financial markets has been favourable, and this extends for most of 2018 Given the accumulated debt structure, market-based FX adjustments will be small and incremental. As was shown above, Ukraine's economy has an institutional set-up that allowed an accumulation of foreign-currency debt in all sectors of the economy from government to the private sector (banks and nonfinancial businesses). Despite past crises, FX debt deleveraging is generally slow. This implies that the negative effect on net wealth is still a systemic issue. Hence, authorities are keen to employ highly defensive strategies, as they did over 2016-17. A successful outcome of these strategies is guite possible over 2018, given the continued supportive external environment, as evidenced by booming stock markets in the US, prevailing expectations that the US administration's tax reforms will boost the US economy further, and the sliding value of US dollar, which is measured by the nominal basket-based currency index, the DXY9. By year-end 2018, we forecast the DXY inching towards the 90-point level and even crossing it with some margin, i.e. so that the index is inside the 85-90 range¹⁰. Looking beyond 2018, the trick with market sentiment will become more complex, and will depend on how the Eurozone economies are performing given government formation outcomes in such leading economies of the currency bloc as Germany and Italy. Also, in economic terms, there are questions over the sustainability of the German current-account surplus, as Germany's trade partners—especially the emerging markets' group that usually borrow in FX to finance imports-must be stretching their debt positions. The US economic story is also unfolding in such a way that if the Fed increases the policy rate in 2018, which is possible, it may negatively affect the household and nonfinancial sectors, which are still sizably leveraged.

⁷ Lower bound of the range is a CPI-based real TWI for UAH, while the upper bound is a PPI-based real TWI.

⁸ Perfectly aligned currency by its real TWI indices is when misalignment equals zero.

⁹ See https://www.bloomberg.com/quote/DXY:CUR

¹⁰ This implies we regard the US corporate tax reform to be neutral to the USD valuation, as reportedly a large share of offshore deposits of US corporations are denominated in US dollars.



While the liberal reform agenda is popular in Ukraine, wider FX liberalization appears unrealistic, as it runs contrary to current conditions in the economy

- Domestic agenda rules out wider FX liberalisation. Given the favourable external environment in the financial markets and considerations of the negative effect on net wealth. Ukraine's authorities are keen to adhere to the above-mentioned defensive strategies that affect the FX market of the UAH. This should take place as an attenuated adjustment of the UAH's accumulated misalignment, which is our base-case expectation vs. the worst case of an abrupt adjustment. Defensive strategies include a tight fiscal stance (primary surplus of 0.5-1.0% of GDP) and double-digit interest rates paid by the NBU on excess reserves (operationally this is done via NBU-issued certificates of deposits). Furthermore, authorities proved last year they are able to impose an even tougher stance if there is financial risk of a run on the UAH. We consider increases in the policy rate over the fall of 2017 as implicitly aimed at calming the FX market, and draw the same conclusion from the central government's continued balanced-budget approach over January-November that was relaxed only in December. A quite similar stance will be observed over 2018, in the final year of current political cycle that will fade away at the end of 1Q19 on the back of scheduled presidential elections.
- Our UAH FX rate projections: This said, we stick with the view laid down in the
 previous Quarterly Report that the UAH's adjustment will take place gradually over 2018.
 Over 2019, our base-case projections are about more visible adjustments taking place as
 a new political cycle starts up. At the time, concerns over access to external debt
 refinancing will rise again (see Chart 23, below, and in the appendix tables for precise
 details of the forecast).

Chart 20. UAH's CPI- and PPI-based real trade-weighted indices, rebased at 100 points as of December 1999

Monthly history from Jan-95 through Dec-17. Forecast for 2018-20

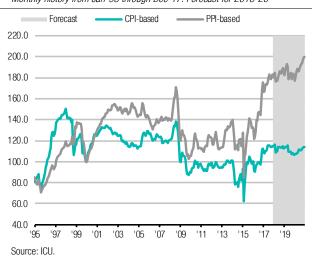


Chart 21. Percentage change over previous year of the UAH's nominal and real* trade-weighted indices (% YoY)

Monthly history from Jan-95 through Dec-17. Forecast for 2018-20

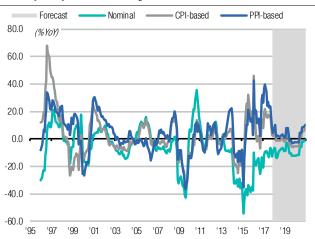




Chart 22. Misalignment of Ukrainian hryvnia (UAH) as measured by its CPI- and PPI-based real trade-weighted indices

Monthly history from Jan-95 through Dec-17. Forecast for 2018-20

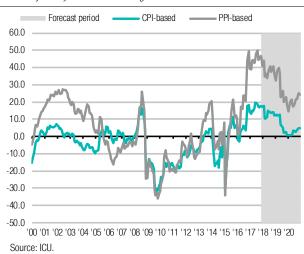


Chart 23. Monthly data on UAH's market rate and ICU's real TWI-implied fair-value range through 3 October 2017 and forecast for rest of 2017 and 2018-19 (UAH per USD)

Monthly history from Jan-95 through Dec-17. Forecast for 2018-20

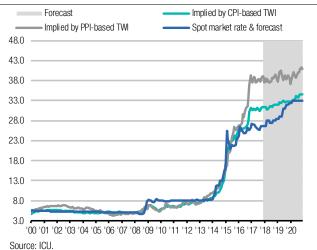
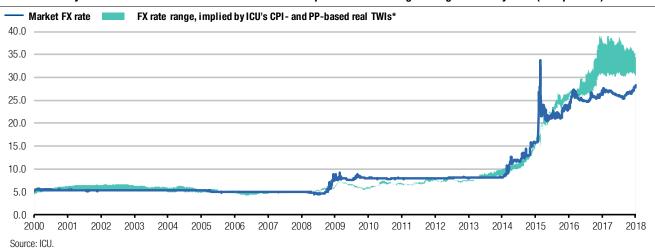


Chart 24. Daily data on UAH's market rate and ICU's real TWI-implied fair-value range through 9 January 2018 (UAH per USD)



Bank lending: growth amid high NPLs

Growth in bank lending can be observed in most sectors: consumer lending, auto loans, and, albeit weaker, in the corporate sector. New mortgages are still very rare. The total amount of loans issued in 2017 equalled a negligible UAH2.3bn.



Whilst corporate lending is weak, banks compete for the solvent borrowers...

...NPLs are record high in Ukraine—55%— but their share is half that in nonstate banks vs. state banks The historical loan portfolios that remain on bank's balance sheets are of very poor quality. The average share of NPLs is 54.9%, and has remained at this level since the beginning of 2017 when the NBU has changed it methodology to more accurately reflect the true level of bad assets. Unlike five years ago when market estimated the true NPL (~30%) level to be significantly higher than what was officially reported (~10%), we believe that the current level of NPLs is trustworthy. Yet one should understand that a significant part of the problematic exposure is amassed in state banks that used to have less-than-perfect lending standards. Privatbank had around UAH200bn of gross corporate exposure that stopped performing soon after the nationalization. Unfortunately, there is no separate group called "banks with Russian state capital" in official statistics. However, with NPLs going as high almost 100% in banks like VTB, we estimate the level of NPLs in non-state banks to be within the 25–20% range.

Chart 25. NPL levels across bank groups

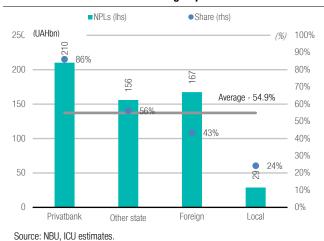
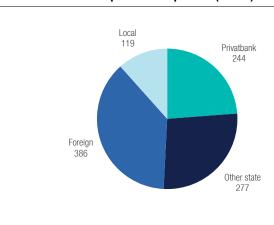


Chart 26. Gross loan portfolio composition (UAHbn)



Source: NBU, ICU estimates

Growth in short-term corporate loans. The growth in the corporate lending sector is not statistically significant. Gross loans outstanding are stuck around UAH1.0trln, and they have not increased alongside the pace of nominal GDP growth. Restructured loans are one of the reasons why the gross amount of loans remains at current levels despite the revival, which is, albeit, sluggish. Banks with Russian state capital are among those most actively engaged in restructuring. As we expected, they are shrinking balance sheets while trying to exit the market with very modest success.

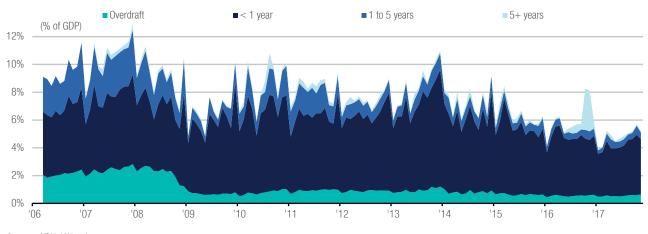
Statistics on new loans issued is the more accurate estimate of lending activities. We suggest dividing the absolute amounts by GDP in order to avoid the FX effect.

The amount of new loans to corporates grew by an impressive 20% YoY in 2017 to UAH161bn. There was steady growth in the new-loans-to-GDP ratio in 2017, which remained somewhat lower than in 2016, even if adjusted for one-off, non-market events such as PrivatBank.

There is a steady decline in the share of FX loans, as banks agree to change the currency of the loan for hryvnia as a part of a restructuring deal. During 2017, the share of UAH loans increased to 54% from 49%.



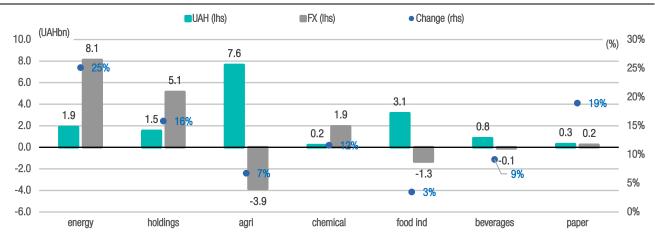
Chart 27. New corporate loans issued per month as percentage of annual GDP



Sources: NBU, ICU estimates

The energy sector saw the largest increase in the amount of gross loan portfolio—UAH10bn (29% YoY). We believe this growth was driven by state banks issuing loans to government-owned enterprises as well as to the private sector.

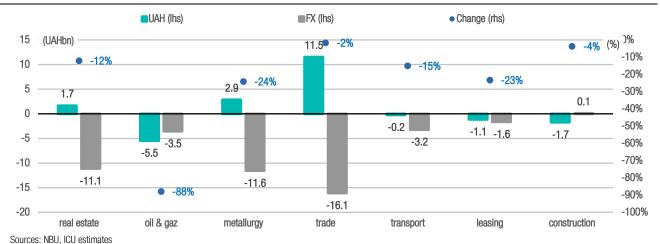
Chart 28. Industries with the biggest absolute rise in gross loan exposure in 2017 (YoY)



Sources: NBU, ICU estimates



Chart 29. Industries with the greatest absolute decline in gross loan exposure in 2017 (YoY)

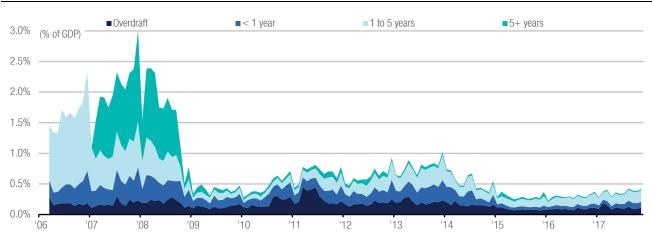


Retail lending demonstrates the fastest recovery pace

Household loans

Retail lending demonstrates a very significant pace of growth—UAH gross consumer loans increased 30% YoY in 2017, UAH gross auto loans grew 36% YoY in 2017. A low comparison base in the primary explanation for this explosive growth. But postponed demand, improved consumer expectations, and the rise in auto sales revived the market.

Chart 30. New retail loans issued per month as percentage of annual GDP



Sources: NBU, ICU estimates

The boost in retail lending raised questions whether it is too large and if the regulator should intervene. Judging by its relative size to GDP, the amount of new retail loans is far less than it was during the 2012–13 retail lending boom.



Chart 31. UAH consumer loans to households (stock)

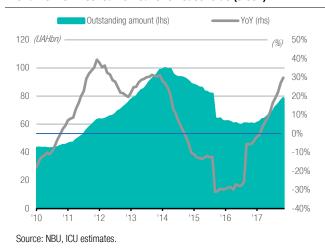
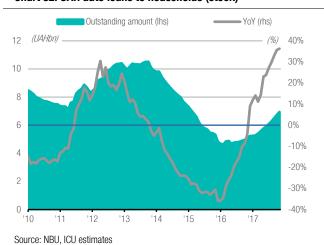


Chart 32. UAH auto loans to households (stock)



Sovereign debt: An update as of year-end 2017

Ukraine started 2017 with UAH1.93bn (US\$70.97bn) of debt, including both sovereign and

guaranteed debt, and through to end of last year, increased it to UAH2.06bn or US\$76.33bn.

This increase was mainly due to new borrowings made during the past year. During last year,

Ukraine received an additional US\$1bn from the European Union, via a debt transaction done in September in Eurobonds, increasing outstandings by US\$1.4bn, and issued UAH1.87bn

Comparing these figures with GDP, we observe that the debt-to-GDP ratio during the first

nine months of last year declined to slightly above 73%. This is significantly lower than at the

beginning of the year when, in local currency, it was about 81%, and in US dollars it was

77.3% (using the official exchange rate). So, despite the increase in debt outstanding, the

debt-to-GDP ratio becomes slightly lower, but still above the goal of 71% for 2020 set by the IMF for the EFF program in 2015. Our estimate is that the debt-to-GDP ratio will be at 74% at the end of 2017, due to additional borrowings and the low GDP level. An increase in GDP

of domestic bonds, which exceeded the coverage of domestic debt redemptions.

Sovereign debt dynamic in 2017

Ukraine's debt outstanding rose US\$5.4bn during the first 11 months of 2017

Debt-to-GDP ratio declined to above 73% despite the increase in total debt, as GDP growth was around 80% last year

will not cause a further decline in this ratio. Domestic bonds: new investors and portfolio structure

Domestic debt is about 35% of total sovereign debt Domestic debt, which is about 35% of total debt outstanding (excluding guaranteed debt), remains as an important part of budget financing. At the end of November, it amounted to US\$26.5bn or US\$6bn more than Eurobonds outstanding. However, the main portion of this debt is in the NBU and state-owned banks' portfolios. According to our calculations and estimates, NBU holds 48.08% of total domestic bonds outstanding, while banks' portfolios have 48.07%. Out of banks' portfolios, state-owned banks hold about 90%. So, the NBU and state-owned banks hold more than 90% of domestic bonds in their portfolios.

