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# Quarterly Report

## Keep the music playing



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# Executive summary

***"The best way to destroy the capitalist system [is] to debauch the currency."***

*John Maynard Keynes quotes Vladimir Lenin in his book "The Economic Consequences of the Peace" (1920)*

ICU's macroeconomic view on Ukraine in the forecasted three-year period of 2013-15 is summarised in the following viewpoints:

**Cornered, and with limited room for manoeuvre.** Ukraine finds itself backed into a corner by quite serious economic and fiscal deterioration due to a mix of external and internal factors. The economy is now officially in a double-dip recession as of 4Q12. With prospects for growth anaemic (our base-case forecast for 2013 is 1.7% YoY, while meaningful growth is not expected until 2014), financing needs for this year are daunting in the face of out-of-control external debt. Authorities are caught in the crossfire between the demands of key external lenders like the IMF and Kremlin, and deteriorating, domestic economic conditions.

With the country's sovereign credit rating a notch away from the default area, prospects for a further worsening of government debt metrics put Ukraine's government at risk of being denied access status to private lenders. Hence, current talks with the IMF on financial assistance are key to our base-case macroeconomic scenario.

**IMF is key in relieving the sovereign external burden in 2013-14.** We devoted a great deal of attention to the issue of Ukrainian authorities' (of the government, central bank, and state-run entities) external obligations burden, which is set to increase in the 2013-14, if there is no agreement with either the IMF or the Kremlin. Pending agreements with both the IMF and the Kremlin hold the key to relieving this issue<sup>1</sup>. Our analysis yields the conclusion that a certain deal with the IMF in early 2013 is the most likely (60% probability) of all the options we observed. Hence, again, an IMF deal this year is an integral part of our base-case scenario, and we explain why in detail in this report (see "Geopolitics: IMF, Kremlin, or going it alone" on pp.11 and "Assessment of sovereign external obligations' burden in 2013-14" on pp.55).

**The combination of recession, deflation, and rising debt could be a Molotov cocktail for the economy, if not deactivated.** In our view, the survival instinct of the authorities is prompting them to deactivate a macroeconomic cocktail of recession, deflation, and increased government financing requirements, all of which may take place on the doorstep of 2013. The currently unfolding decline in domestic interest rates, a pro-growth event, is a reflection of the reduced risk premium the market attaches to the UAH. A likely IMF-induced energy tariff increase will spur inflation to 5%, a healthy level, and add momentum to GDP growth in nominal terms, a positive event for sovereign credit metrics. All in all, a quick deal with the IMF is a final step in turning around the economy. If Ukraine's authorities fail to engineer all of the above, then a worst-case scenario could unfold, giving rise to talks of a sovereign debt restructuring.

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<sup>1</sup> The Financial Times article, "Russia hands Ukraine \$7bn gas bill," published on 25 January, 2012, on the Russian state-run natural gas giant Gazprom seeking a US\$7bn fine from Ukraine for an alleged unsanctioned, lower annual volume of natural gas purchased in 2012, reinforces our call that an IMF deal is more likely.

**In the external balance, two issues loom large: the trade deficit and payouts to the IMF.**

Despite few positive trends observed in foreign trade such as the growing diversification of exports among steel, food, and engineering (see "External balance: The changing face of foreign trade", pp.34), the country's foreign trade is set to remain in heavy deficit, as imports of costly hydrocarbons are weighing it down.

Our base-case scenario envisages that Ukraine imports 33bcm a year of natural gas in the next three years, although Naftogaz's portion of imports will be maintained at 25bcm in order to cut sovereign fiscal costs and FX reserves spending, a task which has been undertaken by Ukraine's authorities to help Naftogaz's imports (see "Naftogaz: Cutting back the deficit", pp.29). Our base-case scenario is for the yearly average import price on natural gas in 2013 at US\$404 per 1,000 m<sup>3</sup>, and then moving up to US\$405 in 2014, followed by a reduction to US\$399 in 2015.

All in all, this results in a still-sizable current account deficit, which is set to diminish over 2013-15, from 7.1% of GDP this year to 5.7% in 2014 and 4.2% of GDP in 2015. Together with external debt payouts, the economy's external financing requirements also on the rise. In 2013-14, the debt owed to the IMF looms large, with US\$5.9bn of principal repayments due in 2013, US\$3.7bn in 2014, and US\$1.3bn in 2015. With the IMF financing received this year and borrowings from complimentary resources, Ukraine's FX reserves are set to rise by US\$3.8bn, and this will bring the imports coverage ratio up from 2.9x last December to 3.3x at year-end 2013. See more in "Balance of payments assessment for the 2013-15 period", pp.40.

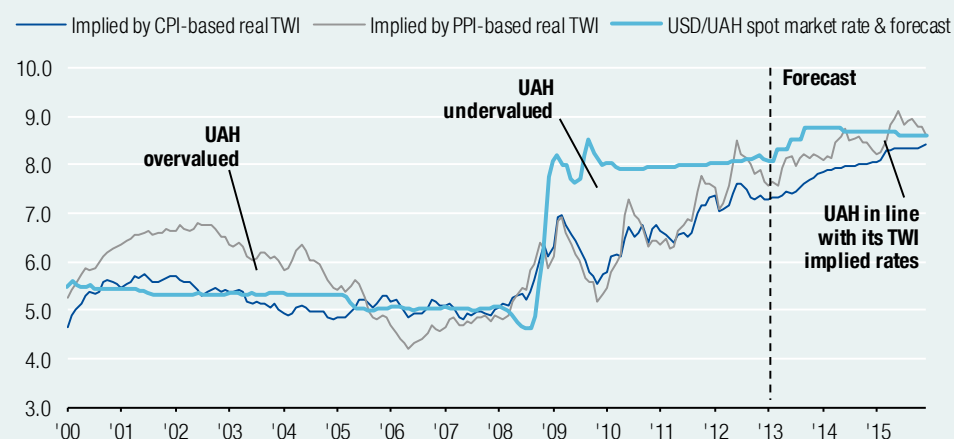
**Hryvnia: Recession and current account deficit spell weaker currency.**

As a deal with the IMF is on horizon, the prospects for the UAH in the next six-month and nine-month periods are to become weaker than the current spot of 8.14/USD, as the above-mentioned factors such as recession and a 7% current account deficit are likely for 2013. However, in our view, the authorities would resist a sizable devaluation of the UAH due to, primarily, the high fiscal cost it would create. (The quote at the top of this section epitomises this approach.) Hence, we argue that in 2013, the UAH weakens to 8.75/USD by year-end (8.58/USD yearly average), then slides further, to 8.71/USD as a yearly average in 2014. An average rate of 8.63/USD forecasted for 2015 is going to be in line with ICU's trade-weighted valuations of the hryvnia.

For more details, please see "View on UAH: Internal devaluation since 2H12" on pp.43.

**Chart 1. UAH's exchange rate forecast against the exchange rates implied by ICU's UAH real TWIs (CPI- and PPI-based)**

*Hryvnia per US dollar*





# Politics & geopolitics

Ukraine's ruling incumbents underwent a relatively smooth transition during the parliamentary elections held last October; however, the economy did not fare as well. In the run-up to the elections, incumbent President Yanukovich's government adhered to a policymaking strategy that caused economic growth to fall below 1.0% YoY for the full-year 2012, from 5.1% in 2011. In effect, the economy flirted with recession all year long in 2012, and eventually went into a shallow recession in 4Q12. Last year's policy mix was maintained for the sake of perceived stability on the part of the electorate, which the government saw as an important factor in maintaining its *status quo* amid difficult economic conditions. Nevertheless, the positive outcome of this approach by the government was the relatively painless parliamentary elections, in which Mr Yanukovich's support base remained more or less intact.

Last year's elections marked the end of the 2010-12 political cycle and the beginning of a new cycle that will last through the two-year period of 2013-14. The current political cycle will culminate with the presidential elections in March 2015. President Yanukovich has tasked his newly appointed government with laying the ground for his re-election in 2015 by striving to engender economic conditions in 2013, as well as in 2014, that will help avoid a severe economic downturn and instead steer the economy towards a recovery at least from the current shallow recession and beef-up the government coffers for a fiscal loosening in first-half 2014 to please voters.

The year 2013 thus presents a sizable challenge to the authorities, especially as sovereign external obligations are set to spike compared to 2012 (and 2014 is quite similar in this regard.) Most of these obligations are due to the IMF and Kremlin-run Gazprom (see pp.11, 55). Hence, to relieve this external burden, Ukraine's authorities must decide how their policies should be adjusted, and with whom they should co-operate between the IMF and the Kremlin. Our assessment of the latter indicates a deal with the IMF as more likely than with the Kremlin (see subsection "Geopolitics: IMF, Kremlin, or going it alone", pp.11).

## New Parliament: A relatively quiet and costly transition

*Recent parliamentary elections came out rather smoothly as for the ruling authorities, ...*

Elections in Ukraine's nascent democracy have always been a prime focus of the nation's attention. To win the consent of the public (ie, among the voters), politicians are motivated to be generous. In the language of the government's fiscal and monetary policies, this means engendering a rise in social spending from the state budget, alongside stable prices on goods deemed as public (from basic staples to utilities), and a sense of stability and well being, respectively. Factored into the latter is the phenomenon that the nation's employment stability still ranks below that of the nominal exchange-rate. Hence, in sum, it is a general rule of thumb that during the period of the run-up to a presidential or parliamentary elections, the tone for the government's upcoming economic policy is set in such a way.

*... while they turned out to be quite costly in terms of the economic slowdown that took place, partially due to policy choices*

The 28 October parliamentary elections nicely dovetailed with this policy set. Authorities worked hard to engineer a smooth transition of government in this election campaign without a loss of power in the legislature. While this goal was handily achieved (see Chart 2 and Chart 3, pp.8), authorities subjected the country's economic growth and fiscal sustainability to stressful levels in attaining this goal. At the very time when the economy re-entered a period of lacklustre growth in early 3Q12, four months before the parliamentary

election date, policymakers responded to the economic woes with pro-cyclical measures like tight monetary policy in order to withstand increased market pressure on the UAH exchange rate. This policy response, which continued over the second half of 2012, had an exponential effect on the slowing economy, and likely pushed it into the double-dip recession it experienced in 4Q12. With depressed demand from both local and foreign consumers, the weakness of Ukraine's economy is likely to spill over into 2013, overshadowing conditions in the first half of the year.

Indeed, the results of the parliamentary elections prove that the ruling administration of President Yanukovich and his Party of Regions did not fall victim to a sluggish economic recovery on their watch (started in early 2010). However, while the economy has not since recovered to 2008's pre-crisis level, the public's visible dismay at the lack of a decent recovery did not translate into any voter backlash on incumbent politicians during the October 28<sup>th</sup> elections. As a result, the Party of Regions commands a majority of 252 MPs in the newly elected Parliament, together with their faithful allies in the Communist Party and among the still non-affiliated MPs.

***The majority in the "new" Parliament is 252 MPs, versus that of the "old" Parliament, which ranged from 242-254 MPs***

Our analysis of the shape and size of the parliamentary majority, led by the Party of Regions since March 2010 (the first month that power was handed over by the Yulia Tymoshenko-led government to Mykola Azarov, the Party of Regions' choice for prime minister), has so far indicated the following.

First, the Party of Regions has not only preserved a ruling majority in the legislature, but it has strengthened its faction. The majority in the "new" Parliament accounts for 252 MPs, while in the "old" one, it enjoyed a number of MPs ranging from 242 to 254. As for the faction of the Party of Regions itself, it grew from 192 before parliamentary elections to 210-strong currently.

Second, the PoR-led majority is capable of further consolidating by growing to up to 261 MPs. It is quite possible that it will succeed in luring some non-affiliated MPs who are politically moderate and business-minded (some of whom were ministers in Mr Azarov's Cabinet of Ministers in 2010-12). Also, out of the five MPs who are yet to be elected (the State Election Committee cancelled results in five regional constituencies on the grounds that it was "not possible to determine the result of vote"), there are fair chances that the battle between the opposition and ruling parties will result in a draw, and lead to the ultimate election of two, or even three, MPs who would end up supporting the ruling majority.

***This majority will not be able to alter the Constitution; ...***

Third, the Communist Party is a rather weak element of the ruling coalition, prone to ducking socially sensitive laws. For instance, over the course of 2010-12, while a part of the ruling majority, they abstained from supporting the state budget law each year, labelling it as a pro-business bill, and one that lacks the costs for social issues, ranging from healthcare to education, and from war veterans' subsidies to pensions. It should be taken into account that this type of grandstanding is characteristic of this particular party, which on the one hand, tries to save face with respect to its voters, and also, promotes its existence among its senior partners in the majority. Such instances of grandstanding by the Communist Party are also possible in the future. However, the PoR has tolerated this *modus operandi* in the past, and is likely to continue to tolerate it further, as long as it will be still able to pass law. If the PoR secures a 261-strong majority, as we argue above, then it would be able to pass law, while the 32-strong Communist Party faction would be preoccupied with its grandstanding ritual, by commanding a 229-strong majority, which would still be enough to pass law.

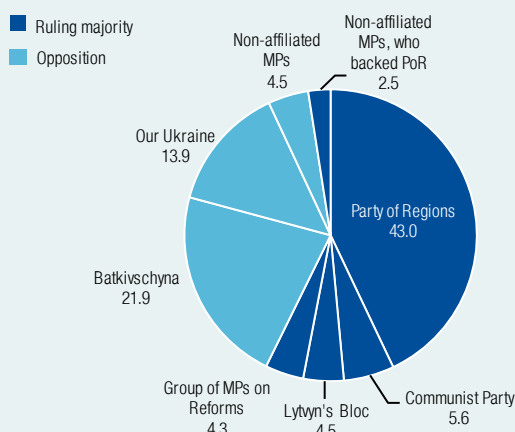
**... hence, the cornerstone event will be the presidential elections on 29 March, 2015**

Fourth, the ruling majority is not able to adopt a constitutional amendment, which requires an approval by at least 300 MPs. Hence, the PoR will not be able to engineer a change in the presidential elections procedure like switching the elections from a public vote to a vote in the Parliament, which would effectively be an approval by the MPs. Thus, the next cornerstone date in Ukraine's political and economic spheres will be on 29 March, 2015, the last Sunday of the month<sup>2</sup>.

More details on our analysis of the benchmark votes are provided in the Appendix "Ruling majority in the old and new Parliaments: The evolution over 2010-12," on page 49.

**Chart 2. Breakdown of old Parliament, voting on 4 Sep 2012: ruling majority, opposition and non-affiliated MPs (%)**

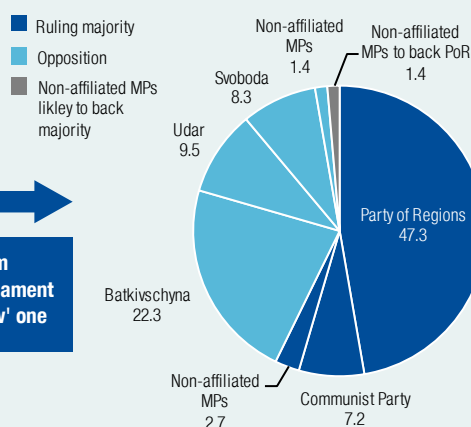
100% = 447 MPs



Sources: Parliament of Ukraine, Investment Capital Ukraine LLC.

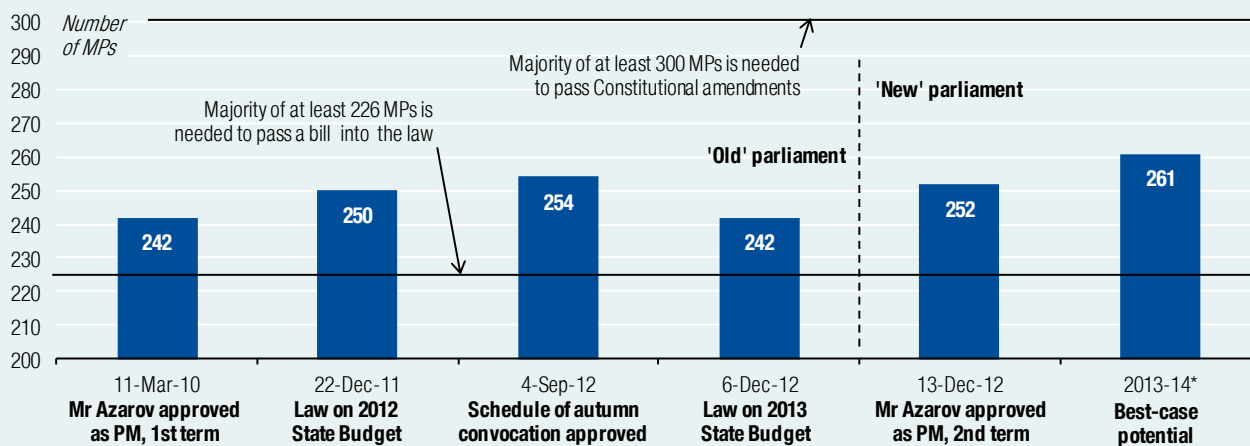
**Chart 3. Breakdown of new Parliament, voting on 13 Dec 2012: ruling majority, opposition and non-affiliated MPs (%)**

100% = 444 MPs



Sources: Parliament of Ukraine, Investment Capital Ukraine LLC.

**Chart 4. Number of MPs that form ruling majority in Ukraine's parliament during key benchmark votes<sup>1</sup> (number of MPs)**



Note: [1] for more details on these votes please refer to Appendix "Ruling majority in the old and new Parliaments: The evolution over 2010-12" on page 49.  
Sources: Parliament of Ukraine, Investment Capital Ukraine LLC.

<sup>2</sup> It is a constitutional norm that the next presidential elections are to be held on the last Sunday of March of the fifth year of the presidential term of the incumbent president.



## New political cycle: What's in store for 2013-14?

*During the 2013-14 political cycle, President Yanukovych would concentrate his government's efforts ...*

*... on policies that would support his re-election in March 2015*

*The appointment of a new speaker of the Parliament is a guarantee for smoother passage of bills initiated by Mr Azarov's government*

*PM Azarov has been retained to troubleshoot the state's fiscal position, which had been deteriorating in 2H12*

*A new wave of staffers in the government ...*

After nearly three years in the 2010-12 political cycle, Ukraine has entered a new one that will be a bit shorter in life-span, lasting for only two years, 2013 and 2014, to be terminated by the presidential elections in early 2015, ie, at the end of March, 2015. President Yanukovych, who saw his own Party of Regions cement a 252-strong majority in the legislature in October's parliamentary elections, has now shifted his focus towards efforts for successful re-election in the presidential elections.

Hence, in the next two years, all the political and geopolitical posturing seen by Ukraine's leadership, as well as its economic policymaking, will be framed in such a way as to engineer, as we mentioned above, the re-election of President Yanukovych into his second five-year term.

In order to achieve this, Mr Yanukovych's administration has laid out four steps to bolster such economic policymaking measures that would strengthen his chances for re-election.

First, Volodymyr Rybak was selected as the key person in the Parliament responsible for the smooth functioning of the legislature. The 66-year-old Yanukovych loyalist and native of the Donetsk oblast is one of the founding fathers, along with PM Mykola Azarov (65), of the Party of Regions. A down-to-earth, reasonably articulate, and quite dynamic individual who is straightforward in the best tradition of Donetsk, Mr Rybak is an ideal replacement by Mr Yanukovych for the previous Parliament speaker, Volodymyr Lytvyn (56). Mr Lytvyn's political orientation and skills developed under the Kuchma presidency, a bit earlier than Mr Yanukovych's own rise into prominence, allowing him to master Ukrainian-style political manoeuvring, a quality that is underrated among the political establishment in Donetsk. Hence, given the fact that the ruling majority supporting Mr Yanukovych has not diminished its ranks, Mr Rybak serves as confirmation of Mr Yanukovych's bid for a smooth ride into re-election following March 2015.

Second, Mr Yanukovych retained Mykola Azarov (65) as Prime Minister mainly because of his lengthy track record as a master of fiscal risk management. As the economy sank in the second half of 2012 due to a mix of macro factors along with fiscal deterioration exposed in September which have been growing ever since, Mr Azarov has again emerged as an indispensable government officer who is best suited for the job.

Third, in acknowledgement of the fact that the economy needs impetus for change as well as reform as soon as possible, which could foremost be achieved by addressing the expectations among the business and investor communities as well as among the wider public by revealing new plans for reforms for economic recovery, Mr Yanukovych's administration's first task has been to inject "new blood" into the key government posts.

On 24 December, Mr Yanukovych named the members of the new government, among whom there are two out of three Deputy Prime Minister posts given to the under-40 officials. The first of these is Sergiy Arbuzov (36), a Donetsk-native, who rose literally from nowhere into the Central Bank Governor post back in 2010, and then in late 2012, became the No.3 person in the government after Messrs Yanukovych and Azarov. The Second is Oleksandr Vilkul (38), who quickly climbed the career ladder in his native Dnipropetrovsk oblast to become a CEO of an iron ore mining company (owned by a Party of Regions member and country's wealthiest person, Rinat Akhmetov) before his 30<sup>th</sup> birthday, and then a Yanukovych-appointed governor of the Dnipropetrovsk oblast before his 35<sup>th</sup>. While Mr Yanukovych left the complexity of the energy sector to Yuriy Boiko (54), who has commanded the sector since the early 2000s, he appointed Ihor Prasolov (50), another

name that grew into prominence, thanks to the Party of Regions' wealthiest businessman, Rinat Akhmetov, who is regarded as a technocrat, to the post of Economy Minister from the post of the head of the NBU Council.

*... under Mr Azarov's watch were tasked with engineering a turnaround in the stagnant economy*

It is worth noting that Mr Arbuzov and Mr Prasolov came into the government after a relatively short time at the central bank, which was still quite enough, however, for them to become familiar with the macroeconomics and monetary policymaking standards needed to effectively parley with IMF on the same level (we do give high praise to the NBU's recently adopted Guidelines for Monetary Policy in 2013 for their explicit focus on targeting stable and low inflation in the economy alongside the preservation of macroeconomic stability. This once again underscored the fact that albeit verbally, the NBU's regulatory framework was moving quite close to the IMF's required rules of policymaking).

*One of Mr Yanukovich's legacies in office, the idea of engaging non-PoR politicians, turned out to be ineffective*

And lastly, the fifth step undertaken by Mr Yanukovich's administration was his total departure from experimentation with engaging moderate politicians from competing political camps in the government. In the past, Mr Yanukovich undertook personal initiatives to offer posts in the governments to such prominent politicians like Sergiy Tigipko (who later become a member of the Party of Regions, but never become a member of the party's core) and Petro Poroshenko (who has represented the most moderate wing of the still-diverse opposition camp).

President Yanukovich's new government mirrors his core backers, ranging from Ukraine's wealthiest man, Rinat Akhmetov, to powerful natural gas and chemicals lobbyist and wealthy businessman, Dmytro Firtash, to a still-understated circle of prominent businessmen epitomised by the president's elder son, Oleksandr Yanukovich (39). To a lesser extent, this government reflects the interests of the rank-and-file members of the Party of Regions, who are the businesspeople or bureaucrats of old-guard mentality, but who are still the core of the party. These men were loyal to Mr Yanukovich while he was in the opposition himself, before 2010, and will back him at all cost to help bring about his re-election in 2015.

**Table 1. Comparison of key decision makers by age between the two political cycles: the previous (2010-12) and upcoming (2013-14)**

Position	Political cycle 2010-12			Political cycle 2013-14		
	Name of official person	Date of birth	Age (yrs)	Name of official person	Date of birth	Age (yrs)
<b>Parliament</b>						
Speaker	Volodymyr Lytvyn <sup>±</sup>	28-Apr-1956	56	Volodymyr Rybak <sup>μ</sup>	3-Oct-1946	66
<b>Cabinet of Ministers</b>						
Prime Minister	Mykola Azarov <sup>μ</sup>	17-Dec-1947	65	Mykola Azarov <sup>μ</sup>	17-Dec-1947	65
1st deputy PM	Andriy Klyuyev <sup>μ</sup>	12-Aug-1964	48	Sergiy Arbuzov <sup>♦</sup>	24-Mar-1976	36
Deputy PM	Borys Kolesnikov <sup>£</sup>	25-Oct-1962	50	Yuriy Boiko <sup>§</sup>	9-Oct-1958	54
Deputy PM	Sergiy Tigipko <sup>±</sup>	13-Feb-1960	52	Oleksandr Vilku <sup>£</sup>	24-May-1974	38
Finance Minister	Yuriy Kolobov <sup>♦</sup>	8-Apr-1973	39	Yuriy Kolobov <sup>♦</sup>	8-Apr-1973	39
Economy Minister	Petro Poroshenko <sup>±</sup>	26-Sep-1965	47	Ihor Prasolov <sup>£</sup>	4-Feb-1962	50
Minister of Revenues and Dues <sup>1</sup>	Oleksandr Klymenko <sup>♦</sup>	16-Nov-1980	32	Oleksandr Klymenko <sup>♦</sup>	16-Nov-1980	32
Minister of Cabinet of Ministers	Anatoliy Tolstoukhov <sup>μ</sup>	2-Jan-1956	57	Olena Lukash <sup>§</sup>	12-Nov-1976	36
<b>Median age (yrs)</b>			<b>50</b>			<b>39</b>

Notes: [1] New ministry that embraced functions of State Tax Administration and Customs Service. Previously Mr Klymenko serves as head of State Tax Administration. ♦ Persons, which are associated by top political experts and media as people close to Mr Yanukovich's most inner circle the family allegedly via Yanukovich's elder son Oleksandr;

μ Persons who in similar fashion are associated as strongly trustworthy loyalists to President Yanukovich's Party of Regions core; £ Persons associated with Rinat Akhmetov, a Donetsk-native and key businessman in the Party of Regions ranks and Ukraine's wealthiest individual; § Persons associated with Dmytro Firtash, another key businessman in Party of Regions, who, while not a Donetsk-native, commands private sector natural gas supplies in the economy;

± Persons who were borrowed by Yanukovich from soft opposition parties and blocs to experiment with a solution to win wider public support to his rule during the 2010-12 political cycle.

Sources: Presidential Administration, Investment Capital Ukraine LLC.

## Geopolitics: IMF, Kremlin, or going it alone

### Determining the likely direction of futures economic policies

***There is limited room for the government to manoeuvre between the IMF and Kremlin due to the debt overhang***

As the 2013-14 political cycle has just started, due to external debt overhang there is limited room for Ukraine's authorities for manoeuvre in terms of geopolitics. Currently Ukraine's sovereign financial obligations as well as sizable quasi-sovereign obligations under the agreement on natural gas imports point onto two players of global economic and political powers, respectively IMF and Russian government epitomised by Kremlin, to which Ukraine's authorities needs to talk to relieve the burden.

***In 2013 alone, authorities have to repay a total of US\$10.6bn to creditors; ...***

In 2013, Ukraine's authorities are set to repay (both principal and interest) a total of US\$10.6bn of sovereign and quasi-sovereign debt, the lion's share of which, US\$6.0bn, is due to the IMF. Authorities are also to pay to Gazprom via the Kremlin some US\$10.5bn, if Naftogaz's gas purchases this year mirror the previous year's in terms of volume.

***... while in 2014, this volume of payouts could be repeated***

In 2014, this pattern of payouts may be repeated. The problem is that part of the sovereign debt due in 2013 has a short-term nature, and hence is likely be refinanced over this year with a debt instrument of the same short-term maturity<sup>3</sup>. This year, a total of US\$2.1bn of this kind of debt, including interest payments, is maturing. Hence, currently, the total volume of sovereign external debt for 2014 amounts to US\$8.0bn. With the above-mentioned possibility that some debt due in 2013 is likely to be refinanced into maturity in 2014, there are fair chances that the actual volume of sovereign debt in 2014 will increase over the course of 2013. Hence, in terms of sovereign debt due, there is a good chance that next year will be no different from the current one in this regard. The same may hold true for the authorities' payouts to Gazprom for the imports of natural gas by state-run Naftogaz, if again, the latter keeps the volume of purchases at the same level as in the previous couple of years<sup>4</sup>.

Hence, in order to decrease the external burden on Mr Yanukovich's newly appointed government in 2013-14, Ukraine's president has to formulate an appropriate strategy for this period.

***In total, the external debt payouts due in 2013 represent a sharp increase if compared to yearly payments in the 2011-12 period***

As our data on sovereign and quasi-sovereign debt due in the 2013-14 political cycle shows, there is a sizable increase in the payouts to foreign lenders (see Appendix section "Sovereign external debt: The 2010-12 history and prospects since 2013", pp.51). The Chart 58 on page 52 shows truly telling evidence that this particular political cycle is a burdened by high debt payouts by the government.

Moreover, these payouts start as soon as 1Q13. Out of the total US\$10.6bn schedule for this year, the US\$2.0bn comes due in the first quarter, followed by US\$3.1bn and US\$3.0bn in the 2Q13 and 3Q13, respectively. Slightly below US\$2.5bn is due in the fourth quarter (see Chart 59, pp.52). This data indicates the need for a quite swift determination by Ukraine's government on how to respond to this debt burden.

<sup>3</sup> This debt instrument is foreign-currency government bonds issued domestically (under Ukrainian law). They were mostly sold to commercial banks. It is believed that sizable part of these securities landed in the hands of state-run banks. According to our estimations, the share of these securities held by state-run banks accounts for 38%. Given the tight conditions of the local bond market, the government will have quite limited possibility to extend maturity of these securities while refinancing them in the domestic bond market.

<sup>4</sup> Here we assume the 25bcm volume of natural gas, which was imported by Naftogaz in 2012. As far as the price is concerned, our forecast for 2013 and 2014 stands at US\$404 and US\$405 per 1,000 m<sup>3</sup> respectively (see Chart 61, pp.21). Hence, a total payout to Gazprom by Naftogaz could amount to US\$10.2bn in each year of 2013 and 2014.

***Ukraine authorities need to choose between bail-outs by the IMF or Kremlin, or relying on its own resources***

Out of all possible scenarios, in our view, there are just few viable ones.

The first one is resuming a Stand-By Arrangement programme with the IMF which would begin extending loans to Ukraine's authorities on a regular basis to match (or net) the due payouts. In exchange, Ukraine's authorities should start ramping up their economic policymaking, albeit gradually.

The second scenario is cooperation with the Kremlin, which could range from an exchange of small concessions to bigger ones, *in extremis*, where Ukraine would ask for a loan to refinance a sizable chunk of debt owed to the IMF, while the Kremlin would in exchange ask Ukraine to concede a part of its sovereignty to the Kremlin. As such, the issue of Ukraine's joining the Kremlin-run Customs Union would have just been the opening chapter of a lengthy process designed to restore the powers of Kremlin that rule vast territories of the late Soviet Union.

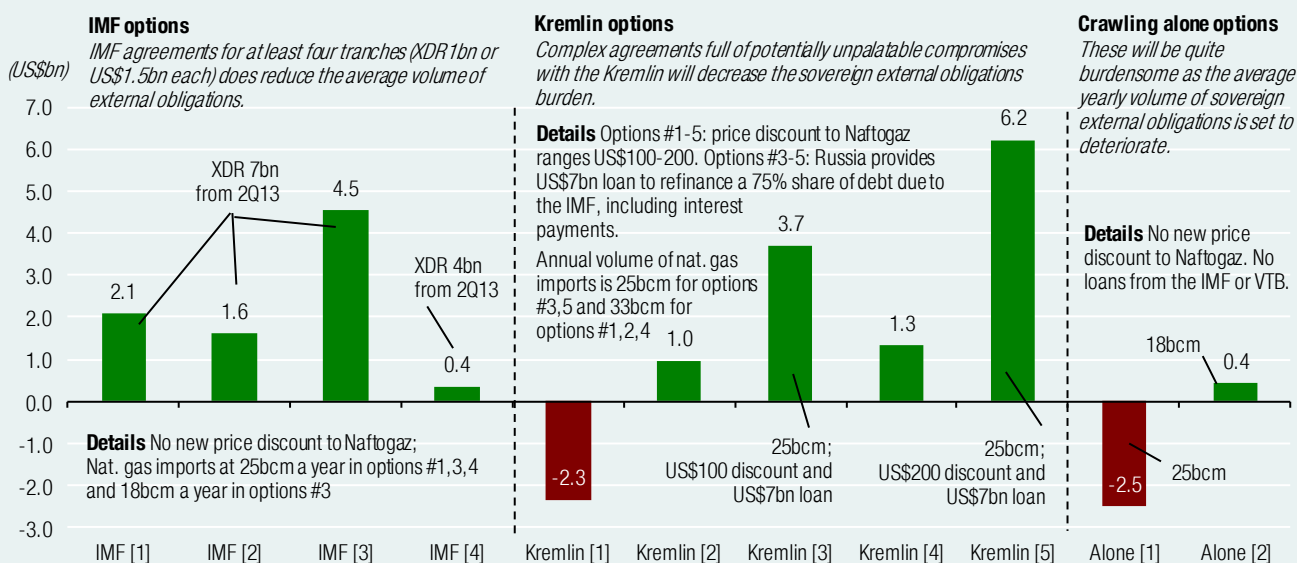
The third option is for Ukraine to face the reality of relying on own resources to make all its payments due in 2013 and beyond.

Our analysis of the matter, which is laid out in detail in the Appendix section, titled "Assessment of sovereign external obligations' burden in 2013-14" (pp.55), yields the following results:

- 1) **Going it alone.** It would be quite economically burdensome for Ukraine to rely totally on its own resources, while making all the debt payouts due in the next few years. . The relative deterioration of the sovereign external burden would be US\$2.5bn, if the volume of natural gas to be imported by Naftogaz stands at 25bcm. Another scenario, where Naftogaz imports 18bcm, would make just a marginal improvement of US\$0.4bn, but appears less feasible if other factors are taken into account. In terms of probabilities, the two scenarios depicted in Chart 5 for this option have very low chances of materialising (well below 5%, see Chart 5 on page 13 and Table 16-Table 17 on page 60).
- 2) **A deal with the Kremlin.** There is great temptation for Ukraine's authorities to forgo socially painful economic reforms by striking a deal with the Kremlin. However, a Kremlin deal that would substantially relieve the sovereign external burden, as Chart 5 shows, needs to include not only at least a US\$100 additional discount to the natural gas price paid by Naftogaz to Gazprom, but also a US\$7bn loan that would be used to repay most part of the debt to the IMF. By default, such a deal would also include a sizable concession of sovereignty from Kiev to Moscow, which appears as even more politically painful as carrying out economic reforms. In terms of probability, only one scenario of all the Kremlin's options yielded a significant level of probability in our analysis of 17.5% (Chart 5 on pp.13, Table 16-Table 17 on pp.60), which provides for US\$3.7bn in yearly relief to the sovereign external burden in 2013-14.
- 3) **A deal with the IMF.** While requiring a range of socially painful reforms, a deal with the IMF would allow a range of mid- and long-term benefits to the incumbent ruling authorities as well as to the economy. As far as the economy is concerned, this would strengthen macroeconomic fundamentals by narrowing fiscal and current account deficits. As far as the incumbent ruling authorities are concerned, this kind of a deal would afford them policymaking freedom (from the Kremlin diktat) in the next political cycle, during which they are keen to govern. In terms of probability, there are two scenarios that showed a significantly probability of materialising; these are scenarios that provide for a US\$1.6bn and US\$0.4bn yearly average improvement in the external burden, with a probability of 24.0% and 18.0%, respectively (Chart 5 on pp.13, Table 16-Table 17 on pp.60).

**Chart 5. Increase or decrease in the yearly average Ukraine's sovereign external obligations<sup>1</sup> for 2013-14 period<sup>2</sup> (US\$bn)**

Increasing burden is depicted in red bar, while decreasing one is in green



Notes: [1] sovereign external obligations are 1) projected Naftogaz payments to Gazprom, and 2) sovereign and quasi-sovereign external debt due; [2] Over the yearly average sovereign external debt burden for 2011-12;

Remarks: Breakdown by available groups of options: IMF, Kremlin or crawling alone. Each group is sub-divided into final options with a certain number of assumptions Breakdown by available groups of options: IMF, Kremlin or crawling alone. Each group is sub-divided into final options with a certain number of assumptions. For more details on this calculation see Appendix "Assessment of sovereign external obligations' burden in 2013-14", pp.55 Breakdown by available groups of options: IMF, Kremlin or crawling alone. Each group is sub-divided into final options with a certain number of assumptions Breakdown by available groups of options: IMF, Kremlin or crawling alone. Each group is sub-divided into final options with a certain number of assumptions. For more details on this calculation see Appendix "Assessment of sovereign external obligations' burden in 2013-14", pp.55.

Source: Investment Capital Ukraine LLC.

## Parallels between Ukraine and Egypt

**There are striking similarities between Ukraine and Egypt in their bids to weather economic challenges ahead**

There are several political and economic similarities right now between Ukraine and Egypt in the start of 2013.

The first similarity is that both countries are preparing to welcome IMF missions in their capitals for talks on likely IMF financial support. The IMF mission is to arrive nearly simultaneously in Kiev and Cairo this January.

The second is that both economies run a fiscal burden of energy subsidies, and generally suffer from self-inflicted mishaps in economic policymaking. Kiev supports subsidies to households on natural gas, while Cairo is said to be allocating around a 20-25% share of state budget expenditures<sup>5</sup> on fuel subsidies. The IMF advises eliminating these both through "a socially-balanced programme." However, for both governments to undertake reform of the state subsidies would be a politically painful measure that is likely to be greeted by a backlash from the political opposition and voters.

Another shared similarity, in our view, is geopolitical, as both countries' standings represent a "too-big-to-fail" factor to the leading nations in the West. In other words, in terms of the geopolitical game by the leading political and economic global powers, it is more worthwhile for the West to support each nation than to allow them to fail victim to economic calamity. Egypt is a vital benchmark for the Middle East countries that went through the revolutionary "Arab Spring" period in 2010 and made a bold bid for transition to fledgling democracies. Ukraine is another fledgling democracy, albeit from the CIS area, where democratic

<sup>5</sup> US\$16bn a year, according to Masood Ahmed, Director of the Middle East and Central Asia department of the IMF, on 19 March 2012. See <http://www.imf.org/external/np/exr/countryfacts/egy/index.htm>.

processes have been backtracking recently, and are under the risk of further reversion, such as in the case of successful reforms as Georgia.

As shown above, Ukraine's authorities face choosing between the IMF and Kremlin, which both appear instrumental in supporting economic growth in Ukraine, albeit via their own mix of prescribed incentives.

Ultimately, the range of similarities in two countries' current economic standing leads us to conclude that IMF support, if extended this year to one of these two countries, is likely to be granted to the other. Comparing Egypt and Ukraine on whether either country is closer to an IMF deal than the other, it is the former that had entered into a Staff-Level Agreement with the IMF on 20 November, 2012. This indicates that few steps are left before the IMF disburses the funds to the Egyptian authorities (although there is a chance that another postponement may take place as Egypt readies for parliamentary elections, which may slow down the reformist drive by the government). As of now, Ukraine has no Staff-Level Agreement with IMF, while at the same time, it has just ended parliamentary elections, and thus, its policymakers may be less restrained by politics.

**Chart 6. Ukraine and Egypt: Cost of protection against the sovereign default (bp)**  
The market of credit default swaps (CDS) agreements on 5-year sovereign debt

History since 1 October 2010 through 25 January 2013





# Global economy

The current global slowdown is pervasive and widespread. The Eurozone, Ukraine's second-largest trading partner by turnover, has been the most severely hit worldwide by the current crisis. However, a global recovery is in sight in the second half of 2013, and in 2014-15, global growth is seen to accelerate, thanks to the positive results expected from structural reforms that have been underway in the most indebted economies since 2012.

## **“Old-new” global challenges to keep growth subdued**

*There are challenges ahead in 2013-15 that will subdue global growth*

There are several macro factors globally that will influence Ukraine's economy this year, and likely a bit beyond (ie, in the remaining part of our forecasted three-year period of 2013-15). These are the so-called “old-new” challenges, which have existed in the past, but will also spill over into the current year, and remain as the key risk factors for the global economy.

*First, deleveraging is having a deleterious effect on growth globally, ...*

First, deleveraging is a major factor that is still affecting the global economy. In the several years that have passed since the 2008 crisis unfolded, during which time the private sector swapped debt with the public sector, the elected politicians in many major economies in 2012 turned to fiscal austerity measures as an initial solution to the current economic malaise. Hence, a tacit withdrawal of fiscal stimulus has been taking place since 2012 in the major economies (like the US, UK, and Eurozone). The burden of macroeconomic safeguarding therefore fell on the shoulders of the central banks, which were left alone in the driver's seat to steer their economies away from new recessions. Their efforts were not totally successful, however. Most major global economies have teetered on the edge of slowdown in 2012, while the Eurozone entered a double-dip recession (read more on this factor in the next section), resulting in its push for fiscal austerity as its main policymaking theme. However, the primary positive outcome from the readiness of the central banks of major global economies to intervene is that financial markets calmed down in the second half of 2012. The “whatever-it-takes” position taken by the ECB governor in the middle of last year has been decisively effective, and it could also be attributed to the universal stance of the major central banks towards safeguarding economic growth in 2013, as well.

*... leaving central banks under pressure to safeguard economic growth on their own*

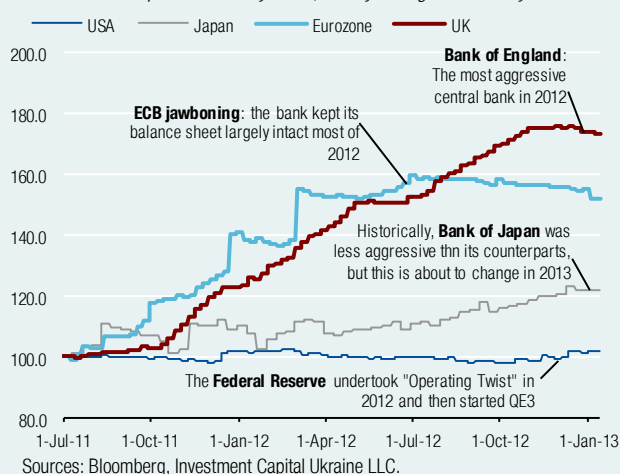
*Secondly, the Eurozone recession is spilling over into 2013*

Second, despite the above-mentioned fact that bond market yields declined from distressed levels as shown at the right-hand chart above, the Eurozone debt crisis is extending the recession there into 2013. Hence, this will engender subdued demand from the Eurozone member states, which are Ukraine's key trading partners, for the latter's exports. According to latest data on Ukraine's foreign trade as of October 2012, the Eurozone economy accounted for just a 13.3% share of Ukraine's exports of goods. This should not undermine the fact that Eurozone troubles have wider ramifications, especially with regard to its closest neighbours, ie, the other economies of European Union that are not members of the currency union. For Ukraine, the entire European Union accounts for a 23.7% share of its exports, and all the economies of the European continent (excluding the CIS economies) account for a 24.5% share.

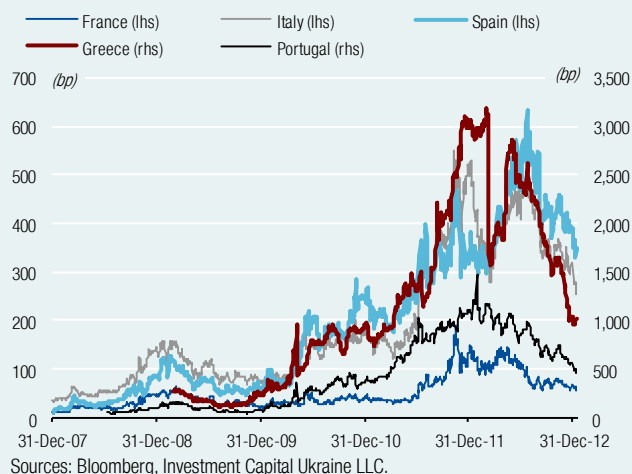
**Chart 7. How effective monetary policy jawboning could be: ECB's balance sheet size relative to its counterparts (left) and sovereign spreads of the weakest Eurozone members (right)**

*Evolution of balance sheets of major global central banks*

*Rebased at 100 points on 1 July 2011, history through 14 January 2013*



*Spread of 10-year sovereign bond yield over German Bund (basis points)*



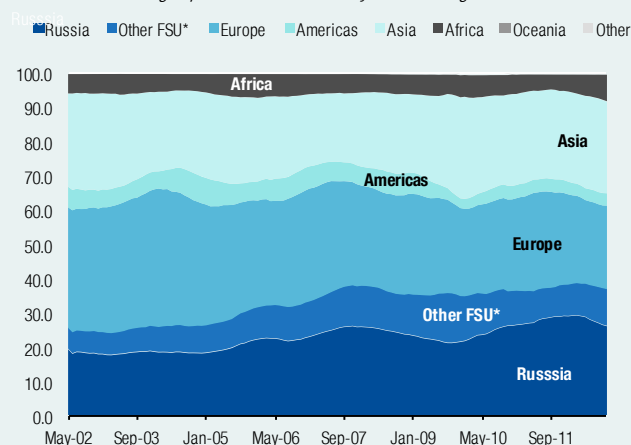
The weak economy in Europe is first of all creating a drag on Ukraine's growth via the member countries' mutual interlinkages through balance of payments, ie, through trade and capital flows. As was indicated above, exports from Ukraine to Europe are to be sluggish in the current year. And secondly, as far as capital flows are concerned, the drag there is epitomised by European banks that have been withdrawing from Ukraine's banking sector since 2009, and who will continue to do so this year, as well, regardless of how quickly the Eurozone copes with the current recession.

Thus, these two factors together will have an aggregate drag effect on Ukraine's economy in 2013. The good news is that the Eurozone economy, as well as that of the EU, is expected to recover in the 2H13, and this will likely spur demand for Ukraine's exports and hence liven up its industrial sector.

**Chart 8. Breakdown of Ukraine's merchandise exports by key destinations (% of total)**

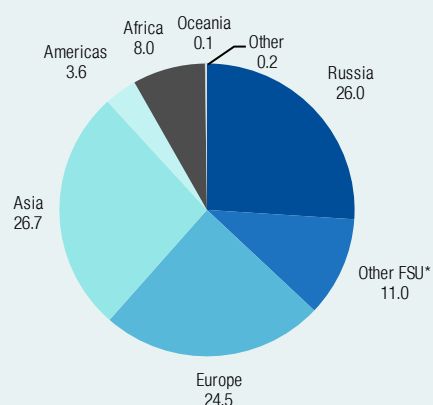
*Historical evolution*

*of 12-month rolling export volumes since May 2002 through October 2012*



*12-month rolling export volumes as of October 2012*

*100% = US\$70.0bn*



Note: FSU – former Soviet Union. Source: State Statistics Service of Ukraine.

**Third, global growth in 2013 is seen as proceeding slower than was previously thought, with an acceleration of growth not expected till 2H13**

Third, as was indicated above, the global economy's growth is at the bottom of the current economic cycle. The most indebted economies are mired in recession, while those which are more resilient are in a slowing-down phase. However, over the past six-month period, there has been a great deal of effort on the part of the policymakers (mainly engineered by the central banks) to reignite growth in the major global economies. On the back of this development, the broader expectations for global growth have shifted towards a lower level than what was previously envisaged (for instance, the IMF's forecast for global economic growth for 2013 was set at 3.6% in October 2012, versus the 3.9% published in July 2012). This trend is incorporated into our base-case scenario.

**Fourth, the crude oil price is set to stay elevated, due to central banks' activism and to continued unrest in the Middle East**

Fourth, the crude oil price is likely to remain elevated. Here, two factors are at play in favour of the current level of crude: the first is continued activism on the part of the central banks, which support prices on a range of assets traded in the financial markets by injecting additional liquidity into the latter. The second is geopolitical; primarily the rift caused by tensions in the Middle East between Iran, with ambitions for nuclear technology development, and the West, represented by Israel the US, and the EU as the *de facto* police of the region. The trade and financial sanctions imposed by the US and EU are having a negative effect on Iran's economy; however, this has not been enough to fully appease the Israeli government, which regularly reminds the West about the nuclear threat stemming from Iran. The Obama administration's approach to this particular issue (as well as that in other powers involved in the talks with Iran) centres on a non-military solution, which should keep down the risk of the launch of a full-out military attack on Iranian nuclear facilities. However, there are clear signs that these talks between key global powers and Iran will proceed quite slowly. This is why geopolitical risk on the global economy, stemming from the Iran factor and embedded into the crude oil price, is likely to remain in place, and will be phased out but quite gradually. Hence, the crude price is likely to stay elevated despite the ongoing development in shale output (read more on our crude price forecast in 2013-14 below, on pp. 18).

**Chart 9. Global and Chinese manufacturing PMI**

Monthly history through December 2012



**Chart 10. Chinese exports growth (% YoY)**

Monthly history through December 2012



**Fifth, the Chinese economy's soft landing of 2012 is likely passing**

Finally, China's economy, which is among Ukraine's top three trading partners by turnover, has been experiencing a sort of soft landing since 2H12. The latest indicators on the health of the Chinese economy, such as its manufacturing PMI and merchandise exports, were both in positive territory (see charts above), breaking out from the trends seen in the very recent past, when they were both in dangerous territory that indicated a possible extension of the slowing trend in the Chinese economy. Hence, our base-case scenario on Ukraine's economy relies on the IMF's forecast of an acceleration of growth in China from 7.8% YoY in 2012 towards 8.2% YoY in 2013.

## Global macro indicators vital to Ukraine's economy in 2013

### Global growth

*Our base-case scenario for 2013 relies on the premise that global growth is being propped up by major central bank activism, ...*

As was discussed above, the global economy's growth pattern remains tenuous, as it is associated with a myriad of risks (political as well as economic). However, there is a broad perception that activism on the part of the major central banks—evidenced by such policy actions such as, first, the US Federal Reserve bond-buying programme and the Fed's policy shift to targeting the high unemployment level; and second, the ECB's "jawboning" style of verbal intervention in the financial markets, which was in fact enough to somewhat normalise the Eurozone sovereign debt market—did prevent major economies, and hence the entire global economy as a whole, from a new and possibly severe contraction.

*... allowing the global economy to rise 3.5% YoY for the year*

Hence, our base-case scenario for 2013 envisages global growth that accelerates from 3.3% YoY estimated for 2012 towards 3.5% YoY in 2013. For the remaining part of our three-year period under forecast, ie, 2014 and 2015, yearly growth in global GDP is estimated at 4.1% YoY and 4.3% YoY, respectively. Beginning in 2014, there should be more indication that the Eurozone and wider European Union economies are becoming more resilient and competitive.

*In Russia, the economy is supported by a still-elevated crude oil price and growth up from 3.6% in 2012 to 3.7% in 2013*

With regard to economic activity in Russia, Ukraine's largest trading partner by turnover, the IMF has forecasted that its economy is also to accelerate from 3.6% YoY in 2012 towards 3.7% YoY in 2013. Then, in the 2014-15 period, the Russian economy is projected to be flat, growing at the same 3.8% YoY rate, given the fact that a large part of the economy (in the public and private sectors), being dependent on oil revenues, will not enjoy another round of crude oil price increases, but rather, will see a decrease in price, albeit quite slow (see below for our view on the crude oil price). Nevertheless, thanks to the still-elevated level of Urals crude (the benchmark for Russian oil), at above the US\$100/bbl threshold in 2013-14 and moving below it, to the US\$96/bbl level in 2015, the oil-dependent part of the Russian economy will be supported. Hence, Russia's economy as a whole will be allowed a safety net of still-hefty oil revenues in 2013 as well as in 2014-15, in order undergo a further restructuring of the economy aimed at lowering its oil dependence.

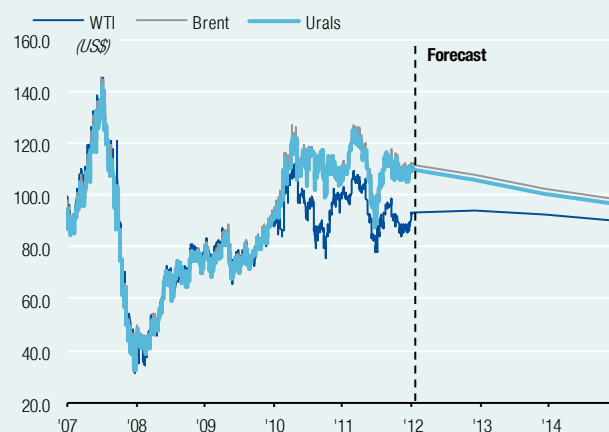
### Crude oil

The current conditions in the crude oil spot and futures markets (see Chart 11) provide our base-case scenario with the basis for our expectations regarding the crude price in 2013-15 (see Table 2, pp.19). As we discussed above, the crude price is being supported at an elevated level, despite the unfolding shale boom, by a mix of factors: mainly, the monetary easing by major central banks, and the Iran issue, which complicates the geopolitical arena. Hence, our WTI crude forecast for 2013 is US\$92/bbl as the year's average, and then in 2014 and 2015, it moves up to US\$94 and US\$91 respectively.

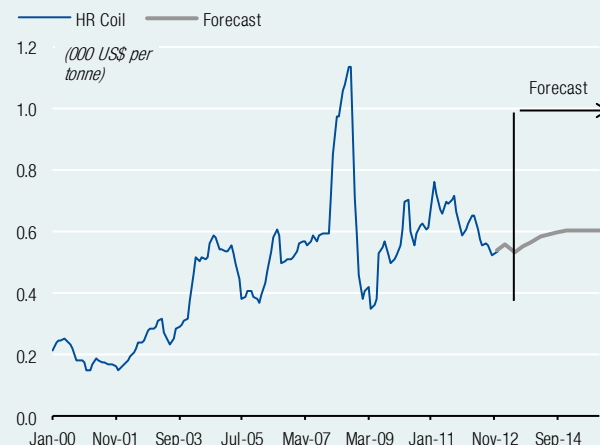
### Steel

The steel market, which follows global growth patterns, has remained in a downward trend due to the ongoing recession in the Eurozone and the general slowdown in the global economy. The LME<sup>6</sup> steel billet futures prices have been dwindling down as of late. However, the current prices of the steel billet futures on the LME imply an eventual rebound in the steel market. Our above-mentioned forecast of the recovery of the global economy is thus envisaged in our forecast for the steel price (Chart 12 and Table 2).

<sup>6</sup> London Metal Exchange ([www.lme.com](http://www.lme.com))

**Chart 11. Crude oil price (US\$ per barrel)***Spot and futures market daily quotations*

Sources: Bloomberg, Investment Capital Ukraine LLC.

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

Sources: Bloomberg, Investment Capital Ukraine LLC.

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

	Quarterly forecast								Annual forecast <sup>4</sup>							
	1Q13F	2Q13F	3Q13F	4Q13F	1Q14F	2Q14F	3Q14F	4Q14F	1Q15F	2Q15F	3Q15F	4Q15F	2012E	2013F	2014F	2015F
World real GDP <sup>1</sup>	3.0	3.5	3.5	4.0	3.5	3.5	4.7	4.7	3.8	3.8	4.8	4.8	3.3	3.5	4.1	4.3
Russia real GDP <sup>1</sup>	3.2	3.9	4.0	3.7	3.2	4.0	4.0	4.0	3.5	4.0	4.0	3.8	3.6	3.7	3.8	3.8
Crude oil (US\$ <sup>2</sup> )	89.5	90.9	92.3	95.0	94.6	94.2	93.8	93.0	92.4	91.8	91.2	90.0	94.2	91.9	93.9	91.4
Steel (US\$ <sup>3</sup> )	556.0	533.0	548.0	564.0	579.0	588.0	596.0	598.0	598.0	598.0	598.0	598.0	579.0	550.3	590.3	598.0

Notes: [1] real GDP growth rate to previous year; [2] crude oil price is WTI crude and priced as per barrel; [3] steel price is HR coil price and priced as per tonne;

[4] crude oil and steel prices are the average for the period.

Source: Investment Capital Ukraine LLC.

# Ukraine's economy brief

The economy entered a double-dip recession in 4Q12. Its growth prospects in 2013 are divided into weak 1H and stronger 2H, when global economic cycle is expected to turn upward. Hence, our base-case scenario expects an anaemic 1.7% YoY real GDP growth this year to be followed by a more sensible recovery in 2014-15. In our view, the 2011-12 period of cold relations with its key lender IMF is in the past. Ukraine is warming to a new mind-set in policymaking advised by IMF and is likely to reach an agreement with IMF on funding in order to mitigate a sizable sovereign external debt burden that looms in the 2013-14 period. For Ukraine, which suffers from disinflation, the IMF advised remedies could be a welcomed measure like increasing regulated tariffs via, as IMF advises, a "socially-balanced programme". This may spur inflation to return back from negative territory to a healthy one of around 5% YoY. Hence, nominal GDP growth should be back on growing path and depart from stagnation. We expect weaker UAH in 2013, but argue that internal devaluation that has been since 2H12 has been narrowing a nominal devaluation required by the fundamentals printed by ICU's real trade-weighted indices.

If Ukraine's authorities fail to win IMF on their side and eventual sign an agreement with the Fund on new lending, then our worst case scenario would unfold, where current recession drags its feet through all 2013. Rising risk premiums would destroy credibility of fiscal policy and break down the pegged exchange rate regime. This outcome would bring more fiscal costs on the shoulders of the government; hence, talks of sovereign debt restructuring would spring up.

## Past and future pattern of economy's growth

### The recent past: What is behind the 2012 recession?

*The quarterly performance of the economy was uneven in the 1H12, and then the economy sank into a double-dip recession in the 4Q12*

Ukraine's economy did not any surprise on the upside in 2012. It had quite a mixed performance in the first half of the year, followed by a lacklustre performance in the second half. In the 1Q12, it posted a 0.3% on-quarter SA<sup>7</sup> contraction, the first one of its kind since the deep recession of 2008-09, which turned out to be, in our view, an echo of 2011 policies (on this issue, more is elaborated below). The second quarter was quite strong (+3.0% YoY and +1.9% SA QoQ), however, thanks to a great extent to a final push by the authorities on making the Euro-2012 football championship happen. Then, two consecutive quarters of contractions followed: -1.2% QoQ and -1.0% QoQ in 3Q and 4Q, respectively. Hence, the full-year growth rate is estimated at 0.3% YoY, which is down sharply from the 5.1% YoY seen back in 2011.

*The reason behind the 2012 recession is two-fold: weak external demand and failure of domestic policymaking;*  
...

Considering the economy from the supply-side viewpoint—ie, from agriculture to industrial production, construction to transport, and lastly, to retail trade (see Chart 13-Chart 18, pp.21)—there was no sector that could escape the slowing trend of 2H12. These charts and the data they contain for 2012 underline our premise that it was not a particular failure on the part of one single sector, eg, industrial, to perform positively, but instead, a broad-based set of factors that failed. In particular, a mix of poor, home-grown economic policies carried out by the authorities combined with negative external factors that gave rise to the hiccup in the economy in the second half of the year.

<sup>7</sup> Seasonally adjusted percentage change of GDP to previous quarter, the same as SA QoQ.



**Chart 13. Industrial sector:**

Industrial production index since January 2000 through December 2012

Monthly data, rebased at 100 points as of December 1999

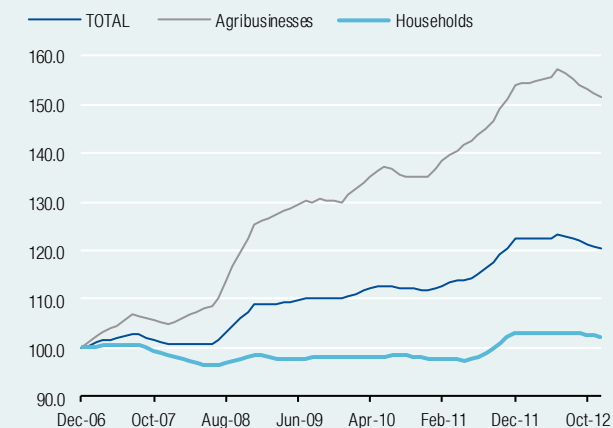


Sources: State Statistics Service of Ukraine, Investment Capital Ukraine LLC.

**Chart 14. Agriculture sector:**

Industrial production index since December 2006 through December 2012

Monthly data, rebased at 100 points as of December 2006

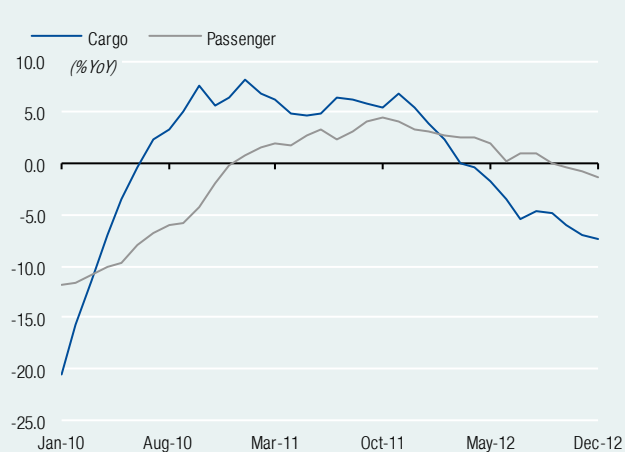


Source: State Statistics Service of Ukraine, Investment Capital Ukraine LLC.

**Chart 15. Transport sector:**

Growth rate of cargo and passenger transport turnover, through Dec-2012

Year-on-year percentage change of the 12-month rolling volume



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

**Chart 16. Construction sector:**

Growth rate of price-adjusted UAH-based volume of construction works

Year-on-year percentage change of the CPI-adjusted construction volumes

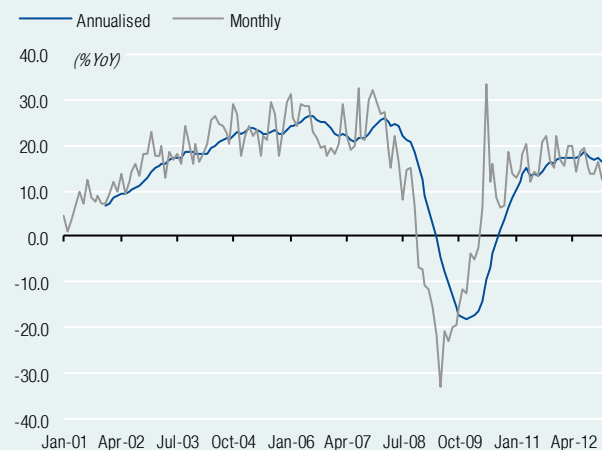


Sources: State Statistics Service of Ukraine, Investment Capital Ukraine LLC.

**Chart 17. Retail trade sector:**

Growth rate of price- and seasonally-adjusted volume of retail trade

Year-on-year percentage change of the monthly and 12-month rolling volumes



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

**Chart 18. Non-financial services sector:**

Growth rate of price-adjusted volume of services

Year-on-year percentage change of the monthly and 12-month rolling volumes



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

**...Its foundations were cemented yet back in 2011, when the first cracks in the global economy began to show**

**Ukraine's authorities have tightened their economic policies in response to the rising tide of FX reserve losses since late 2011 and all of 2012**

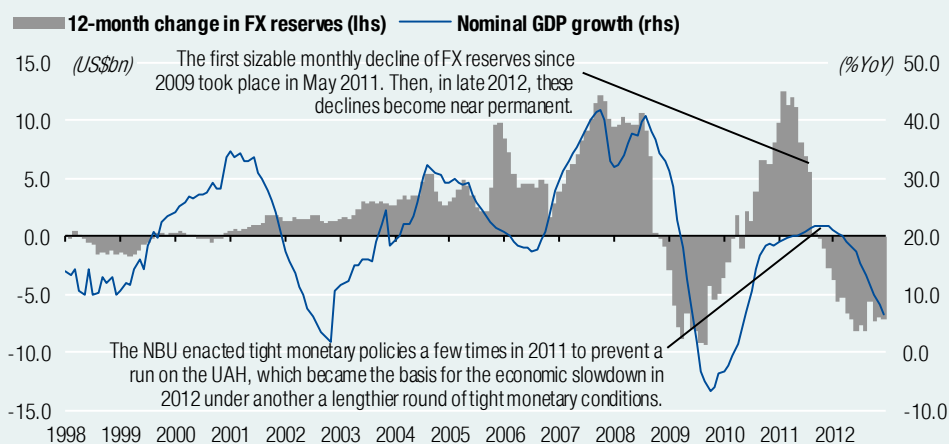
The macro foundations behind the 2012 slowdown and eventual double-dip recession in the 4Q12 were laid in 2011, at that point three corresponding factors resurfaced: 1) a softening of world steel prices due to China, where authorities curbed inflation with a mix of tighter policies that affected steel demand there and steel prices globally; 2) Ukraine as a steelmaking specialist became affected in mid-2011, as the production index of its steel-making sector and its entire industrial production index hit their post-2008 highs and then started gradually sliding over the 2H11 and 2012; and 3) Ukraine's authorities responded to these troubles with a poorly equipped toolbox of policies that proved to be pro-cyclical (ie exacerbating rather than ameliorating the weakness in the economy).

The fact of the matter is that back in 2011, the central bank employed occasionally tight monetary approaches to stem unwanted pressure on the local currency in the foreign-exchange market. At very first sign of a possible run on the local currency, whose nominal exchange rate versus the US dollar has been carefully safeguarded to date by authorities as their key policy target, the NBU's first response in terms of monetary and regulatory policies was to calm down the financial market activity. The first sign of a possible tide turning against the UAH appeared in May 2011, and then in the fall of the same year, this turned into a wave of FX reserves losses, which, on a 12-month rolling basis, amounted to US\$3bn by the end of 2011. Then, during the course of 2012, this wave surged to a high-tide level which, while running throughout the year, peaked to US\$8bn twice (in June and August) and ended the year at a still quite elevated level of US\$7bn.

All through 2012, the authorities' prioritised economic policies centred around one concept, "stability," which meant the nominal stability of the exchange rate to the US dollar, along with price stability on food staples—all socially sensitive issues to deal with on the eve of parliamentary elections in October 2012. In the end, authorities' efforts to cater to the political agendas of the incumbents ahead of elections ultimately served to subordinate the country's overall macroeconomic health and stability, including employment and output, for the sake of protecting the rigid exchange rate policy aimed at stabilising the UAH versus the USD.

**Chart 19. Ukraine's economy nominal growth and FX reserves change in the past 12-month period. History from January 1998 through December 2012**

*Growth of nominal GDP is percentage change to the same period a year ago (%YoY) and the 12-month rolling volume of FX reserves change is in billion of US dollars*



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

## The future: Key factors to shape the growth drivers

*The previous pattern of the economy's growth is unsustainable, and risks encountering new downgrades of sovereign credit ratings, ...*

*... which are now at B3, B, and B by Moody's, S&P and Fitch, respectively*

*Base-case scenario: IMF deal in 1H13; attraction of more foreign capital inflows*

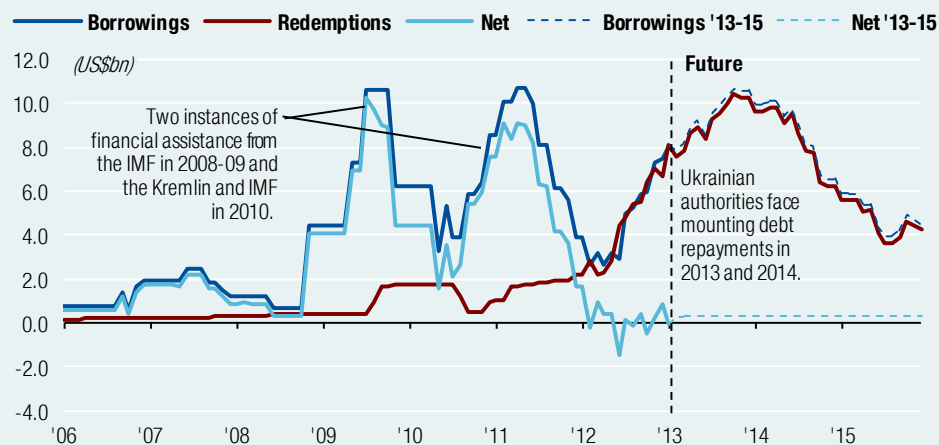
In our view, the pattern of growth seen in late 2011 and over 2012 is unsustainable going forward. Sovereign creditworthiness is at risk of further downgrades. As of now, Ukraine has the following sovereign credit ratings: Moody's: B3/Negative; S&P: B/Negative; Fitch: B/Stable. Hence, if recession and deflation root down in the economy deeply enough during 1Q13, with no official assistance coming in (from either the IMF or the Kremlin), then the ratings risk being downgraded to default status, as the accumulation of debt due is mounting (see Chart 20 below).