But more interesting are the portfolios of individuals and non-residents. Out of total bonds outstanding, these portfolios were small, just 0.2% and 0.7%, respectively, but they had very important changes during 2017.



Individuals increased their portfolios rapidly to UAH1.47bn at the end of 2017 Individual investors changed their view on domestic bonds after Parliament cancelled the tax on income received from sovereign debt. Interest rates on sovereign debt were close to deposit rates, but the difference in taxation was important. During 2017, individuals invested nearly UAH1.4bn in bonds, increasing their portfolios to about UAH1.47bn. But fear of local currency devaluation forced individuals to choose FX-denominated bonds, which were 88% of their portfolios.

Non-residents also have a small share of domestic debt, but mostly in localcurrency At the same time, non-residents' view on the domestic bonds market is the opposite. At the end of 2017, their portfolios were held 98% in local-currency bonds. This contrasts to the beginning of 2017, when non-residents had less than 16% of local-currency bonds in their portfolios. At the end of 1Q17, their portfolios were still concentrated in FX-denominated bonds. At the beginning of June 2017, non-residents lost interest in government bonds, and their portfolios fell sharply from UAH5.30bn to UAH0.06bn. But after the significant appreciation of the local currency in August, and Citi Group's issue of CLN in hryvnia, non-residents moved their funds back into Ukrainian debt. Since August and till the end of 2017, they gradually purchased UAH5.2bn, which included only UAH0.09bn of FX-denominated bonds.

Individuals and nonresidents sufficiently increased purchase of local-currency debt At the end of January, 2018 situation with domestic debt developed sufficiently. Increase in the key policy rate to 16% (by 150bp from mid-December decision) and expectations of hryvnia strengthening in short-term perspective inside the year, forced non-residents to increase their investments in local-currency debt. At the end of January, they purchased about UAH3.5bn of local-currency bonds, increased portfolio to UAH9.33bn (US\$0.33bn) and share in total bonds outstanding rose to 1.25%. Also, individuals increased share of local-currency bonds in their portfolio to 20% from about 14% at the year 2018 beginning).

Our view for 2018

Debt-repayment schedule is flat, and total amount of repayments is about US\$11bn, including US\$4.5bn in local currency

Debt repayments in 2018 should not be very difficult for Ukrainian government, as, according to our estimates, the Ukrainian state budget will have to pay only about US\$6.50bn in FX. This amount includes US\$3.21bn of domestic bonds denominated in foreign currencies—US dollars and euros—and US\$3.29bn for debt principal and interest repayments to foreign lenders, including the IMF. Also budgeted is debt repayment in local currency, which currently, amounts to UAH127.51bn, or about US\$4.5bn at the current exchange rate.

The greatest pressure from external debt repayments falls in March and September

The schedule of external debt repayments is mostly level throughout the year, without large payouts. Monthly external debt repayments will not exceed US\$0.3bn for all months other than two. In March and September, interest payments on Eurobonds are scheduled in the amount of US\$0.59bn, and they will bring the total monthly payouts above US\$0.7bn. So, it is realistic that all these external debt repayments will be made on time.

Domestic-debt repayments are flat and will have little pressure on the budget Domestic debt also has a flat schedule of repayments. Again, the greatest amount will be in March, when the MoF will have to repay US\$0.68bn in FX, and UAH9bn (US\$0.32bn) in local currency. Other months have mostly a flat debt burden in local currency, at about UAH10bn each month.

The MoF will refinance debt repayments and will avoid spending FX in the local market This year will be usual for the domestic bond market. The MoF will do its best to refinance all debt repayments, especially those denominated in FX. This refinancing of payments in FX in the local market was been explained many times by the Ministry's top management. Refinancing of domestic debt will mostly depend on the cost of financing, and general performance of budget revenues collection.



Year 2018 will be concentrated on market presence and readiness for large repayments during following years So, 2018 will be one of decisions on how to navigate the peak in external debt repayments scheduled for 2019–2020, which amount to around US\$4.5bn each year. The MoF will try to increase its market presence this year, and will make attempts to issue new Eurobonds or tap UKRAIN 7.375% '32, which was issued in September 2017. The recent level of spreads is quite high, and not very supportive for a new issue. The MoF's attempts will depend on the general soundness of Ukraine, especially around news from the IMF about the next tranche. Recently, we saw a decline in spreads, as five-year CDS fell to 319bp in the second week of January, making market conditions considerably better for the MoF.

Economic activity in 4Q17: Growth slows

Real GDP growth is expected to slow to 1.6% YoY in 4Q17 Official statistics have produced a first estimate of 3Q17 real GDP, pointing to an expansion of 2.1% YoY, down from 2.3% YoY in the previous quarter. More important, growth of Ukraine's economy slowed to 0.2% QoQ SA compared with 0.6% QoQ seen in 2Q17.

The monthly statistical data on key non-financial sectors of the economy for 4Q17, revealed that the composite output index rose 1.2% QoQ SA, while in December growth accelerated to 3.2% MoM SA, up from 1.7% in the previous month (see the table below).

The industrial sector posted modest recovery, having expanded 0.3% MoM SA in December, while on a quarterly basis, growth was 0.5% SA in the three months to December. Reported data for December was a 0.5% YoY decrease, while in full-year 2017 industrial output declined of 0.1%. Seasonally adjusted data suggest that this particular sector has stabilized. At the same time, it is too early to say whether it may constitute a new upward trend.

Retail trade and construction were key contributors to growth in 2017

Weak performance for the October–December period was shown by cargo transportation and agriculture, which delivered a decline of 1.8% QoQ and 0.7% QoQ, respectively in seasonally adjusted terms. At the same time, solid performance posted retail trade (+4.3% QoQ SA) mostly thanks to rising real wages, and construction sector (+2.7% QoQ SA) backed by increased private and government investment.

Based on the above data, we expect that 4Q17 real GDP growth will be slightly close to 0.3% QoQ SA, while in year-over-year terms, it will slow to 1.6% not least because of the high-base effect, as real GDP grew 4.8% YoY in 4Q16. More evident reasons for the slowdown seen over 2H17 were the tight fiscal and monetary policies maintained by the authorities. In the end, our assessment for full-year 2017 real GDP growth remains at +2% YoY.

Table 1. Performance of key sectors of Ukraine's economy in November and over October–December 2017

Sector's	Seasonally adjusted*			Trend*		
Indicator	Change ¹ (%MoM)	Change ² (%QoQ)	Change ³ (%YoY)	Change ¹ (%MoM)	Change ² (%QoQ)	Change ³ (%YoY)
Agriculture index	-0.9	-0.7	-3.6	-0.02	-0.2	-1.1
Retail trade, retailers (UAHm, CPI-adj)	+8.8	+4.3	+43.7	+4.9	+4.5	+40.6
Transport turnover, cargo (tonne*km)	+4.1	-1.8	+2.0	+1.8	+0.2	-0.01
Transport turnover, passenger (passenger*km)	+0.8	+0.8	-6.6	-0.02	+0.2	-3.5
Industrial production index	+0.3	+1.2	-3.4	+0.1	+0.3	-2.7
Construction (UAHm, CPI-adj)	+9.3	+2.7	+26.2	+2.8	+2.8	+22.2
Composite index	+3.2	+1.2	+9.0	+1.8	+1.5	+9.0

Notes: * adjusted by Demetra using adjustment method of Tramo-Seats; [1] month-on-month change of December of 2017 to November 2017; [2] quarter-on-quarter change of Oct-Dec of 2017 to Jul-Sep of 2017; [3] year-on-year change of December of 2017 to December of 2016.

Source: State Statistics Service of Ukraine, ICU.



Government will try to boost Ukraine's economy in the run-up to the presidential elections Looking forward, we stick to our view expressed in the previous *Quarterly Report*: In 2018, we expect that a government-led boost to the economy on the eve of presidential elections will be quite decisive and result in a 3% YoY real GDP increase. Then, in 2019, there is a projected a slowdown towards +1.9% YoY, as it would require a FX flexibility injection, and, hence, it would serve as a mini-shock to business balance sheets, which usually are loaded with FX debt. That kind of slowdown will be over by 2020, when growth momentum is expected to be regained. We assign a +3% YoY real GDP increase for 2020.

Chart 33. Agriculture-production index

History (from January 2007 through December 2017), forecast for 2018-19

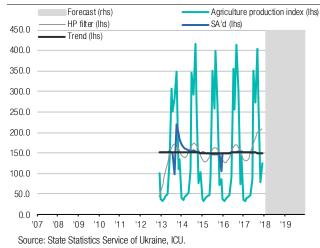


Chart 35. Industrial-production index

History (from January 2007 through December 2017), forecast for 2018-19

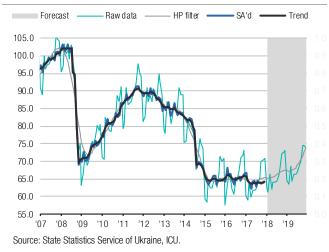


Chart 34. Retail trade (UAHbn, in constant prices of Dec-1999)

History (from January 2007 through December 2017), forecast for 2018-19

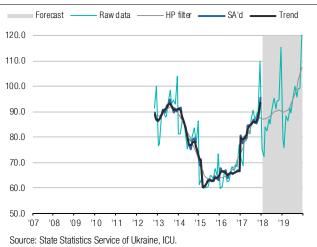


Chart 36. Construction (UAHbn, in constant prices of Dec-2001)

History (from January 2007 through December 2017), forecast for 2018-19

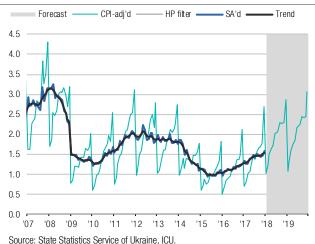




Chart 37. Cargo-transportation turnover (m tonne * km)

History (from January 2007 through December 2017), forecast for 2018-19

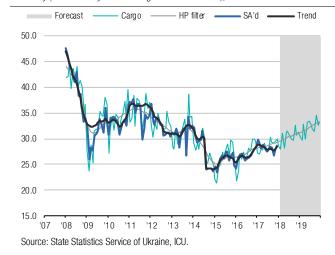
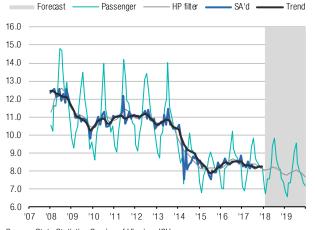


Chart 38. Passenger-transportation turnover (m * km)

History (from January 2007 through December 2017), forecast for 2018-19



Source: State Statistics Service of Ukraine, ICU.

Sectoral balances: Stronger hryvnia pushed external-sector surplus up in 3Q17

The latest data on national accounts, which are available through 3Q17, reveal a further increase in the external-sector surplus. This was achieved by means of a higher deficit in the domestic private sector caused by higher final expenditure on goods and products.

External-sector surplus rose for the third consecutive quarter, and reached 7.2% of GDP This particular sector posted a deficit of UAH35bn or 4.3% of nominal GDP in the three months to September, while in 2Q17, it still ran a surplus of 0.6% of GDP. At the same time, the government sector managed to reduce its deficit to 3% of GDP, down from 4.9% seen in the 2Q17. Subsequently, a surge in the deficit of the domestic private sector along with the still-high deficit of the government sector resulted in an external-sector surplus of 7.2% of three-month nominal GDP, which increased from 4.3% in 2Q17 and rose for the third quarter in a row.

In our view, the domestic private-sector deficit in 3Q17 was boosted by the hryvnia's appreciation in nominal terms seen in April–August 2017, along with macroeconomic stabilization after the politically imposed trade blockade in Eastern Ukraine, which increased consumer confidence (see Chart 46 p. 30), and pushed up domestic demand. This resulted in lower savings and higher investments, which had to be financed by borrowings from abroad. On the flip-side, imports growth rates were still higher than those of exports¹¹ in July through September.

When looking from the perspective of the 12-month rolling basis, Ukraine's sectoral balances remained almost unchanged in 3Q17. The external-sector surplus grew 0.1ppt to 5.6% of GDP, while the government-sector deficit widened to 4.6% of GDP, up from 4.5% seen in 2Q17. This implies that the domestic public sector ran a deficit of 1% of GDP, the same level as it did in the previous quarter.

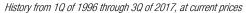
¹¹ In 3Q17, imports rose 17.8% YoY and 4.2% QoQ on a 12-month rolling basis. At the same time, exports increased by 17.3% YoY and 3.9% QoQ.



Ukraine remains a net borrower, as both the domestic government and private sectors are currently in deficit. This creates preconditions for the hryvnia's weakness in the medium-term perspective However, Ukraine's domestic non-government sector remains in deficit for the fifth quarter in a row on a 12-month rolling basis. Here it should be mentioned that Ukraine's government traditionally runs a deficit, which can be financed by higher domestic savings, lower investments, or positive net exports. With respect to the fact that Ukraine's domestic non-government sector is currently in deficit (meaning that investments exceed savings), and the external sector has remained in surplus over last 10 years, we conclude that both the domestic government and non-government have to borrow abroad in order to finance their expenditures, and these borrowing are made in foreign currency. Thus, the current stance of Ukraine's sectoral balances implies future weakness of the hryvnia. Meanwhile, the same situation in Ukraine's economy was observed prior to the 2008 financial crisis and prior to the 2014 economic crisis, which both brought about significant depreciation of the hryvnia.

We expect that the external-sector surplus will narrow to some extent in 4Q17, as the latest available data show a decrease in the trade-balance deficit. At the same time, summarizing the results of full-year 2017, both the domestic government and non-government sectors will likely run a deficit.