The debt market pressures (epitomised by rising refinancing requirements, the cost of borrowing, and the credit ratings' perspective) would readily translate into a persistent wave of FX reserve losses, which were at US\$7bn at the end of 2012, and could remain quite elevated, to the tune of several billion dollars going forward. This could develop into an avalanche of deteriorations that at some point, could lead to an eventual bail-out by one of the above-mentioned authorities. To conclude, this is not our base case scenario, but instead, the worst case one.

Hence, a more probable scenario is set to unfold going forward, and according to our base-case scenario, there are two unfolding themes that would precipitate this. One, the global economy's growth is set to gradually rebound into the second half of the year. In China, a recovery from the soft landing of 2012 was evident already in the 4Q12 statistics. Hence, export steel prices for Ukraine producers are to find their bottom in 1Q13, and are set to gradually recover later on. Two, Ukraine's authorities are to engineer a kind of opening up (via financial assistance from IMF, an event we feel has a 60% probability, as well as attracting private sector investments) in order to refinance the large amount of external debt due in 2013 and 2014, as depicted in the chart below.

**Chart 20. Ukraine's sovereign borrowing and redemptions till end of 2012 and for 2013-15 (US\$bn)**

12-month rolling monthly data



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

*A deal with the IMF will be a trigger to changing perceptions...*

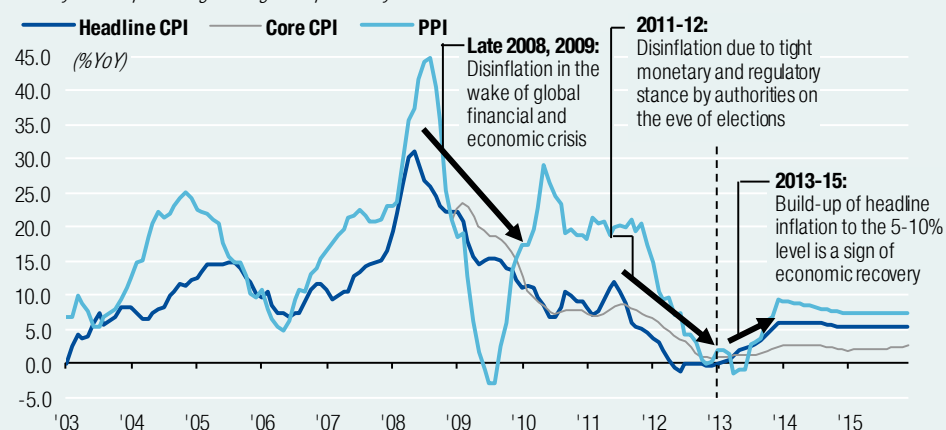
Hence, a deal with the IMF is a key trigger in changing perceptions among, first of all, investors, and also, and private sector businesses, regarding the economic prospects of Ukraine's economy. Then, in our view, fixed-capital investments and household consumption will be the driving forces of the expected recovery from the late 2012 recession to unfold over the course of 2013.

**... and will also be a positive catalyst for businesses to invest**

Another element of the "opening up" policy would be to allow more flexibility in the pricing power of the private- and public-sector companies, including state-run Naftogaz. This fits in well with our base-case scenario of an IMF deal, as one of the key requirements of the Fund is allowing a true pricing of goods and services in the economy, which covers businesses' costs as well as provides for their profitable operations. A greater such free-market environment (free from authorities' directives or *diktat* on prices) is likely to provide an impetus to businesses to operate in terms of seeking profit and then investing. In terms of public sector businesses, there is an indication that authorities will bow to IMF demands and free up regulated tariffs somewhat. All in all, headline consumer inflation will soon be emerging from the deflationary zone, and a gradual expected recovery in external demand over the course of 2013 will accelerate producer-price dynamics (see Chart 21).

**Chart 21. Inflation dynamics in Ukraine since January 2003 through December 2012 (% YoY)**

Monthly data of percentage changes on previous year



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

**Leaving deflation behind and having low headline inflation is a desired target for the government**

The return of the economy to low inflation levels (from headline CPI at -0.2% YoY and PPI at +0.4% YoY in December 2012) will be a welcome sign, as it will be not only a sign of recovery in the economy after the disinflationary period of 2011-12, but also an indication that nominal GDP growth is back on an upside trend, supporting the sovereign debt metrics<sup>8</sup> in the very year when such support is most crucial.

## Fiscal policy: "Smaller state" as key theme

**Through June 2012, Ukraine's government ran the state budget with a primary balance at a near-zero level**

Ukraine's authorities have lost their previous tight grip on the state budget in the 2H12. Due to the economic slowdown and eventual recession in the 4Q12, revenue growth turned south quite sharply. At the same time, while preparing the public for elections, the authorities acted according to a prescribed plan on increasing public expenditures like pensions, public sector wages, and other types of payments. This pre-election spending spree sent the expenditures' growth rate up (see Chart 22, pp.28).

<sup>8</sup> This means that, thanks to the growing nominal volume of GDP, the public debt-to-GDP ratio does not deteriorate if the debt size remains unchanged at the moment. Mathematically saying, the public debt-to-GDP decreases every time, when its denominator goes up faster than numerator.

According to our estimates, the full-year state budget deficit in 2012 rose to 3.1% of GDP<sup>9</sup>, up from a 1.8% deficit in 2011. At the same time, the primary balance of the state budget, which was at 0.0% of GDP at the end of 2011 (hence, revenues matched primary expenditures<sup>10</sup>), deteriorated to a deficit of 1.3% of GDP in the full-year 2012 (see Chart 24, pp.28).

***Then, fiscal deterioration followed, on the back of a sizable slowdown in the economy***

Thus, the 11-month period of near-zero deficit of primary balance (from August 2011 through June 2012) was, in our view, a target of the government's fiscal policy. This allowed the total public debt, including direct and guaranteed debt, as a share of GDP to decline from 38.6% as of August 2011 to 34.5% in June 2012. Since then, the ratio rose to 35.8% as of end-November 2012, due to the above-mentioned fiscal deterioration.

***In 2013, the state budget is set to return to a tighter balance; ...***

In our view, the government is going to return to a tighter primary balance from the current elevated level starting in mid-2013. This is because, as our base-case scenario envisages, Ukraine's authorities agree with the MF on the terms of the new programme in early 2013. One of the basic elements of this programme is a more balanced fiscal policy. In this regard, in our view, Ukraine and the IMF agree on creating a "smaller state," by lowering the ratio of state budget-expenditures as a share of GDP. As this ratio reached 27.5% in 2012 (only the second-highest level of state since 2000, except for 2010, when it was 28.0%), the next three years under the IMF's watch will see the "smaller state" policy gradually unfolding to 26.5% in 2013, 26.3% in 2014, and 25.7% in 2015.

Also, there is a quite important strategic factor stemming from the country's new politics. President Yanukovich's administration will effect a fiscal loosening (within the scope of the previously agreed-upon state size, which is the share of state budget expenditures in GDP) right on the eve of the presidential elections, to be held in March 2015. Hence, the timing of such fiscal loosening is likely to be in early 2014, eg, at the end of 1Q14, or one year before the election date. Or, it could take place at the end of 3Q14, ie, six months prior. In an extreme situation, if fiscal consolidation in 2013 failed, and authorities' room for fiscal loosening becomes narrower, President Yanukovich will be forced to run a campaign with an array of pre-election promises that would imply a fiscal loosening in 2015.

However, out of all three options, the most viable one is that next occurrence of pre-election fiscal loosening will take place between the end of the first quarter and the end of third quarter of 2014, ie between April and September 2014. Until that time, in our view, authorities will be trying to stage a fiscal consolidation and bring down the current rising trend of debt-to-GDP in order to dilute any future scepticism about the fiscal sustainability of the public finances.

***... however, the government's financing needs for 2013 amount to a still-sizable volume of more than UAH 105bn, ...***

In 2013, according to our detailed analysis of the quarterly performance of the state budget (see Table 3, pp.27), the government will be running a tighter primary balance. Over the first three quarters, ie, from January to September, it will be positive, and only in the last quarter, which is usually a period of concentrated budget expenditures, will it slip into a deficit of nearly UAH16bn.

At the same time, however, the payouts of sovereign debt are on the rise versus the previous year. As our calculations show in Table 3, a total of UAH67.2bn should be paid

<sup>9</sup> This estimate is based on our own calculation of total government borrowings in 2012 of UAH107.0bn, including domestic and external borrowings as well as the borrowings made in local currency and foreign currencies. Hence, the total volume of state budget expenditures was UAH385.6bn. This could amount to 5.2% of GDP, if one assumes that total state budget expenditures for the entire year of 2012 amounted to UAH413.6bn, as prescribed by the state budget law. There was no official data available for the full-year budget execution in 2012.

<sup>10</sup> Primary expenditures are total expenditures less debt servicing expenditures.

***... followed by still-sizable  
financing needs of  
UAH101bn in 2014, the  
final year before the  
presidential elections***

over 2013<sup>11</sup>, up from UAH63.0bn in 2012. The 2Q and 3Q of 2013 are going to be the most burdensome to the government in terms of payouts, when nearly UAH20bn needs to be paid each quarter. This year's fourth quarter is relatively less burdensome, as the total volume of debt payouts amounts to UAH12.9bn, down from UAH15.2bn in the 4Q12.

Eventually, a formula of a tighter deficit amid increasing debt payouts will yield a still-sizable volume of financing needs for the government of UAH105bn in 2013, which represents a marginal reduction from UAH107.0bn in 2012. In our base-case scenario, the government's financing needs in 2014 will further amount to a sizable UAH101bn in order to pave the way for President Yanukovych's re-election in March 2015. However, in 2015, the government's financing needs are to decrease to UAH73bn, thanks to a combination of two factors: first, stronger economic growth, which translates into a higher volume of nominal revenues into the state budget; and second, a narrower deficit, thanks to the "smaller state" factor.

In terms of public direct debt, which as of now, stands at 29%, the public debt level over the course of the 2013-15 period is set to increase up until the end of 2013, reaching more than 30%, then subsiding towards below 28% at the end of 2015.

However, in a worst-case scenario, public debt level deterioration would be much more severe than under our base-case scenario, which yields a moderate increase in the public debt level. The severity of such deterioration (up to 40% over the course of 2013, and further up in 2014) implies a serious of state-funded recapitalisations of state-run banks, including formerly private banks that would then fall victim to a new wave of economic crisis, as well as monopolies like Naftogaz.

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<sup>11</sup> This UAH-based volume of debt payout takes into account changes in the UAH exchange rate over 2013.



**Table 3. Public finances in 2012 and forecast for the 2013-15 period,** According to ICU's base-case scenario

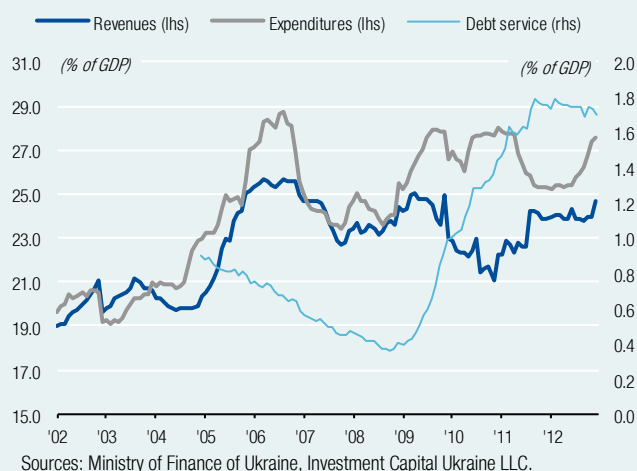
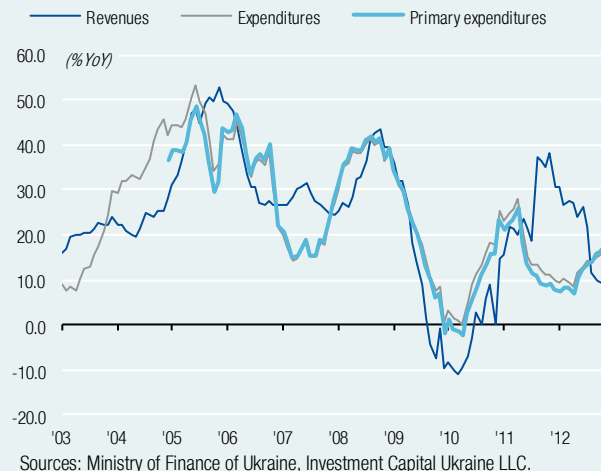
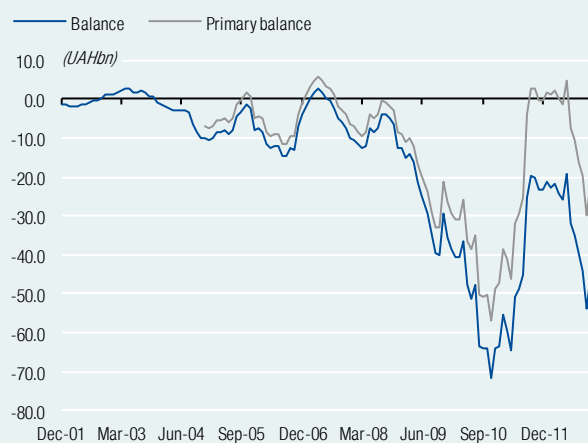
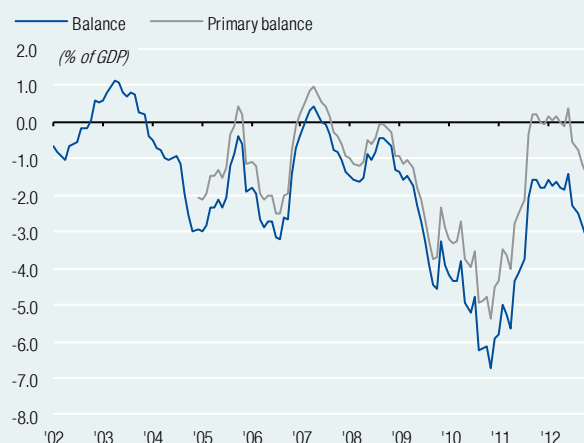
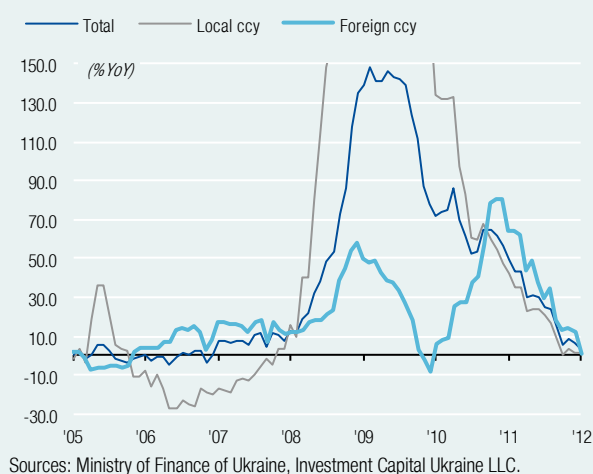
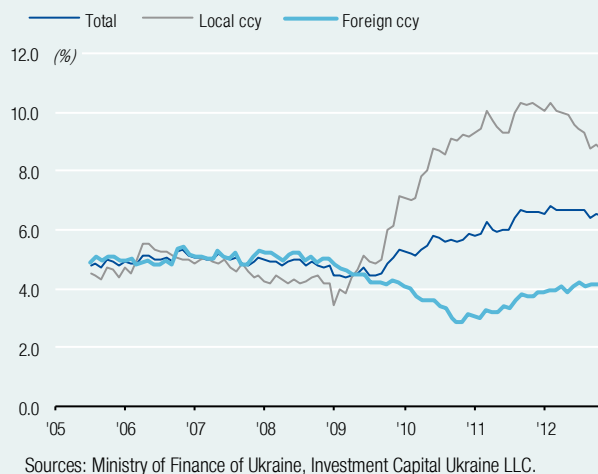
Period	State budget flows (UAHbn)								State budget balance and debt (% of GDP)			
	Revenues	Expenses	Lending	Balance <sup>1</sup>	Debt servicing	Primary balance <sup>2</sup>	Debt due	Financing needs <sup>3</sup>	Balance, LTM	Primary balance, LTM	Financing needs, LTM	Direct debt, eop
<b>Qtly</b>												
1Q12	77.2	75.9	0.3	1.0	5.4	6.7	9.3	8.3	-1.6	0.5	4.5	27.5
2Q12	85.7	92.1	1.3	-7.7	6.2	-0.2	21.7	29.4	-1.4	0.7	5.3	26.9
3Q12	83.4	99.2	1.8	-17.7	5.6	-10.2	16.8	34.5	-2.8	-0.8	6.9	28.1
4Q12	99.7	118.3	1.0	-19.6	9.3	-9.4	15.2	34.9	-3.1	-0.9	7.6	29.1
1Q13	75.3	73.3	0.0	2.0	9.1	11.1	13.8	11.8	-3.1	-0.6	7.8	28.8
2Q13	86.6	93.4	0.0	-6.7	10.1	3.3	20.7	27.4	-3.0	-0.4	7.7	29.1
3Q13	93.7	99.9	0.0	-6.2	8.8	2.6	19.8	26.0	-2.1	0.5	6.9	29.0
4Q13	98.7	125.7	0.0	-27.0	10.6	-16.4	12.9	39.9	-2.6	0.0	7.1	30.1
1Q14	84.1	81.5	0.0	2.6	9.7	12.3	17.8	15.2	-2.5	0.1	7.2	29.3
2Q14	97.0	103.8	0.0	-6.9	10.7	3.8	21.6	28.4	-2.4	0.1	7.0	28.9
3Q14	105.5	111.1	0.0	-5.5	8.3	2.7	11.3	16.8	-2.3	0.2	6.2	28.3
4Q14	111.2	139.8	0.0	-28.6	11.1	-17.5	11.5	40.1	-2.3	0.1	6.1	29.2
1Q15	93.3	89.2	0.0	4.1	9.7	13.9	7.7	3.6	-2.2	0.2	5.2	28.3
2Q15	108.1	113.6	0.0	-5.5	11.0	5.5	8.3	13.8	-2.0	0.3	4.3	27.8
3Q15	118.2	121.6	0.0	-3.3	9.7	6.4	9.4	12.7	-1.8	0.5	3.9	27.1
4Q15	124.9	153.0	0.0	-28.1	11.5	-16.5	14.8	42.9	-1.8	0.5	3.9	27.8
<b>Yearly</b>												
2012 E	346.0	385.6	4.4	-44.0	26.4	-17.6	63.0	107.0	-3.1	-1.3	7.6	29.1
2013 F	354.3	392.2	0.0	-37.9	38.6	0.7	67.2	105.2	-2.6	0.0	7.1	30.1
2014 F	397.7	436.2	0.0	-38.4	39.8	1.4	62.1	100.5	-2.3	0.1	6.1	29.2
2015 F	444.6	477.4	0.0	-32.8	42.0	9.2	40.3	73.0	-1.8	0.5	3.9	27.8

Notes: LTM – last 12-month period; eop – end of period.

[1] balance equals to revenues less a total of expenses and lending; [2] primary balance equals to revenues less a total of expenses, lending and debt servicing;

[3] financing needs equals to a total of debt due and state budget balance taken with opposite sign.

Sources: Ministry of Finance of Ukraine, Investment Capital Ukraine LLC.

**Chart 22. State size: budget revenues and expenditures as share of GDP (%)**
*Monthly history from January 2002 through December 2012*

**Chart 23. Growth rate of state budget revenues and expenditures (% YoY)**
*Monthly history from January 2003 through December 2012*

**Chart 24. State budget balance. Monthly history from January 2002 through December 2012**
*12-month rolling UAH-based volume*

*As share of GDP*

**Chart 25. Growth rate in debt servicing payments (% YoY)**
*Monthly history from January 2006 through December 2012*

**Chart 26. Government's average cost of funding (% per year)**
*Monthly history from January 2005 through December 2012*


## Naftogaz: Cutting back the deficit

***Our revised estimate of Naftogaz's deficit yielded a US\$1bn reduction in its deficit in 2012 versus 2011, ...***

***... showing that it had slowed to 1.6% of GDP in 2012, down 0.7ppt from 2011***

Our latest update<sup>12</sup> of the method used to calculate the Naftogaz deficit<sup>13</sup> yielded a somewhat better view on the standing of the state-run company than what we had previously gauged<sup>14</sup>. In full-year 2012 authorities did undertake a mix of measures that cut the deficit to US\$2.8bn or UAH22.3bn from US\$3.8bn (UAH30.7bn) in 2011 (see Chart 28, pp.31).

The cornerstone of these measures was a restructuring of Naftogaz's business model by the company last year, which cut down its volume of imports, which was, in part, a result of a more effective use of available resources, and also, a further concession on the part of the domestic consumer base to the private sector. In 2011, private sector supplies accounted for a 12.3% share of imports. Later, in 2012, this share rose to 24.4%.

So effectively, Naftogaz's deficit of 2.3% of GDP in 2011 slowed to 1.6% in 2012.

Our base-case forecast for 2013 envisions Naftogaz raising household tariffs by 20% with no change in the volume of imports of natural gas, which currently stands at 25bcm, the same level as in 2012. However, we note the authorities' call to cut volume to as low as 18bcm<sup>15</sup> down from the estimated level of 25bcm in 2012<sup>16</sup>. (Our calculations on Naftogaz's deficit did not yield any sizable benefit to the company from this reduction, see charts on pp.31).

At the same time, the economy's balance of natural gas for 2013 should not change dramatically (see Chart 27, pp.30), as the total volume of supplies is forecasted at 64bcm, 6.5% down from 68bcm in 2012, due to the slowdown in the economy that spilled over from 2H12 into 1H13, and to further improvement in the efficacy of domestic consumption.

<sup>12</sup> The key difference from the previous approach lies in the following: we separated Naftogaz's flows (imports and domestic sales) of natural gas from ones made by the private sector (in 2011-12, the private sector was represented solely by Ostchem Holding Limited, a Cyprus-registered company).

<sup>13</sup> We estimate Naftogaz's deficit as being the difference between imports expense and cash revenues collected from the customer base, which includes households, communal heating enterprises, and industrial consumers along with other, minor, ones.

<sup>14</sup> See our *Quarterly Report* "Stretched, but holding up," published on 27 July, 2012 and *Ukraine handbook 2013* "Closer look at a rare species," published on 17 December, 2012.

<sup>15</sup> bcm – billion cubic metres.

<sup>16</sup> To every profit-driven company, such a reduction would in fact represent a concession of a market share to a competitor or a group of competitors. However, in the case of state-run Naftogaz, which is a sort of zombie company, this concession is viable, because it reduces the volume of Naftogaz operating flows (imports, domestic sales), hence the need for the state to run a complex scheme on supporting Naftogaz via the government's balance sheet and state-run banks' balance sheets. In effect, Naftogaz's bloated balance sheet requires state support in the form of higher sovereign and quasi-sovereign debt and a lower level of FX reserves. In reducing the Naftogaz balance sheet (for instance, by reducing the volume of import purchases of natural gas), authorities reduce future requirements of public debt and FX reserves.

**For 2013, we forecast Naftogaz to import 25bcm of natural gas. Authorities' call of 18bcm looks less likely to us**

The total volume of imports is forecast to decrease to 33bcm, of which 8bcm, or 24.2% is provided by the private sector<sup>17</sup>. Hence, for two years in a row, the share of private-sector imports out of total natural gas imports was sizable. (It may even rise if authorities deliver on their promise to cut imports by Naftogaz to 18bcm in 2013, an assumption we do not figure into our base-case scenario. Then, Naftogaz's share of imports is set to decrease to 54.5% in 2013 from 75.6% in 2012.)

The change in the natural-gas market structure that took place in 2012, which separated out domestic customers between the public and private-sector suppliers of natural gas, implies that Naftogaz retains the same customer base as in 2012. (A further deepening of changes in the domestic, natural-gas market results in Naftogaz's lowered volume of imports (at 18bcm a year) and a lower customer base among industrial consumers, to as low as 20%.)

**... increases household tariffs by 20%, and retains its share of supplying industrial customers to at least 50%**

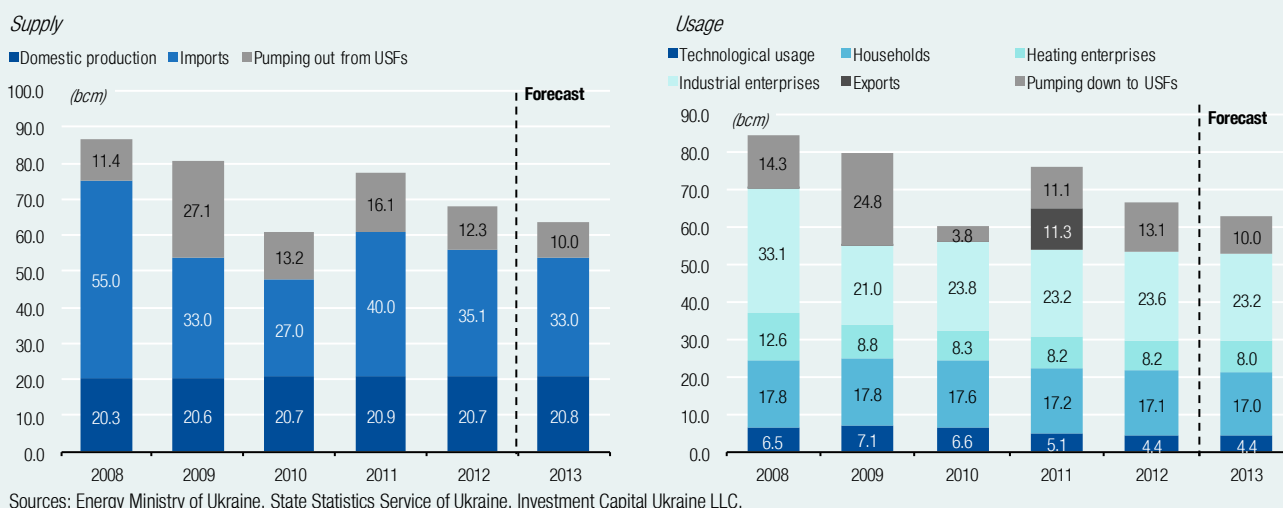
Our calculations under base-case assumptions assume that Naftogaz imports 25bcm of natural gas and supplies at least 50% of the needs of industrial consumers in 2013 (in 2012, this share stood at 49.2%). Given the priority the authorities are putting on achieving a lower deficit in Naftogaz every year going forward, they will target making Naftogaz's deficit lower in 2013 than in it was 2012. We believe this is achievable when Naftogaz's share of supplies to the industrial sector stands at least at a 50% share.

**Eventually, we believe the 2013 deficit will further decline, to US\$2.2bn**

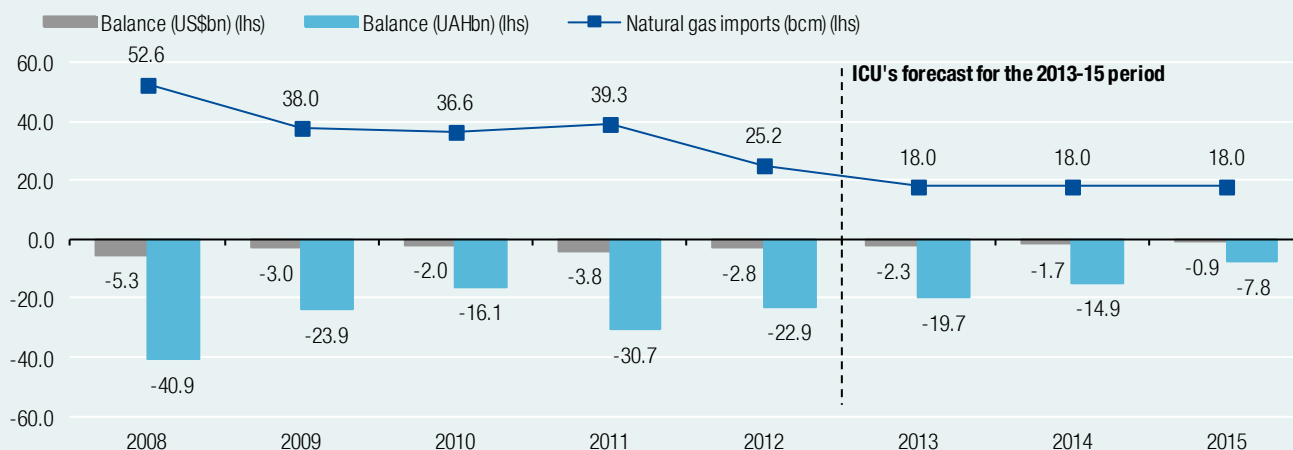
Ultimately, these assumptions yield that Naftogaz's deficit in 2013 shrinks to US\$2.2bn (UAH19.4bn or 1.3% of GDP). In the next two years following 2013, our forecast for identical assumptions as in 2013 yields a deficit reduction to 0.9% and 0.4% of GDP, respectively.

If authorities refrain from increasing tariffs by 20% for non-industrial consumers, while our above assumptions remain valid for 2013-15, then Naftogaz's deficit would be marginally higher than we indicated above, at 1.4% in 2013, and 1.1% and 0.7% of GDP in 2014 and 2015, respectively.

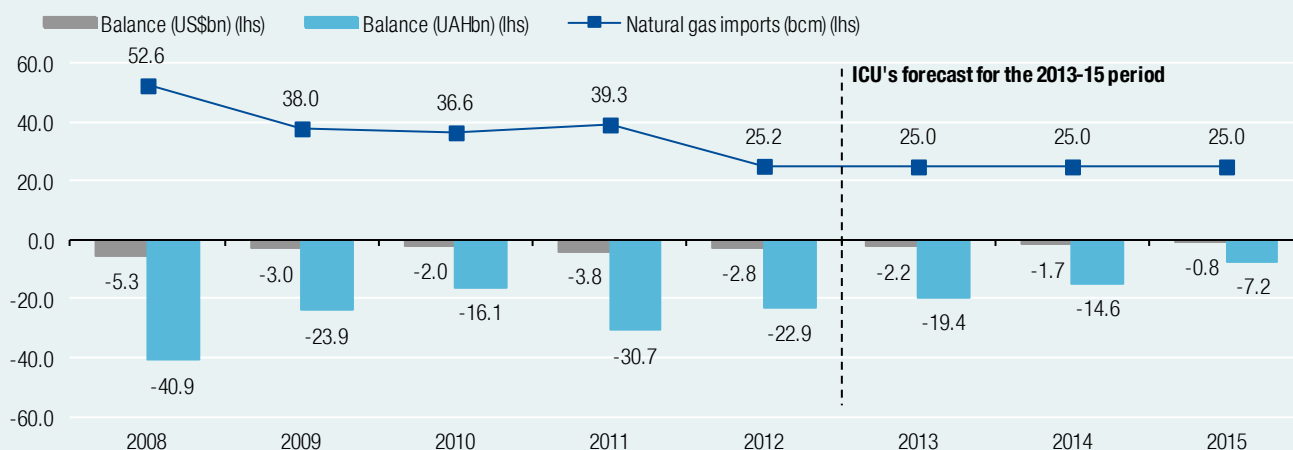
**Chart 27. Ukraine's yearly plan of natural gas balance in 2008-12 and forecast for 2013 (billions cubic metres)**



<sup>17</sup> In 2011 and 2012, Ostchem Holding Limited was the only private supplier of imported natural gas to Ukraine. The rest of natural gas imports was supplied by state-run Naftogaz. In 2005-08, RosUkrEnergo provided these supplies.

**Chart 28. Naftogaz deficit: 2008-12 history and projections for 2013-15**Under assumption that annual volume of natural gas imports by Naftogaz amounts to **18bcm** a year in 2013-15

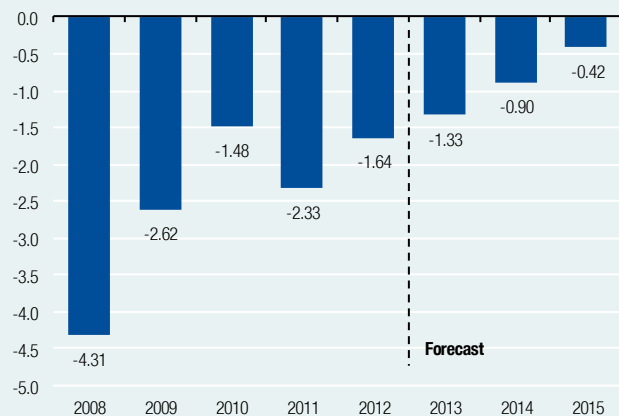
Note: Natural gas imports are by Naftogaz of Ukraine. Sources: Energy Ministry of Ukraine, State Statistics Service of Ukraine, Investment Capital Ukraine LLC.

**Chart 29. Naftogaz deficit: 2008-12 history and projections for 2013-15**Under assumption that annual volume of natural gas imports by Naftogaz amounts to **25bcm** a year in 2013-15

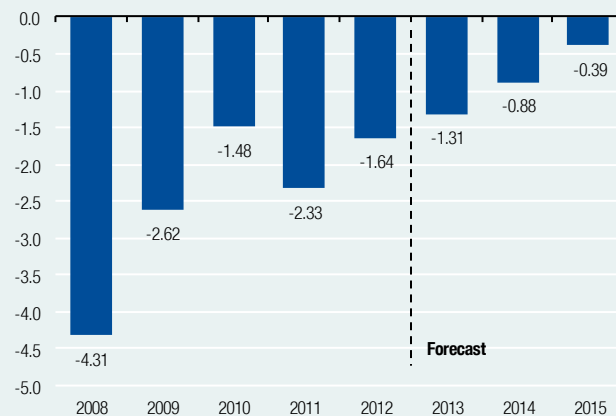
Note: Natural gas imports are by Naftogaz of Ukraine. Sources: Energy Ministry of Ukraine, State Statistics Service of Ukraine, Investment Capital Ukraine LLC.

**Chart 30. Naftogaz deficit in 2013-15 under different assumptions of physical volume of imports in 2013-15**Assuming that imports stand at **18bcm** a year

(% of GDP)

Assuming that imports stand at **25bcm** a year

(% of GDP)



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

## Monetary policy: Breaking with past, spurring bank lending

*The economic and fiscal woes of late 2012 are forcing Ukraine's authorities to break with its past policy mix*

The economic and fiscal deterioration that took place in the 2H12 (see Chart 24, pp.28), will bear likely future fiscal costs of considerable and unsustainable size, as long as the monetary policy approach used then remains in the toolbox of the Ukraine's policymakers. This will effectively force authorities to change their approach to economic policymaking.

The way the country's monetary policy responds to the current woes in the economy is thus a key factor in determining what kind of growth the economy will see in 2013 and a bit beyond, ie, in early 2014-15.

By historical standards, base money growth was at quite modest in 2011 and 2012, of 6.3% and 2.1% YoY in December of each respective year. This was supposed to lay groundwork for a low-inflation environment. However, instead, it turned out that a disinflationary trend began to take root in the economy back in late 2011, engendering a consumer-price deflation in late 2012. Instead of enjoying a slower pace of inflation, the economy tumbled late last year (entering a double-dip recession in 4Q12), as on-year growth of nominal GDP was approaching the zero level (see Chart 31, pp.33).

Aside from the external shock that had impacted the economy in the 2H12, there were internal factors that also negatively affected economic activity. While the money supply from the central bank into the banking system was positive, and at quite moderate growth rate of 4.2% on average throughout 2012 (albeit not as much as in 2010, at +15% YoY<sup>18</sup>, or back in the pre-2008 period of fast economic expansion<sup>19</sup>), there has been only a sluggish revival of bank lending in the sector year to date.

The crux of the matter involves two factors that lie on the surface of the matter, resulting from a discord between central bank liquidity injections and commercial bank lending.

*The new monetary policy approach is designed to keep the UAH risk premium lower, ...*

One, an increased risk premium, which is attached to UAH assets, made bank lending highly unaffordable for local businesses as real rates spiked in the 2H of 2012 (see Chart 33 and Chart 34 on page 33).

Second, a continued contraction of the banking sector's balance sheet, which encompasses the environment of commercial banks that shy away from risk and have a bias towards rebalancing their bloated balance sheets.

*... hence, pushing interest rates down from the late 2012 high, ...*

As for the first factor, Ukraine's authorities will try to reduce the risk premium, and hence the real rate, going forward, by a mix of factors, including striking a deal with the IMF that is believed will be a confidence booster for UAH assets. In our view, the fact that interest rates on loans and deposits turned south in early 2013 (as shown in Chart 33 and Chart 34) is an indication, among other factors, that markets do believe that a deal with IMF is probable.

As for the second factor, there is no quick fix to this issue. As shown in Chart 32 on page 33 on page 33, the banking sector had a loan-to-deposit ratio of 1.52x as of November 2012, which is still too high. This implies that going forward, the banking sector as a whole will be biased in making its balance sheets leaner, ie, with loan-to-deposit ratios tending towards 1.0x (a modern sign of a healthy bank). Thus, our forecast is that Ukraine's banking sector will reduce its loan-to-deposit ratio to 1.20x as of end-2014 and 1.15x as of end-2015.

<sup>18</sup> Average growth rate in 2010.

<sup>19</sup> In August 2008, base money growth rate over past 12-month period was at 43.9% YoY in average.



**... and fostering state-run bank lending, while the private sector banks' business is to shrink**

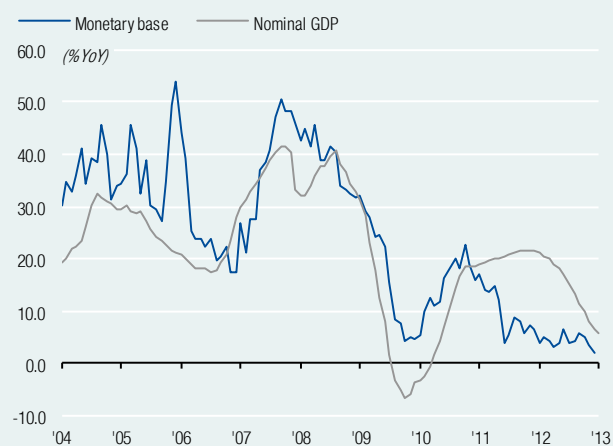
Hence, in 2013, monetary policy will likely be tasked to support economic growth and to break the disinflationary environment. As for the latter task, authorities are intent on pulling the economy out of its deflationary state and engendering a low inflation-rate, which will accelerate the growth rate level of nominal GDP.

In terms of the latter task (inflation), the NBU is not expected to produce a sizable stimulus to spur price growth; instead, it would count on regulated tariff increases undertaken by the government, which should bring headline and core CPI up over the course of 2013.

As for the former task (economic activity), the NBU is likely to warm up to the government's idea to establish state-run banks that would finance national projects. This is a sensible plan for the still-struggling banking sector, in which the public sector, represented by the state-run banks, is set to expand by accelerating lending to the broader economy, rather than solely supporting Naftogaz). At the same time, the private sector banks as a whole will contract (with European banks likely to continue withdrawing their capital from the country).

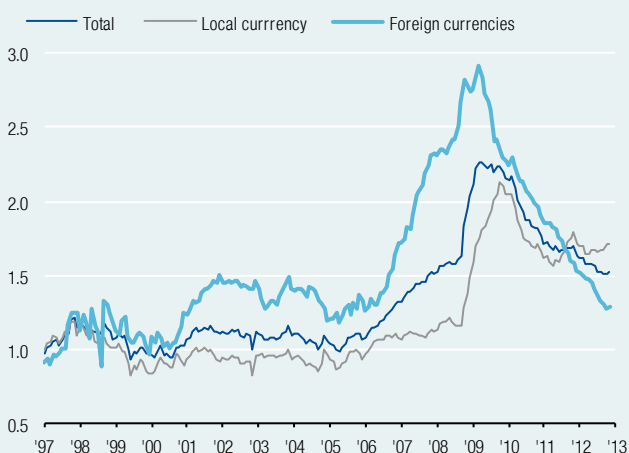
**Chart 31. Monetary base and nominal GDP growth rates (% YoY)**

Percentage change to a year ago



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

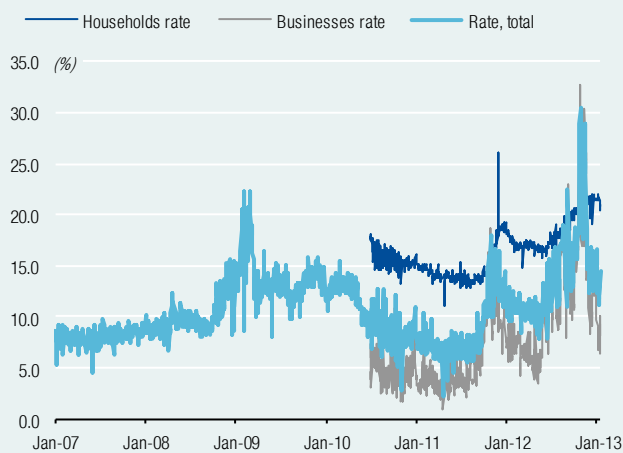
**Chart 32. Ukraine's banking sector: Loan-to-deposit ratio (x)**



Note: the ratio is calculated upon the gross loan volumes.

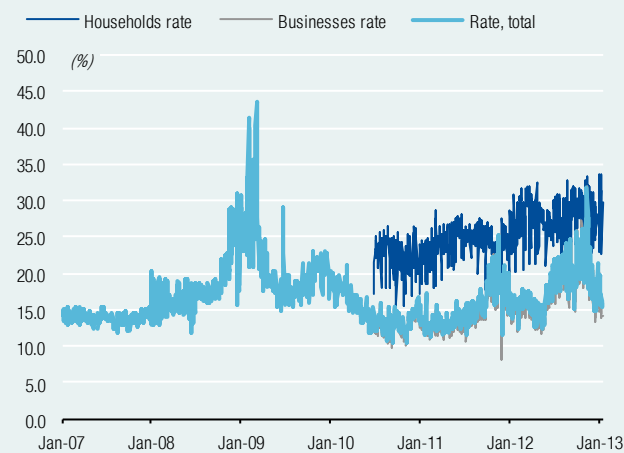
Sources: National Bank of Ukraine, Investment Capital Ukraine LLC.

**Chart 33. Banking sector aggregate deposit rate (% per year)**



Source: National Bank of Ukraine.

**Chart 34. Banking sector aggregate loan rate (% per year)**



Source: National Bank of Ukraine.

## External balance: The changing face of foreign trade

***Both cyclical trends and one-off events affected Ukraine's trade balance in 2012, ...***

Thanks to the economy's receptiveness to trade, and to a lesser extent, to capital flows, Ukraine's external balance has been (and will continue to be) providing a great deal of influence on the country's economic activity. Alongside the cyclical trends in 2012 such as a gradual decoupling of energy and steel prices (negative to Ukraine's economy) and a diversification of exports (positive for Ukraine), there were one-off events such as the Euro-2012 that also impacted the balance of payments during the year. Hence, below we provide our estimate on the latter one-off impact on the country's trade balance.

***... whereas in 2013, the cyclical trends will dominate, absent of one-offs such as a Euro-2012***

In 2013, in our view, the impact of cyclical trends, such as those mentioned above, will likely endure. While among the possible one-offs that may spring up this year, there is only a small chance that a Euro-2012 type of event could be repeated. Luckily, for a nation bidding for a chance to host the Euro tournament is like winning a lottery with nearly insurmountable odds. And for Ukraine, there was a series of grand mistakes made by the authorities<sup>20</sup> during the Euro-2012 preparations, which provide some guarantee that public funds will not be exploited for projects that lack thorough vetting. Hence, we repeat: there is a very slim chance that a Euro-2012-sized public funding would affect Ukraine's imports flow this year and in 2014-15, the remaining part of our three-year macroeconomic forecast.

### The changing face of merchandise exports

***Ukraine's exports are diversifying ...***

One of the long-term and positive trends that unfolded throughout 2012 was the further diversification of exports, as depicted in the below charts. While the domestic steel sector has been suffering a slowing trend in export prices as well as in demand, there were other sectors of the domestic economy—namely, the food, agribusiness<sup>21</sup>, and engineering<sup>22</sup> sectors—which, on the contrary, were enjoying robust demand from abroad.

***... from its past dominance of steel exports towards a more resilient and even mixture ...***

Thus, in the last 12-month period through November 2012, steel exports from Ukraine declined by 10.5% versus the same month a year ago, amounting to US\$19.5bn, or a 28.0% share of total exports. Yet at the beginning of 2012, the steel exports' share of total exports from Ukraine stood at 32.0%. Hence, a 2.0ppt decline took place in nearly one year, representing a sizable shift in the overall structure of exports. During the last 10-year period, this shift has been much more dramatic, at 12.4ppt (down from 40.4% in May 2002; see Chart 36 on page 35), and represents a tectonic change in Ukraine's exports.

At the same time, exports from the food and agribusiness sector have been on a steady rise for most of 2012, with its growth rate reaching 37.9% YoY in November, while the total volume of the last 12-month period amounted to US\$17.5bn, or a 25.2% share of total exports (in share terms, up 6.7ppt YTD in 2012, and up by 13.0ppt since May 2002).

<sup>20</sup> Like the decision to put the Korean-made high-speed trains on the local rails, which turned into a near disaster during the winter's freezing temperatures, when local commuters experienced being stopped in the middle of the country as a result of faulty equipment due to the extreme temperatures.

<sup>21</sup> These are the sectors of domestic economy that are accounted for in the country's exports statistics as Live animals, Animal products, Cereals and other plants, Animal or vegetable fats and oils, and Prepared foodstuffs.

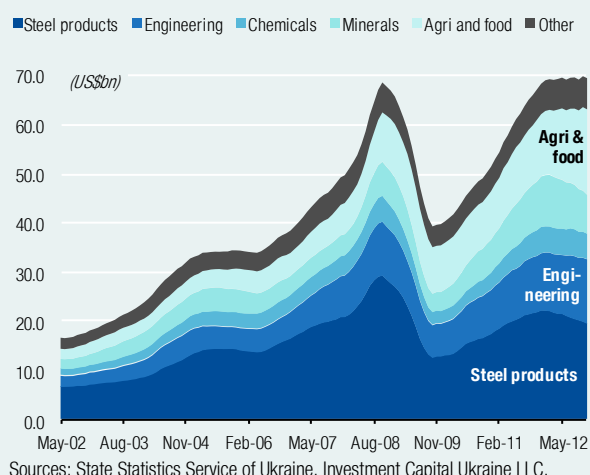
<sup>22</sup> These are the sectors of domestic economy that are accounted for in the country's exports statistics as Machinery and Transport vehicles.

**...of steel, agribusiness, and engineering exports, which together account for a 72% share of all exported goods**

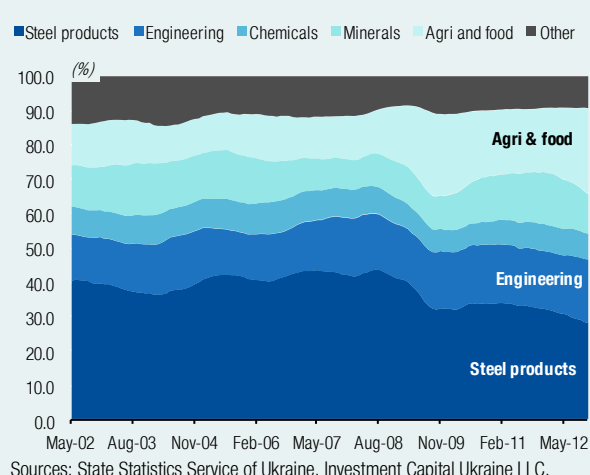
Similarly, engineering sector exports rose in 2012, and by 14.7% YoY in November alone. Albeit this was a slower growth pace than in 2011, it was nonetheless a quite remarkable growth rate, as the country's entire exports grew by 3.4% YoY in November. The share of this sector in total exports rose to 18.8%, up 1.8ppt from beginning of 2012 and +5.1ppt over past 10-year period. In USD volume terms, the engineering sector exports' size amounted to u\$13.0bn in November 2012.

**Chart 35. Evolution of breakdown of Ukraine's merchandise exports from May 2002 through November 2012**

*Last 12-month rolling volumes. Billions of US dollars*

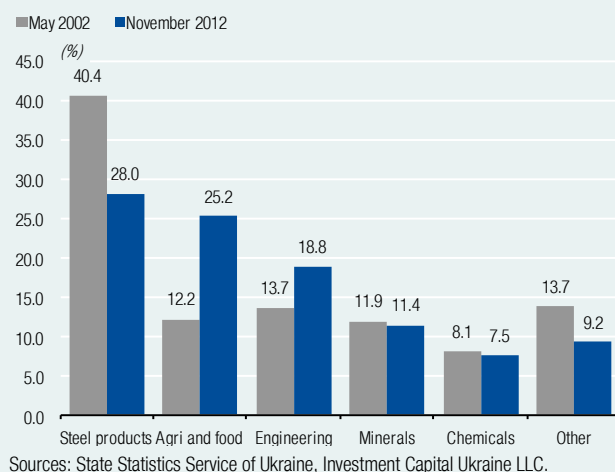


*Last 12-month rolling volumes. Percentage share of total*

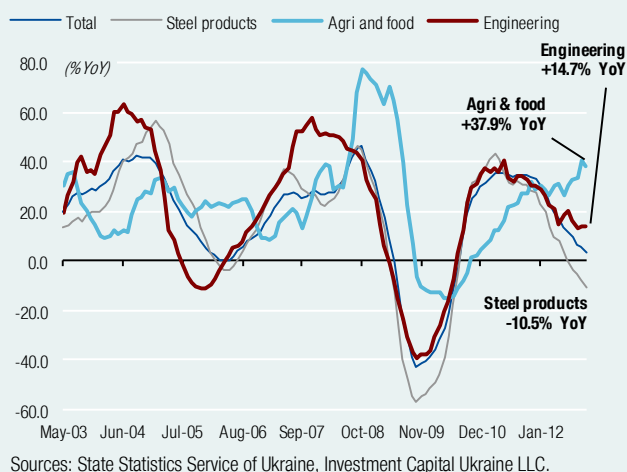


**Chart 36. Breakdown of Ukraine's merchandise exports: between May 2002 and November 2012 (% of total)**

*Last 12-month rolling volumes. Percentage share of total*



**Chart 37. Growth rates of key items of Ukraine's merchandise exports (% YoY)**



Hence, the key outcome of 2012 in terms of trade is that Ukraine succeeded in developing its industrial base and its competitiveness to such an extent that propelled its status from a steelmaking specialist towards a more diversified specialty, comprising food and agriculture and engineering with the steelmaking sector.

In 2013, the above-mentioned trend is set to soften, as steel exports are set to recover, albeit quite gradually, and cyclical downward pressure on global food prices may slow down the growth of agri-based exports. However, there are still three sectors that will significantly influence the size of the country's exports.

## Changing the face of merchandise imports

**Ukraine's imports side is more rigid by structure, ...**

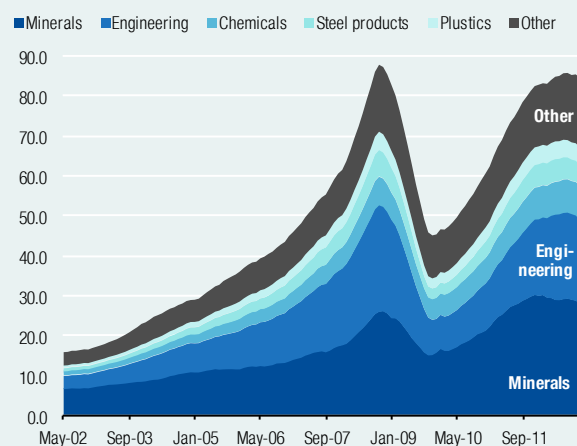
**... where energy and engineering imports dominate**

On the imports side, Ukraine's economy continues to be a sizable net-importer of minerals (mostly hydrocarbons), which accounted for US\$28.0bn, or a 33.1% share of total merchandise imports last November in LTM terms.

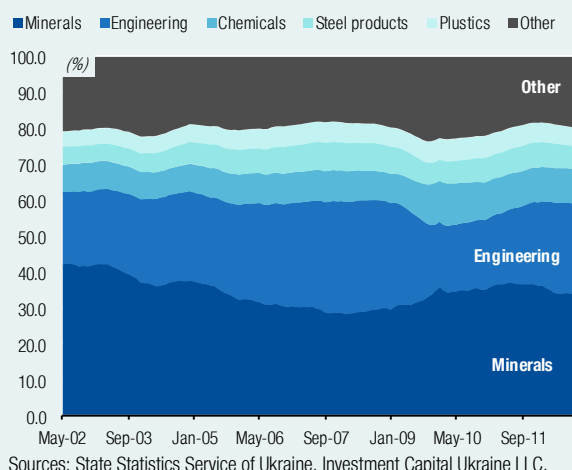
Another sizable part of imports, which reflects the pattern of domestic demand as well as the domestic need for capital stock modernisation, is engineering goods, which, similar to the exports side, comprise machinery and transport vehicles. This item accounted for US\$21.0bn, or a 24.8% share of the total imports of goods in November 2012.

**Chart 38. Evolution of breakdown of Ukraine's merchandise imports since May 2002 through November 2012**

*Last 12-month rolling volumes. Billions of US dollars*

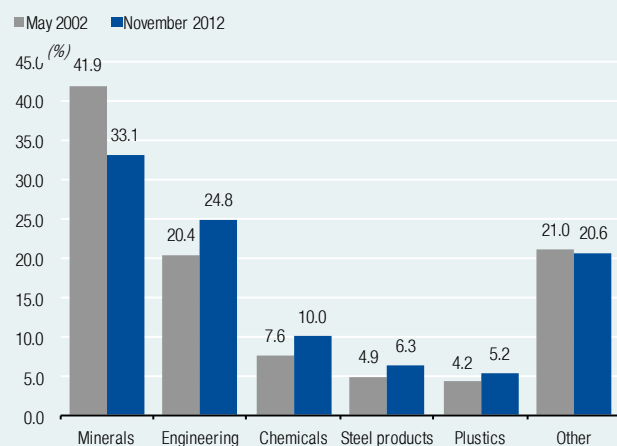


*Last 12-month rolling volumes. Percentage share of total*



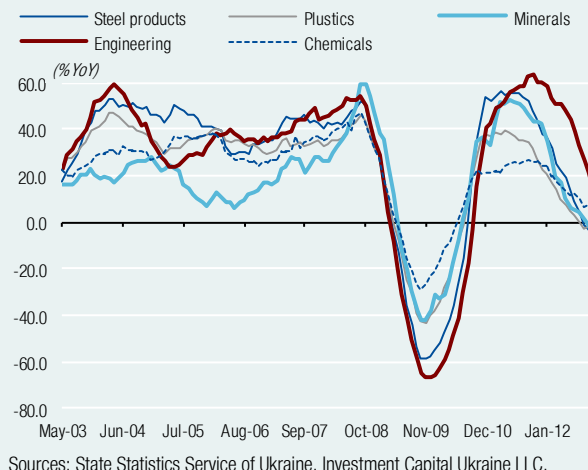
**Chart 39. Breakdown of Ukraine's merchandise imports: between May 2002 and November 2012 (% of total)**

*Last 12-month rolling volumes. Percentage share of total*



**Chart 40. Growth rates of key items of Ukraine's merchandise imports (% YoY)**

*Percentage change to previous year of the last 12-month rolling volumes*



Hence, these two sectors remain the key one in Ukraine's economy currently, accounting for a 57.9% share of the country's total trade, and only marginally down over the past 10 years by 4.4ppt, from a 62.2% share in May 2002 (see Chart 39 pp.36).

**The country's rigid imports structure is due to state subsidies to energy consumption**

In our view, such a rigid imports structure is the result of several factors, mostly the state protection of the public sector *en masse* from negative price shocks stemming from high energy prices. This is particularly true for natural gas imports and domestic consumption (unlike the oil products consumption arena, which is much more liberalised).

As the next set of charts shows, Ukraine's economy as a net importer of hydrocarbons has been experiencing a noticeable increase in import prices for natural gas, oil products, and crude oil. Since the last economic and financial crisis began at the end of 2008, the import price of natural gas rose by 25.1%. However, the physical volume of imports of natural gas declined just by 7.2%. This indicates how costly the state subsidy is for the domestic consumption of gas by households, and how painful this issue is in political terms for the authorities, who have tended to postpone the socially painful decision on increasing tariffs (see Chart 41-Chart 43, pp.37-38).

***In 2013, we expect that a gradual increase in the natural gas tariff will take place***

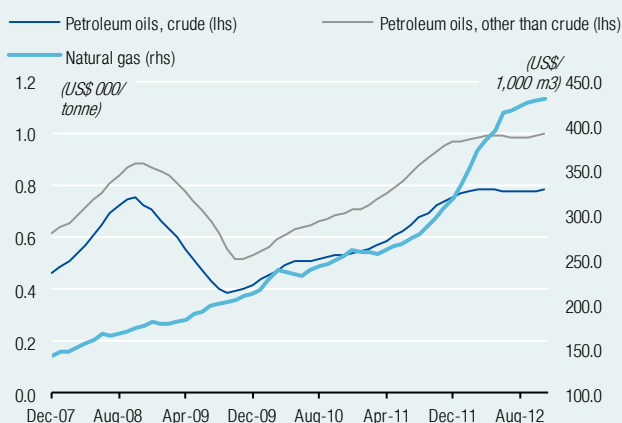
However, going forward, the issue of the sensitivity of the domestic consumption of natural gas to the increased import price is likely to be addressed, albeit gradually and via, as the IMF likes to call this sort of transition, a "socially-balanced programme." Our base-case scenario for our 2013-15 trade forecast envisages that authorities bow not only to IMF requirements, but also dare to take this path, ie, the "socially-balanced programme," in order to mitigate likely future costs of a sizable scale if the economy crumbles under the weight of too many unresolved issues (such as recession, deflation, subsidies on energy consumption by the public).

Hence, the growth rate of the country's minerals imports (depicted as a thick blue line in Chart 40 on page 36) should firmly bottom in 2013 due to the sluggish growth of the economy as a whole, and thanks to the substitution effect (especially in producing heating utilities) of coal for natural gas and somewhat higher efficiency of energy consumption as a result of higher prices paid by household consumers.

**Chart 41. Prices on imported hydrocarbons**

*LTM rolling volumes.*

*History from December 2008 through November 2012*

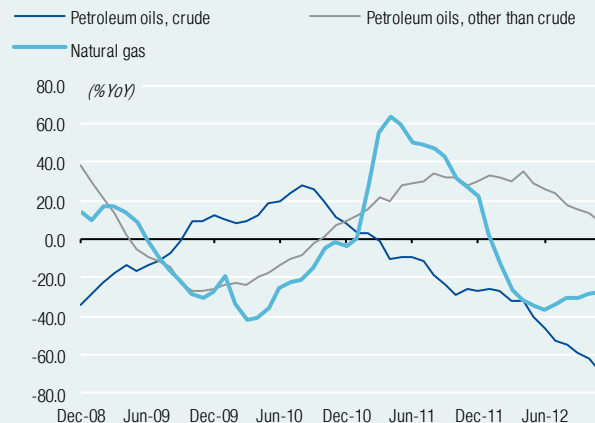


Source: State Statistics Service of Ukraine, Investment Capital Ukraine LLC.

**Chart 42. Growth of physical volume hydrocarbons imports (% YoY)**

*Percentage change vs. the previous year of LTM rolling volumes.*

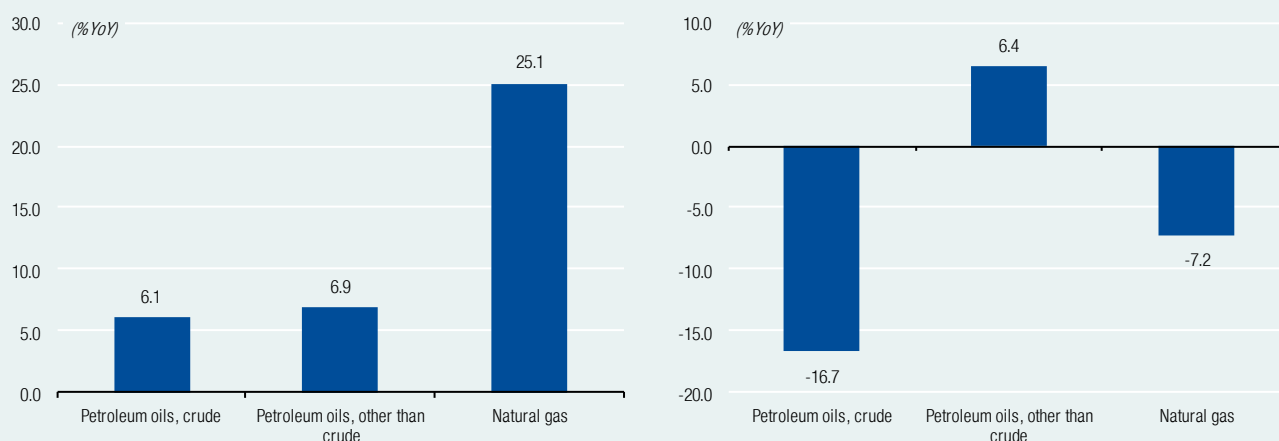
*History from December 2008 through November 2012*



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

**Chart 43. Average growth rate of hydrocarbon imports: prices (left) and physical volumes (right)**

Calculated upon the monthly data on growth rates from December 2008 through November 2012



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

## Trade deficit adjustment for Euro-2012

***In 2012, the trade deficit was deteriorating, but made a U-turn at the end of the year, ...***

***... which provided only a 0.2ppt YTD widening of the trade deficit***

***A 14% YoY increase in engineering imports was a key driver of the deficit widening,...***

***... in our view, this was due to Euro-2012 preparations***

In 2012, the merchandise trade deficit widened again to a quite dangerous level, reaching an intra-year peak of 9.6% of GDP in August, and then sliding to 8.8% in November. In the past year, the economy began with a merchandise trade deficit of 8.6% of GDP; hence, the deficit widened by 0.2ppt over the course of 2012.

The key factors in supporting the high deficit centre on the key components of imports: minerals and engineering items. These two had different growth rates, as for the entire year of 2012, the USD volume of minerals declined by 5.4% YoY in November, whereas engineering imports rose at a quite robust pace of 14.2% YoY. Indeed, the latter appeared to be the fastest-growing import item aside from other (non-classified) items, which added 14.8% YoY (see Chart 40, pp.36).

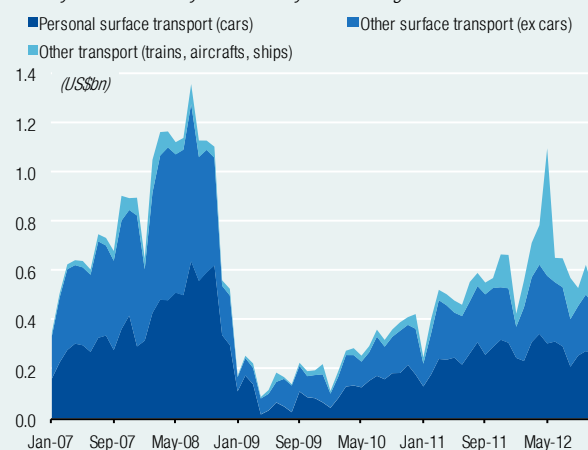
There are two items within the reported volume of engineering imports, namely, machinery and transport vehicles, which grew last November versus November 2011 by 6.5% and 30.4%, respectively. A more detailed analysis of the transport vehicles, which includes imports of Korea-, Germany- or Japan-manufactured cars (an indicator that closely mirrors the market for car leasing by banks), as well as imports of other means of transport, provides clues as to why such a fast rise was taking place. The fact of the matter is that, quite remarkably, imports of other means of transport (trains, air, and marine vessels) spiked in 2012 (see Chart 45, pp.39), reaching US\$1.8bn in the last 12 months through November, while in 2010 and in 2011, these imports were at US\$0.3bn and US\$0.8bn, respectively.

In our view, this spike was due to the preparations for Euro-2012, which took place in June, and was associated with the highly publicised launch of a high-speed train service that unites the country's capital with key cities that hosted the matches for the football tournament. The trains were imported from South Korea, and the service itself started shortly before the Euro-2012. Hence, it is likely that these imports of Korean trains were factored into trade statistics. Also, it is likely that other trade flows took place in 2012 that were primarily caused by the preparations for the Euro-2012.



**Chart 44. Breakdown of transport vehicles imports (US\$bn)**

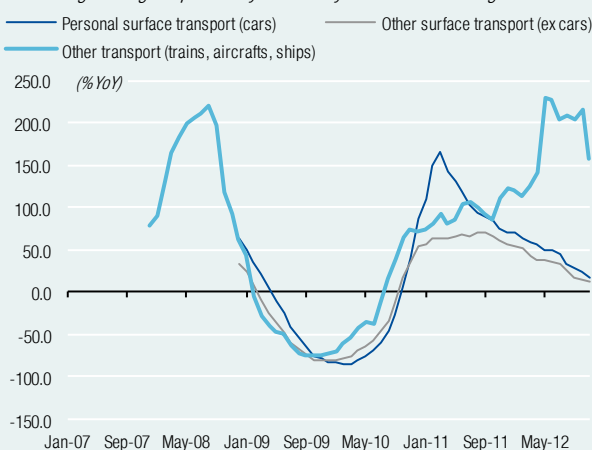
Monthly volumes. History from January 2007 through November 2012



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

**Chart 45. Growth rate of transport vehicles imports (% YoY)**

Percentage change to previous year. History from Jan-07 through Nov-12



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

**Adjusting the trade deficit in 2012 for the Euro-2012 yields a 0.4ppt improvement of deficit as a share of GDP**

The Euro-2012 was what we called earlier in this report a one-off factor, which influenced the country's entire trade flow. In our further analysis, we considered the item of transport vehicles, in which we assumed the period of 2010 to be mostly free from the Euro-2012 effect, and hence used its monthly average of imports of "other means of transport" as a kind of benchmark. Hence, the Euro-2012 factor that boosted this item of imports was assessed in USD terms as being in the range of US\$0.3bn in the early stages to US\$1.8bn at the peak. Subtracting this factor from the imports side, the adjusted trade balance of 2012 stood at 7.9% of GDP in November, versus the unadjusted trade balance of 8.8%<sup>23</sup>.

This implies that the adjusted trade deficit (free of the Euro-2012 impact) improved over 2012 by 0.4ppt, contrary to a 0.2ppt worsening in raw, unadjusted terms.

**The ex-minerals trade surplus was down 0.6ppt as a share of GDP in unadjusted terms, and flat in adjusted terms**

One of our preferred gauges of domestic demand conditions, which is derived from the foreign trade data, the ex-minerals trade balance, stood at a 2.8% of GDP surplus in November 2012, down 0.6ppt from beginning of the year. In adjusted terms, it remained flat, at a 3.7% of GDP surplus, albeit touching a 2.6% low in June.

These two relative comparisons of overall trade balance and ex-mineral balance in adjusted and unadjusted terms underscores that Ukraine's economy weathered 2012 without a noticeable deterioration in deficit, which by any standard, still remains sizable. The fact that both deficits (adjusted and unadjusted) touched their lows at mid-year and then trended lower indicates in our view that: 1) the Euro-2012 factor, which had an official life span of one month, phased out; and 2) that the tight monetary policy of 2H12 was directed at mitigating the increased risk premium attached to the UAH due to deteriorated trust in the financial market and business community in the *de-facto* pegged exchange-rate regime.

<sup>23</sup> Foreign-trade data for December 2012 showed that the unadjusted deficit widened to 9.4% of GDP, while the adjusted deficit rose to 8.5%.

**Chart 46. Assessing the Euro-2012 impact on the trade balance: ex-minerals trade balance (left) and total trade balance (right) History from January 2002 through December 2012**



## Balance of payments assessment for the 2013-15 period

Our assessment of the balance of payments for the 2013-15 period (see Table 4, pp.42) is based on the assumptions that shape our base-case scenario for Ukraine's economy in the next three-year period (see "Yearly forecast for 2013-15, base-case scenario", pp. 46).