Chart 39. Ukraine's sectoral balances: quarterly volumes (UAHbn)



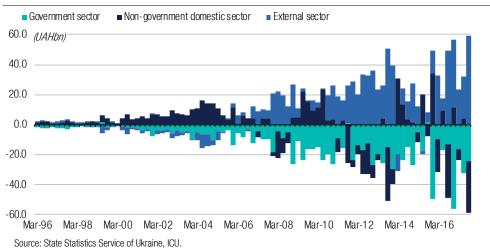




Chart 40. Ukraine's sectoral balances: quarterly volumes (% of GDP)

History from 1Q of 1996 through 3Q of 2017, as percentage of quarterly GDP

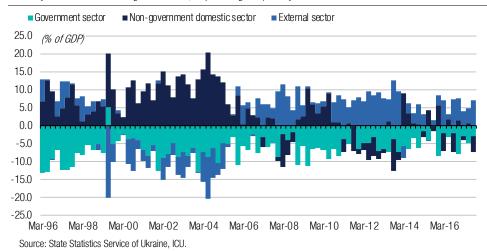
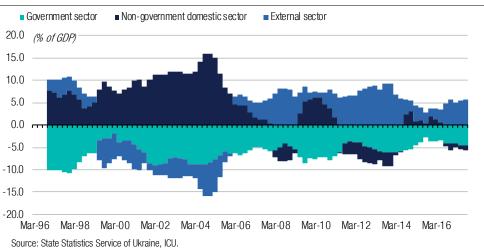


Chart 41. Ukraine's sectoral balances: last four-quarter rolling volumes (% of GDP)

History from 1Q of 1996 through 3Q of 2017, as percentage of quarterly GDP



Rising consumer spending amid still-high unemployment

Households' consumption increased significantly in 2017, being boosted by a solid increase of both nominal and real wages. The latest data shows that real wages increased 18.9% YoY in December, (see Charts below), while nominal wages soared 35.5% YoY.

However, despite rising wages, the labour market remains stagnant and far away from a tight stance. Although official statistics show that the unemployment rate decreased to 9.4% in 3Q17, down from 10.1% and 9.6% seen in first and second quarters of 2017, respectively, this contraction is explained by seasonality.

At the end of 3Q17, the economically active population amounted to 17.9m, which was 0.1m less compared with the same period last year (18.0m). At the same time, the number of employed people stood at 16.22m, down from 16.33m seen a year ago, which implies that

Falling unemployment observed in January through September 2017 was prompted by seasonal factors



the number of employed contracted more than the overall economically active population. Thus, the unemployment rate increased to 9.4% in 3Q17, up from 9.2% seen in 3Q16.

In annualized terms, unemployment has been steadily rising since 4Q15 At the same time, if we look at the unemployment rate in annualized terms, it becomes clear that Ukraine's economic recovery seen in 2016–2017 was accompanied by rising unemployment, which had been increasing for eight quarters in a row and reached 9.1% in 3Q17, while in 4Q15 it was still 8.8%.

Expected acceleration of the economy should improve labour market stance this year However, we are cautiously optimistic regarding the labour market stance in this year, as we expect that government efforts to boost the economy in the run-up to presidential elections (including a further increase of minimum wages and wages in the public sector) will raise employment and tighten the labour market to some extent.

Chart 42. Average monthly wage through December 2017 (UAH, adjusted for CPI) at constant prices of December 2001



Chart 43. Growth rate of average monthly wage (UAH, adjusted for CPI) at constant prices of December 2001

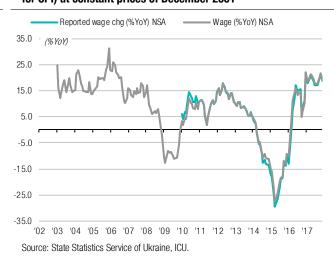
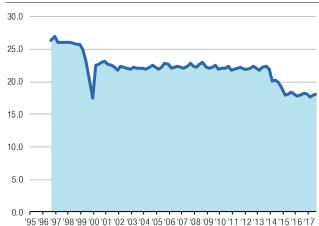


Chart 44. Unemployment rate* through 3Q17 (%)



Note: * Data series is based upon last 12-month quarterly averages. Source: State Statistics Service of Ukraine, ICU.

Chart 45. Economic active population through 3Q17 (m)



Note: * Since 1Q of 2014 population is adjusted for occupied territories (Crimea and parts of Donbas). Source: State Statistics Service of Ukraine, ICU.



Consumer confidence: Up on higher social transfers

Increase in payments of pensions and scholarships boosted consumer confidence despite rising devaluation expectations

Consumer confidence remained steady for the first part of the year, but turned to growth in May being boosted by higher real wages, a stronger hryvnia, and overall macroeconomic stabilization. October's reading was the highest since July 2014, albeit, it slowly declined in November and December. It is worth noting that consumer confidence traditionally has a high negative correlation with devaluation expectations of the hryvnia (see Chart 46, p. 30). However, at the end of 2016, the situation changed, as both the consumer confidence index and the devaluation expectation index moved in the same direction, which is explained by the doubling of the minimum wage, which occurred in January 2017, and boosted consumer confidence.

The same situation was observed in autumn 2017. Despite the fact that devaluation expectations were rapidly increasing and had reached an all-time high in November, the consumer-confidence index moved in the same direction, which, again, can be linked to higher social transfers, such as increased payments of pensions and scholarships since October. Given the planned increase of the minimum wage as well as wages in the public sector starting January 2018, there is room for further growth of consumer confidence in the following months. However, high inflation and hryvnia's rapid depreciation may deteriorate consumer confidence to some extent.

In 2017, Ukraine saw an increase in purchases of durable goods, which implies rising consumer confidence

Another measure of consumer confidence is purchases of durable goods. Evidence of this are the statistics for new car sales, which have been gathering momentum since early 2016. In November 2017, sales rose 27.3% YoY, down from 32.8% YoY in October, which can be explained by the weaker hryvnia, as most cars are imported, while in 11M17 sales of new cars soared 33.7% YoY. At the same time, the highest growth was shown in sales of middle-priced cars, while sales of economy-class cars, which had dropped significantly, have not yet recovered (see Chart 47, p. 30).

Chart 46. Consumer confidence and devaluation expectations indices

Monthly history from June 2014 through December 2017

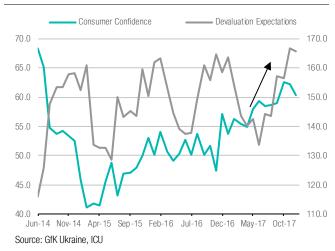
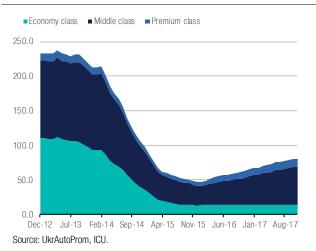


Chart 47. Sales of new cars in Ukraine (thousands of units, last 12-month rolling volumes

Monthly history from January 2013 through November 2017





Industrial sector did not fully recover after the trade blockade of temporarily occupied territories, and posted 0.1% decline in full-year

2017

Industrial orders increased at the end of the year thanks to a weaker hryvnia

Industrial sector will experience modest recovery in 2018, not least thanks to a low base

Industrial activity: Modest recovery in 4Q17

Earlier this year, Ukraine's industrial sector was hit hard by the economic blockade of temporarily occupied territories in the Eastern Ukraine, which put a halt to the sector's recovery. The industrial-production index dropped significantly in April (-6.7% YoY), and did not manage to recover to pre-blockade levels through December (see Chart 35, p. 25), when it turned to modest growth.

Industrial orders for Ukraine's goods—another gauge of the sector's performance (depicted in charts below)—have also shown quite sluggish performance for the most of the year if viewed through the prism of inflation and seasonally adjusted data. However, in November they posted growth of 9.1% YoY, accelerating to 23.7% YoY in December. In month-overmonth terms, new industrial orders grew 12.7% SA in December being driven by an increase in orders from abroad (+21% MoM SA), while domestic orders remained at the same level. We stick to the view that the reason for such an increase was the hryvnia's depreciation, as Ukrainian goods became cheaper for foreigners. The weak hryvnia will likely boost demand from abroad in the following month.

Regarding the year 2018, we stick to our view that the industrial sector will experience further recovery being supported by a number of factors: 1) an increase in wages and, generally, in government expenditures, which will feed into demand for industrial production (food, durable goods, capital goods), 2) a two-fold reduction of rental rates for gas production beginning in 2018, which will give a nudge to gas producers, and 3) intention of PJSC Ukrzaliznytsya to direct about UAH32.2bn to capital investment in 2018.

Chart 48. Monthly volume of industrial orders through Dec-17 (UAHbn, seasonally-adjusted, at constant prices of December 2012)

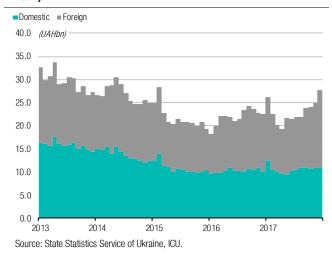
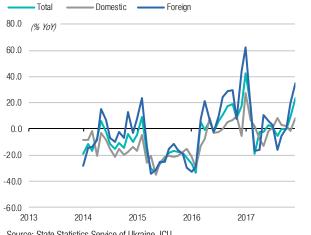


Chart 49. Change in the monthly volume of industrial orders through Dec-17 (% YoY, seasonally-adjusted, at constant prices of December 2012)

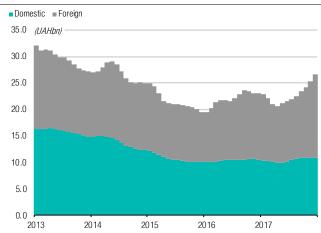


Source: State Statistics Service of Ukraine, ICU.

9 February 2018

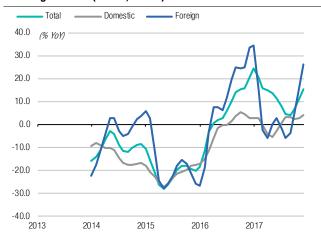


Chart 50. Monthly volume of industrial orders through Dec-17 (UAHbn*)



Note: * Based upon seasonally-adjusted, at constant prices of December 2012. Source: State Statistics Service of Ukraine. ICU.

Chart 51. Change in the monthly volume of industrial orders through Dec-17 (% YoY, trend*)



Note: * Based upon seasonally-adjusted, at constant prices of December 2012. Source: State Statistics Service of Ukraine. ICU.

Inflation: Consumer vs. producer prices

Rising prices on food products were key booster of inflation Over the course of 2017, the increase in prices on food and non-alcoholic beverages become the main driver of the CPI's growth. If in January the contribution of this particular segment to headline CPI was 1.3ppt out of total 12.6% YoY, in September it was already 7.9ppt out of 16.4% YoY (see Chart below), when headline CPI hit a 1.5-year high. In our view, such acceleration of growth of prices on food and non-alcoholic beverages was boosted simultaneously by 1) so-called cost-push inflation due to the poor harvest in 2017, and 2) demand-pull inflation, which resulted from increased domestic demand on the back of increased real wages.

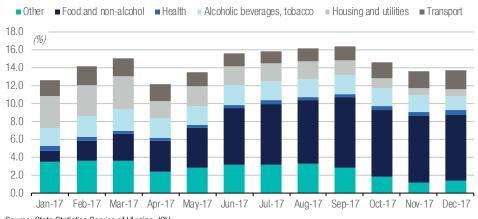
On the flip-side, growth of prices on housing and utilities had been decelerating since January—their contribution to headline CPI decreased to 0.8ppt in December, down from 3.5ppt in January—mainly thanks to the low-base effect (e.g. heating tariffs were raised in October 2016, and did not have an impact on headline CPI since October 2017).

Primarily thanks to growth deceleration of two abovementioned components (food and housing and utilities), the headline CPI slowed to 14.6% and 13.6% in October and November respectively. However, being driven by higher transport cost and increased prices on healthcare, the headline CPI slightly increased in December—to 13.7% YoY.



Chart 52. Headline inflation by components (%YoY)

Monthly history from January 2017 through December 2017



Source: State Statistics Service of Ukraine, ICU.

Despite slowing headline inflation, core inflation gains momentum At the same time, while headline inflation has decelerated by the year's end from the September's peak, core inflation has been accelerating for four months in a raw and reached 9.5% YoY in December, while it was still 7.7% YoY in September.

The NBU reacted to accelerating inflation with two increases of the key policy rate by 100 bps in October and December to 13.5% and 14.5% respectively. In January 2018 the regulator increased the key policy rate one more time—by 150 bps to 16%, the decision widely unexpected by the market. Although the NBU stated that increases were made to tame inflation, we stick to the view that the interest rate hike in December and especially in January 2017 were also made in order to support the hryvnia.

In 2018, inflation will likely remain in double-digits

We maintain our view that headline inflation will remain in double-digits (most likely in a range of 12—14%) over 2018 due to increased inflationary risks from 1) higher minimum wages starting in 2018, which have already contributed to growth of consumer prices in 2017, 2) expansionary fiscal policy, as higher spending on infrastructure and social transfers are already included in the state budget 2018, and 3) expected higher real GDP growth rates, which traditionally push inflation up.

On the other hand, the growth of producer prices has been steadily decreasing since February (with the exception of a slight increase in August), and slowed to 16.5% YoY in December, the lowest rate since June 2016. Here it is worth noting that growth was driven primarily by mining (see Chart 56, p. 34), due to higher prices on world commodities markets.

Producer process have been decelerating over the course of 2017, thus creating preconditions for future slowing of the We consider two opposing factors regarding the dynamics of producer prices in 2018. First, we stick to the view that commodity prices will remain stable or decline over 2018, thus restricting growth of input prices for producers. At the same time, we take into account the high correlation between the value of the US dollar and commodities prices (see Chart 57, p. 34). Given our expectation that the dollar's value will pause for the next three-to-six month period, and then gradually decline over the next six-month period, these are preconditions for an increase in commodity prices. Given the above, we believe that the growth of producer prices will remain close to current rates, followed by some slowdown due to the high-base effect.

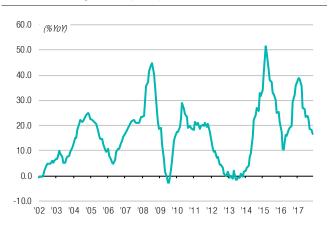


Chart 53. Change of headline CPI (%YoY)



Source: State Statistics Service of Ukraine, ICU.

Chart 54. Change of PPI (%YoY)



Source: State Statistics Service of Ukraine, ICU.

Chart 55. Change of key components of headline CPI (%YoY)

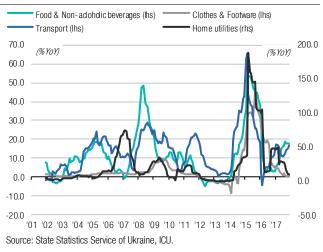


Chart 56. Change of key components of PPI (%YoY)



Chart 57. A year-on-year change of Ukraine's mining sector producers price index, a PPI sub-component, plotted against growth in the CRB Raw Industrials index¹ (%YoY)



 $\textbf{Note: [1] $ \underline{http://www.crbtrader.com/data.asp?page=chart\&page=chart\&sym=BVY00\&name=BLS\%20Raw\%20Industrialsweether.} \\$

Source: State Statistics Service of Ukraine, ICU.



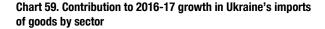
Foreign trade: a less favourable 2018

The Ukrainian economy remains closely tied to global commodity markets, as natural gas, oil, oil products, and coal account for approximately 20–25% of Ukraine's import costs, while agriculture and metals comprise around 70% of the country's exports earnings. The Ukrainian industry took a severe hit from the trade blockade of the separatist-held part of Donbass and the resultant loss of production assets in those territories. In 2017, steel and coal output fell 12% and 16%, respectively. But buoyant metals prices more than compensated the production losses, while still-moderate oil prices alleviated the burden of growing import volumes of natural gas and refined products. However, the situation in world markets is reversing in 2018: oil price growth is accelerating, while steel and iron ore prices are poised to subside. Therefore, much will depend this year on the success of Ukraine's efforts to increase its energy independence and grow export potential. We see high risks in pursuing this strategy, and expect the external trade deficit to increase 11% to US\$7bn in 2018.

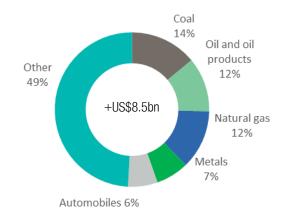
Risks of a larger trade deficit are rising

in 2018, we expect Brent prices to rise 17%, while world steel and iron ore prices should slip 8-16% After elevated metal prices and relatively low prices for oil in 2017, Ukraine is entering a much less favourable 2018. In 2018, we expect prices for steel and iron ore to decline 8% YoY and 16% YoY, respectively. At the same time, we forecast the Brent price to grow 17% YoY, driving natural gas prices 12–15%.

Chart 58. Ukraine's imports of goods (US\$bn)







Sources: NBU, State Statistics Committee of Ukraine, ICU..

Ukraine's efforts to increase its energy independence and enhance its export potential in the metals and agricultural sector should partly offset the negative impact of global commodity-market trends. We expect the Ukrainian metals and mining complex to slightly recover from the expropriation of production assets and come out with 5% growth in output. The power sector should reduce its dependence on expensive imported anthracite from 5mtpa to 3mtpa. Domestic output of refined oil products should rise 18% to 2.6mt. Also, Ukrainian natural gas producers should ramp up their output 6% to 22bcm. Finally, the Ukrainian agriculture and food sector should continue its integration with the EU market and increase exports volumes

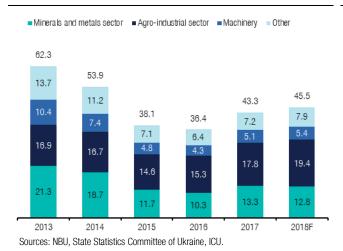
However, the rising domestic output also highly depends on the state's deregulation efforts, and integration with EU market's quality standards, and are subject to high execution risks. In addition, the agricultural sector depends on weather conditions and the government's

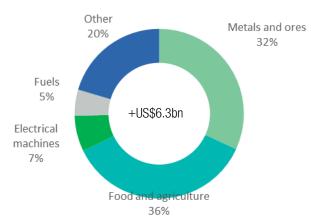


progress of introducing EU-compliant quality standards. While we estimate the external-trade deficit to widen 11% to US\$7bn in 2018, our forecast faces significant upside risks.

Chart 60. Ukraine's exports of goods (US\$bn)

Chart 61. Contribution to 2016-17 growth in Ukraine's exports of goods by sector





Sources: NBU. State Statistics Committee of Ukraine, ICU

Coal, oil products, natural gas, metals and automobiles were the key drivers of the Ukraine's imports in 2017, accounting for 14%, 12%, 12%, 7% and 6%, respectively of the US\$8.5bn growth in imported-goods volumes. For exports, the key drivers were food and agriculture, and metals and mining, which comprised 36% and 32% of the US\$6.3bn growth, respectively. We expect agriculture and food will increase their role in the foreign trade balance in 2018.

Crude oil drives energy prices

Higher US shale oil production and weaker global demand to push crude prices back to US\$62-64/bbl in 2Q18 The price of crude oil is the key driver of Ukraine's rising imported energy costs. In 2H17, Brent crude rose 45%, spurred by signs of the global market's rebalancing as a result of stronger demand, OPEC production cuts and their extension, geopolitical tensions in the Middle East, and multiple other disruptive factors. That series of events attracted significant inflow of speculative capital into crude instruments, which should keep supporting oil prices in the near term. We expect the Brent price to average US\$68/bbl in 1Q18, up 11% QoQ and 22% YoY.

For full-year 2018, we expect average the Brent price to rise 17% to US\$65/bbl However, the decline in the crude-oil surplus should slow throughout 2018, and we expect the Brent price to go down to US\$62–64/bbl in 2Q18. Growth in global oil demand should weaken as a result of higher prices and slower EM economies. China, the key engine responsible for 50% of 2017 demand growth, looks determined to have more balanced economic growth, while its rising exports of refined products give evidence of a saturated domestic market. The country may also significantly reduce crude purchases for its strategic reserves. Higher oil prices will also prompt a rising supply response from non-OPEC producers, particularly from US shale oil companies, which are able to quickly ramp up production. Overall, we anticipate Brent to average US\$65/bbl for 2018, up 17% YoY.



Chart 62. Quarterly Brent price forecast (US\$/bbl)

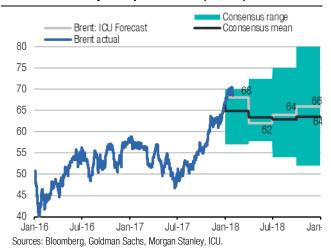
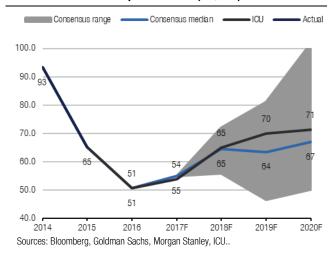


Chart 63. Annual Brent price forecast (US\$/bbl)



Oil prices are the key driver of growing prices for gasoline, diesel fuel, and other refined products in Ukraine. We anticipate that oil prices, together with UAH depreciation, will drive average retail prices for refined products in Ukraine by 17–20% in 2018.

Chart 64. Average annual prices for natural gas in Europe vs Brent price

	2014	2015	2016	2017	2018E
Natural gas in Europe, TTF hub, \$/tcm	355	252	194	216	249
%, YoY		-29%	-23%	11%	15%
Brent, \$/bbl	93	66	51	55	65
%, YoY		-29%	-22%	8%	17%
Sources: Bloomberg, ICU					

Sources: Bloomberg, Goldman Sachs, Morgan Stanley, ICU.

In 2014–17, Ukraine imported natural gas at prices tied to spot gas benchmarks at European hubs, with these benchmarks also closely correlating with Brent prices. Therefore, we expect that natural gas prices may grow almost in line with oil prices, by 12–15% in 2018. This forecast incorporates expectations that 2018 is going to be the first year of significant additions of LNG imports to Europe, which may weigh on natural gas prices in the region.

Lower gas import volumes offset rising prices

Ukraine's imports of natural gas may decline 12–15% in 2018 Gas imports expected low in 1Q18, and to decline over 2018

With natural gas inventories in Ukraine ~20% higher than a year ago and a relatively mild winter, Ukraine does not need to import significant volumes of gas in 1Q18. Moreover, we expect a 21% decline in imports of gas to 11.1bcm for the full-year 2018 due to current high stocks of gas, lower gas consumption, and increasing domestic production. As a result, Ukraine may reduce its gas import costs by 10% to US\$3.4bn in 2018.

Gas consumption to decline due to high inventories and lower steel capacity

We expect apparent consumption of natural gas in Ukraine to decline 5% to 33.1bcm in 2018 as a result of high gas stocks, loss of intensively consuming production assets in occupied Donbass, milder winter weather, and the continuing downward trend driven by higher efficiency of both industry and households. In 2017, Ukraine's consumption of natural gas,



net of technical use for transportation, slipped 2.4% to 28.4bcm. At the same time, technical-use consumption shows a clear trend of declining due to more efficient operations of the state gas transportation company, Ukrtransgaz.

Gas price reform and lower taxes drive production

We expect Ukraine's output of natural gas to grow 6% to 22bcm in 2018 Court ruling outcome is mostly positive for Ukraine, as it significantly loosened the take-or-pay term

We anticipate that production of natural gas in Ukraine may grow 6% to 22bcm in 2018 thanks to the efforts of both state-owned Ukrgazvydobuvannia (UGV) and private companies. In 2017, UGV, which accounted for 73% of domestic production of natural gas in 2017, announced details of its ambitious plans to increase gas production from 14.6bcm in 2016 to 20bcm in 2020. UGV plans to achieve this target by enhancing drilling activity and optimizing production at existing wells. While the UGV program is subject to high execution risks, the abilities of parent Naftogaz Ukraine to finance UGV's production capex have significantly improved with deregulation of domestic prices for natural gas: UGV's capex budget increased to US\$1bn in 2018 from US\$150–200m in 2015–16. Lower taxation will be another driver of rising domestic production: in December 2017, the Ukrainian parliament cut royalty rates for new gas wells from 14% and 29% to 6% and 12% (rates dependent on 5km depth threshold).

Chart 65. Apparent consumption of natural gas in Ukraine (bcm)





Stockholm court ruling: more positive than negative

In December, the Stockholm arbitrage court made a decision on the dispute between Gazrpom and Naftogaz Ukraine over the 2004–19 supply contract. According to the court's decision, take-or-pay volume for Naftorgaz declined to 5bcmpa from 52bcmpa for the remainder of the contract term.

The purchase price now is tied to spot natural gas prices at European hubs, and, therefore, will be lower than prices of European supplies by \$10/tcm, which is the cost of transporting gas from hubs to the EU-Ukraine border, which, on average, accounted for 4% of Ukraine's total imported gas cost in 2017. If Ukraine buys 5bcm from Gazprom in 2018, this will effectively imply an 8–11% rise in the per-tcm imported cost, versus the 12–15% expected rise in spot natural gas prices at European hubs.

At the same time, resuming supplies of gas from Russia to 4-5bcmpa deprive Ukraine of the related income from transiting gas through Ukraine's territory. Such income loss would



average US\$28/tcm, or US\$112–140m in 2018, and, therefore, will exceed the US\$40–50m gain from lower Russian gas prices.

Another positive for Ukraine from the Stockholm court's ruling is that Naftogaz does not have to pay for Gazprom's gas supplied to the non-controlled territories of Donbas. The price of gas supplied in 2Q14 was recalculated using a new formula to US\$352/tcm from US\$485/tcm. As a result, the amount due from Naftogaz for supplies in 4Q13 and 2Q14 was recalculated to US\$2.02bn from US\$2.9bn. This amount may be reduced by another ruling from the court relating to gas-transit terms, which is expected to be issued on 28 Feb 2018.

Overall, we believe the decision of Stockholm's court is mostly positive for Ukraine, as it significantly loosened the take-or-pay terms, and linked the gas purchase price to market benchmarks.

Oil prices boost import costs of oil products

Imports of oil products to
Ukraine will rise 10% in
2018, driven by higher oil
prices, but weighed by
leaner consumption and
stronger domestic
production

On the back of higher prices, imports of oil products to Ukraine increased by 27% to US\$4.2bn in 2017, and it became the third-largest contributor to Ukraine's imports growth. Rising oil prices will push the cost of imported refined products for Ukraine further up 10% YoY to \$4.6bn in 2018. We expect oil-product prices will grow 17% in USD terms for Ukraine, in line with Brent prices.

However, higher prices will also weigh on consumption of fuels in Ukraine, which we expect to decline 2% in 2018, and this will partly offset the effect of growing prices. In 2017, consumption of motor and jet fuels in Ukraine increased by 3% to 10.13mt, just 5% short of 2013 levels.

Another factor that will weigh on fuel imports in Ukraine will be growing domestic output of refined products, which we expect to rise 18% to 2.6mt in 2018 after a 13% YoY growth in 2017. The key growth contributor, Ukrtatnafta, plans to ramp up refining volumes at its Kremenchug refinery by 40% to 3.1mt in 2018. We trim this growth by half in our estimates though, due to high execution risks.

.Chart 67. Apparent consumption of oil products in Ukraine by fuel type (mt)

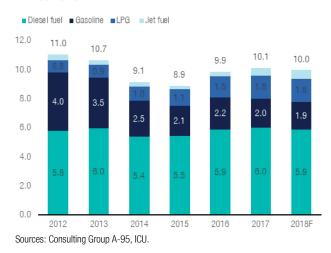


Chart 68. Production vs imports of oil products in Ukraine (mt)





Anthracite substitution and lower met coal prices to weigh on coal imports

Ukraine's coal imports should decline 26% to US\$2.4bn on lower metcoal prices, higher domestic coal production, and leaner anthracite consumption

The surge in world prices for metallurgical coal, and the loss of coal-mining assets in separatist-held territories caused coal to contribute the highest share, 12%, in Ukraine's imports growth in 2017. We expect this to diminish in 2018, as met-coal prices should decline 14%, while Ukraine will continue reducing its dependence on expensive imported anthracite, Overall, we expect coal imports to decline 26% to US\$2.4bn in 2018.

In 2017, Ukraine increased imports of coal and coke by 82% to \$3.2bn, mainly due to a significant hike in world prices of metallurgical coal. The prices of met coal soared 33% YoY to average US\$189/t, due to a combination of supply disruptions in Australia, coal production restrictions, and a surge in steel demand in China. In physical terms, imports of coal rose 26% to 15.6mt, as Ukraine had to substitute domestic supplies of anthracite with imports as a result of lost mining assets in separatist-held territory of Donbass.