**The current account balance is to remain in the deficit zone in 2013-15, albeit with the deficit contracting**

Our analysis incorporates the official forecast on the current account balance, which is to remain in the red, at nearly US\$12.7bn (7.4% of GDP) in 2013, contracting to deficits of US\$11.3bn (5.9%) and US\$9.4bn (4.4%) in 2014-15, respectively. A slow recovery in steel exports will be mitigated by a rise in agri-based exports. At the same time, energy import prices are set to remain elevated (in particular, on natural gas, see Chart 61 on page 56). Inflows of FDI will remain subdued, at near US\$7bn in 2013. FDI inflows are to increase marginally, to US\$7.7bn and US\$8.6 in 2014 and 2015, respectively.

While the domestic banking sector shrinks, the economy's external borrowings are to remain a vital source of financing; hence, debt flows are to rise further. This explains why the entire economy will face rising refinancing needs in 2013-15. Relations with key lenders are vital.

**The IMF programme starts in 2013, in which the NBU will receive a total of XDR7bn into its FX reserves**

Thus, it is assumed that Ukraine will strike a deal with the IMF in 2Q13, receiving a total of XDR7.0bn in 2013-14 (all tranches will go into the central bank's books, not the government's) under the new programme. Meanwhile, there is little chance that Ukraine's authorities will tap official Russian financial assistance (via VTB Bank), as they have been refraining from the political liabilities that are usually attached to such assistance.

**Sovereign Eurobond issuance is to decline from US\$4.9bn in 2012 to US\$4bn/yr in 2013 and to US\$3bn/yr in 2014-15, as Ukraine will provide high yields to investors**

Eurobond market access is likely to be open for Ukraine's government and state-run entities, as well as to private ones, in the 2013-15 period (despite the 2014 break in the reformist mood of authorities due to presidential elections). This is especially true in 2013 thanks to abundant international liquidity created by the central banks of leading industrialised economies. Hence, the government is set to issue US\$4bn of Eurobonds in 2013 and then US\$3bn each year in 2014-15 (note that it borrowed US\$4.85bn in 2012), effectively refinancing all the sovereign bonds due in this period.

During the forecasted period, the domestic bond market will provide the government with the ability to refinance its USD- and EUR-denominated bonds issued in the recent past. However, authorities will reduce gross borrowing of these securities on the back of the continued policy efforts towards de-dollarization of the economy. In our view, the annual

gross volume of issuance of these bonds is set to amount to US\$2.5bn in 2013, and then US\$1bn in 2014-15.

***State-run banks and top private banks are to tap Eurobond market beginning in 2014***

Banks are returning to the Eurobond market starting this year, and we believe that only state-run banks will be courted by investors. This would imply that private-sector banks<sup>24</sup> of poor credit quality will not roll over their Eurobonds in 2014-15; instead, it would be state-run banks and top private-sector banks that will issue Eurobonds. Hence, in total, the banking sector Eurobonds due will be refinanced in 2014-15 with 100% and 120% rollover ratios, respectively (in 2013, we expect a total of US\$1.0bn Eurobond issuance by state-run banks).

***The corporate sector is to borrow more from the Eurobond market, while lowering its rollover ratio for other types of borrowings***

Domestic corporations, including the state-run ones, are to borrow from the Eurobond market. In 2013, this borrowing is to amount to US\$3.0bn, including a new bond of US\$0.5-0.7bn size by a state-run entity, Financing of Infrastructural Projects<sup>25</sup>. In 2014-15, we assigned a 150% rollover ratio to corporate Eurobonds due in these years. Regarding other types of corporate external debt (loans, trade loans, other), we assumed that in 2013 the roll over ratio, which was at 135% in 2012 according to our estimations, will subside to 115% and then lowering to 107% in each year of 2014 and 2015.

***We see a FX reserves recovery in 2014 and developments in 2015 that should keep reserve the import coverage ratio at 3 months***

Effectively, as our calculations show, we expect Ukraine's FX reserves to be nearly flat by the end of 2013 at 14.4% of GDP with 2.8 months of import coverage. In 2014, we expect to see a US\$1.3bn increase of FX reserves and expect FX reserve's relative metrics to slide to 13.7% of GDP, while retaining 2.9 months of import coverage. We expect a marginal build-up of FX reserves of US\$1.6bn in 2015, and import coverage to rise to 3.0 months.

<sup>24</sup> This group includes Finance and Credit Bank, VAB Bank, Nadra Bank.

<sup>25</sup> Bloomberg code: UKRINF.

**Table 4. ICU's assessment of Ukraine's economy balance of payments in 2013-15 and its external financial needs (US\$m)**

Balance of payments	Forecast period				Roll-over ratios				Comments to rollover ratios
	2012E	2013	2014	2015	2012	2013	2014	2015	
<b>Current account balance</b>	<b>-14,407</b>	<b>-12,669</b>	<b>-11,271</b>	<b>-9,433</b>					
<b>ST debt due next 12M<sup>1</sup></b>	<b>-55,799</b>	<b>-60,734</b>	<b>-69,339</b>	<b>-70,742</b>					
<b>Government</b>									
Official lenders (IMF)	-772	-2,618	-2,607	-761	0%	0%	0%	0%	Government pays back to IMF, no new borrowings
Russian banks (VTB)	-2,000	0	0	0	0%	0%	0%	0%	No new borrowings
Eurobonds	-500	-1,000	-1,000	-500	970%	300%	300%	600%	MoF issues Eurobonds each year, net borrowings positive
Dom.bonds <sup>2</sup> in foreign ccy	-595	-1,918	-293	-603	515%	130%	341%	166%	Gross issuance in '13 is US\$2.5bn, US\$1bn/yr in '14-15
Other	245	0	0	0	133%	0%	0%	0%	All-time avg roll-over ratio for authorities (BoP monthly data)
<b>Central bank</b>									
Official lenders (IMF)	-2,670	-3,256	-1,073	-487	0%	142%	573%	0%	IMF programme starts in 2Q13 and amounts to XDR7bn
Other	-21	0	0	1	0%	0%	0%	0%	ICU assumption
<b>Banks</b>									
Eurobonds	-1,106	-15	-479	-969	0%	6705%	100%	120%	State-run banks' issuance provide the rollover of debt due
Other lenders	-11,796	-7,432	-6,574	-5,738	70%	75%	80%	85%	European banks continue withdrawing, albeit at lower pace
<b>Corporations</b>									
Eurobonds	-225	0	-1,645	-1,785	244%	N/M*	150%	150%	Gross issuance US\$3.0bn in '13, including UKRINF US\$0.7bn
Loans	-10,691	-13,084	-15,850	-17,601	135%	119%	104%	104%	Corporations as a whole to lower their roll over ratios
Trade loans	-17,579	-21,513	-26,061	-28,941	135%	119%	104%	104%	The same as above
Other	-8,089	-9,899	-11,992	-13,317	135%	119%	104%	104%	The same as above
Demand for foreign ccy, net	-9,676	-5,514	-3,676	-3,676					
<b>Total financing needs<sup>4</sup></b>	<b>-79,882</b>	<b>-78,917</b>	<b>-82,520</b>	<b>-83,811</b>					
FDI, net	7,045	6,959	7,696	8,557					ICU forecast for the period
<b>Borrowings</b>									
Government	7,585	6,500	4,000	4,000					ICU calculations based on debt due this year and roll-over ratios
Central bank	0	4,610	6,146	0					ICU calculations based on debt due this year and roll-over ratios
Banks	8,258	6,574	5,738	6,040					ICU calculations based on debt due this year and roll-over ratios
Corporations	49,746	54,236	60,230	66,823					ICU calculations based on debt due this year and roll-over ratios
<b>Total financing<sup>5</sup></b>	<b>72,633</b>	<b>78,879</b>	<b>83,810</b>	<b>85,421</b>					
<b>FX reserves change</b>	<b>-7,248</b>	<b>-38</b>	<b>+1,290</b>	<b>+1,610</b>					
<b>FX RESERVES</b>									
At the start of year	31,795	24,546	24,508	25,798					
At the end of year	24,546	24,508	25,798	27,408					
Change (%YoY)	-22.8	-0.2	5.3	6.2					
<b>FX reserves (% of GDP)</b>									
At the start of year	18.3	14.2	14.4	13.7					
At the end of year	14.2	14.4	13.7	12.9					
Change (ppt)	-4.2	0.2	-0.6	-0.8					
<b>FX reserves imports coverage (months)</b>									
At the start of year	3.7	2.8	2.8	2.9					
At the end of year	2.8	2.8	2.9	3.0					
Change (months)	-0.8	0.0	0.0	0.1					

Notes: [1] Short-term debt due in next 12 month period since beginning of the respective year; [2] domestically issued bonds denominated in foreign currencies (USD and EUR), including USD-denominated Treasury Obligations; [3] N/M – not meaningful, this is because the rollover ratio cannot be applied to a volume that equals to zero, in fact we assume that Ukraine's corporations are to issue US\$3.0bn of Eurobonds in 2013, this figure is taking into account in the row of corporate borrowings for 2013;

[4] total financing needs equals to the sum of current account balance, short-term debt due next 12 months and demand for foreign currency by households;

[5] total financing equals to the sum of FDI and borrowings by all segments of the economy (government, central bank, banks and corporations);

[6] latest historical data is used to derived corporate borrowings roll-over, which was 132.3% in November 2012, then it adjusted down in each year of 2013-15 period by a factor of 95%, 84% and 78% respectively.

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

## View on UAH: Internal devaluation since 2H12

***We forecast the UAH weakening to 8.75/USD at year-end 2013***

Our base-case scenario assumes that USD/UAH rate weakens from current spot rate of 8.14/USD to 8.75/USD at year-end 2013 and the yearly-average rate in 2013 is 8.58/USD. Then, in year average terms UAH slides to 8.71/USD in 2014 and gains back to an 8.63/USD yearly-average rate in 2015.

Below we provide our rationale behind this forecast.

### Macroeconomic conditions

***Recession, sizable current account deficit spell future weakness of UAH***

From the macroeconomic point of view, an economy in a recession and running sizable external deficit has to (and generally does) welcome a weaker nominal exchange rate of national currency to gain more of external competitiveness *vis-à-vis* its trading partners and eventually to boost output thanks to better exports. Ukraine does fit well into this definition by the first two parameters: it entered a double-dip recession in 4Q12, and its current account deficit is estimated at near 8% of GDP. Our forecast for 2013 shows that reasonable growth rate returns in the 2H of the year and yet current account deficit, albeit narrowing, remains large, at 7% of GDP. Hence, the financial market's short-term expectations are for a weaker currency over 2013. As Ukraine's authorities are preparing to strike a deal with IMF on financial assistance (expectedly in the end of 1Q13 to receive the first tranche in the 2Q13), they are to allow more flexibility into the USD/UAH exchange rate.

Hence, standing at the doorsteps of 2013, hryvnia has much more chance to go weaker than stronger over next six- to nine-month period. In our view, authorities would resist sizable devaluation of UAH due to, first of all, high fiscal cost it would create.

### ICU's trade-weighted indices

***ICU's real trade-weighted indices for the hryvnia have been on a declining trend in 2H12 and in early 2013,...***

We pay a great deal of attention to the reading the UAH's real trade-weighted indices, which are calculated according to ICU's methodology (see "Methodology: UAH trade-weighted index (update)" on pp.89 and Chart 49-Chart 52 on pp.45). They capture the exchange rates and price dynamics (via CPI and PPI) of Ukraine in relation to its main trade partners. Alongside the historical data series of the indices, there are forecasted series for the 2013-15 period. The latter are built upon ICU's forecast for Ukraine's inflation and the UAH's future exchange rate and the IMF's inflation forecast and the NDF markets' view on exchange rates on the countries that are the main trading partners with Ukraine (see Chart 47 and Chart 48 on pp.44).

***...this is what is called internal devaluation***

The indices' path in 2H12 indicates that Ukraine's economy underwent a short period of internal devaluation (depicted in Chart 47 by declining trade-weighted indices of the UAH). Indeed, the domestic economy was experiencing disinflation during most of 2012 (which caused consumer price deflation at the year-end), while the main trading partners saw higher inflation. Moreover, domestic monetary conditions were too tight to stem devaluation pressure on the pegged UAH from the financial market – this was also in contrary to a widespread usage globally of the weaker national currency as a tool to bolster the national economy.

Hence, this short period of internal devaluation has caused a weakening of the UAH not via its nominal exchange rate (on the spot FX market), but via a weakening of its real trade-weighted value.

**Over 2013-15, the UAH's FX rate will converge with its values implied by ICU's TWIs**

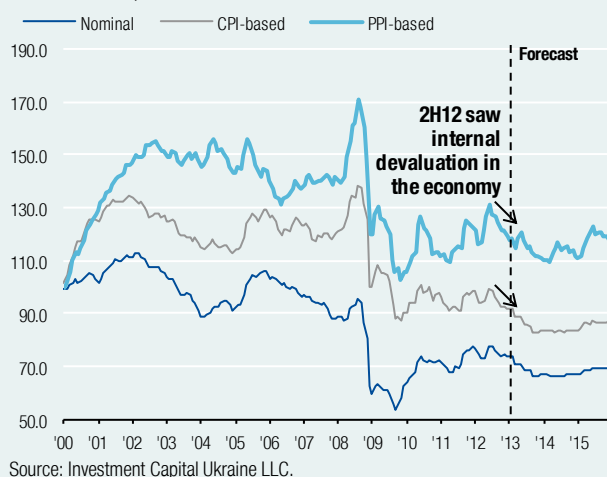
Taking into account the above, we think that past period of sizable deviation of the USD/UAH spot market rate from the rates implied by ICU's real TWIs is going to be phased out gradually over 2013-15. The period of 2009-12 saw a wide gap between the two being narrowed, but not completely eliminated. This may likely take place in 2015, in our view, when the USD/UAH spot rate will be in line with its trade-weighted values.

A contrary argument that this outcome is not assured going forward, and that in the future, these two (the UAH's spot rate and its rates implied by trade-weighted values) have fairly good chances to repeat the very recent period, when they were sizably apart from each other. These arguments are indeed valid, but not probable.

In our view, what is probable is that Ukraine's economic policymaking will be concentrated to minimise any wasting of the fiscal capacity of the government (a strong currency policy, surely in relative terms, is part of this approach). This is especially true, as President Yanukovich is quite serious about making his re-election in March 2015 happen.

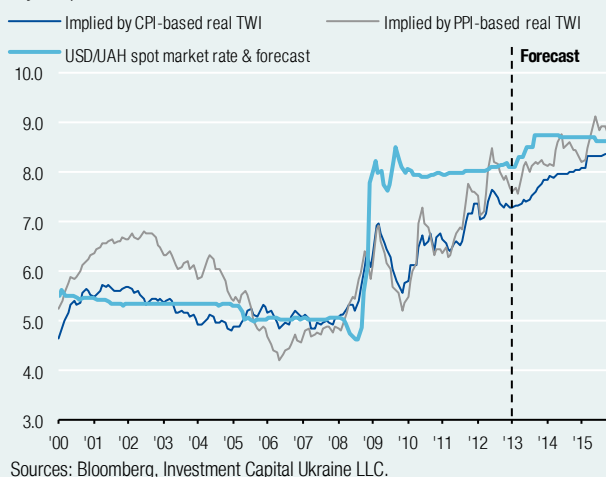
**Chart 47. ICU's UAH trade-weighted indices: The 2000-12 history and the 2013-15 forecast**

*Rebased at 100 points on December 1999*



**Chart 48. UAH's exchange rate forecast against the exchange rates implied by ICU's UAH real TWIs (CPI- and PPI-based)**

*Hryvnia per US dollar*



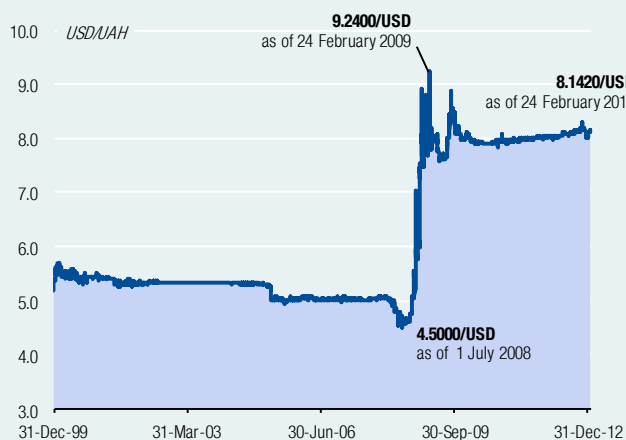
## ICU's PPP observations

We also employ a PPP (purchasing power parity) approach to assessing the relative value of ICU's consumer basket, which consists of basic consumer goods and services, in three cities: Kiev, New York, and Moscow. See "ICU consumer basket: Observation of Kiev, New-York and Moscow prices" on pp.86-88. Our observation made in January 2013 yielded a US dollar value of the basket of US\$39.47 (down 2.7% YoY), US\$58.93 (up 11.8% YoY), and US\$49.80 (up 14.4% YoY), respectively. Kiev's value in the basket has been the lowest compared with the other two. This has been a constant feature of our observation since its inception in February 2010, underlining that Ukraine's consumer demand is much weaker than in these two other countries. Moreover, it is weak in general, as shown in the appendix, "Ukraine household consumption: Relative comparisons" on page 85. Ukraine's economy has been a rare example globally, in which the households' downshift in consumption from the pre-2008 period has been one of the most severe ones. This evidence plays in favour of the relatively strong exchange rate policy by the NBU in the 2013-15 period of forecast.



**Chart 49. UAH exchange rate per USD set by the market**

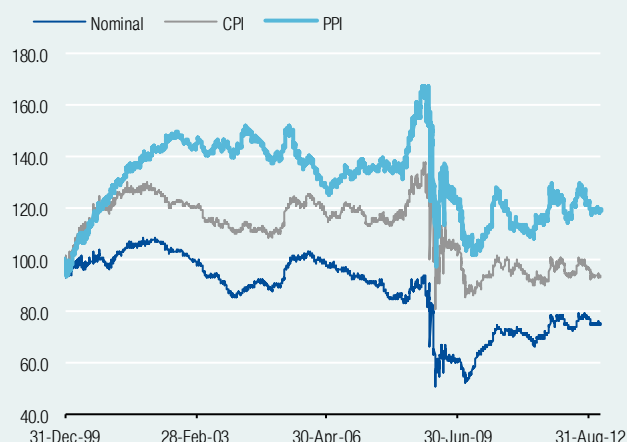
Daily history since 31 December 1999 through 24 February 2013



Sources: Bloomberg, Investment Capital Ukraine LLC.

**Chart 50. UAH nominal and CPI- and PPI-based real trade-weighted indices (TWIs), rebased at 100 points on 31 Dec 1999**

Daily history since 31 December 1999 through 24 February 2013



Source: Investment Capital Ukraine LLC.

**Chart 51. UAH TWIs misalignment to their 5yr and 10yr averages.** Daily history since 6 January 2005 through 24 February 2013

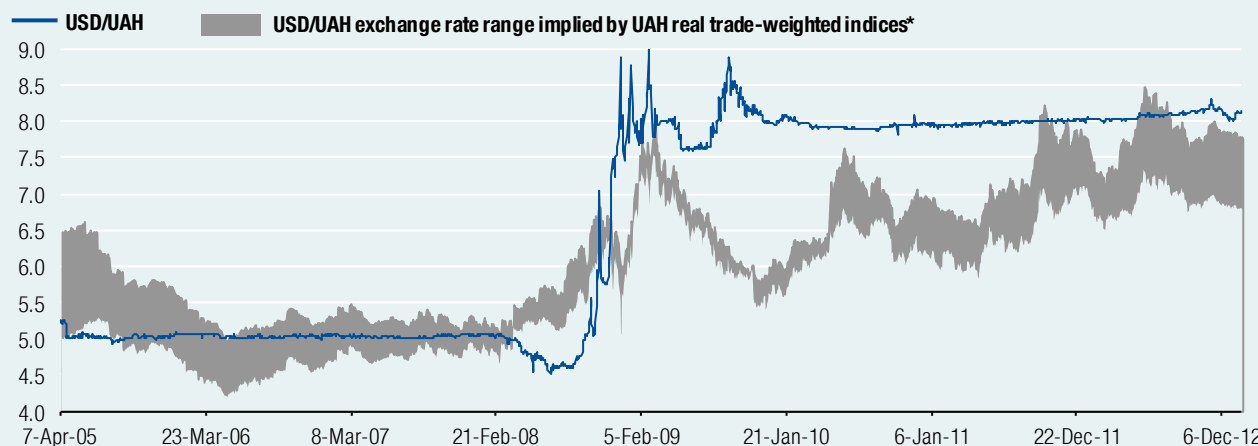
UAH's TWIs less their 5-year rolling averages



UAH's TWIs less their 10-year rolling averages\*



Note: Data on 10-year rolling averages is available starting from 3 January 2005. Sources: Investment Capital Ukraine LLC.

**Chart 52. USD/UAH exchange rate vs. the range of real-TWI-implied rates.** Daily history since 6 January 2005 through 24 February 2013

Note: \* The USD/UAH rate implied by UAH's real TWI is calculated by multiplying UAH/USD market exchange rate by the ratio of misalignment between the real TWI and its 5-year and 10-year long-term averages. The calculation is based on the four series of TWIs: CPI- and PPI based indices and their misalignment with 5-year and 10-year rolling averages of these indices. The grey-coloured area represents the range of exchange rates implied by real TWIs, where the daily high point is the highest implied rate out of the four series and similarly the daily low point is the lowest implied rate out of the four series. Source: State Statistics Service of Ukraine, Investment Capital Ukraine LLC.

## Yearly forecast for 2013-15, base-case scenario

Table 5. Forecast of key macroeconomic indicators for 2013-15 (annual)

	Historical data for 2003-12										Forecast by ICU		
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012E	2013F	2014F	2015F
Activity													
Real GDP (%YoY)	9.6	12.1	2.7	7.3	7.9	2.3	-14.8	4.1	5.2	0.2	1.7	4.0	4.2
Nominal GDP (UAHbn)	267	345	441	544	721	948	913	1,083	1,317	1,399	1,465	1,635	1,827
Nominal GDP (US\$bn)	50	65	87	108	143	184	114	136	165	173	171	188	212
GDP per capita (US\$, ann)	1,044	1,371	1,850	2,319	3,091	3,982	2,474	2,977	3,613	3,805	3,749	4,127	4,660
Unemployment rate (%)	9.1	8.6	7.2	6.2	6.4	6.4	8.8	8.1	7.9	8.4	8.0	7.8	7.8
Prices													
CPI headline (%YoY, eop)	8.2	12.3	10.3	11.6	16.6	22.3	12.3	9.1	4.6	-0.2	5.5	5.4	5.4
CPI headline (%YoY, average)	5.2	9.0	13.6	9.1	12.8	25.3	16.0	9.4	8.0	0.6	2.2	5.9	5.4
PPI (%YoY, eop)	11.2	24.3	9.6	15.4	23.2	21.1	15.3	18.8	17.4	0.4	6.2	7.4	7.4
PPI (%YoY, average)	7.8	20.3	17.0	9.6	20.5	33.6	7.4	21.4	19.9	6.0	1.2	6.9	7.4
Fiscal balance													
Consolidated budget bal. (UAHbn)	-0.5	-9.9	-7.5	-3.5	-6.1	-11.3	-34.4	-63.3	-18.3	-39.5	-40.1	-39.5	-31.2
Consolidated budget bal. (% of GDP)	-0.2	-2.9	-1.7	-0.6	-0.8	-1.2	-3.8	-5.9	-1.4	-2.8	-2.7	-2.4	-1.7
Budget balance (UAHbn)	-1.0	-10.2	-7.9	-3.8	-9.8	-12.5	-35.5	-64.3	-23.6	-44.0	-37.6	-37.8	-32.2
Budget balance (% of GDP)	-0.4	-3.0	-1.8	-0.7	-1.4	-1.3	-3.9	-5.9	-1.8	-3.1	-2.6	-2.3	-1.8
External balance													
Exports (US\$bn)	29.0	41.3	44.4	50.2	64.0	85.6	54.3	69.3	88.8	89.4	91.0	96.7	101.7
Imports (US\$bn)	27.7	36.3	43.7	53.3	72.2	100.0	56.2	73.2	99.0	103.8	103.4	107.7	110.8
Trade balance (US\$bn)	1.3	5.0	0.7	-3.1	-8.2	-14.4	-2.0	-4.0	-10.2	-14.3	-12.4	-11.0	-9.1
Trade balance (% of GDP)	2.6	7.7	0.8	-2.8	-5.7	-7.8	-1.7	-2.9	-6.2	-8.3	-7.3	-5.9	-4.3
Current account balance (US\$bn)	2.9	6.9	2.5	-1.6	-5.3	-12.8	-1.7	-3.0	-10.2	-14.4	-12.7	-11.3	-9.4
Current account balance (% of GDP)	5.8	10.6	2.9	-1.5	-3.7	-6.9	-1.5	-2.2	-6.2	-8.3	-7.4	-6.0	-4.5
Net FDI (US\$bn)	1.4	1.7	7.5	5.7	9.2	9.9	4.7	5.8	7.0	7.0	7.0	7.7	8.6
Net FDI (% of GDP)	2.8	2.6	8.7	5.3	6.4	5.4	4.1	4.2	4.3	4.1	4.1	4.1	4.0
C/A bal. + net FDI (% of GDP)	8.6	13.3	11.6	3.8	2.8	-1.6	2.6	2.0	-2.0	-4.2	-3.3	-1.9	-0.4
External debt (US\$bn, eop)	23.8	30.6	39.6	54.5	80.0	101.7	103.4	117.3	126.2	134.2	134.9	135.6	126.3
External debt (% of ann'd GDP, eop)	47.5	47.2	45.6	50.4	55.8	55.3	90.9	86.1	76.5	77.4	78.7	72.2	59.6
FX reserves (US\$bn, eop)	6.9	9.5	19.4	22.3	32.5	31.5	26.5	34.6	31.8	24.5	24.5	25.8	27.4
FX reserves (% of ann'd GDP, eop)	13.8	14.7	22.3	20.6	22.6	17.2	23.3	25.4	19.3	14.2	14.4	13.7	12.9
External debt / FX reserves (x, eop)	3.4	3.2	2.0	2.4	2.5	3.2	3.9	3.4	4.0	5.5	5.5	5.3	4.6
FX reserves imports cov (months)	3.6	3.8	6.4	6.1	6.4	4.5	7.1	6.8	4.5	2.8	2.8	2.9	3.0
Interest rates													
Central bank key rate (% eop)	7.00	9.00	9.50	8.50	8.00	12.00	10.25	7.75	7.75	7.50	7.00	7.00	7.00
3-month rate (% eop 4Q)	17.91	15.03	11.46	9.90	7.58	21.60	17.59	6.12	19.72	25.52	15.00	10.00	10.00
Exchange rates													
UAH trade-weighted index (nominal)	90.78	91.29	105.76	96.33	88.22	62.35	62.62	72.39	77.27	73.96	66.85	66.80	69.24
UAH trade-weighted index (real)	116.76	112.78	129.21	123.61	120.06	100.21	90.26	97.73	98.76	91.99	83.29	83.39	86.67
UAH/US\$ (eop)	5.33	5.31	5.05	5.05	5.05	7.80	8.00	7.97	8.00	8.08	8.75	8.70	8.60
UAH/US\$ (average)	5.33	5.32	5.10	5.03	5.03	5.25	8.03	7.95	8.32	8.07	8.58	8.71	8.63
UAH/€ (eop)	5.60	6.71	7.20	5.97	6.66	7.36	10.90	11.45	10.66	10.61	11.38	11.75	11.61
UAH/€ (average)	6.04	6.62	6.35	6.32	6.89	7.67	11.19	10.54	11.15	10.45	11.38	11.76	11.64
US\$/€ (eop)	1.26	1.36	1.18	1.32	1.46	1.40	1.43	1.34	1.30	1.31	1.30	1.35	1.35
US\$/€ (average)	1.13	1.24	1.24	1.26	1.37	1.47	1.39	1.33	1.34	1.29	1.33	1.35	1.35
Population													
Population (million, eop)	48.0	47.3	47.0	46.6	46.4	46.1	46.0	45.8	45.6	45.5	45.5	45.5	45.5
Population (%YoY)	-0.9	-1.4	-0.8	-0.7	-0.6	-0.5	-0.4	-0.4	-0.3	-0.2	-0.1	-0.1	0.1

Notes: eop – end of period; cov – coverage; con'd – consolidated; ann – annualised.

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

## Quarterly forecast for 2013-15, base-case scenario

Table 6. Forecast of key macroeconomic indicators for 2013-15 (quarterly)

		Quarterly forecast by ICU											
	4Q12E	1Q13F	2Q13F	3Q13F	4Q13F	1Q14F	2Q14F	3Q14F	4Q14F	1Q15F	2Q15F	3Q15F	4Q15F
Activity													
Real GDP (%YoY)	-2.7	1.0	1.0	2.5	2.5	3.0	3.5	4.5	5.0	3.5	4.0	4.5	4.8
Nominal GDP (UAHbn)	358.6	305.2	357.8	413.7	388.4	336.7	397.1	463.7	437.1	373.8	442.9	519.5	491.0
Nominal GDP (US\$bn)	44.2	36.8	42.1	47.3	44.4	38.5	45.6	53.3	50.2	43.0	51.5	60.4	57.1
GDP per capita (US\$, ann)	3,804	3,800	3,766	3,741	3,747	3,785	3,864	3,997	4,126	4,224	4,352	4,508	4,658
Unemployment rate (%)	8.4	8.4	8.4	8.2	8.0	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8
Prices													
CPI headline (%YoY, eop)	-0.2	0.3	1.9	3.1	5.5	6.1	6.1	5.7	5.4	5.4	5.4	5.4	5.4
CPI headline (%YoY, average)	-0.1	0.1	1.4	2.6	4.8	6.1	6.1	6.0	5.5	5.4	5.4	5.4	5.4
PPI (%YoY, eop)	0.4	0.8	-2.2	1.5	6.2	6.5	6.8	7.1	7.4	7.4	7.4	7.4	7.4
PPI (%YoY, average)	0.3	1.3	-2.2	1.3	4.6	6.4	6.7	7.0	7.3	7.4	7.4	7.4	7.4
Fiscal balance													
Consolidated budget bal. (UAHbn)	-21.7	5.0	-6.3	-5.8	-33.0	5.3	-6.4	-4.5	-33.9	7.5	-4.4	-1.4	-33.0
Consolidated budget bal. (% of GDP)	-6.1	1.6	-1.7	-1.4	-8.5	1.6	-1.6	-1.0	-7.8	2.0	-1.0	-0.3	-6.7
Budget balance (UAHbn)	-19.6	2.4	-6.4	-6.2	-27.4	2.6	-6.7	-5.4	-28.3	4.1	-5.4	-3.2	-27.8
Budget balance (% of GDP)	-5.5	0.8	-1.8	-1.5	-7.0	0.8	-1.7	-1.2	-6.5	1.1	-1.2	-0.6	-5.7
External balance													
Exports (US\$bn)	22.6	20.8	21.9	23.7	24.6	22.7	23.8	24.6	25.6	24.2	25.1	25.7	26.7
Imports (US\$bn)	26.9	25.5	24.7	25.1	28.1	26.3	25.7	26.4	29.4	27.1	26.6	27.1	30.0
Trade balance (US\$bn)	-4.3	-4.7	-2.9	-1.4	-3.4	-3.5	-1.9	-1.7	-3.8	-2.9	-1.5	-1.4	-3.3
Trade balance (% of GDP)	-9.7	-12.9	-6.8	-2.9	-7.7	-9.2	-4.3	-3.2	-7.6	-6.7	-2.9	-2.3	-5.9
Current account balance (US\$bn)	-4.4	-4.5	-2.7	-1.9	-3.6	-3.4	-1.9	-2.0	-3.9	-2.9	-1.5	-1.6	-3.4
Current account balance (% of GDP)	-10.0	-12.3	-6.4	-4.0	-8.0	-8.9	-4.2	-3.8	-7.8	-6.7	-2.9	-2.7	-6.0
Net FDI (US\$bn)	2.1	1.8	1.4	2.0	1.7	1.9	1.7	2.1	2.0	2.1	2.0	2.2	2.2
Net FDI (% of GDP)	4.8	4.9	3.4	4.2	3.9	5.0	3.8	3.9	3.9	4.9	3.9	3.7	3.9
C/A bal. + net FDI (% of GDP)	-5.2	-7.3	-3.0	0.2	-4.2	-3.9	-0.4	0.0	-3.9	-1.8	1.0	1.0	-2.1
External debt (US\$bn, eop)	134.2	134.0	132.8	133.2	134.9	134.9	135.3	134.2	135.6	126.9	125.1	124.8	126.3
External debt (% of ann'd GDP, eop)	77.4	77.0	77.0	77.8	78.7	78.3	77.0	73.8	72.2	66.0	63.2	60.8	59.6
FX reserves (US\$bn, eop)	24.5	24.5	24.5	24.5	24.5	24.8	25.2	25.5	25.8	26.2	26.6	27.0	27.4
FX reserves (% of ann'd GDP, eop)	14.2	14.2	14.3	14.4	14.4	14.4	14.3	14.0	13.7	13.6	13.4	13.2	12.9
External debt / FX reserves (x, eop)	5.5	5.5	5.4	5.4	5.5	5.4	5.4	5.3	5.3	4.8	4.7	4.6	4.6
FX reserves imports cov (months)	2.8	2.8	2.8	2.9	2.8	2.9	2.9	2.9	2.9	2.9	2.9	2.9	3.0
Interest rates													
Central bank key rate (% eop)	7.50	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
3-month rate (% eop 4Q)	25.52	15.00	15.00	15.00	15.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Exchange rates													
UAH trade-weighted index (nominal)	73.96	71.03	68.56	66.52	66.85	66.21	66.59	66.80	66.80	68.44	69.24	69.24	69.24
UAH trade-weighted index (real)	91.99	88.84	85.51	82.58	83.29	82.96	83.21	83.08	83.39	85.93	86.72	86.33	86.67
UAH/US\$ (eop)	8.05	8.30	8.50	8.75	8.75	8.75	8.70	8.70	8.70	8.70	8.60	8.60	8.60
UAH/US\$ (average)	8.12	8.30	8.50	8.75	8.75	8.75	8.70	8.70	8.70	8.70	8.60	8.60	8.60
UAH/€ (eop)	10.62	11.12	11.48	11.55	11.38	11.81	11.75	11.75	11.75	11.75	11.61	11.61	11.61
UAH/€ (average)	10.66	11.12	11.48	11.55	11.38	11.81	11.75	11.75	11.75	11.75	11.61	11.61	11.61
US\$/€ (eop)	1.32	1.34	1.35	1.32	1.30	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35
US\$/€ (average)	1.31	1.34	1.35	1.32	1.30	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35
Population													
Population (million, eop)	45.55	45.53	45.50	45.50	45.49	45.51	45.48	45.48	45.47	45.53	45.50	45.50	45.49
Population (%YoY)	-0.2	-0.1	-0.1	-0.1	-0.1	-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.