We expect met-coal prices to decline 14% to average \$162/t as a result of slowing demand from Chinese steel mills, rising Chinese coal production, and seaborne supplies from Australia. At the same time, we expect volumes of thermal coal imports to decline 30% to 3.5mt, as Ukraine will continue efforts to substitute imported anthracite with domestic gas coal. The Ministry of Energy and Coal Industry of Ukraine expects the country will reduce consumption of anthracite by 40% to 3mt in 2018. We also anticipate domestic production of gas coal to increase 12% in 2018, mainly due to the efforts of the key private coal producer, DTEK and state-owned Krasnolimanska and other mines.

Chart 69. Forecast of met-coal price (US\$/t)

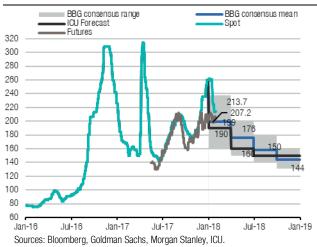
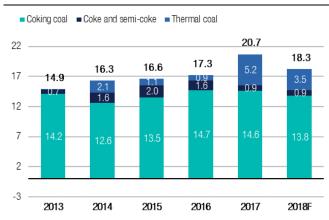


Chart 70. Imports of coal and coke to Ukraine (mt)



Sources: Energobusiness, Metalurgprom, ICU...

Automobile imports to slow, but remain strong

Although poised to slow vs 2017, we expect growth in Ukraine's car imports The importation of cars was the fifth-biggest contributor to Ukraine's 2017 imports growth, having comprised 7% of the total. Imports of automobiles to Ukraine grew 44% to \$2.1bn. Sales of new cars in Ukraine grew 25% to 80K vehicles, while sales of used cars surged 3.3x to 57K units, with the market driven by growth in disposable incomes and the realization of postponed demand. Although Ukrainian car dealers expect a slowdown in car demand growth, we forecast that car imports will still be one of the main drivers of Ukraine's imports. Lower import taxes on used cars from the EU and liberalization of the EU visa regime for



Ukrainians should further boost car imports to Ukraine in 2017–18, while the motorization rate in Ukraine remain low at 170 cars per capita in 2016 vs 439 cars per capita in CEE.

Lower prices to outweigh recovery in steel production

We expect world prices for steel and iron ore to drop 5–8% and 10–16% respectively, and will outweigh a 5% recovery in production volumes In 2018, we expect world prices for steel and iron ore to slip 5–8% and 10–16%, respectively. The main factor behind those declines should be the moderate slow-down of the Chinese economy. At the same time, however, we also anticipate a continuing moderate recovery of Ukraine's steel production, which should grow 5% to 23mt. Taken together, these two factors should result in export revenues of the sector to slip 2-4%.

Revenues from exporting Ukrainian metals-and-mining products grew 27% to US\$13.4bn in 2017 thanks to favourable world pricing, and despite falling production and sales volumes. Production of steel, the main contributor to the sector, declined 12% to 22mt as a result of the trade blockade in Donbass, and following Ukraine's loss of control of production assets located in the occupied territories. At the same time, prices for exported Ukrainian steel rose 30–40% in 2017, while prices for iron ore rose 40–50% and more than offset the impact from production losses.

Chart 71. Ukraine's monthly production of steel (000t)

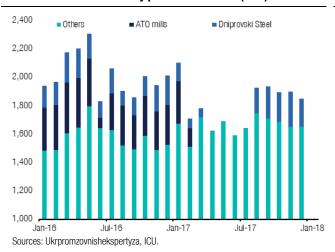
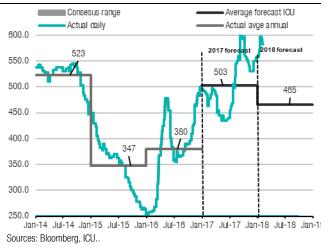


Chart 72. Prices for Ukraine-exported, hot-rolled coil (US\$/t)



Free Trade Agreement helps Ukrainian agrarians to further boost their exports to the EU

Agriculture and food the key exports driver

The food and agriculture sector is significantly increasing in importance for Ukraine's export economy. In 2017, it contributed 33%—the highest share—to Ukrainian exports growth. Even though spring frosts and summer drought substantially undermined crop yields causing output to fall, and soft commodity prices remaining weak, Ukraine's revenues from agriculture and food exports rose 16% to \$17.7bn in 2017. Rising exports to the EU are the key driver of agri exports: in 11M2017, the growth in exports to EU amounted to \$1.7bn, 75% of the total agri exports growth.

We expect the effect of the Free Trade Agreement with EU will continue boosting Ukraine's agri exports in 2018. The number of companies authorized to supply agricultural products to the EU increased to 289 in 2017 from 277 in 2016, and will continue to expand. The Agrarian Ministry of Ukraine plans to introduce ~150 European standards of food safety and quality in 2018, which will lead to better quality and higher volumes of Ukrainian agriproducts sold to



Europe. Also, in case weather conditions are more favourable in 2018 than they were in 2017, agrarians may once again increase their harvest, adding to export volumes. While we expect prices of agricultural commodities to remain mostly flat, the higher volumes may help Ukrainian agricultural to grow 4–6% in 2018.



External environment: macro & markets

The external macroeconomic and financial markets environment appears supportive to Ukraine's economy currently and for the next 12-month period. Despite the fact that the US Fed appears committed to a series of steady interest rate increases, the US dollar has been weakening since early 2017. This trend is projected to extend well into 2018. In our view, commodities prices turned upward thanks to this turnaround of the USD valuation..

A sober look at the prevailing buoyancy

Amid the prevailing buoyancy in the global financial markets, we retain a sober scepticism...

...in the US, the corporate sector is unlikely to invest its greater cash flow from the corporate tax cut...

...instead, there will be more share buybacks, a beloved practice of nowadays of US listed corporations As was highlighted in our previous *Quarterly Report*, for more than a year, prevalent thinking has held that the global economy and financial markets are again experiencing a Goldilocks moment. Buoyancy of the financial markets over 4Q17 and in early 1Q18, which is evidenced by the performance of the US stock market indices, indeed reinforced this view. There is probusiness sentiment in the US and globally, especially since the US administration made progress on corporate tax reform.

There is a debate on how US corporations will use the increased cash flow they get thanks to corporate tax relief. Will they would invest or use the funds for other purposes? In our view, the answer is not straightforward. However, one thing is certain and that is that the longstanding, beloved practice of US corporations to engage in continued share buyback programs is not going to end anytime soon. Rather, this tax-cut windfall will support the current, nearly US\$400bn that flows into buybacks every quarter (in annualized seasonallyadjusted terms), which is, albeit, down recently from a peak of US\$600bn/quarter seen in late 2015 and early 2016. See Chart 73, p. 45. This activity is very supportive of the ongoing stock-market performance and corporations' top managers' compensation scheme, as stockprice performance continues to be a top business-strategy priority of corporate boards. Also, there are a great many shareholder activists who pressure US companies to follow the widespread practice of returning spare "cash" to investors via dividends in addition to buybacks. Not least, US corporations as of late have not been rushing to invest much out of their own funds from operations, as depicted on Chart 75, p. 45. Since mid-2000s, the volume of fixed investments has been well below internally generated funds. Hence, as of today, it is not a shortage of funds from internally generated operations that prevented business from making greater fixed investments. The reason likely is complex. Hence, if US corporations realised larger cash flows from operations due to tax cuts, there is no reason, nor precedence, to expect a substantial rise in business investment. Instead, expect larger buyback programs, and, hence, the US stock market may extend share-price increases for another year.



Debt positions of nonfinancial businesses as well as households are still quite elevated despite recent deleveraging after the 2007–08 GFC Attention should be paid to another important element of the financial position of US corporations, their debt-to-internal-funds-from-operations ratio. This ratio did not improve much after the Global Financial Crisis of 2007–08. As of end-3Q17, it was about 4x, while on the eve of GFC, it was at a peak of 5x. The sector as a whole deleveraged to 3.5x in 2009–10. When the business sector starting borrowing again, it sent the debt-to-internal funds ratio back up to 4x, where it is now. See Chart 74, p. 45.

Deleveraging of the household sector stopped recently at the levels of (i) more than 1x as measured by the ratio of liabilities to disposable income and (ii) more than 10x as measured by the ratio of debt-to-demand deposits and currency. There are early signs that this sector may embark on another round of high leverage. See Chart 76-Chart 77 on p. 46.

As the US Fed raises short-term interest rates, there is risk that firms that are now too indebted could start failing

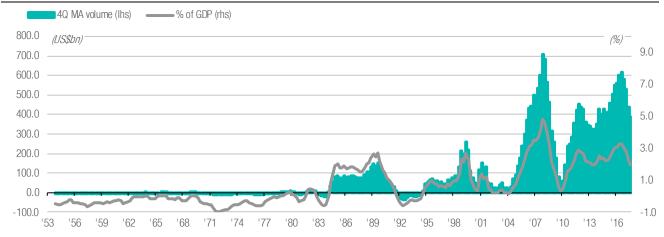
Further decline of DXY
index is expected in 2018,
this supports EM
economies and
commodities

Within the US corporate sector, balance sheets are highly diverse with varying ratios of debt-to-internal funds, some higher than the sector average of 4x, and some lower. Those with weak balance sheets are now highly vulnerable to interest-rate risk as the Fed raises rates. In this environment, according to Hyman Minsky's Financial Instability Hypothesis, companies that previously had a speculative structure of debt to income—income was sufficient to service debt, but principal payments required refinancing—could find themselves in a Ponzi structure in that they will have to (re)finance interest as well as principal payments, which will increase their debt burden. This may be happening already with non-financial corporations. This development could be mitigated if the US federal government runs larger deficits, injecting net financial assets into the non-government sector, and supporting income flows. This should occur when the US administration adopts the tax reform and budget for next fiscal year. Hence, developments in the US are likely to support the corporate sector despite the Fed's policy of raising interest rates. This should persist through 2018 and early 2019, until opposition to federal government deficits could force a reversal of the policy with an aim to narrow the fiscal deficit. Then, this will be an issue for the US economy.

Given all of the above, we are sceptical that the Fed will be able to deliver on a steady series of policy rate increases over 2018—expectations currently are for four, 25bps increases in 2018. Our view is that a series of steady rate increases is capable of forcing some over-indebted businesses and households into difficulties. The US dollar slide over the past two years, as measured by DXY index, is an indication that financial market participants do support the strong dollar view, which could be implied by the Fed's promise of future rate hikes for the next 12-month period. The dollar's weakening has a flip side, which is the gradual recovery of other major currencies like the euro, British pound, and Japanese yen, which previously experienced extensive weakness due own factors. That weakness reversed in early 2017, progressed over the year, and is set to gradually continue in 2018. This development has been supportive to the EM economies in 20017, and a similar trend should persist in 2018.



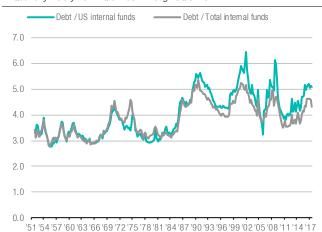
Chart 73. Volume of flows with shares in the liabilities of US non-financial corporations: quarterly history through 3Q17 (US\$bn)



Source: Federal Reserve flow of funds accounts.

Chart 74. Debt-to-internal funds* ratio of US non-financial corporate sector (x)

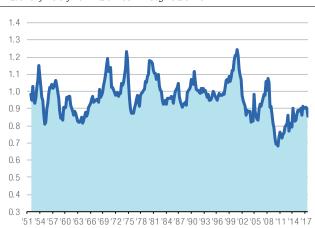
Quarterly history from 1Q of 1951 through 3Q of 2017



Note: * US internal funds – funds from operations derived from US domestic operations; Total internal funds – US internal funds plus foreign earnings retained abroad, plus inventory valuation adjustment, minus net capital transfers paid. Source: Federal Reserve flow of funds accounts.

Chart 75. Ratio of fixed investments-to-internal funds*

Quarterly history from 1Q of 1951 through 3Q of 2017



Note: * US internal funds – funds from operations derived from US domestic operations; Total internal funds – US internal funds plus foreign earnings retained abroad, plus inventory valuation adjustment, minus net capital transfers paid. Source: Federal Reserve flow of funds accounts.



Chart 76. Total liabilities of the household sector to personal disposable income (x)

Quarterly history from 1Q of 1951 through 3Q of 2017



Source: Federal Reserve flow of funds accounts.

Chart 77. Ratio of debt-to-demand deposits of the householder sector (x, logarithmic scale)

Quarterly history from 1Q of 1951 through 3Q of 2017



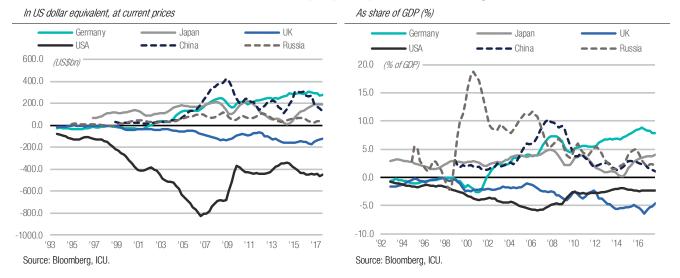
Source: Federal Reserve flow of funds accounts.

Current account (im-)balances: An update

Global imbalances are still out there, shifting among regions while broadly remaining same in size relative to GDP There is still a worrying amount of FX leverage in the global financial system. We have collected data on selected economies' current-account balances, including the major global economies like the US, Germany, Japan, UK, and China (see chart below). This data reveals that the pre-2008 shape of "global imbalances" migrated from one group of economies to another, while remaining similar in terms of overall size. The UK overtook the US as the leading deficit nation in terms of share of GDP, while Germany overtook China as the leading surplus nation. Brexit and the subsequent devaluation of the GBP made only a small correction to the UK's position, while President Trump's agenda on international trade, which aims to reduce trade deficits with main trade partners like China among others, is yet to be realised. While it is possible that this mixture of deficits and surpluses can persist for several years, it nevertheless introduces a mounting risk of another debt crisis. This current-account structure indicates that there are a number of economies that borrow in FX to finance imports from the surplus economies. FX overleveraging is out there, and another debt crisis just may happen. Again.