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

## **Appendices: Thematic charts & tables**

The following pages contain the details charted and tabled data for the appropriate sections in this report.

## Ruling majority in the old and new Parliaments: The evolution over 2010-12

Below, we provide several tables on selected voting that took place in the 2010-12 period. These tables depict how the ruling majority has been evolving in the so-called 'old' and 'new' Parliaments. The former is the Parliament of 6th convocation, which lasted from 23 November, 2007 through 6 December, 2012, and the latter is the one of 7th convocation, which started on 12 December, 2012.

### 'New' Parliament's benchmark vote

**Table 7. Breakdown of parliament vote on approving Mykola Azarov as prime minister, voted on 13 December 2012 (number of MPs)**

Party	Total	Supported	Against	Other*
Party of Regions	210	208	0	2 <sup>1</sup>
Communist Party	32	32	0	0
Batkivschyna	99	0	51	48
Udar	42	0	38	4
Svoboda	37	0	37	0
Non-affiliated MPs	24	12	3	9
<b>Total</b>	<b>444</b>	<b>252</b>	<b>129</b>	<b>63</b>

Notes: Other includes MPs that abstained from voting or were absent; [1] two MPs of Party of Regions were absent.

Sources: Parliament of Ukraine, Investment Capital Ukraine LLC.

### 'Old' Parliament's benchmark votes

**Table 8. Breakdown of parliament vote on approving Mykola Azarov as prime minister, voted on 11 March 2010 (number of MPs)**

	Total	Supported	Against	Other*
Party of Regions	172	172	0	0
Communist Party	27	27	0	0
Lytvyn's Bloc	20	20	0	0
Tymoshenko's Bloc	155	8	3	144
Our Ukraine	72	11	1	60
Non-affiliated MPs	4	4	0	0
<b>Total</b>	<b>450</b>	<b>242</b>	<b>4</b>	<b>204</b>

Notes: Other includes MPs that abstained from voting or were absent; [1] two MPs of Party of Regions were absent.

Sources: Parliament of Ukraine, Investment Capital Ukraine LLC.

**Table 9. Breakdown of parliament vote on the Law of 2012 state budget, voted on 22 December 2011 (number of MPs)**

	Total	Supported	Against	Other*
Party of Regions	192	190	0	2
Communist Party	25	0	1	24
Lytvyn's Bloc	20	20	0	0
Tymoshenko's Bloc	103	0	0	103
Our Ukraine	65	10	6	49
Group of MPs on Reforms	20	18	0	2
Non-affiliated MPs	25	12	1	12
<b>Total</b>	<b>450</b>	<b>250</b>	<b>8</b>	<b>192</b>

Notes: Other includes MPs that abstained from voting or were absent; [1] two MPs of Party of Regions were absent.

Sources: Parliament of Ukraine, Investment Capital Ukraine LLC.

**Table 10. Breakdown of parliament vote on adopting changes to the schedule of the autumn convocation, voted on 4 September 2012 (number of MPs)**

	Total	Supported	Against	Other*
Party of Regions	192	180	1	11
Communist Party	25	25	0	0
Lytvyn's Bloc	20	20	0	0
Tymoshenko's Bloc	98	0	0	98
Our Ukraine	62	0	0	62
Group of MPs on Reforms	19	18	0	1
Non-affiliated MPs	31	11	0	20
<b>Total</b>	<b>447</b>	<b>254</b>	<b>1</b>	<b>192</b>

Notes: Other includes MPs that abstained from voting or were absent; [1] two MPs of Party of Regions were absent.

Sources: Parliament of Ukraine, Investment Capital Ukraine LLC.

**Table 11. Breakdown of parliament vote on the Law of 2013 state budget, voted on 6 December 2012 (number of MPs)**

	Total	Supported	Against	Other
Party of Regions	194	187	0	7
Communist Party	25	0	25	0
Lytvyn's Bloc	20	20	0	0
Tymoshenko's Bloc	97	0	21	76
Our Ukraine	63	5	19	39
Group of MPs on Reforms	19	19	0	0
Non-affiliated MPs	31	11	4	16
Total	449	242	69	138

Notes: Other includes MPs that abstained from voting or were absent; [1] two MPs of Party of Regions were absent.

Sources: Parliament of Ukraine, Investment Capital Ukraine LLC.



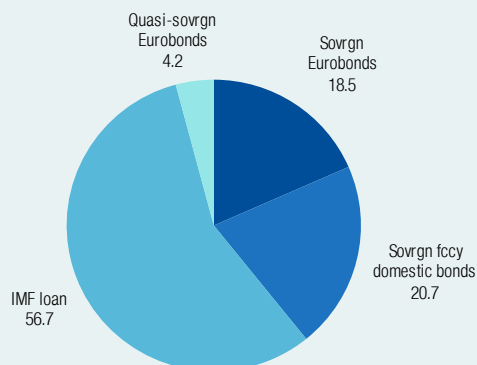
## Sovereign external debt: The 2010-12 history and prospects since 2013

Breakdown of sovereign and quasi-sovereign external debt due in 2013-14 and beyond

**Chart 53. Breakdown of sovereign external debt due in 2013 by type of debt instrument (%)**

100% = **US\$10.6bn**

Yearly data as of 30 January 2013

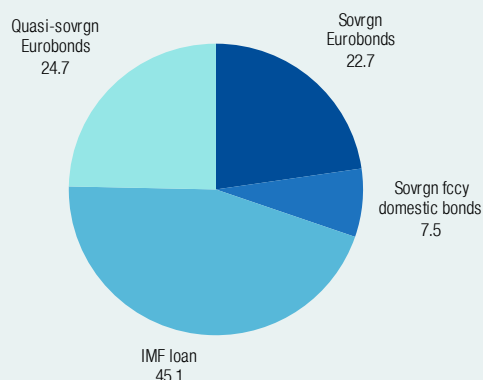


Sources: Ministry of Finance of Ukraine, Bloomberg, Investment Capital Ukraine LLC.

**Chart 54. Breakdown of sovereign external debt due in 2014 by type of debt instrument (%)**

100% = **US\$8.3bn**

Yearly data as of 30 January 2013

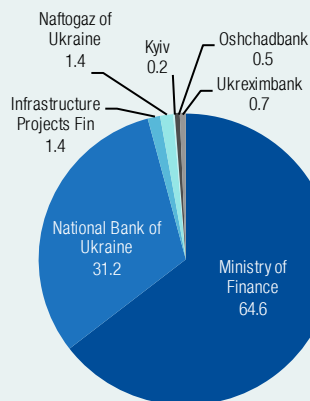


Sources: Ministry of Finance of Ukraine, Bloomberg, Investment Capital Ukraine LLC.

**Chart 55. Breakdown of sovereign external debt due in 2013 by borrowers (%)**

100% = **US\$10.6bn**

Yearly data as of 30 January 2013



Sources: Ministry of Finance of Ukraine, Bloomberg, Investment Capital Ukraine LLC.

**Chart 56. Breakdown of sovereign external debt due in 2014 by borrowers (%)**

100% = **US\$8.3bn**

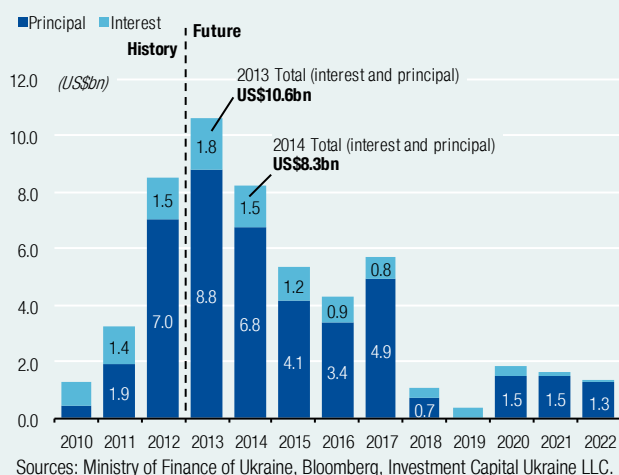
Yearly data as of 30 January 2013



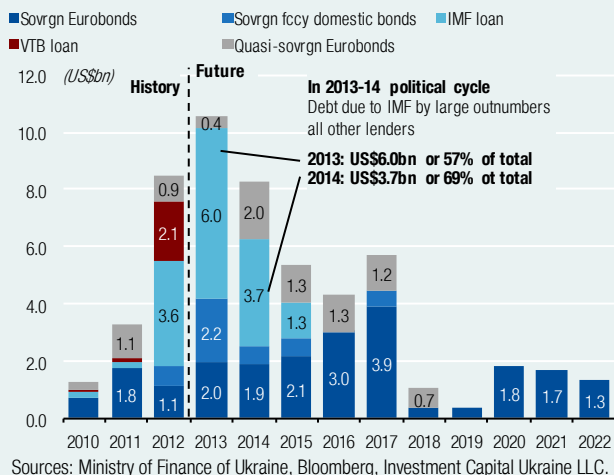
Sources: Ministry of Finance of Ukraine, Bloomberg, Investment Capital Ukraine LLC.

**Chart 57. Ukraine's sovereign and quasi-sovereign external debt due in 2010-22 (US\$bn): Breakdown of debt due by cash flow type (left chart) and breakdown by type of debt instrument (right chart)**

Yearly data as of 26 December 2012, which breaks down the annual volume of debt into interest and principal repayments

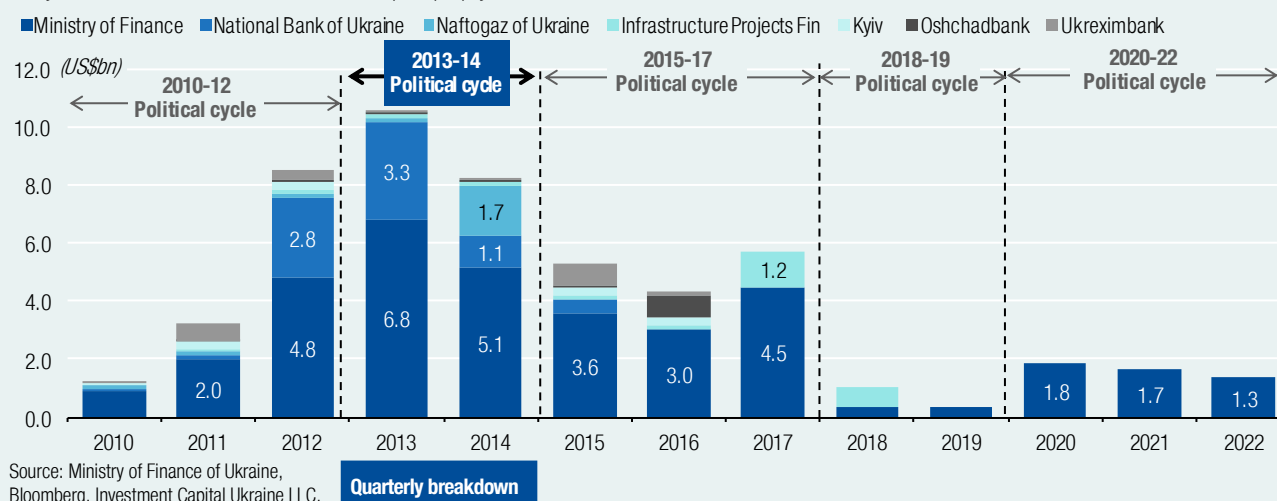


Yearly data as of 26 December 2012, which breaks down the annual volume of debt into type of debt instruments used to attract the debt



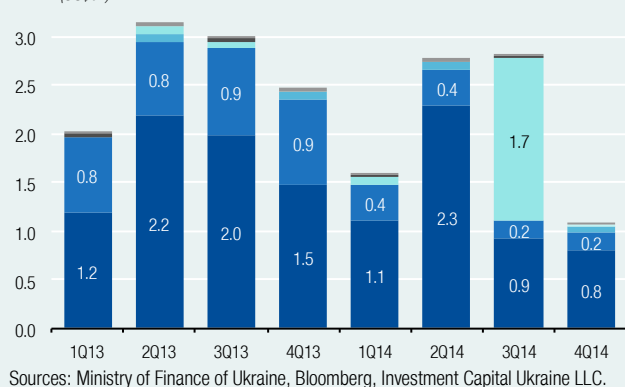
**Chart 58. Ukraine's sovereign and quasi-sovereign external debt due in 2010-22: Breakdown by ultimate borrower (US\$bn)**

Yearly data as of 26 December 2012. Interest and principal payments are included.

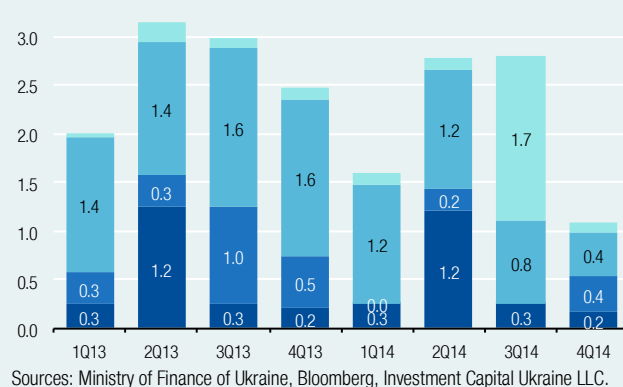


**Chart 59. Ukraine's sovereign and quasi-sovereign external debt due in 2013-14 (US\$bn): Breakdown of debt due by ultimate borrower (left chart) and breakdown by type of debt instrument (right chart)**

Yearly data as of 26 December 2012. Interest and principal payments are included.



Yearly data as of 26 December 2012. Interest and principal payments are included.



## Yearly breakdown of sovereign and quasi-sovereign external debt due 2010-22

**Table 12. Breakdown of the sovereign and quasi-sovereign external debt, including interest payments and principal re-payments (US\$m)**  
By type of debt instrument, data as of 30 January 2013

Year	Interest payments							Principal re-payments							Grand Total
	Sovrgn Euro-bonds <sup>1</sup>	Loans <sup>2</sup>	Local bonds <sup>3</sup>	Local retail bonds <sup>4</sup>	Municipal Euro-bonds <sup>5</sup>	Corporate Euro-bonds <sup>6</sup>	Total	Sovrgn Euro-bonds <sup>1</sup>	Loans <sup>2</sup>	Local bonds <sup>3</sup>	Local retail bonds <sup>4</sup>	Municipal Euro-bonds <sup>5</sup>	Corporate Euro-bonds <sup>6</sup>	Total	
2010	316	236	0	0	58	234	843	419	0	0	0	0	0	419	1,262
2011	571	347	0	0	58	378	1,354	1,200	0	0	0	200	500	1,900	3,254
2012	614	288	142	0	41	392	1,477	500	5,442	595	0	250	250	7,036	8,514
2013	956	130	265	13	20	425	1,810	1,000	5,873	1,913	0	0	0	8,786	10,596
2014	878	48	112	17	20	425	1,500	1,000	3,680	293	200	0	1,595	6,768	8,268
2015	839	10	67	0	20	242	1,177	1,299	1,248	603	0	250	750	4,150	5,327
2016	726	0	40	0	0	178	943	2,250	0	0	0	300	825	3,375	4,318
2017	621	0	40	0	0	146	806	3,300	0	530	0	0	1,088	4,918	5,724
2018	333	0	0	0	0	26	359	0	0	0	0	0	690	690	1,049
2019	333	0	0	0	0	0	333	0	0	0	0	0	0	0	333
2020	333	0	0	0	0	0	333	1,500	0	0	0	0	0	1,500	1,833
2021	157	0	0	0	0	0	157	1,500	0	0	0	0	0	1,500	1,657
2022	98	0	0	0	0	0	98	1,250	0	0	0	0	0	1,250	1,348
<b>Total</b>	<b>6,774</b>	<b>1,059</b>	<b>664</b>	<b>30</b>	<b>216</b>	<b>2,445</b>	<b>11,190</b>	<b>15,218</b>	<b>16,244</b>	<b>3,933</b>	<b>200</b>	<b>1,000</b>	<b>5,698</b>	<b>42,292</b>	<b>53,483</b>

Notes: [1] sovereign Eurobonds; [2] IMF loans extended to MoF and NBU as well as VTB loan to MoF; [3] foreign-currency sovereign bonds issued on the domestic bond market; [4] USD-denominated sovereign bonds issued domestically with special purpose to be sold to retail investors; [5] municipal Eurobonds issued by City of Kyiv, which are considered as quasi-sovereign external debt; [6] corporate Eurobonds issued by state-run banks and non-bank entities, which are considered as quasi-sovereign external debt.

Sources: Ministry of Finance of Ukraine, Bloomberg, Investment Capital Ukraine LLC.

**Table 13. Breakdown of the sovereign and quasi-sovereign external debt, including interest payments and principal re-payments (US\$m)**  
By ultimate borrower, data as of 30 January 2013

Year	Interest payments								Principal re-payments								Grand Total
	MoF	NBU	Kyiv <sup>1</sup>	Nafto-gaz	Inf. Pro-jects <sup>2</sup>	Osh-chad-bank	Ukr-exim-bank	Total	MoF	NBU	Kyiv <sup>1</sup>	Nafto-gaz	Inf. Pro-jects <sup>2</sup>	Osh-chad-bank	Ukr-exim-bank	Total	
2010	457	94	58	137	0	0	97	843	419	0	0	0	0	0	0	419	1,262
2011	806	112	58	152	71	29	127	1,354	1,200	0	200	0	0	0	500	1,900	3,254
2012	943	101	41	152	96	58	87	1,477	3,867	2,670	250	0	0	0	250	7,036	8,514
2013	1,310	55	20	152	146	58	70	1,810	5,531	3,256	0	0	0	0	0	8,786	10,596
2014	1,039	16	20	152	146	58	70	1,500	4,100	1,073	0	1,595	0	0	0	6,768	8,268
2015	912	4	20	0	146	58	39	1,177	2,663	487	250	0	0	0	750	4,150	5,327
2016	765	0	0	0	146	29	4	943	2,250	0	300	0	0	700	125	3,375	4,318
2017	661	0	0	0	146	0	0	806	3,830	0	0	0	1,088	0	0	4,918	5,724
2018	333	0	0	0	26	0	0	359	0	0	0	0	690	0	0	690	1,049
2019	333	0	0	0	0	0	0	333	0	0	0	0	0	0	0	0	333
2020	333	0	0	0	0	0	0	333	1,500	0	0	0	0	0	0	1,500	1,833
2021	157	0	0	0	0	0	0	157	1,500	0	0	0	0	0	0	1,500	1,657
2022	98	0	0	0	0	0	0	98	1,250	0	0	0	0	0	0	1,250	1,348
<b>Total</b>	<b>8,147</b>	<b>382</b>	<b>216</b>	<b>743</b>	<b>920</b>	<b>289</b>	<b>494</b>	<b>11,190</b>	<b>28,109</b>	<b>7,485</b>	<b>1,000</b>	<b>1,595</b>	<b>1,778</b>	<b>700</b>	<b>1,625</b>	<b>42,292</b>	<b>53,483</b>

Notes: [1] City of Kyiv; [2] Financing of Infrastructural Projects (Bloomberg code: UKRINF).

Sources: Ministry of Finance of Ukraine, Bloomberg, Investment Capital Ukraine LLC.

## Quarterly breakdown of sovereign and quasi-sovereign external debt due in 2013-14

**Table 14. Breakdown of the sovereign and quasi-sovereign external debt, including interest payments and principal re-payments (US\$m)**  
By type of debt instrument, data as of 30 January 2013

Period	Interest payments							Principal re-payments							Grand Total
	Sovrgn Euro-bonds <sup>1</sup>	Loans <sup>2</sup>	Local bonds <sup>3</sup>	Local retail bonds <sup>4</sup>	Muni-cipal Euro-bonds <sup>5</sup>	Corpo-rate Euro-bonds <sup>6</sup>	Total	Sovrgn Euro-bonds <sup>1</sup>	Loans <sup>2</sup>	Local bonds <sup>3</sup>	Local retail bonds <sup>4</sup>	Muni-cipal Euro-bonds <sup>5</sup>	Corpo-rate Euro-bonds <sup>6</sup>	Total	
<b>1Q13</b>	255.2	40.4	63.6	0.0	0.0	32.5	391.6	0.0	1,348.3	260.9	0.0	0.0	0.0	1,609.2	<b>2,000.8</b>
<b>2Q13</b>	242.1	35.3	84.1	8.6	10.0	180.0	560.2	1,000.0	1,348.3	235.1	0.0	0.0	0.0	2,583.4	<b>3,143.5</b>
<b>3Q13</b>	255.2	30.3	42.2	0.0	0.0	108.3	436.0	0.0	1,588.4	959.6	0.0	0.0	0.0	2,548.0	<b>2,983.9</b>
<b>4Q13</b>	203.9	24.4	74.7	4.6	10.0	104.2	421.8	0.0	1,588.4	457.3	0.0	0.0	0.0	2,045.7	<b>2,467.5</b>
<b>Total for 2013</b>	<b>956.3</b>	<b>130.4</b>	<b>264.7</b>	<b>13.2</b>	<b>20.0</b>	<b>424.9</b>	<b>1,809.5</b>	<b>1,000.0</b>	<b>5,873.4</b>	<b>1,912.9</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>8,786.3</b>	<b>10,595.8</b>
<b>1Q14</b>	255.2	18.4	3.8	0.0	0.0	108.3	385.6	0.0	1,204.3	0.0	0.0	0.0	0.0	1,204.3	<b>1,589.9</b>
<b>2Q14</b>	203.9	13.9	56.0	8.6	10.0	104.2	396.6	1,000.0	1,204.3	170.8	0.0	0.0	0.0	2,375.1	<b>2,771.7</b>
<b>3Q14</b>	255.2	9.4	3.8	0.0	0.0	108.3	376.6	0.0	839.3	0.0	0.0	0.0	1,595.0	2,434.3	<b>2,811.0</b>
<b>4Q14</b>	164.1	6.3	48.1	8.6	10.0	104.2	341.3	0.0	432.1	122.1	200.0	0.0	0.0	754.2	<b>1,095.6</b>
<b>Total for 2014</b>	<b>878.3</b>	<b>48.0</b>	<b>111.6</b>	<b>17.2</b>	<b>20.0</b>	<b>424.9</b>	<b>1,500.2</b>	<b>1,000.0</b>	<b>3,680.0</b>	<b>292.9</b>	<b>200.0</b>	<b>0.0</b>	<b>1,595.0</b>	<b>6,767.9</b>	<b>8,268.08</b>

Notes: [1] sovereign Eurobonds; [2] IMF loans extended to MoF and NBU as well as VTB loan to MoF; [3] foreign-currency sovereign bonds issued on the domestic bond market; [4] USD-denominated sovereign bonds issued domestically with special purpose to be sold to retail investors; [5] municipal Eurobonds issued by City of Kyiv, which are considered as quasi-sovereign external debt; [6] corporate Eurobonds issued by state-run banks and non-bank entities, which are considered as quasi-sovereign external debt.

Sources: Ministry of Finance of Ukraine, Bloomberg, Investment Capital Ukraine LLC.

**Table 15. Breakdown of the sovereign and quasi-sovereign external debt, including interest payments and principal re-payments (US\$m)**  
By ultimate borrower, data as of 30 January 2013

Period	Interest payments								Principal re-payments								Grand Total
	MoF	NBU	Kyiv <sup>1</sup>	Nafto-gaz	Inf. Pro-jects <sup>2</sup>	Osh-chad-bank	Ukr-exim-bank	Total	MoF	NBU	Kyiv <sup>1</sup>	Nafto-gaz	Inf. Pro-jects <sup>2</sup>	Osh-chad-bank	Ukr-exim-bank	Total	
<b>1Q13</b>	341.1	18.0	0.0	0.0	0.0	28.9	3.6	391.6	850.5	758.7	0.0	0.0	0.0	0.0	0.0	1,609.2	<b>2,000.84</b>
<b>2Q13</b>	355.0	15.2	10.0	75.8	72.8	0.0	31.4	560.2	1,824.7	758.7	0.0	0.0	0.0	0.0	0.0	2,583.4	<b>3,143.53</b>
<b>3Q13</b>	315.4	12.3	0.0	75.8	0.0	28.9	3.6	436.0	1,678.9	869.1	0.0	0.0	0.0	0.0	0.0	2,548.0	<b>2,983.95</b>
<b>4Q13</b>	298.5	9.1	10.0	0.0	72.8	0.0	31.4	421.8	1,176.6	869.1	0.0	0.0	0.0	0.0	0.0	2,045.7	<b>2,467.46</b>
<b>Total for 2013</b>	<b>1,310.0</b>	<b>54.6</b>	<b>20.0</b>	<b>151.5</b>	<b>145.6</b>	<b>57.8</b>	<b>70.1</b>	<b>1,809.5</b>	<b>5,530.7</b>	<b>3,255.5</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>8,786.3</b>	<b>10,595.78</b>
<b>1Q14</b>	271.5	5.8	0.0	75.8	0.0	28.9	3.6	385.6	844.8	359.4	0.0	0.0	0.0	0.0	0.0	1,204.3	<b>1,589.87</b>
<b>2Q14</b>	277.9	4.5	10.0	0.0	72.8	0.0	31.4	396.6	2,015.7	359.4	0.0	0.0	0.0	0.0	0.0	2,375.1	<b>2,771.66</b>
<b>3Q14</b>	265.2	3.1	0.0	75.8	0.0	28.9	3.6	376.6	662.4	177.0	0.0	1,595.0	0.0	0.0	0.0	2,434.3	<b>2,810.99</b>
<b>4Q14</b>	224.6	2.5	10.0	0.0	72.8	0.0	31.4	341.3	577.3	177.0	0.0	0.0	0.0	0.0	0.0	754.2	<b>1,095.57</b>
<b>Total for 2014</b>	<b>1,039.3</b>	<b>15.9</b>	<b>20.0</b>	<b>151.5</b>	<b>145.6</b>	<b>57.8</b>	<b>70.1</b>	<b>1,500.2</b>	<b>4,100.1</b>	<b>1,072.8</b>	<b>0.0</b>	<b>1,595.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>6,767.9</b>	<b>8,268.08</b>

Notes: [1] City of Kyiv; [2] Financing of Infrastructural Projects (Bloomberg code: UKRINF).

Sources: Ministry of Finance of Ukraine, Bloomberg, Investment Capital Ukraine LLC.

## Assessment of sovereign external obligations' burden in 2013-14

*This Appendix section details possible scenarios for Ukraine's authorities in dealing with external obligations*

*In terms of financial obligations, the daunting issue of refinancing IMF debt due in 2013-14 remains*

*Solutions range from resuming the IMF programme to tapping other sources*

*Payments under the Naftogaz-Gazprom agreement for natural gas imports is another major issue for 2013-14*

In order to evaluate the direction of Ukraine's economic policymaking in 2013 and 2014, in our view, one needs to take into account the two following factors. The first is sovereign external debt obligations due in this period, and the second is Naftogaz's regular payments to Gazprom for imported natural gas, which in the past few years has become a kind of public debt that has drawn down the country's official FX reserves.

### External debt

As for the first factor, Ukraine authorities face a rise in external debt due in the next few years compared to the recent past. Thus, as our data shows in the above section of the Appendix (see "Sovereign external debt: The 2010-12 history and prospects since 2013", pp.51), there is an increase in the volume of sovereign and quasi-sovereign external debt, including interest and principal re-payments. If it stood at US\$3.3bn and US\$8.5bn in 2011 and 2012, respectively, it is set to rise to as much as US\$10.6bn in 2013, and currently, the volume due in 2014 stands at US\$8.3bn. A large part of this debt, including interest, is due to the IMF, and stands at a 57% share of the US\$10.6bn total for 2013, and at a 46% share of the US\$8.3bn total for 2014 (see Chart 53 and Chart 54 on page 51). In total, Ukraine's debt due to the IMF for the 2013-14 period, including interest payments, amounts to US\$9.7bn (see Chart 57-Chart 59 on page 52).

Hence, it is vital for Ukraine's authorities, who have only a thin layer of cash in government coffers to refinance this debt via either opening a new loan programme with the IMF, which would effectively be a refinancing of the debt due in 2013 and 2014, or via finding other lenders who would refinance the debt owed to the IMF and other lenders in the next two years.

### Natural gas payments under contract with Russia's Gazprom

Another factor is Naftogaz's payments to Gazprom on imported natural gas. Ukraine's state-run Naftogaz has been under the pressure of more than a 20% YoY increase in the yearly average price on imported natural gas in both years of 2011-12. This was a result of crude oil price rise in the global market, which is taken into account by Naftogaz-Gazprom agreement on natural gas supplies via price formula. At the same time, authorities were very slow in restructuring the domestic natural gas market in terms of raising efficiency consumption and increasing the still-low regulated tariff on natural gas consumption for households.

Just in the last two years, state-run Naftogaz paid Gazprom a total of US\$22.8bn for supplies of 66bcm of natural gas. By yearly breakdown, these purchases amounted to US\$11.8bn for 40bcm and US\$10.7bn for 25bcm of natural gas in 2012. As Chart 61 on the next page illustrates, the annual average price paid by Naftogaz increased by 29% YoY in 2012 after the previous year's rise of similar magnitude of 26.3%. While the next few years are likely to bring a lower price for gas for Ukraine than 2012 (our base-case forecast assumes a 4.7% decrease, from US\$424 to US\$404 on average in 2012), the payments should remain a quite heavy burden for Naftogaz, and hence the government. For instance, if 2013 mirrors the previous year's volume of imports of 25bcm, Naftogaz will face a US\$10.2bn import bill.

Hence, Ukraine's government has only the following viable options to minimise this kind of burden.

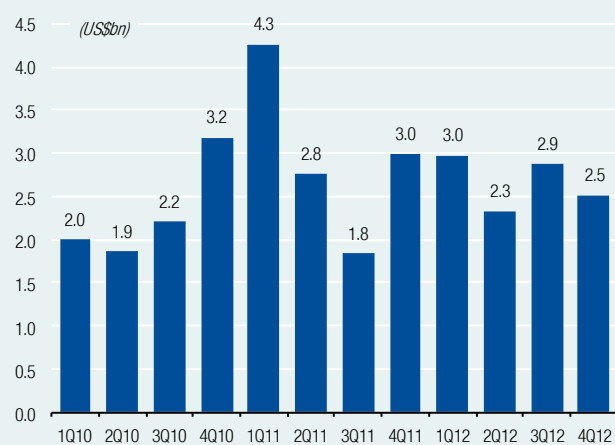
***This type of external burden could be reduced by domestic measures for efficiency and restructuring, ...***

***... and by gaining better terms in its agreement with Gazprom***

The first option is for a reduction in Naftogaz's volume of natural gas imports. This could be achieved by a blend of measures such as better efficiency of consumption (a measure that does not yield meaningful results in the short term) and a restructuring of the domestic natural gas market in a such a way that would allow private-sector market players to fill market niches previously occupied by Naftogaz and, hence, shrink Naftogaz's balance sheet (a solution that is likely to be realised starting in 2013<sup>26</sup>).

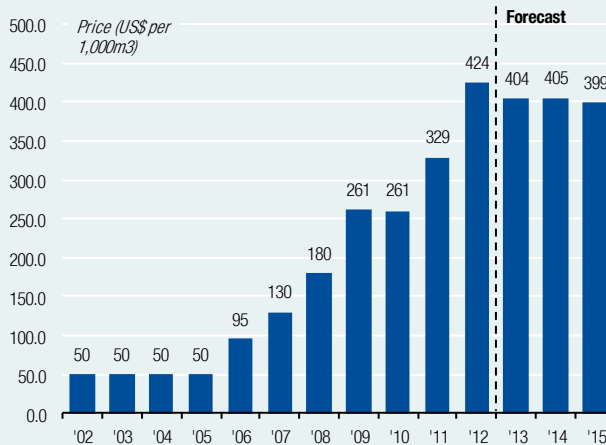
Another option is to convince the Russian government to renegotiate the current agreement between Naftogaz and Gazprom in such a way that would result in a further reduction of the price paid by Naftogaz. This could serve as an additional discount to be built in into the price formula, on the top of the US100 discount agreed upon between the Ukrainian and Russian governments back in 2010.

**Chart 60. Quarterly volume of payments by Naftogaz to Gazprom (US\$bn)**



Sources: Interfax-Ukraine, Investment Capital Ukraine LLC.

**Chart 61. History of yearly average price paid by Naftogaz to Gazprom, the 2013-25 forecast is by ICU (US\$ per 1,000m<sup>3</sup>)**



Sources: Bloomberg, Investment Capital Ukraine LLC.

## The options

***There are several options for Ukraine's authorities to lower the external burden in the 2013-14 period***

Hence, below are several options or scenarios in which Ukraine's authorities are tackling the burden of the external obligations. These are divided into three groups, and each group is subdivided into selected options, each with its own assumptions.

The idea is to determine under each scenario: 1) the volume of sovereign external obligations in 2013 and 2014; and 2) whether they will increase or decrease in relation to the past two years of 2011 and 2012. This latter period is by intent considered as a base one, as it spanned over two-thirds of the length of the 2010-12 political cycle, weathered by incumbent authorities without major economic calamity. Then, especially in 2011-12, the incumbent authorities saw a sizable rise in the external burden due to, primarily, higher energy prices; and secondly, financial obligations such as Eurobonds and the bilateral loan agreement that came into maturity in that period.

<sup>26</sup> In fact, this solution was in effect in 2013 and back in mid 2000s. Then, in the former case there was DF Group, an offshore holding of one of Ukraine's wealthiest business men Dmytro Firtash, that was allowed to supply 8bcm of natural gas imported from Russia to its chemical enterprises. In the latter case, there was a politically controversial solution to allow RosUkrEnergo, a joint venture between a group of Ukraine's business men and Russian state-run Gazprom, supplying of imported natural gas to Ukraine's industrial sector.



***Each option results in a calculated level of external burden increase or decrease over 2013-14***

The result of the calculations under each scenario yields a numeric figure, which shows how much the sovereign external obligations as a yearly average for the 2013-14 period differ from the 2011-12 period. Naturally, if this numeric figure is positive, it means that the burden of sovereign external obligations increases and the sovereign external position is deteriorated. Otherwise, when the figure is negative, the burden declines, and the sovereign external position is relieved.

The results are shown in one table (see Table 16, pp.60), while each of the options has a dedicated sub-section depicting the results received under this option in supporting tables and charts.

***IMF options assume that Ukraine's authorities rely on a resumed IMF programme to mitigate the problematic 2013-14 period***

1) **IMF (Option #1).** Under this group of options, Ukraine comes to an agreement with the IMF. As far as the Kremlin is concerned, Ukraine is paying for natural gas under the current agreement with Gazprom; hence, no additional discount is being negotiated. This option assumes that the IMF programme starts in 1Q13, and Ukraine will receive seven tranches XDR1.0bn each or XDR7.0bn in total over the next couple of years. The total volume of natural gas imports by Naftogaz in 2013-14 amounts to 25bcm, the same volume as in 2012. **Results:** Sovereign external obligations are set to decrease in 2013 and 2014, to US\$14.9bn and US\$15.2bn, respectively. This averages out to US\$15.1bn a year, and represents a US\$2.1bn decrease in average external debt for 2013-14 over 2011-12. More details can be found on pp.61-62.

2) **IMF (Option #2).** Most of the assumptions are the same as in the above scenario, except for one: the IMF programme starts in 2Q13. **Results:** In yearly average terms, sovereign external obligations are set to **decrease by US\$1.6bn** in the 2013-14 period over the 2011-12 period (more details on pp.63-64).

3) **IMF (Option #3).** Most of the assumptions are the same as in the above two scenarios, except for the volume of natural gas imports, which is assumed at 18bcm, and timing of IMF programme, which is assumed to start in 2Q13, same as in IMF option #2. **Results:** In yearly average terms, sovereign external obligations are set to **decrease by US\$4.5bn** in the 2013-14 period over the 2011-12 period (more details on pp.65-66).

4) **IMF (Option #4).** The key assumptions are the following. The IMF programme starts in 2Q13 and Ukraine's authorities show low commitment to fully implement it. Hence, the Fund provides XDR4.0bn in equal quarterly tranches (each worth XDR1.0bn) over 2013-14. The volume of natural gas imports amounts to 25bcm. **Results:** In yearly average terms, sovereign external obligations are set to **decrease by mere US\$0.4bn** in the 2013-14 period over the 2011-12 period (more details on pp.67-68).

***Kremlin options assume that Ukraine is relying on the Russian government for assistance***

5) **Kremlin (Option #1).** The Kremlin group of options has one key assumption in common, which is that Ukraine's authorities are shying away from implementing required IMF reforms; hence, they face the need to refinance the IMF debt due in 2013-14 from other sources, including for a bail-out loan, from the Kremlin's coffers. Under this particular option, Ukraine succeeds renegotiating with the Kremlin for an additional US\$100 discount to the price for natural gas paid under the current agreement with Gazprom. The total volume of natural gas imports by Naftogaz in 2013-14 amount to 33bcm. **Results:** Sovereign external obligations are set to increase to US\$20.6bn and US\$18.3bn in 2013 and 2014, respectively. This averages out to US\$19.5bn a year and represents a **US\$2.3bn increase** over the US\$17.1bn yearly average volume of sovereign external obligations in the 2011-12 period (more details on pp.69-70).

- 6) **Kremlin (Option #2).** The same as above, while under this particular option, Ukraine succeeds in renegotiating with the Kremlin for an additional US\$200 discount to the price for natural gas paid under the current agreement with Gazprom. **Results:** In yearly average terms, sovereign external obligations are set to **decrease by US\$1.0bn** in the 2013-14 period over the 2011-12 period (more details on pp.71-72).
- 7) **Kremlin (Option #3).** Under this set of assumptions, Ukraine's authorities talk with Kremlin quite extensively on a number of issues in order to relieve their external debt burden in 2013-14. Thus, they will succeed in obtaining a US\$100 discount to the price for natural gas from the Kremlin and likely decide to tap a bail-out loan from the Kremlin coffers. The latter, as per one of the assumptions under this option, amounts to US\$7.3bn to be provided by VTB, Russia's state-run bank, enough to refinance a 75% share of the principal and interest payments owed to IMF over 2013-14. The total volume of natural gas imports by Naftogaz in 2013-14 amount to 25bcm. **Results:** In yearly average terms, sovereign external obligations are set to **decrease by a sizable volume of US\$3.7bn** in the 2013-14 period over the 2011-12 period (more details on pp.73-74).
- 8) **Kremlin (Option #4).** This scenario is identical to the previous one (Kremlin option #3), except for Naftogaz's annual volume of natural gas imports for 2013-14, which instead of 25bcm, amounts to 33bcm. **Results:** In yearly average terms, sovereign external obligations are set to **decrease by US\$1.3bn** in the 2013-14 period over the 2011-12 period (more details on pp.75-76).
- 9) **Kremlin (Option #5).** This scenario is very similar to the Kremlin option #3, except for one item: Naftogaz receives an additional US\$200 price discount. **Results:** In yearly average terms, sovereign external obligations are set to **decrease by US\$6.2bn** in the 2013-14 period over the 2011-12 period (more details on pp.77-78).
- 10) **Going it alone (Option #1).** This group of options has one basic assumption, that Ukraine's authorities decide to "go it alone," without any type of new agreements with either the IMF or Kremlin. As far as IMF is concerned, the US\$9.8bn of debt repayments, including interest, will be a burden for authorities that should be either paid back or refinanced from other sources. As far as the Kremlin is concerned, Ukraine is paying the price for natural gas under the current agreement with Gazprom; hence, no additional discount is being negotiated. The total volume of natural gas imports by Naftogaz in 2013-14 amounts to 25bcm. **Results:** Sovereign external obligations are set to increase to US\$20.8bn and US\$18.5bn in 2013 and 2014 respectively. This averages out to US\$19.6bn a year, and represents a **US\$2.5bn increase** over the US\$17.1bn a year, an average volume of sovereign external obligations for the 2011-12 period (more details on pp.79-80).
- 11) **Going it alone (Option #2).** The same as above, except for the annual volume of natural gas imports by Naftogaz in 2013-14, which amount to 18bcm a year. **Results:** Sovereign external obligations are set to increase to US\$17.8bn and US\$15.6bn in 2013 and 2014, respectively. This averages to US\$16.7bn a year, and represents a **US\$0.4bn decrease** over the US\$17.1bn a year, an average volume for sovereign external obligations in the 2011-12 period (more details on pp.81-82).

***"Going it alone" means that Ukraine's authorities decided to face the economic headwinds of 2013-14 by relying on its own resources***

## Conclusions

***In terms of probabilities, there are three options that have higher chances of materialising, in our view; ...***

***... there are options involving the IMF and Kremlin as part of the solution; ...***

***... a deal with the IMF that results in XDR4bn in funding in 2Q13 has a 24% probability...***

***... an IMF loan of XDR7bn size has an 18% probability; ...***

***... and lastly, a deal with the Kremlin that combines a US\$100 discount with a loan has a 17.5% probability***

To sum up the possible outcome of the above-mentioned assumptions, we assign probabilities to them, which are summarised in Table 17 on page 60.

In brief, this exercise began with assigning probabilities to each of three groups of options. A deal with the IMF has a 60% probability. A 35% probability went to a deal with the Kremlin. And, the “going it alone” outcome has a 5% probability.

Thus, in our view, cooperating with the IMF brings mid-term and long-term benefits to the economy and the ruling incumbent politicians, who are not only battling for survival in the 2013-14 period, which culminates with presidential elections in March 2015, but also, they are confident of staying in power after the presidential elections, and as such, are very much concerned with their survival in the following periods. This said, a renewed IMF programme comes with quite a few strings attached, which are rather politically painful with regard to the ruling authorities’ promise for better growth-based prospects than in the other option, which is cooperating with the Kremlin. The latter has both mid-term and long-term vision on engaging the so-called “near abroad” countries into “its sphere of strategic interests.” Hence, its proposals bring more sugar-sweet resolutions to the incumbent authorities’ short-term challenges. However, from the mid-term and long-term perspective, closer cooperation with the Kremlin would mean a narrower scope of for effective political and economic decision-making power by the ruling authorities in Kiev, including Ukraine’s president, the Cabinet of Ministers, or the central bank.

Hence, our assessment on the probabilities showed a 60% chance for an IMF deal and a 35% chance for a deal with the Kremlin. Given the fact that the next couple of years will be quite difficult for Ukraine’s authorities to weather on their own due to increased payouts to lenders, we assign a 5% probability to the outcome designated as “going it alone”.

Inside of each of three groups of options, we assigned a probability rate to each of the options. For instance, the going-it-alone group has two options, each of which differs from the other by just one factor, the volume of natural gas to be imported by Naftogaz. Hence, in our view, Ukraine’s authorities deciding to rely on their own resources would be much more natural in restructuring the domestic natural gas market in such a way to lower Naftogaz’s annual volume of purchases from Gazprom. Hence, we assigned a 95% probability to the option that assumes an 18bcm volume of annual imports by Naftogaz. At the same time, an option with no change in this volume compared to the 2012 volume of imports has a 5% probability.

Finally, the available results on probabilities for each option not only inside own group but also in the whole realm of options (see last row in the Table 17 on page 60) yielded the following outcome: there are three options with the highest probabilities (of more than a 17% threshold). Two of them are IMF options, whereby lending by the Fund starts in 2Q13 and differs by size. The one with a XDR7.0bn loan from IMF has a 24% probability. The second, an XDR4.0bn loan from the IMF, has an 18% probability. And finally, the last is the Kremlin option, in which a US\$100 price discount and a loan to refinance IMF debt are provided, with a 17.5% probability. The real outcome to the equation may be more complex, and may in fact compose some components of the other above-mentioned options.

Table 16. Forecast of Ukraine's sovereign external debt burden for 2013-14 (US\$bn)

Period	IMF options				Kremlin options					Crawling alone	
	Nat.gas imports 25bcm, no discount, loan XDR7.0bn since 1Q13	Nat.gas imports 25bcm, no discount, loan XDR7.0bn since 2Q13	Nat.gas imports 18bcm, no discount, loan XDR7.0bn since 2Q13	Nat.gas imports 25bcm, no discount, loan XDR4.0bn since 2Q13	Nat.gas imports 33bcm, discount US\$100	Nat.gas imports 33bcm, discount US\$200	Nat.gas imports 25bcm, discount US\$100, VTB loan US\$7bn	Nat.gas imports 33bcm, discount US\$100, VTB loan US\$7bn	Nat.gas imports 25bcm, discount US\$200, VTB loan US\$7bn	Nat.gas imports 25bcm, discount US\$0	Nat.gas imports 18bcm, discount US\$0
<b>Quarterly forecast</b>											
1Q13	3,213	4,601	3,858	4,601	4,580	3,755	2,930	3,538	2,299	4,601	3,858
2Q13	4,336	4,336	3,599	4,336	5,690	4,865	4,051	4,652	3,421	5,719	4,983
3Q13	3,950	3,950	3,233	3,950	5,441	4,616	3,647	4,227	3,017	5,491	4,774
4Q13	3,424	3,424	2,709	3,424	4,912	4,087	3,125	3,703	2,495	4,965	4,251
1Q14	2,879	2,879	2,161	2,879	4,053	3,228	2,554	3,136	1,924	4,102	3,383
2Q14	4,107	4,107	3,377	5,325	5,289	4,464	3,781	4,376	3,151	5,325	4,595
3Q14	4,538	4,538	3,801	5,386	5,357	4,532	4,120	4,721	3,489	5,386	4,650
4Q14	3,658	3,219	2,486	3,658	3,624	2,799	2,698	3,295	2,068	3,658	2,925
<b>Yearly</b>											
2010 History	10,505	10,505	10,505	10,505	10,505	10,505	10,505	10,505	10,505	10,505	10,505
2011	15,073	15,073	15,073	15,073	15,073	15,073	15,073	15,073	15,073	15,073	15,073
2012	19,200	19,200	19,200	19,200	19,200	19,200	19,200	19,200	19,200	19,200	19,200
2013 Forecast	14,922	16,311	13,399	16,311	20,623	17,323	13,753	16,120	11,232	20,777	17,865
2014	15,181	14,743	11,825	17,248	18,324	15,024	13,154	15,528	10,633	18,471	15,553
<b>Yearly average</b>											
2011-12	17,137	17,137	17,137	17,137	17,137	17,137	17,137	17,137	17,137	17,137	17,137
2013-14F	15,052	15,527	12,612	16,780	19,473	16,173	13,454	15,824	10,933	19,624	16,709
<b>External obligations load per year</b>											
Change <sup>1</sup>	-2,085	-1,610	-4,525	-357	2,337	-963	-3,683	-1,313	-6,204	2,488	-427

Note: [1] increase (decrease). Source: Investment Capital Ukraine LLC.

Table 17. Probabilities of the options (%)

Shaded are the three options with highest probabilities out of all options listed in this table

Probability	IMF options (60%)				Kremlin options (35%)					Crawling alone (5%)	
	Nat.gas imports 25bcm, no discount, loan XDR7.0bn since 1Q13	Nat.gas imports 25bcm, no discount, loan XDR7.0bn since 2Q13	Nat.gas imports 18bcm, no discount, loan XDR7.0bn since 2Q13	Nat.gas imports 25bcm, no discount, loan XDR4.0bn since 2Q13	Nat.gas imports 33bcm, discount US\$100	Nat.gas imports 33bcm, discount US\$200	Nat.gas imports 25bcm, discount US\$100, VTB loan US\$7bn	Nat.gas imports 33bcm, discount US\$100, VTB loan US\$7bn	Nat.gas imports 25bcm, discount US\$200, VTB loan US\$7bn	Nat.gas imports 25bcm, discount US\$0	Nat.gas imports 18bcm, discount US\$0
Per group <sup>1</sup>	60.00	60.00	60.00	60.00	35.00	35.00	35.00	35.00	35.00	5.00	5.00
Per each option <sup>2</sup>	10.00	40.00	20.00	30.00	10.00	5.00	50.00	30.00	5.00	5.00	95.00
Final <sup>3</sup>	6.00	24.00	12.00	18.00	3.50	1.75	17.50	10.50	1.75	0.25	4.75

Notes: [1] probability of each of the three groups (sum of the groups' probabilities totals to 100%); [2] probability of each option inside a group (sum of the options' probabilities inside a group totals to 100%); [3] final probability of an option inside the three groups (sum of final probabilities totals to 100%).

Source: Investment Capital Ukraine LLC.

## IMF Option #1

**Key assumptions for 2013-14:** Naftogaz's imports **25bcm** of natural gas each year, with no additional natural gas price discount from Gazprom. **The IMF programme starts in 1Q13**, and its total size amounts to XDR7.0bn or US\$10.8bn. Hence, each quarter since 1Q13 Ukraine's authorities receive an XDR1.0bn tranche per quarter.

**Table 18. Breakdown of quarterly and yearly volume of sovereign external obligations in 2010-12 and forecast for 2013-14 (US\$m)**

By type of sovereign external obligation

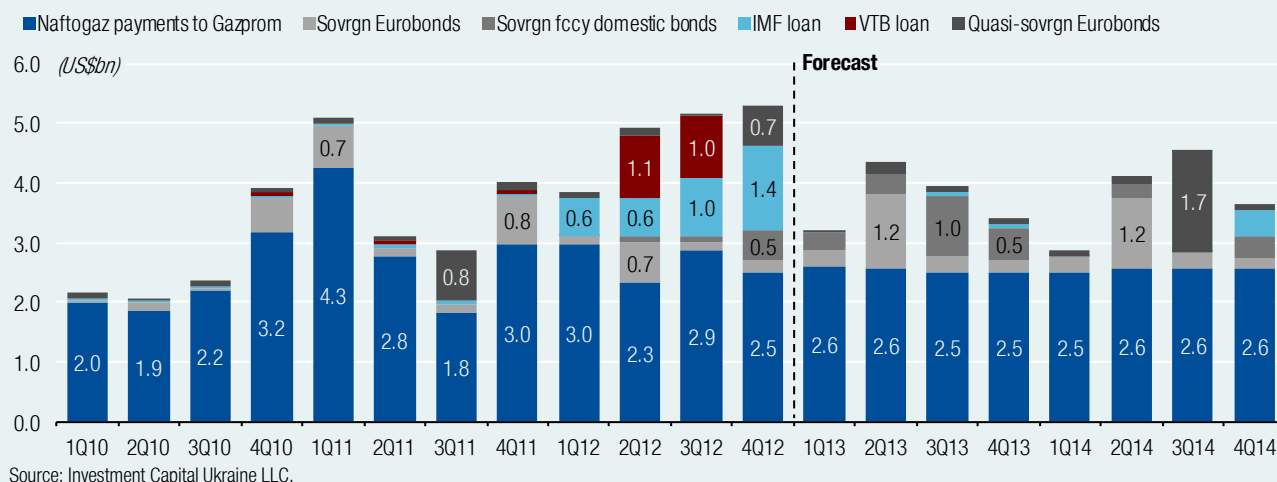
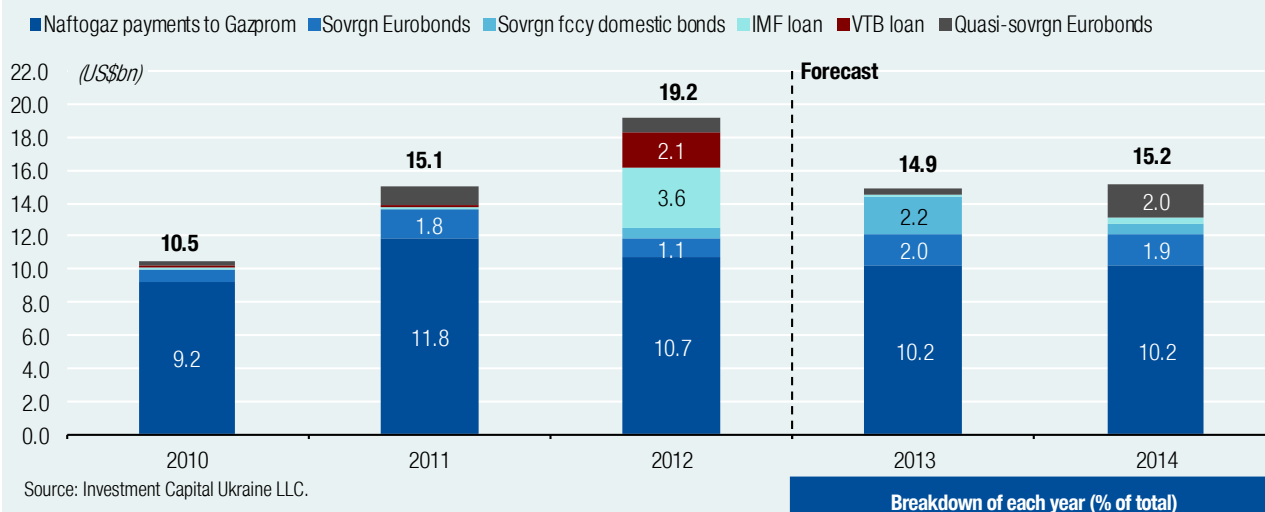
Period	Sovereign Eurobonds	Sovereign fccy domestic bonds <sup>1</sup>	IMF loan <sup>2</sup>	VTB loan	Quasi-sovereign Eurobonds <sup>3</sup>	Naftogaz pay-ments to Gazprom <sup>4</sup>	Total
<b>Quarterly</b>							
1Q10	21	0	40	0	94	1,994	<b>2,149</b>
2Q10	137	0	40	0	29	1,859	<b>2,065</b>
3Q10	21	0	40	0	109	2,206	<b>2,376</b>
4Q10	556	0	48	67	60	3,184	<b>3,915</b>
1Q11	696	0	53	0	109	4,250	<b>5,108</b>
2Q11	151	0	53	67	83	2,758	<b>3,112</b>
3Q11	135	0	53	0	836	1,831	<b>2,855</b>
4Q11	790	0	53	67	108	2,980	<b>3,998</b>
1Q12	135	12	629	0	108	2,973	<b>3,858</b>
2Q12	670	112	627	1,067	108	2,326	<b>4,910</b>
3Q12	135	86	997	1,016	32	2,876	<b>5,143</b>
4Q12	175	526	1,394	0	684	2,511	<b>5,290</b>
1Q13	255	324	0	0	32	2,600	<b>3,213</b>
2Q13	1,242	328	0	0	190	2,576	<b>4,336</b>
3Q13	255	1,002	77	0	108	2,508	<b>3,950</b>
4Q13	204	537	71	0	114	2,498	<b>3,424</b>
1Q14	255	4	0	0	108	2,512	<b>2,879</b>
2Q14	1,204	235	0	0	114	2,554	<b>4,107</b>
3Q14	255	4	0	0	1,703	2,575	<b>4,538</b>
4Q14	164	379	438	0	114	2,562	<b>3,658</b>
<b>Yearly</b>							
2010	735	0	169	67	292	9,243	<b>10,505</b>
2011	1,771	0	213	134	1,136	11,819	<b>15,073</b>
2012	1,114	736	3,647	2,083	933	10,686	<b>19,200</b>
2013	1,956	2,191	148	0	445	10,182	<b>14,922</b>
2014	1,878	622	438	0	2,040	10,203	<b>15,181</b>
<b>Yearly avg</b>							
2011-12	1,443	368	1,930	1,108	1,034	11,253	<b>17,137</b>
2013-14	1,917	1,406	293	0	1,242	10,192	<b>15,052</b>
<b>External obligations load per year</b>							
<b>Increase (decrease)</b>	475	1,038	-1,637	-1,108	208	-1,060	<b>-2,085</b>

Notes: [1] sovereign foreign-currency bonds issued in the domestic bond market, including USD-denominated retail bonds called Treasury Obligations; [2] IMF loans to the MoF and NBU, net of the incoming loans from the IMF to be received in the 2013-14 period, in accordance with above mentioned assumptions; [3] quasi-sovereign Eurobonds issued by city of Kyiv, state-run banks and non-bank entities; [4] historical data is based upon Interfax-Ukraine news, while 2013-14 data is ICU forecast.

Sources: Ministry of Finance of Ukraine, Bloomberg, Investment Capital Ukraine LLC.

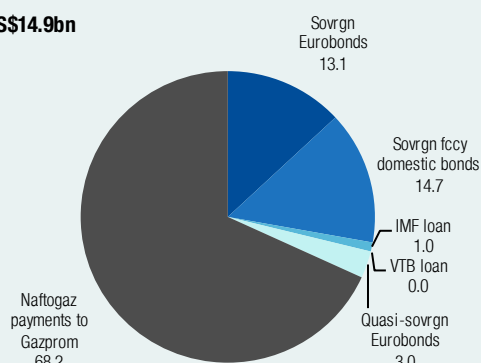
**Chart 62. Quarterly volume of sovereign external obligations in 2010-12 and forecast for 2013-14 (US\$bn)**

**IMF option #1:** Naftogaz's imports 25bcm of natural gas each year, with no additional natural gas price discount from Gazprom. The IMF programme starts in 1Q13, and its total size amounts to XDR7.0bn or US\$10.8bn. Hence, each quarter since 1Q13 Ukraine's authorities receive an XDR1.0bn tranche per quarter.

**Chart 63. Yearly volume of sovereign external obligations in 2010-12 and forecast for 2013-14 (US\$bn)****Chart 64. Breakdown of yearly volumes of sovereign external obligations in 2013 and 2014 (% of total)**

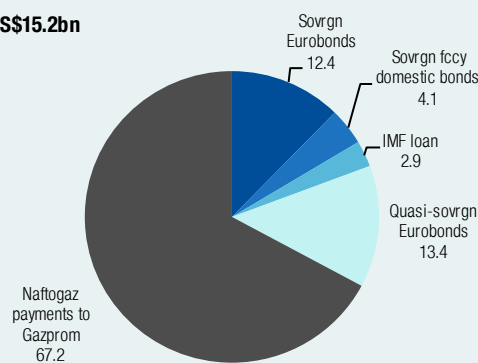
Forecast for 2013

100% = US\$14.9bn



Forecast for 2014

100% = US\$15.2bn



Source: Investment Capital Ukraine LLC.

Source: Investment Capital Ukraine LLC.

## IMF Option #2

**Key assumptions for 2013-14:** Naftogaz's imports **25bcm** of natural gas each year, and has no additional natural gas price discount from Gazprom. **The IMF programme starts in 2Q13**, and its total size amounts to XDR7.0bn or US\$10.8bn. Hence, each quarter since 2Q13 Ukraine's authorities receive an XDR1.0bn tranche per quarter.

**Table 19. Breakdown of quarterly and yearly volume of sovereign external obligations in 2010-12 and forecast for 2013-14 (US\$m)**

By type of sovereign external obligation

Period	Sovereign Eurobonds	Sovereign fccy domestic bonds <sup>1</sup>	IMF loan <sup>2</sup>	VTB loan	Quasi-sovereign Eurobonds <sup>3</sup>	Naftogaz pay-ments to Gazprom <sup>4</sup>	Total
<b>Quarterly</b>							
1Q10	21	0	40	0	94	1,994	<b>2,149</b>
2Q10	137	0	40	0	29	1,859	<b>2,065</b>
3Q10	21	0	40	0	109	2,206	<b>2,376</b>
4Q10	556	0	48	67	60	3,184	<b>3,915</b>
1Q11	696	0	53	0	109	4,250	<b>5,108</b>
2Q11	151	0	53	67	83	2,758	<b>3,112</b>
3Q11	135	0	53	0	836	1,831	<b>2,855</b>
4Q11	790	0	53	67	108	2,980	<b>3,998</b>
1Q12	135	12	629	0	108	2,973	<b>3,858</b>
2Q12	670	112	627	1,067	108	2,326	<b>4,910</b>
3Q12	135	86	997	1,016	32	2,876	<b>5,143</b>
4Q12	175	526	1,394	0	684	2,511	<b>5,290</b>
1Q13	255	324	1,389	0	32	2,600	<b>4,601</b>
2Q13	1,242	328	0	0	190	2,576	<b>4,336</b>
3Q13	255	1,002	77	0	108	2,508	<b>3,950</b>
4Q13	204	537	71	0	114	2,498	<b>3,424</b>
1Q14	255	4	0	0	108	2,512	<b>2,879</b>
2Q14	1,204	235	0	0	114	2,554	<b>4,107</b>
3Q14	255	4	0	0	1,703	2,575	<b>4,538</b>
4Q14	164	379	0	0	114	2,562	<b>3,219</b>
<b>Yearly</b>							
2010	735	0	169	67	292	9,243	<b>10,505</b>
2011	1,771	0	213	134	1,136	11,819	<b>15,073</b>
2012	1,114	736	3,647	2,083	933	10,686	<b>19,200</b>
2013	1,956	2,191	1,537	0	445	10,182	<b>16,311</b>
2014	1,878	622	0	0	2,040	10,203	<b>14,743</b>
<b>Yearly avr</b>							
2011-12	1,443	368	1,930	1,108	1,034	11,253	<b>17,137</b>
2013-14	1,917	1,406	769	0	1,242	10,192	<b>15,527</b>
<b>External obligations load per year</b>							
<b>Increase (decrease)</b>	475	1,038	-1,162	-1,108	208	-1,060	<b>-1,610</b>

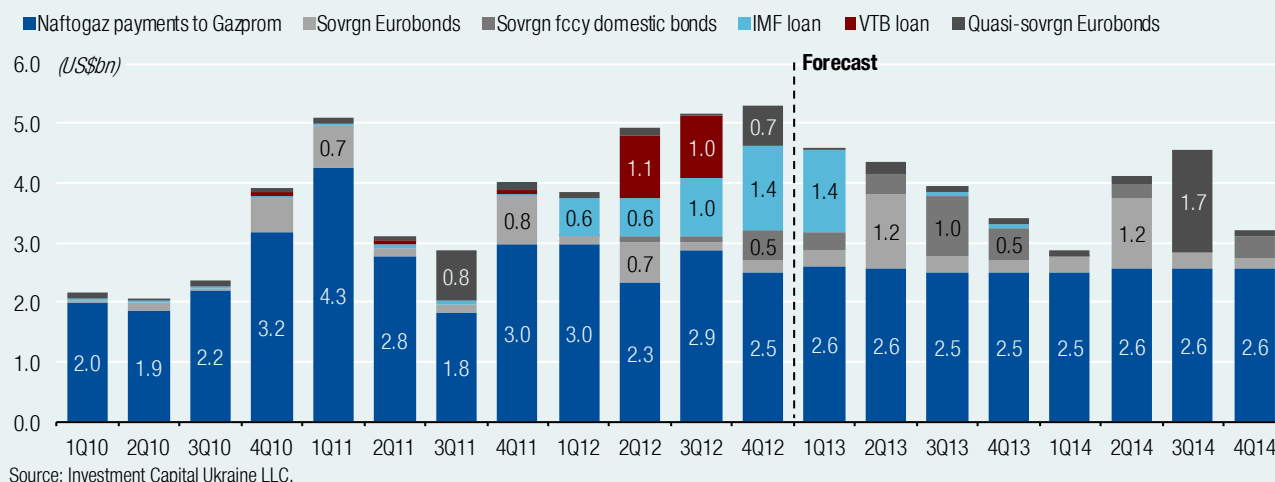
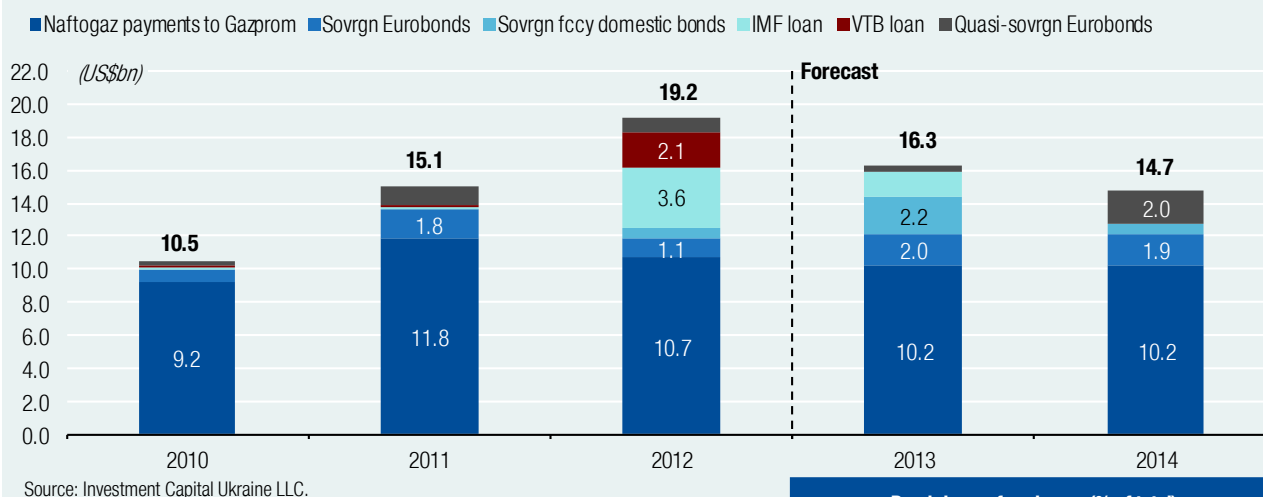
Notes: [1] sovereign foreign-currency bonds issued in the domestic bond market, including USD-denominated retail bonds called Treasury Obligations; [2] IMF loans to the MoF and NBU, net of the incoming loans from the IMF to be received in the 2013-14 period, in accordance with above mentioned assumptions; [3] quasi-sovereign Eurobonds issued by city of Kyiv, state-run banks and non-bank entities; [4] historical data is based upon Interfax-Ukraine news, while 2013-14 data is ICU forecast.

Sources: Ministry of Finance of Ukraine, Bloomberg, Investment Capital Ukraine LLC.



**Chart 65. Quarterly volume of sovereign external obligations in 2010-12 and forecast for 2013-14 (US\$bn)**

**IMF option #2:** Naftogaz's imports 25bcm of natural gas each year, and has no additional natural gas price discount from Gazprom. The IMF programme starts in 2Q13, and its total size amounts to XDR7.0bn or US\$10.8bn. Hence, each quarter since 2Q13 Ukraine's authorities receive an XDR1.0bn tranche per quarter.

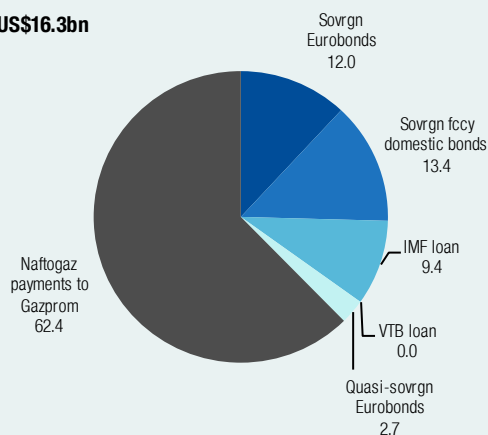
**Chart 66. Yearly volume of sovereign external obligations in 2010-12 and forecast for 2013-14 (US\$bn)**

Breakdown of each year (% of total)

**Chart 67. Breakdown of yearly volumes of sovereign external obligations in 2013 and 2014 (% of total)**

Forecast for 2013

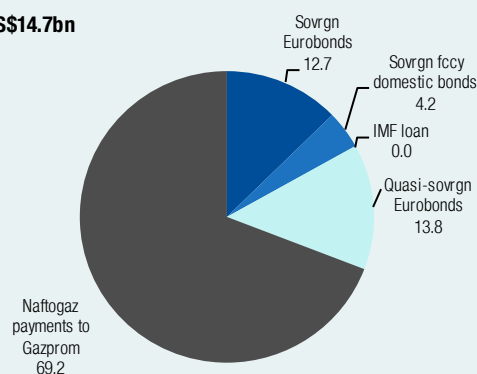
100% = US\$16.3bn



Source: Investment Capital Ukraine LLC.