Chart 78. Selected economies' current accounted balances: yearly history from 4Q of 1992 through 3Q of 2017



DXY and crude oil prices

Historical pattern of DXY/crude oil correlation is returning this year While the long-term correlation between the DXY (index of USD against the basket of major currencies) and crude oil prices remained strongly negative at 81% for a 20-year period and was at 94% for the last five years, the pattern was disrupted during the last one to three years, as positive expectations of a Trump presidency pushed the DXY higher along with oil prices. Thus, the correlation was an insignificant, negative 19%–14%, which implies randomness. At the same time, the 30-day correlation stood at a negative 82%, back to its "normal" position. Although short-term numbers can be very volatile, they reflect what long-term numbers will look like later.

The appointment of the new head of the Fed raises some questions about future monetary policy. It is expected that there will be three rate hikes this year, as there were in 2017. If this scenario plays out, the dollar may appreciate at some point, which may cause a downturn in commodities demand and prices. On the other hand, we saw a gradual decline in the USD valuation against other major currencies (through DXY index) in 2017 on the back of the same policy. This is generally considered to be good for the authorities, as a cheaper USD creates a tapering of the US's trade deficit, which is a stated preference of President Trump. Hence, we do not expect appreciation of the dollar this year.

Thus, as we expect oil prices to be in the range of US\$58-62/bbl in 2018, and US dollar to depreciate in the 2H18, and the historical pattern of DXY/crude oil correlation is likely to be maintained.



Chart 79. DXY, Brent and WTI relative movement

Daily history from 1 January 2013 through 29 December 2017

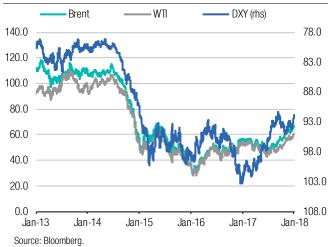


Chart 80. Correlation between DXY and oil brands

History from January 1998 through December 2017





Domestic politics

Ukraine is entering the last year of the current political cycle, which will culminate with presidential elections in late March 2019. As ever, investors should expect noisy politics, as rivalry has already heated up and will only intensify. This said, we do not expect any serious political crises in 2018, such as Maidan that occurred in 2004 and 2013-14, despite the brutal adjustment in average personal income that most people experienced in 2014–16.

Current political cycle ends, rivalry ramps up

Ukraine's political theater enters the final year before presidential elections on 31 March 2019 Ukraine's political theatrics are ramping up in anticipation of presidential and parliamentary elections. The public is joining in via mass political protests. Called Maidans, it is seldom that these mass mobilizations by the public change the course of politics. In fact, it has only happened twice: once in 2004, and again in 2013–14. Both times, there was mix of:

- economic strife, such as the disparity between the growth in income of ordinary Ukrainians vs. more privileged elements of society such as the bureaucrats and oligarchs,
- (2) foreign meddling from Russia, which hoped to reabsorb Ukraine into another Soviet Union.

Expect more political rivalry and attempts to stir up a new Maidan

Previously, economic inequality and meddling from Russia were the prime irritants that disrupted the status quo. In 2013–14, Maidan was about rejecting a push for Ukraine to become part of a Customs Union, a scheme of Kremlin social engineers, which Russian Prime Minister Medvedev thought would be "a better version of the EU." They were proposing a fiscal and monetary union that would, effectively, be controlled by the Kremlin, along the lines of the former Soviet Union economic system.

We don't expect a new Maidan this year because there is a lack of one vital ingredient this time that was present previously. And that is we don't see Russia meddling in internal Ukraine affairs such that the incumbent administration is leaning towards handing the country over to the Kremlin.

In our view, these attempts are bound to fail, hence, the current political cycle ends in due process However, the other ingredient still exists: gaping income inequality. The tension this has caused was exploited by different political parties over the course of 2017 with attempts to imitate past Maidans. Over the fall and early December 2017, Mikheil Saakashvili's attempts to guide mass protests against the incumbent authorities resulted in failure. This outcome will not deter additional attempts, which should take place over 2018. However, we expect they, too, will result in failure. Our base-case scenario calls for the current political cycle to end with presidential elections in March 2019, as scheduled.

Government's push for a minimum wage increase is set to continue in 2018...

We continue to strongly support the government's efforts to push up the minimum wage, which we see as independent of the political cycle. The country's income distribution between wages and gross profits shifted dramatically over 2014–16, away from wages and towards profits, sending wages' share to a historical low of 37% of GDP (see Chart 4-Chart 5, p. 9). An economy with an income distribution structure that is skewed towards profits, as Ukraine's is, is unstable for a number of reasons. First, wage earners have a higher propensity to consume out of their wage income than those whose income is derived from dividends from their businesses. In addition, the wealthy have a lower propensity to consume than average



wage earners. Second, although profits that are retained by businesses support private fixed investments, those investments are a more volatile component of GDP than household consumption and government consumption.

...just slightly affecting the standing of incumbent officials in the eyes of the public After increasing the minimum wage by a ratio of 2x in 2017, the wage share in GDP recovered to just 39% of GDP, up from a low of 37% at the end of 2016. Before the 2014–15 recession, it was greater than 50%. Hence, there is still reason to believe that employees expect further wage adjustments, since they have yet to recover from the hit they took after the crisis of 2014–15. So, in this run-up year to the 2019 elections, we expect another hike in the minimum wage by incumbents looking to increase (1) internal stability of the economy (as this report attempts to argue), as well as (2) their popularity with a skeptical and dissatisfied public (as critics of the current government would argue). The state budget law for 2018 did make another increase in the minimum wage: it amounted to 16% from UAH3,200 to UAH3,723, and the increase has been effective since 1 January. However, President Poroshenko has already made a statement that another increase will take place in 2018, and it will raise the minimum wage to UAH4,100 or a 10% hike from the current level.

What opinion polls tell us

More than 60% of Ukrainians are dissatisfied with politics in general As of the end of 2017, the latest opinions polls suggested that public opinion of Ukraine's prominent politicians was very much dispersed. There is no single, nor are there a pair of politicians that have a sizable approval rating. This situation is not surprising, as in the past, there were very few and short-lived episodes when public opinion strongly backed any one politician. Most of the time, dispersion among many names is the norm. We analyze the current structure of the public's attitude towards prominent politicians as recorded by three polls:

- Razumkov Centre: a very well respected Kyiv-based pollster with a lengthy track record of polls since 1990s, http://razumkov.org.ua
- (2) Rating Group: another Kyiv-based pollster, which has been conducting polls since the mid-2000s; hence, it has a shorter track record than Razumkov has, http://ratinggroup.ua
- (3) International Republican Institute: a Washington-based organization that conducts public opinion screening internationally including in Ukraine, http://www.iri.org

Ukrainians' support of politicians is very dispersed among many figures According to Razumkov data, Ukraine's general public is very much dissatisfied with politics; more than 60% of Ukrainians are not interested in the subject¹². Among the top contenders in terms of popularity are incumbent President Poroshenko and ex-Prime Minister Tymoshenko, although they are followed closely by several others. For example, the recent poll¹³ conducted by Razumkov, Rating Group, and two other local pollsters showed that the above-mentioned contenders are viewed by the public as key rivals for the presidency. Poroshenko beats Tymoshenko in this poll, but by a thin margin, despite the fact that their popularity in the polls has been moving in opposite directions. Attitudes towards Poroshenko have become more negative while Tymoshenko saw a sizable thawing of negative sentiment (see **Error! Reference source not found.**, p. **Error! Bookmark not defined.**).

¹² See http://razumkov.org.ua/en/component/k2/most-ukrainians-are-not-interested-in-politics

¹³ See (in Ukrainian) http://razumkov.org.ua/uploads/socio/2017_Press_reliz_4_company.pdf



There is no clear leader in the polls. There are very slim margins among the top few politicians In another poll conducted by IRI last fall, Ukrainians appear to be cool towards current and past incumbents, and are open to welcoming new names into the political arena. Exchampion, heavyweight boxer Klychko won high rankings in the opinion polls over 2012–13. Now, Vakarchuk, lead singer and song-writer of Ukraine's most famous rock-band Okean Elzy, is seen as Ukraine's most trustworthy public figure (see Error! Reference source not found., p. Error! Bookmark not defined.). His climb in the opinion polls was a puzzle for the professional pollsters in Ukraine, who have doubts that he'll remain in the public's sympathy, despite their perception that he is highly successful and intelligent. They point out that Klychko, who once was at a peak of popularity with the public, saw his ratings melt when he appeared to embark on a political career.

Those who the public sees as most trustworthy, like rock star Vakarchuk, are outside of the modern-day political arena Vakarchuk, however, is very different from Klychko. First, he has not jumped into the fray of local politics. As recently as last December, he posted a speech on YouTube¹⁴ where he laid down in broad terms his social-activism agenda. He promised to stay away from an active career in politics in the near term. So, he will not be running for president in 2019.

As the public leans towards a younger generation of public figures, this theme will be exploited by the frontrunners for March 2019 elections

What is the take-away from the Vakarchuk story and the very dispersed public support of different political figures? It is that Ukraine's public is leaning towards a younger generation of political and public figures. Hence, those who want to be considered as frontrunners are likely to appeal to this sentiment. A politician who succeeds in this effort could gain popularity. Hence, 2018 is not going to be a year of just pro-social rhetoric, but also one of pro-liberal and, hence, pro-reform rhetoric.

In general, President Poroshenko's year-end op-ed¹⁵ published in the local media confirms this idea, in our view. The key phrases of the text are "steady economic development" and "restoration of living standards [of the general public]".

We could see the promotion of a younger generation of government officials in their 30s to more prominent positions. An example, as has been pointed out by one insider of Ukraine's officialdom, is 38-year-old Transport Minister Volodymyr Omelyan¹⁶ who speaks intelligently as well as forcefully and is of towering height, all of which impresses an audience. Ukraine's media reports that he gave 26 interviews in January 2017 alone, more than any other minister of the government. International financial organizations would welcome him, as he has been fighting corruption at the state-run national railroad company. Some insiders of Ukraine's officialdom consider him as a most promising official for promotion. We are not implying that he will become the next prime minister. Instead, PM Groysman is likely to retain his post through end of 1H19.

¹⁴ See (in Ukrainian) https://www.youtube.com/watch?v=8vSm3zyW4Rg

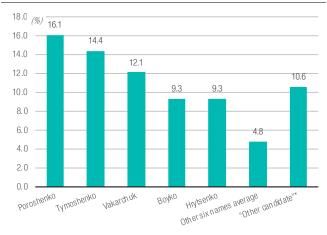
¹⁵ See (in English) http://en.interfax.com.ua/news/general/475198.html

¹⁶ Read his official CV http://mtu.gov.ua/en/content/omelyan-volodimir-volodimirovich.html



Chart 81. Ranking of politicians if presidential elections were held now

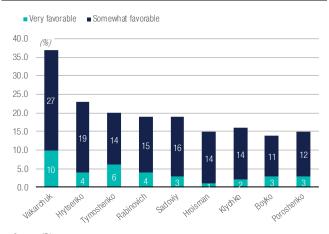
Poll conducted on 28 October through 14 November 2017



Source: Razumkov.

Chart 82. Public attitude to Ukraine's most prominent politicians and public figures

Poll conducted on 14 September through 10 October 2017



Source: IRI.



Forecast for 2018-20

The following two pages of statistics are our yearly and quarterly key macroeconomic indicators with forecasts through 2019.



Yearly forecast 2018-20, base-case scenario

Table 2. Forecast of key macroeconomic indicators for 2018–20 (annual)

				Hist	orical data	a for 2008	-17				Fo	recast by	ICU
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017E	2018F	2019F	2020
Activity													
Real GDP (%YoY)	2.6	-15.0	4.2	5.1	0.5	-0.1	-6.4	-10.3	2.2	2.0	3.0	1.9	2.
Nominal GDP (UAHbn)	948.1	913.3	1,082.6	1,302.1	1,408.9	1,465.2	1,566.7	1,957.0	2,383.2	2,910.2		4,138.3	4,896.
Nominal GDP (US\$bn)	147	113	136	162	173	178	108	85	92	109	122	127	148
GDP per capita (US\$, ann)	3,178	2,451	2,973	3,561	3,793	3,937	2,526	1,991	2,162	2,575	2,877	3,010	3,51
Unemployment rate (%)	6.4	8.8	8.1	7.9	7.5	7.2	9.3	9.1	9.3	9.3	8.6	8.6	7.8
Prices													
CPI headline (%YoY, eop)	22.3	12.3	9.1	4.6	-0.2	0.5	24.9	43.3	12.4	13.7	12.5	13.6	11.9
CPI headline (%YoY, average)	25.3	16.0	9.4	8.0	0.6	-0.3	12.1	48.5	14.9	14.4	12.5	13.8	13.
PPI (%YoY, eop)	21.1	15.3	18.8	17.4	0.4	1.7	31.8	25.5	35.8	17.3	15.1	17.3	13.
PPI (%YoY, average)	33.6	7.4	21.4	19.9	6.0	-0.1	17.0	36.6	20.5	27.5	16.5	16.8	15.0
Fiscal balance													
Consolidated budget bal. (UAHbn)	-11.3	-34.4	-63.3	-18.3	-46.9	-63.0	-67.1	-27.8	-52.8	-1.6	-58.4	-98.1	-76.2
Consolidated budget bal. (% of GDP)	-1.2	-3.8	-5.9	-1.4	-3.3	-4.3	-4.3	-1.4	-2.2	-0.1	-1.7	-2.4	-1.6
Budget balance (UAHbn)	-12.5	-35.5	-64.3	-23.6	-53.4	-64.7	-78.1	-45.2	-70.2	-27.7	-68.6	-106.3	-91.0
Budget balance (% of GDP)	-1.3	-3.9	-5.9	-1.8	-3.8	-4.4	-5.0	-2.3	-2.9	-1.0	-2.0	-2.6	-1.9
External balance													
Exports (US\$bn)	82.5	52.1	65.6	83.7	86.5	81.7	65.4	47.9	46.0	54.4	61.4	65.3	68.7
Imports (US\$bn)	96.8	54.0	69.6	93.8	100.9	97.4	70.0	49.6	51.5	60.7	68.4	71.4	74.9
Trade balance (US\$bn)	-14.4	-2.0	-4.0	-10.1	-14.3	-15.6	-4.6	-1.7	-5.5	-6.3	-7.0	-6.1	-6.2
Trade balance (% of GDP)	-9.8	-1.7	-2.9	-6.2	-8.3	-8.8	-4.2	-2.0	-5.9	-5.8	-5.7	-4.8	-4.2
Current account balance (US\$bn)	-12.8	-1.7	-3.0	-10.2	-14.3	-16.5	-4.6	-0.2	-3.5	-3.7	-4.4	-3.5	-3.0
Current account balance (% of GDP)	-8.7	-1.5	-2.2	-6.3	-8.3	-9.3	-4.2	-0.2	-3.8	-3.4	-3.6	-2.7	-2.
Net FDI (US\$bn)	9.9	4.7	5.8	7.0	7.2	4.1	0.3	3.0	3.3	2.2	2.0	2.8	4.0
Net FDI (% of GDP)	6.8	4.1	4.2	4.3	4.2	2.3	0.3	3.5	3.6	2.0	1.6	2.2	2.
C/A bal. + net FDI (% of GDP)	-2.0	2.6	2.0	-2.0	-4.1	-7.0	-4.0	3.3	-0.2	-1.4	-2.0	-0.5	0.3
External debt (US\$bn, eop)	101.7	103.4	117.3	126.2	134.6	142.1	126.3	118.8	113.7	118.4	122.8	126.3	129.
External debt (% of ann'd GDP, eop)	69.3	91.8	86.2	77.7	77.9	79.6	116.5	139.6	123.7	108.5	100.9	99.2	87.
FX reserves (US\$bn, eop)	31.5	26.5	34.6	31.8	24.5	20.4	7.5	13.3	15.5	18.8	20.0	19.5	21.0
FX reserves (% of ann'd GDP, eop)	21.5	23.5	25.4	19.6	14.2	11.4	6.9	15.6	16.9	17.2	16.4	15.3	14.2
External debt / FX reserves (x, eop)	3.2	3.9	3.4	4.0	5.5	7.0	16.8	8.9	7.3	6.3	6.1	6.5	6.2
FX reserves imports cov (months)	7.0	4.6	4.4	3.8	3.0	3.5	1.8	3.1	3.1	3.3	3.4	3.1	3.3
Interest rates													
Central bank key rate (%, eop)	12.00	10.25	7.75	7.75	7.50	6.50	14.00	22.00	14.00	14.50	15.50	14.50	13.50
Exchange rates													
UAH nominal TWI change (% YoY)	-29.32	0.44	15.59	6.75		-9.23	-34.88	-34.61	-17.85	-9.97	-8.46	-12.55	-0.4
UAH CPI-based real misalign't ¹ (%, eop)	-21.61	-28.15	-15.35	-8.46	-7.68	4.16	-8.59	6.08	18.37	18.14	14.10	2.63	7.3
UAH PPI-based real misalign't ² (%, eop)	-24.69	-33.07	-19.05	-5.21	-10.30	19.38	-3.38	11.99	49.32	45.45	38.92	21.51	28.40
UAH/US\$ (eop)	7.80	8.00	7.94	8.00	8.05	8.24	15.82	24.03	27.10	26.66	28.50	32.50	33.00
UAH/US\$ (average)	6.47	8.11	7.95	8.01	8.15	8.21	14.45	22.99	25.91	26.66	28.50	32.50	33.00
UAH/€ (eop)	10.90	11.45	10.63	10.37	10.62	11.32	19.14	26.10	28.50	31.29	35.06	40.63	41.2
UAH/€ (average)	8.53	11.97	10.81	10.81	10.57	11.18	18.05	25.16	27.85	31.29	35.06	40.63	41.2
US\$/€ (eop)	1.40	1.43	1.34	1.30	1.32	1.37	1.21	1.09	1.05	1.17	1.23	1.25	1.2
US\$/€ (average)	1.32	1.48	1.36	1.35	1.30	1.36	1.25	1.09	1.07	1.17	1.23	1.25	1.2
Population													
Population (million, eop)	46.14	45.96	45.78	45.63	45.55	45.33	42.93	42.76	42.54	42.40	42.33	42.30	42.2
Population (%YoY)	-0.5	-0.4	-0.4	-0.3	-0.2	-0.5	-5.3	-0.4	-0.5	-0.3	-0.2	-0.1	-0.

Notes: eop – end of period; cov – coverage; con'd – consolidated; ann – annualised; TWI – trade-weighted index of UAH; [1] misalignment of UAH by its CPI-based real TWI in percentage of the five-year moving-average of the index; [2] misalignment of UAH by its CPI-based real TWI in percentage of the five-year moving-average of the index; [1 & 2] when marked in green/red, it means UAH has negative/positive misalignment and likely future path of UAH's market exchange rate over next three-month period is strengthening/weakening). Sources: State Statistics Service of Ukraine, NBU, ICU.



Quarterly forecast 2018–20, base-case scenario

Table 3. Forecast of key macroeconomic indicators for 2018-20 (quarterly)

								Forecas	t by ICU					
	3Q17	4Q17E	1Q18F	2Q18F	3Q18F	4Q18F	1Q19F	2Q19F	3Q19F	4Q19F	1Q20F	2Q20F	3Q20F	4Q20F
Activity														
Real GDP (%YoY)	2.1	1.0	3.0	3.0	3.0	3.0	2.5	2.0	1.8	1.5	2.0	2.0	2.0	2.0
Nominal GDP (UAHbn)	821.3	848.0	693.7	788.2	979.9	1,008.3	822.7	946.6	1,172.2	1,196.8	981.6	1,122.6	1,389.2	1,403.3
Nominal GDP (US\$bn)	31.7	31.8	24.8	28.7	35.0	35.4	28.4	30.5	36.6	36.8	29.7	34.0	42.1	42.5
GDP per capita (US\$, ann)	2,494	2,588	2,664	2,755	2,833	2,919	3,004	3,049	3,088	3,122	3,155	3,238	3,368	3,503
Unemployment rate (%)	9.4	9.3	9.1	8.9	8.7	8.6	8.4	8.9	8.7	8.6	8.4	8.2	8.0	7.8
Prices														
CPI headline (%YoY, eop)	16.4	13.7	12.7	12.2	11.6	12.5	12.9	14.7	13.6	13.6	13.6	13.6	13.7	11.5
CPI headline (%YoY, average)	16.2	13.9	13.1	13.1	11.7	12.3	12.6	14.7	14.4	13.6	13.6	13.6	13.7	12.2
PPI (%YoY, eop)	23.1	17.3	14.2	18.6	17.2	15.1	15.9	17.7	16.5	17.3	17.1	15.4	15.4	13.5
PPI (%YoY, average)	23.6	18.6	16.5	16.8	16.9	15.6	15.6	17.5	17.3	16.8	17.1	15.6	15.4	14.4
Fiscal balance														
Consolidated budget bal. (UAHbn)	-10.6	-43.1	2.9	-32.3	7.7	-36.8	-23.7	-37.3	9.5	-46.6	-27.2	-45.2	9.9	-13.6
Consolidated budget bal. (% of GDP)	-1.3	-5.1	0.4	-4.1	0.8	-3.6	-2.9	-3.9	0.8	-3.9	-2.8	-4.0	0.7	-1.0
Budget balance (UAHbn)	-14.5	-42.3	-1.1	-32.1	2.0	-37.5	-24.6	-37.3	2.6	-47.1	-28.5	-45.1	2.0	-20.1
Budget balance (% of GDP)	-1.8	-5.0	-0.2	-4.1	0.2	-3.7	-3.0	-3.9	0.2	-3.9	-2.9	-4.0	0.1	-1.4
External balance														
Exports (US\$bn)	13.6	15.3	14.7	14.6	16.3	15.8	16.3	16.4	16.3	16.3	16.8	17.1	17.1	17.7
Imports (US\$bn)	15.9	16.9	16.2	16.4	17.9	17.9	17.4	18.2	18.4	17.4	18.2	18.9	18.9	18.9
Trade balance (US\$bn)	-2.3	-1.6	-1.5	-1.8	-1.6	-2.1	-1.1	-1.8	-2.1	-1.1	-1.4	-1.9	-1.8	-1.2
Trade balance (% of GDP)	-7.3	-5.0	-6.1	-6.3	-4.6	-5.9	-3.9	-5.7	-5.7	-3.0	-4.5	-5.4	-4.3	-2.8
Current account balance (US\$bn)	-1.7	-1.0	-0.9	-1.2	-1.0	-1.5	-0.5	-1.1	-1.5	-0.5	-0.7	-1.2	-1.2	-0.6
Current account balance (% of GDP)	-5.2	-3.0	-3.4	-4.0	-2.7	-4.1	-1.6	-3.6	-4.0	-1.2	-2.4	-3.5	-2.7	-1.3
Net FDI (US\$bn)	0.3	0.4	0.5	0.5	0.5	0.5	0.7	0.7	0.7	0.7	1.0	1.0	1.0	1.0
Net FDI (% of GDP)	1.1	1.2	2.0	1.7	1.4	1.4	2.5	2.3	1.9	1.9	3.4	2.9	2.4	2.4
C/A bal. + net FDI (% of GDP)	-4.1	-1.8	-1.4	-2.3	-1.3	-2.7	0.9	-1.3	-2.0	0.7	1.0	-0.6	-0.4	1.1
External debt (US\$bn, eop)	117.5	118.4	119.3	120.4	121.4	122.8	123.3	124.4	125.8	126.3	127.0	128.2	129.3	129.9
External debt (% of ann'd GDP, eop)	110.7	107.7	105.4	103.0	100.9	99.2	96.7	96.2	96.1	95.4	94.9	93.4	90.6	87.5
FX reserves (US\$bn, eop)	18.6	18.8	19.1	19.4	19.7	20.0	19.9	19.8	19.6	19.5	19.9	20.3	20.6	21.0
FX reserves (% of ann'd GDP, eop)	17.6	17.1	16.9	16.6	16.4	16.2	15.6	15.3	15.0	14.7	14.9	14.8	14.5	14.2
External debt / FX reserves (x, eop)	6.3	6.3	6.2	6.2	6.2	6.1	6.2	6.3	6.4	6.5	6.4	6.3	6.3	6.2
FX reserves imports cov (months)	3.4	3.3	3.4	3.3	3.3	3.3	3.3	3.3	3.2	3.2	3.2	3.2	3.3	3.3
Interest rates														
Central bank key rate (%, eop)	12.50	14.50	16.00	16.00	15.50	15.50	15.50	15.50	14.50	14.50	13.50	13.50	13.50	13.50
Exchange rates														
UAH nominal TWI change (% YoY)	-6.65	-9.97	-13.28	-9.53	-6.98	-8.46	-2.84	-10.90	-12.68	-12.55	-12.13	-5.86	-2.15	-0.41
UAH CPI-based real misalign't1 (%, eop)	17.05	18.14	11.39	16.30	14.75	14.10	14.05	8.08	3.56	2.63	2.46	5.18	5.84	7.35
UAH PPI-based real misalign't2 (%, eop)	44.31	45.45	36.08	38.00	39.66	38.92	40.97	25.52	22.76	21.51	23.25	20.86	26.02	28.46
UAH/US\$ (eop)	26.64	26.66	28.00	27.50	28.00	28.50	29.00	31.00	32.00	32.50	33.00	33.00	33.00	33.00
UAH/US\$ (average)	25.91	26.66	28.00	27.50	28.00	28.50	29.00	31.00	32.00	32.50	33.00	33.00	33.00	33.00
UAH/€ (eop)	31.47	31.29	33.60	32.73	33.88	35.06	36.25	38.75	40.00	40.63	41.25	41.25	41.25	41.25
UAH/€ (average)	30.46	31.29	33.60	32.73	33.88	35.06	36.25	38.75	40.00	40.63	41.25	41.25	41.25	41.25
US\$/€ (eop)	1.18	1.17	1.20	1.19	1.21	1.23	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
US\$/€ (average)	1.18	1.17	1.20	1.19	1.21	1.23	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
Population														
Population (million, eop)	42.49	42.40	42.49	42.44	42.42	42.33	42.46	42.41	42.39	42.30	42.43	42.38	42.36	42.27
Population (%YoY)	-0.3	-0.3	-0.2	-0.2	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1

Notes: eop – end of period; cov – coverage; con'd – consolidated; ann – annualised; TWI – trade-weighted index of UAH; [1] misalignment of UAH by its CPI-based real TWI in percentage of the five-year moving-average of the index; [2] misalignment of UAH by its CPI-based real TWI in percentage of the five-year moving-average of the index; [1 & 2] when marked in green/red, it means UAH has negative/positive misalignment and likely future path of UAH's market exchange rate over next three-month period is strengthening/weakening). 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.



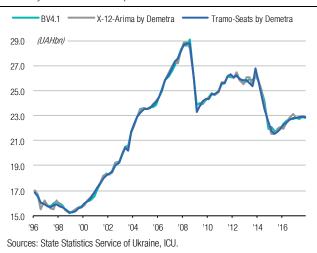
Quarterly GDP: Reported statistics and ICU's calculations

Chart 83. Ukraine's economy from the perspective of quarterly GDP volumes (left) and on-quarter growth rates (right)

1Q96-3Q17 and forecast for 4Q17-4Q20

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



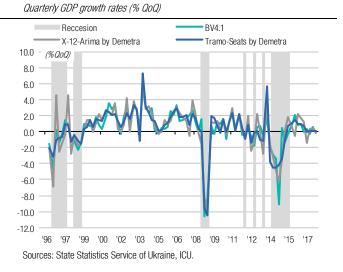


Chart 84. Reported on-year quarterly GDP growth (% YoY)

1Q96-1Q17 and forecast for 2Q17-4Q17

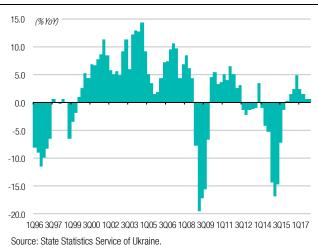


Chart 85. Demand-side components of GDP (% of total, LTM)

1*Q96-4Q1* (

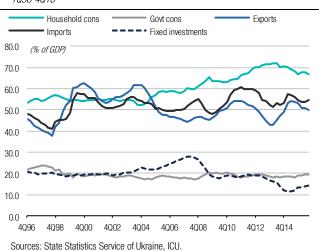




Table 4. Ukraine quarterly GDP size: History from 4Q96 through 1Q17 (UAHm, if not otherwise indicated)

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

Period	Report	ed statistics	on quarterl	y GDP	ICU calculations									
	GDP at	Real	Real	Deflator	Real	GDP at	GDP at co	ons prices¹ (UAHm, SA)	Real G	(%QoQ, SA)			
	current prices (UAHm)	growth (% YoY, qtly)	growth (% QoQ, SA)	(% YoY)	growth (% QoQ, SA ann'd)	cons prices ¹ (UAHm, NSA)	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		+0.0	17,404	16,005	16,221	15,866	+0.3	+4.6		
1Q97	18,728	-8.3		+22.3		+0.0	14,114	15,790	15,816	15,734	-1.3	-2.5		
2Q97	20,485	-6.6		+22.7		+0.0	14,117	15,741	15,587	15,624	-0.3	-1.4		
3Q97	26,076	+0.5		+15.3		-1.6	17,544	15,961	15,533	15,779	+1.4	-0.3		
4Q97	28,076	+0.0		+14.8		+0.3	17,405	16,097	16,247	15,914	+0.9	+4.6		
1Q98	20,871	-0.3		+11.8		-0.1	14,068	15,959	15,787	15,717	-0.9	-2.8		
2Q98	23,367	+0.5		+13.5		+0.2	14,188	15,785	15,704	15,658	-1.1	-0.5		
3Q98	28,908	-0.1		+10.9		-2.0	17,538	15,426	15,432	15,469	-2.3	-1.7		
4Q98	29,447	-6.6		+12.3		-4.3	16,256	15,213	15,222	15,225	-1.4	-1.4		
4Q09	259,908	-6.7		+14.1		-6.5	25,412	24,230	24,332	24,331	+1.3	+1.3		
1Q10	217,286	+4.5	+0.7	+10.7	+2.8	+5.2	21,959	24,451	24,389	24,294	+0.9	+0.2		
2Q10	256,754	+5.4	+1.4	+15.1	+5.7	+4.6	23,110	24,829	24,705	24,685	+1.5	+1.3		
3Q10	301,251	+3.3	+0.4	+17.5	+1.6	+3.2	27,539	24,605	24,606	24,691	-0.9	-0.4		
4Q10	307,278	+3.7	+0.7	+15.6	+2.8	+3.2	25,989	24,924	24,908	24,982	+1.3	+1.2		
1Q11	257,682	+5.1	+2.0	+12.9	+8.2	+4.6	23,066	25,526	25,651	25,571	+2.4	+3.0		
2Q11	311,022	+3.9	+0.3	+16.6	+1.2	+3.4	24,009	25,628	25,670	25,596	+0.4	+0.1		
3Q11	369,818	+6.5	+2.5	+15.2	+10.4	+5.6	29,347	26,193	26,182	26,167	+2.2	+2.0		
4Q11	363,557	+5.0	+0.3	+12.6	+1.2	+5.2	27,309	26,092	26,215	26,300	-0.4	+0.1		
1Q12	293,493	+2.5	-0.8	+11.4	-3.2	+2.3	23,584	26,065	25,962	26,067	-0.1	-1.0		
2Q12	349,212	+3.1	+0.5	+9.0	+2.0	+2.5	24,731	26,175	26,474	26,273	+0.4	+2.0		
3Q12	387,620	-1.3	-1.5	+6.2	-5.9	-1.5	28,963	26,033	25,837	25,917	-0.5	-2.4		
4Q12	378,564	-2.3	-0.8	+6.6	-3.2	-2.6	26,681	25,562	25,499	25,861	-1.8	-1.3		
1Q13	303,753	-1.3	+0.2	+4.9	+0.8	-1.6	23,277	25,724	26,046	25,875	+0.6	+2.1		
2Q13	354,814	-1.2	-0.7	+3.8	-2.8	-2.8	24,208	25,910	26,046	25,624	+0.7	-0.0		
3Q13	398,000	-1.1	+2.3	+4.0	+9.5	+1.0	28,595	25,802	25,331	25,323	-0.4	-2.7		
4Q13	408,631	+3.4	-1.5	+4.3	-5.9	+0.3	27,612	26,241	26,274	26,763	+1.7	+3.7		
1Q14	313,568	-1.0	-3.3	+4.5	-12.6	-3.2	22,994	25,741	25,847	25,769	-1.9	-1.6		
2Q14	375,903	-4.3	-4.2	+11.1	-15.8	-6.7	23,084	25,004	25,023	24,615	-2.9	-3.2		
3Q14	434,166	-5.3	-4.7	+15.4	-17.5	-13.0	27,031	24,161	23,796	23,503	-3.4	-4.9		
4Q14	443,091	-14.4	-4.1	+27.2	-15.4	-15.3	23,538	21,969	22,301	22,525	-9.1	-6.3		
1Q15	367,577	-17.0	-3.5	+41.5	-13.3	-15.5	19,049	22,076	21,515	21,774	+0.5	-3.5		
2Q15	449,575	-14.7	-1.4	+40.1	-5.5	-13.0	19,706	21,792	21,553	21,539	-1.3	+0.2		
3Q15	555,044	-7.2	+1.1	+37.8	+4.5	-7.7	25,077	21,726	21,946	21,681	-0.3	+1.8		
4Q15	584,781	-1.4	+1.4	+32.7	+5.7	-2.5	23,410	21,912	22,066	21,913	+0.9	+0.5		
1Q16	455,637	+0.1	+0.5	+20.5	+2.0	+1.6	19,596	22,364	21,946	22,223	+2.1	-0.5		
2016	535,324	+1.5	+0.9	+15.2	+3.6	+4.0	20,369	22,544	22,431	22,445	+0.8	+2.2		
3Q16	669,170	+2.3	+1.4	+15.5	+5.7	+4.3	26,176	22,763	22,818	22,670	+1.0	+1.7		
4Q16	723,051	+4.8	+1.9	+18.0	+7.8	+4.8	24,534	22,745	23,095	22,844	-0.1	+1.2		
1017	583,882	+2.5	-0.3	+25.0	-1.2	+3.9	20,086	22,811	22,777	22,840	+0.3	-1.4		
2017	656,977	+2.3	+0.6	+20.0	+2.4	+3.6	20,837	22,746	22,858	22,874	-0.3	+0.4		
3017	821,277	+2.1	+1.0	+20.2	+4.1	+3.2	26,726	22,882	22,952	22,888	+0.6	+0.4		
4Q17	848,023	+1.0	+0.5	+16.1	+2.0	+1.8	24,779	22,845	22,921	22,921	-0.2	-0.1		

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 5. ICU consumer basket as of end of January 2018

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

Item of the basket	Description	Kyiv, central district 31-Jan-18 Price (UAH)	New York metro- politan area 31-Jan-18 Price (US\$)	Moscow, central district 31-Jan-18 Price (RUB)
Consumer goods				
Coca-cola (0.5 litre, plastic bottle)	Non-alcohol beverages	8.20	2.00	59.80
Beer Corona Extra (0.33 litre, glass bottle)	Alcoholic beverages	27.95	2.00	150.00
Bunch of fresh bananas (1 kg)	From Ecuador	36.90	1.52	69.99
Pack of milk (1 litter)	Locally produced, soft package, i.e., not glass bottle	22.63	1.59	71.20
Chicken meat (1 kg pack)	Locally produced and branded package, boneless breast	105.95	10.98	229.00
Canned pineapple (0.565 kg, can)	Pineapple circles, Dole brand	56.98	1.75	146.00
Pasta (0.5 kg)	Soft package, produced in Italy	29.00	1.75	83.90
Sugar (1 kg)		23.33	3.07	50.82
Package of table salt (1 kg)		12.99	1.61	28.00
Chicken eggs (10 units pack)	White eggs, standard size	30.34	2.99	95.45
Chocolate bar (50 g)	Snickers	10.68	1.75	31.10
Toothpaste (75ml package)	Colgate	44.44	2.58	163.00
Shampoo (200ml package)	Head & Shoulders brand, for normal hair	51.57	3.42	182.00
Toilet paper (4 rolls package)	Kleenex Cottonelle brand, white paper, Regular toilet tissue	42.04	3.20	139.00
Magazine	Playboy, local edition, A4 format (standard one, not a pocket book format)	59.65	6.99	155.00
Gasoline (1 litre)	Lukoil, regular	30.18	0.75	42.90
Batteries (AA x 4 pack)	A 4-pack of AA Duracell batteries, Alkaline	89.09	4.99	214.00
Coffee (250 g, vacuum pack)	Lavazza Caffe Espresso, brick-like vacuum pack	94.00	6.65	308.00
Services				
Underground commute ticket	Within the central part of the city	5.00	2.75	55.00
Cinema ticket	Thursday's night price for the seat with good location, Hollywood film	100.00	15.59	539.00
Total basket value (in local currency)		880.92	77.93	2 813.16
Exchange rate versus US dollar at spot mar	ket as of date of observation	27.815	1.000	56.192
Total basket value (in US\$)		31.67	77.93	50.06
Overvalued "+" / undervalued "-" (%)				
UAH vs. USD		-59.36		
UAH vs. RUB		-36.74		
Fair value in the long-run as of observ	ation date			
UAH per USD		11.304		
UAH per RUB		0.313		

Source: ICU.



Chart 86. ICU consumer basket value (US\$)

Price history from February 2010 through January 2018



Chart 87. Gasoline A95 equivalent 1 litre (US\$)

Price history from February 2010 through January 2018

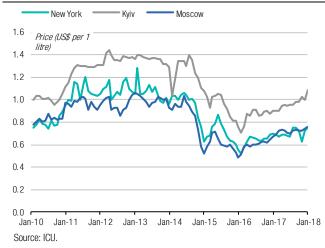


Chart 88. Fresh banana 1 kg bunch (US\$)

Price history from February 2010 through January 2018

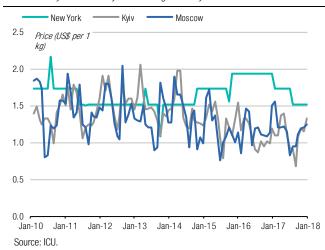


Chart 89. Chicken meat 1 kg pack of boneless breast (US\$)

Price history from February 2010 through January 2018

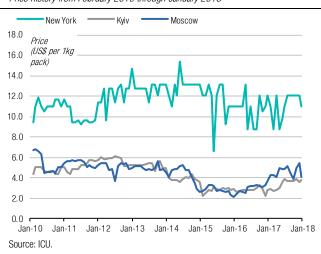


Chart 90. Chicken eggs 10-unit pack (US\$)

Price history from February 2010 through January 2018

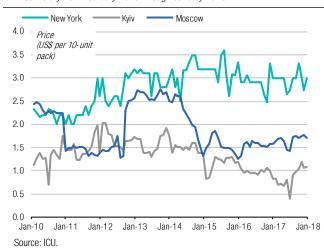


Chart 91. Pasta 0.5 kg soft package Italy-made (US\$)

Price history from February 2010 through January 2018





Chart 92. Beer Corona Extra 0.33 litre glass bottle (US\$)

Price history from February 2010 through January 2018



Chart 94. Shampoo 200ml bottle Head & Shoulders (US\$)

Price history from February 2010 through January 2018

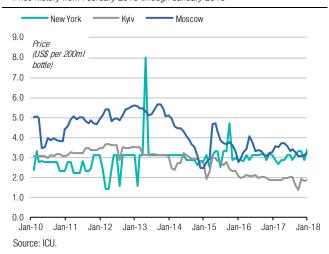


Chart 96. Duracell batteries (AA x 4 pack) (US\$)

Price history from February 2010 through January 2018



Chart 93. Coca-Cola 0.5 litre plastic bottle (US\$)

Price history from February 2010 through January 2018

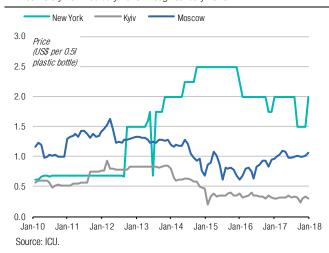


Chart 95. Magazine Playboy, A4 format (US\$)

Price history from February 2010 through January 2018

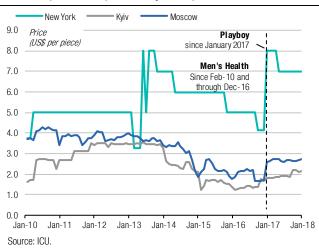
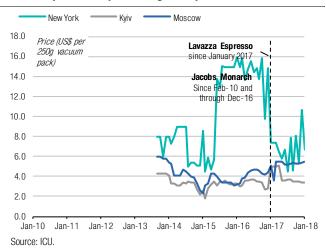


Chart 97. Lavazza Coffe Espresso, 250 g vacuum pack (US\$)

Price history from February 2010 through January 2018



1CU

Chart 98. Value gap of ICU basket in UAH vs. USD and RUB (%)

Price history from February 2010 through January 2018

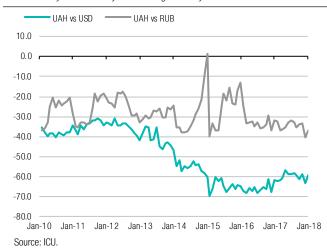


Chart 100. Index of the ICU consumer basket value in local currency (points, rebased at 100 as of February 2010)

Price history from February through January 2018

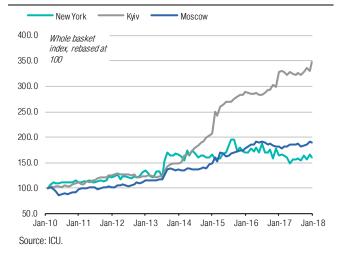


Chart 99. An exchange rate level of UAH per USD and UAH per RUB, which would eliminate the value gap of ICU basket

Price history from February 2010 through January 2018

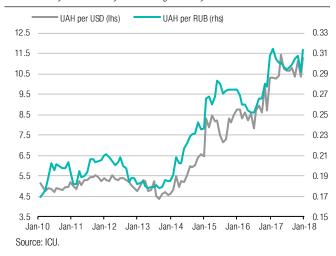
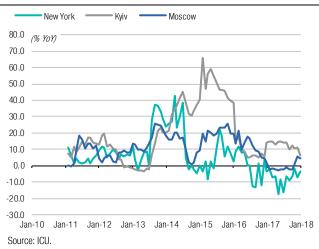


Chart 101. Growth rate of the index of the ICU consumer basket value in local currency (% YoY)

Price history from February 2010 through January 2018





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



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