Forecast for 2014

100% = US\$14.7bn



Source: Investment Capital Ukraine LLC.

## IMF Option #3

**Key assumptions for 2013-14:** Naftogaz imports **18bcm** of natural gas each year, and has no additional natural gas price discount from Gazprom. The IMF programme starts in 2Q13, and, and its total size amounts to XDR7.0bn or US\$10.8bn. Hence, each quarter since 2Q13 Ukraine's authorities receive an XDR1.0bn tranche per quarter.

**Table 20. Breakdown of quarterly and yearly volume of sovereign external obligations in 2010-12 and forecast for 2013-14 (US\$m)**

By type of sovereign external obligation

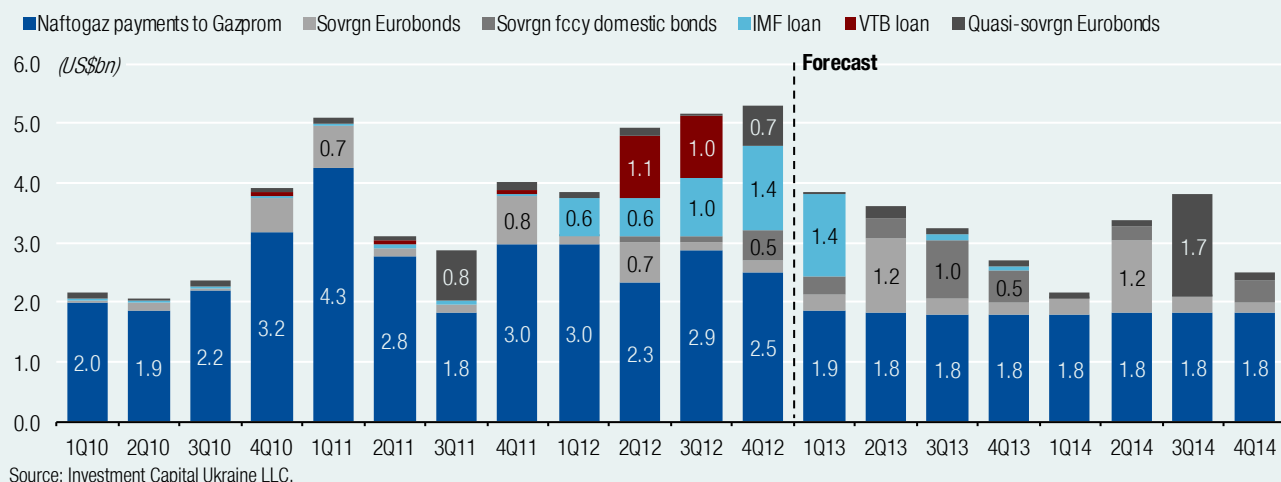
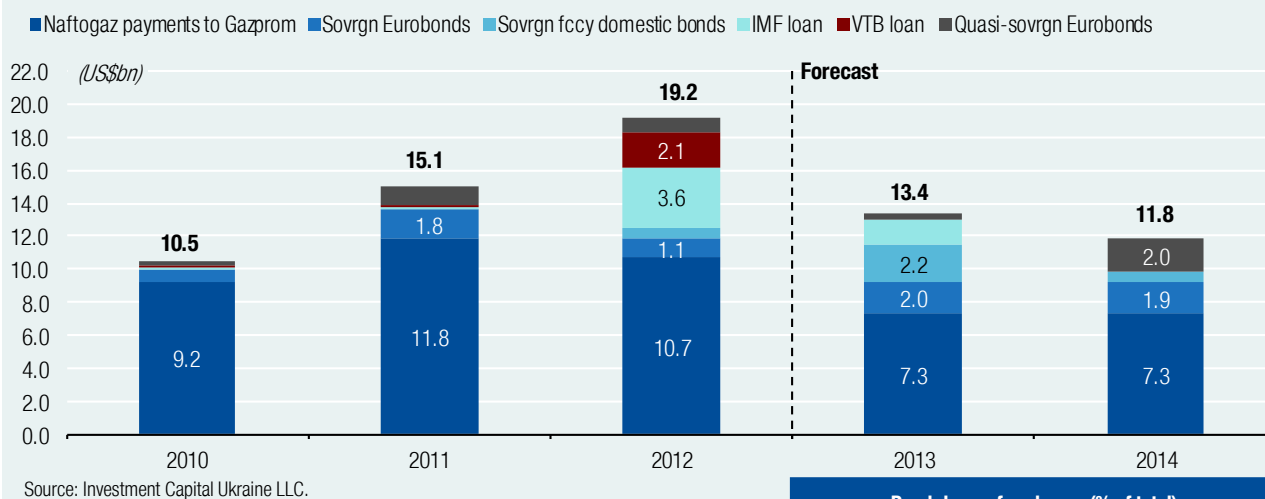
Period	Sovereign Eurobonds	Sovereign fccy domestic bonds <sup>1</sup>	IMF loan <sup>2</sup>	VTB loan	Quasi-sovereign Eurobonds <sup>3</sup>	Naftogaz pay-ments to Gazprom <sup>4</sup>	Total
<b>Quarterly</b>							
1Q10	21	0	40	0	94	1,994	<b>2,149</b>
2Q10	137	0	40	0	29	1,859	<b>2,065</b>
3Q10	21	0	40	0	109	2,206	<b>2,376</b>
4Q10	556	0	48	67	60	3,184	<b>3,915</b>
1Q11	696	0	53	0	109	4,250	<b>5,108</b>
2Q11	151	0	53	67	83	2,758	<b>3,112</b>
3Q11	135	0	53	0	836	1,831	<b>2,855</b>
4Q11	790	0	53	67	108	2,980	<b>3,998</b>
1Q12	135	12	629	0	108	2,973	<b>3,858</b>
2Q12	670	112	627	1,067	108	2,326	<b>4,910</b>
3Q12	135	86	997	1,016	32	2,876	<b>5,143</b>
4Q12	175	526	1,394	0	684	2,511	<b>5,290</b>
1Q13	255	324	1,389	0	32	1,857	<b>3,858</b>
2Q13	1,242	328	0	0	190	1,839	<b>3,599</b>
3Q13	255	1,002	77	0	108	1,790	<b>3,233</b>
4Q13	204	537	71	0	114	1,783	<b>2,709</b>
1Q14	255	4	0	0	108	1,793	<b>2,161</b>
2Q14	1,204	235	0	0	114	1,823	<b>3,377</b>
3Q14	255	4	0	0	1,703	1,839	<b>3,801</b>
4Q14	164	379	0	0	114	1,829	<b>2,486</b>
<b>Yearly</b>							
2010	735	0	169	67	292	9,243	<b>10,505</b>
2011	1,771	0	213	134	1,136	11,819	<b>15,073</b>
2012	1,114	736	3,647	2,083	933	10,686	<b>19,200</b>
2013	1,956	2,191	1,537	0	445	7,270	<b>13,399</b>
2014	1,878	622	0	0	2,040	7,285	<b>11,825</b>
<b>Yearly avg</b>							
2011-12	1,443	368	1,930	1,108	1,034	11,253	<b>17,137</b>
2013-14	1,917	1,406	769	0	1,242	7,277	<b>12,612</b>
<b>External obligations load per year</b>							
<b>Increase (decrease)</b>	475	1,038	-1,162	-1,108	208	-3,975	<b>-4,525</b>

Notes: [1] sovereign foreign-currency bonds issued in the domestic bond market, including USD-denominated retail bonds called Treasury Obligations; [2] IMF loans to the MoF and NBU, net of the incoming loans from the IMF to be received in the 2013-14 period, in accordance with above mentioned assumptions; [3] quasi-sovereign Eurobonds issued by city of Kyiv, state-run banks and non-bank entities; [4] historical data is based upon Interfax-Ukraine news, while 2013-14 data is ICU forecast.

Sources: Ministry of Finance of Ukraine, Bloomberg, Investment Capital Ukraine LLC.

**Chart 68. Quarterly volume of sovereign external obligations in 2010-12 and forecast for 2013-14 (US\$bn)**

**IMF option #3:** Naftogaz imports 18bcm of natural gas each year, and has no additional natural gas price discount from Gazprom. The IMF programme starts in 2Q13, and its total size amounts to XDR7.0bn or US\$10.8bn. Hence, each quarter since 2Q13 Ukraine's authorities receive an XDR1.0bn tranche per quarter.

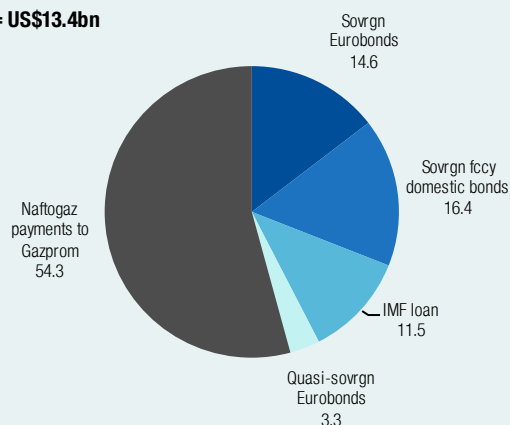
**Chart 69. Yearly volume of sovereign external obligations in 2010-12 and forecast for 2013-14 (US\$bn)**

Breakdown of each year (% of total)

**Chart 70. Breakdown of yearly volumes of sovereign external obligations in 2013 and 2014 (% of total)**

Forecast for 2013

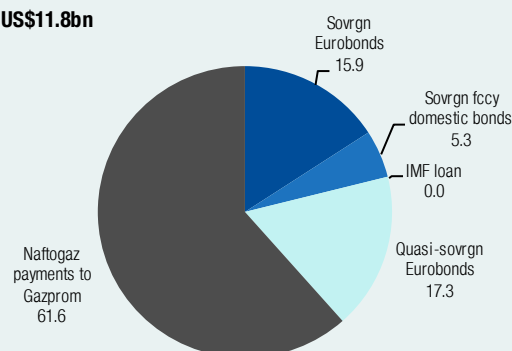
100% = US\$13.4bn



Source: Investment Capital Ukraine LLC.

Forecast for 2014

100% = US\$11.8bn



Source: Investment Capital Ukraine LLC.

## IMF Option #4

**Key assumptions for 2013-14:** Naftogaz's imports **25bcm** of natural gas each year, and has no additional natural gas price discount from Gazprom. The VTB loan due in 2014 is not refinanced by the lender. **The IMF programme starts in 2013**, and due the Ukrainian government's continued hesitancy in carrying out the economic reforms required by the IMF, it receives just four tranches of IMF lending, each totalling XDR1.0bn.

**Table 21. Breakdown of quarterly and yearly volume of sovereign external obligations in 2010-12 and forecast for 2013-14 (US\$m)**

By type of sovereign external obligation

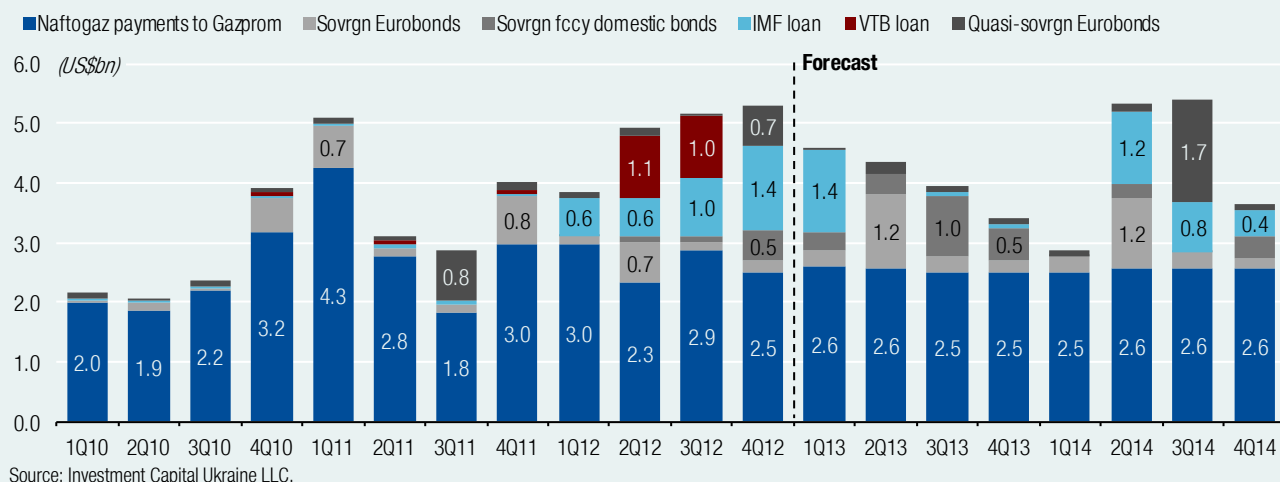
Period	Sovereign Eurobonds	Sovereign fccy domestic bonds <sup>1</sup>	IMF loan <sup>2</sup>	VTB loan	Quasi-sovereign Eurobonds <sup>3</sup>	Naftogaz payments to Gazprom <sup>4</sup>	Total
<b>Quarterly</b>							
1Q10	21	0	0	0	94	1,994	<b>2,109</b>
2Q10	111	0	0	0	29	1,859	<b>1,999</b>
3Q10	21	0	0	0	109	2,206	<b>2,335</b>
4Q10	111	0	0	67	60	3,184	<b>3,422</b>
1Q11	696	0	0	0	109	4,250	<b>5,055</b>
2Q11	131	0	0	67	83	2,758	<b>3,039</b>
3Q11	135	0	0	0	836	1,831	<b>2,802</b>
4Q11	770	0	0	67	108	2,980	<b>3,925</b>
1Q12	135	12	0	0	108	2,973	<b>3,228</b>
2Q12	650	109	0	1,067	108	2,326	<b>4,261</b>
3Q12	135	80	0	0	32	2,876	<b>3,123</b>
4Q12	134	525	41	34	684	2,851	<b>4,268</b>
1Q13	255	324	0	0	32	1,858	<b>2,470</b>
2Q13	1,202	305	0	34	190	1,834	<b>3,565</b>
3Q13	255	996	83	0	108	1,802	<b>3,245</b>
4Q13	164	516	77	34	114	1,800	<b>2,705</b>
1Q14	255	1	0	0	108	1,800	<b>2,164</b>
2Q14	164	212	0	1,034	114	1,798	<b>3,321</b>
3Q14	255	1	0	0	1,703	1,796	<b>3,756</b>
4Q14	164	255	440	0	114	1,795	<b>2,768</b>
<b>Yearly</b>							
2010	263	0	0	67	292	9,243	<b>9,865</b>
2011	1,732	0	0	134	1,136	11,819	<b>14,821</b>
2012	1,054	726	41	1,101	933	11,026	<b>14,880</b>
2013	1,876	2,142	161	67	445	7,293	<b>11,984</b>
2014	838	468	440	1,034	2,040	7,189	<b>12,009</b>
<b>Yearly average</b>							
2011-12	1,393	363	20	617	1,034	11,422	<b>14,850</b>
2013-14	1,357	1,305	301	550	1,242	7,241	<b>11,997</b>
<b>External obligations load per year</b>							
<b>Increase (decrease)</b>	-35	942	280	-67	208	-4,181	<b>-2,854</b>

Notes: [1] sovereign foreign-currency bonds issued in the domestic bond market, including USD-denominated retail bonds called Treasury Obligations; [2] IMF loans to the MoF and NBU, net of the incoming loans from the IMF to be received in the 2013-14 period, in accordance with above mentioned assumptions; [3] quasi-sovereign Eurobonds issued by city of Kyiv, state-run banks and non-bank entities; [4] historical data is based upon Interfax-Ukraine news, while 2013-14 data is ICU forecast.

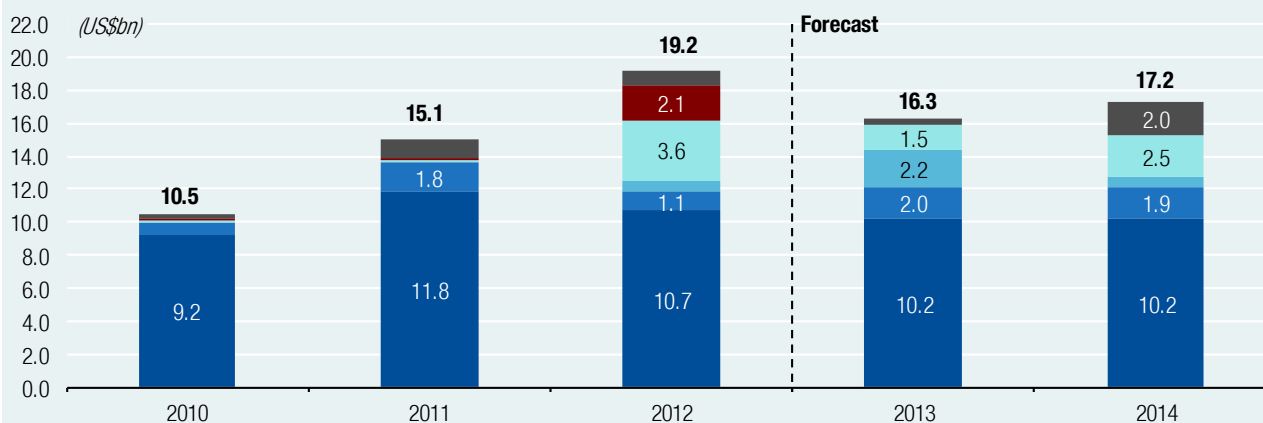
Sources: Ministry of Finance of Ukraine, Bloomberg, Investment Capital Ukraine LLC.

**Chart 71. Quarterly volume of sovereign external obligations in 2010-12 and forecast for 2013-14 (US\$bn)**

**IMF option #4:** Naftogaz's imports 25bcm of natural gas each year, and has no additional natural gas price discount from Gazprom. The VTB loan due in 2014 is not refinanced by the lender. The IMF programme starts in 2Q13, and due the Ukrainian government's continued hesitancy in carrying out the economic reforms required by the IMF, it receives just four tranches of IMF lending, each totalling XDR1.0bn.

**Chart 72. Yearly volume of sovereign external obligations in 2010-12 and forecast for 2013-14 (US\$bn)**

■ Naftogaz payments to Gazprom ■ Sovrgn Eurobonds ■ Sovrgn fccy domestic bonds ■ IMF loan ■ VTB loan ■ Quasi-sovrgn Eurobonds

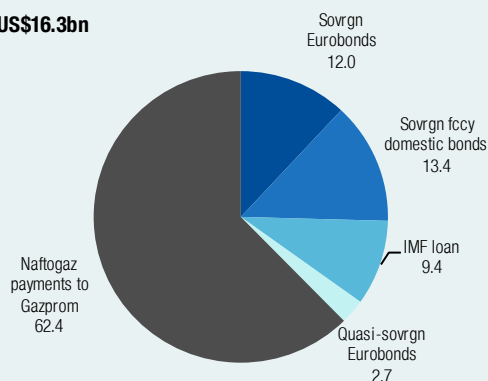


Breakdown of each year (% of total)

**Chart 73. Breakdown of yearly volumes of sovereign external obligations in 2013 and 2014 (% of total)**

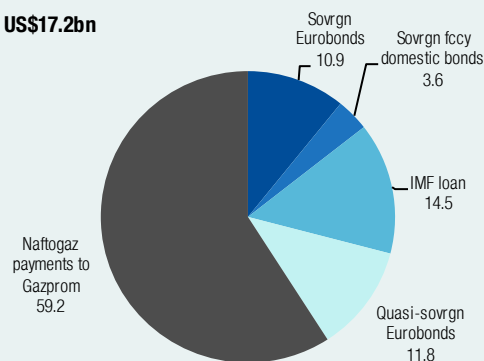
Forecast for 2013

100% = US\$16.3bn



Forecast for 2014

100% = US\$17.2bn



Source: Investment Capital Ukraine LLC.

Source: Investment Capital Ukraine LLC.

## Kremlin Option #1

**Key assumptions for 2013-14:** Naftogaz imports **33bcm** of natural gas each year. Loans due in 2013-14 previously received from the IMF are not refinanced. The Kremlin provides an additional **discount** to the natural gas price formula of **US\$100** per 1,000 m<sup>3</sup>.

**Table 22. Breakdown of quarterly and yearly volume of sovereign external obligations in 2010-12 and forecast for 2013-14 (US\$m)**

By type of sovereign external obligation

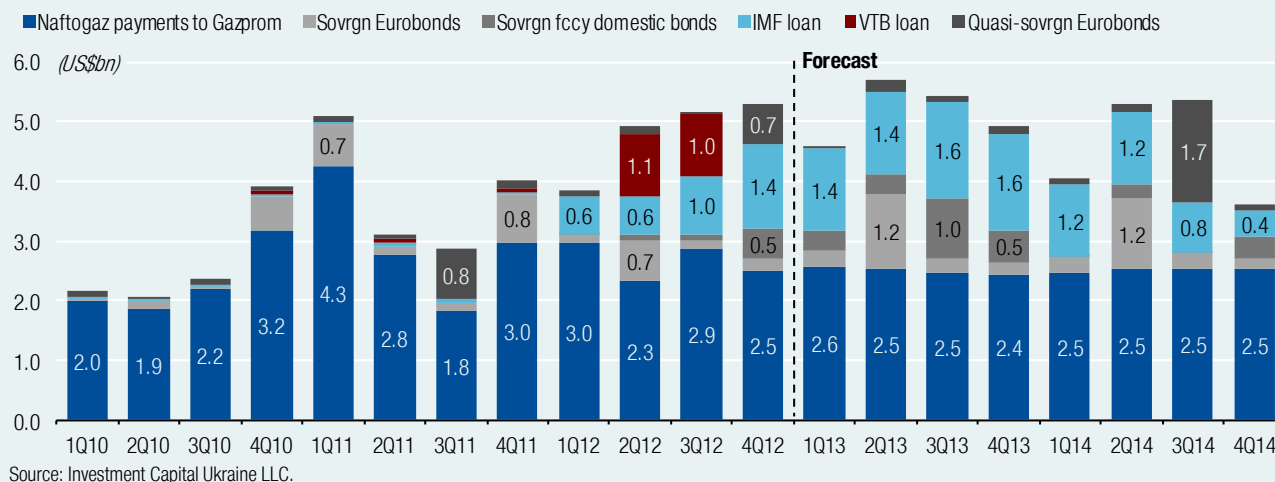
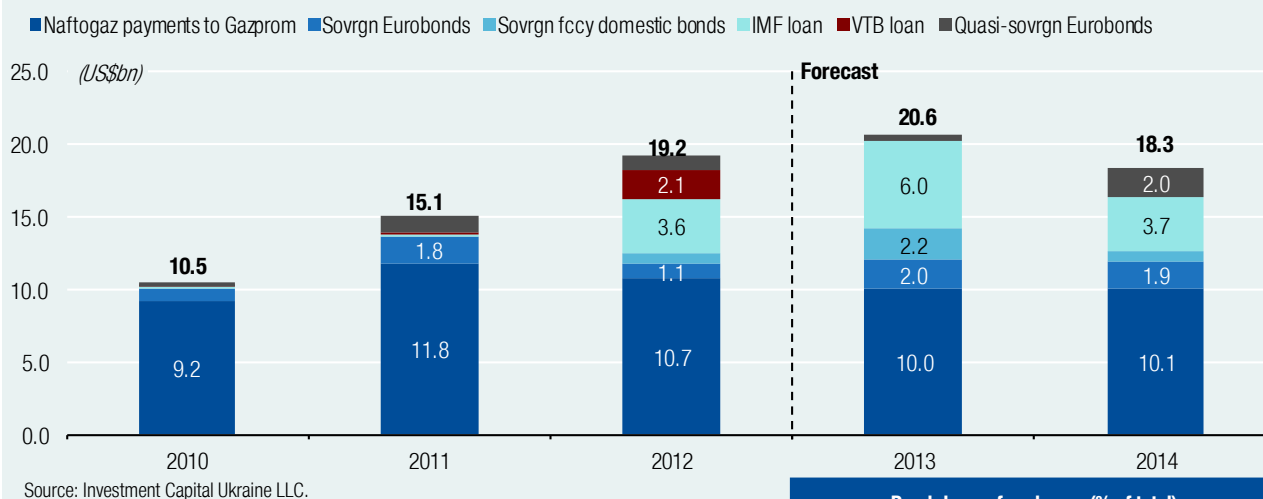
Period	Sovereign Eurobonds	Sovereign fccy domestic bonds <sup>1</sup>	IMF loan <sup>2</sup>	VTB loan	Quasi-sovereign Eurobonds <sup>3</sup>	Naftogaz pay-ments to Gazprom <sup>4</sup>	Total
<b>Quarterly</b>							
1Q10	21	0	40	0	94	1,994	<b>2,149</b>
2Q10	137	0	40	0	29	1,859	<b>2,065</b>
3Q10	21	0	40	0	109	2,206	<b>2,376</b>
4Q10	556	0	48	67	60	3,184	<b>3,915</b>
1Q11	696	0	53	0	109	4,250	<b>5,108</b>
2Q11	151	0	53	67	83	2,758	<b>3,112</b>
3Q11	135	0	53	0	836	1,831	<b>2,855</b>
4Q11	790	0	53	67	108	2,980	<b>3,998</b>
1Q12	135	12	629	0	108	2,973	<b>3,858</b>
2Q12	670	112	627	1,067	108	2,326	<b>4,910</b>
3Q12	135	86	997	1,016	32	2,876	<b>5,143</b>
4Q12	175	526	1,394	0	684	2,511	<b>5,290</b>
1Q13	255	324	1,389	0	32	2,579	<b>4,580</b>
2Q13	1,242	328	1,384	0	190	2,547	<b>5,690</b>
3Q13	255	1,002	1,619	0	108	2,457	<b>5,441</b>
4Q13	204	537	1,613	0	114	2,445	<b>4,912</b>
1Q14	255	4	1,223	0	108	2,463	<b>4,053</b>
2Q14	1,204	235	1,218	0	114	2,518	<b>5,289</b>
3Q14	255	4	849	0	1,703	2,546	<b>5,357</b>
4Q14	164	379	438	0	114	2,529	<b>3,624</b>
<b>Yearly</b>							
2010	735	0	169	67	292	9,243	<b>10,505</b>
2011	1,771	0	213	134	1,136	11,819	<b>15,073</b>
2012	1,114	736	3,647	2,083	933	10,686	<b>19,200</b>
2013	1,956	2,191	6,004	0	445	10,028	<b>20,623</b>
2014	1,878	622	3,728	0	2,040	10,055	<b>18,324</b>
<b>Yearly avg</b>							
2011-12	1,443	368	1,930	1,108	1,034	11,253	<b>17,137</b>
2013-14	1,917	1,406	4,866	0	1,242	10,041	<b>19,473</b>
<b>External obligations load per year</b>							
<b>Increase (decrease)</b>	475	1,038	2,936	-1,108	208	-1,211	<b>2,337</b>

Notes: [1] sovereign foreign-currency bonds issued in the domestic bond market, including USD-denominated retail bonds called Treasury Obligations; [2] IMF loans to the MoF and NBU, net of the incoming loan from VTB to be received in the 2013-14 period, in accordance with above mentioned assumptions; [3] quasi-sovereign Eurobonds issued by city of Kyiv, state-run banks and non-bank entities; [4] historical data is based upon Interfax-Ukraine news, while 2013-14 data is ICU forecast.

Sources: Ministry of Finance of Ukraine, Bloomberg, Investment Capital Ukraine LLC.

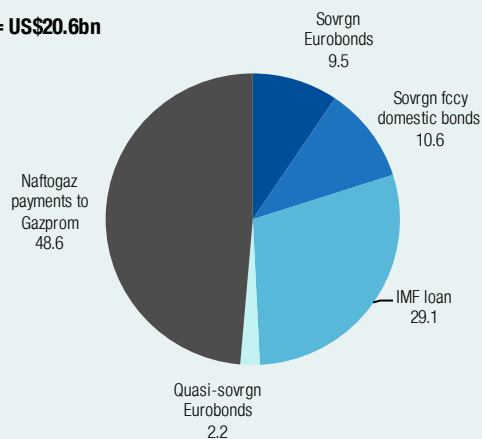
**Chart 74. Quarterly volume of sovereign external obligations in 2010-12 and forecast for 2013-14 (US\$bn)**

**Kremlin option #1:** Naftogaz imports 26bcm of natural gas each year. Loans due in 2013-14 previously received from the IMF and VTB are not refinanced. Kremlin provides additional discount to natural gas price formula of US\$100 per 1,000 m<sup>3</sup>.

**Chart 75. Yearly volume of sovereign external obligations in 2010-12 and forecast for 2013-14 (US\$bn)****Chart 76. Breakdown of yearly volumes of sovereign external obligations in 2013 and 2014 (% of total)**

Forecast for 2013

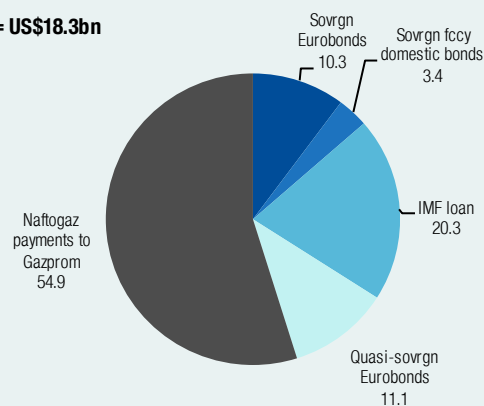
100% = US\$20.6bn



Source: Investment Capital Ukraine LLC.

Forecast for 2014

100% = US\$18.3bn



Source: Investment Capital Ukraine LLC.



## Kremlin Option #2

**Key assumptions for 2013-14:** Naftogaz imports **33bcm** of natural gas each year. Loans due in 2013-14 previously received from the IMF are not refinanced. The Kremlin provides an additional **discount** to the natural gas price formula of **US\$200** per 1,000 m<sup>3</sup>.

**Table 23. Breakdown of quarterly and yearly volume of sovereign external obligations in 2010-12 and forecast for 2013-14 (US\$m)**

By type of sovereign external obligation

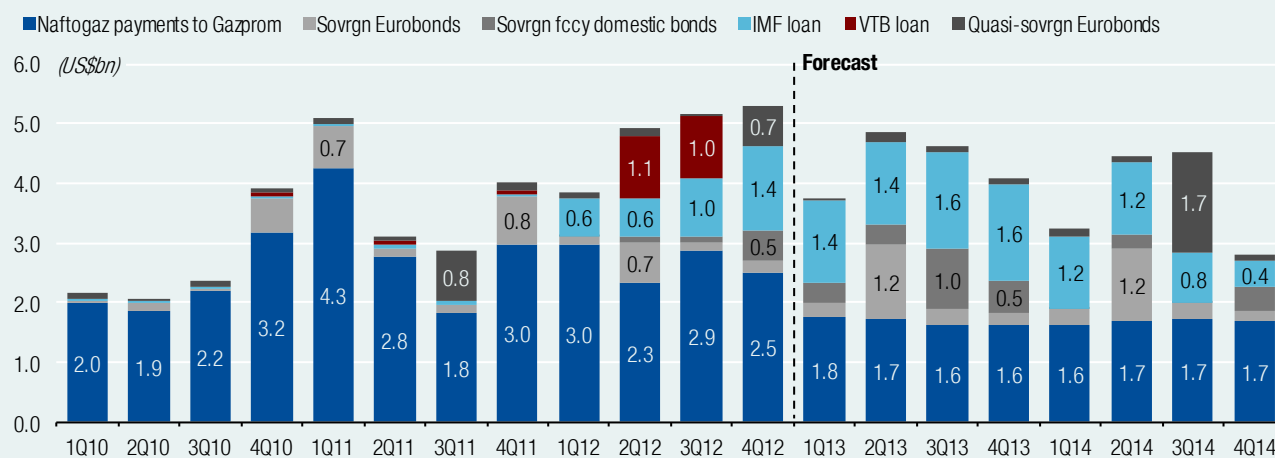
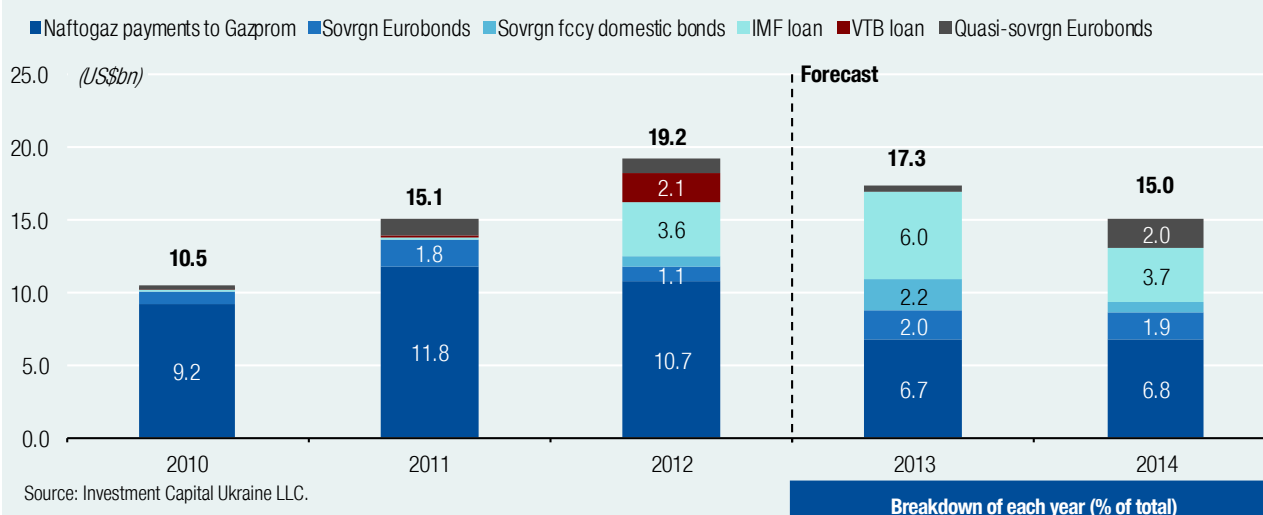
Period	Sovereign Eurobonds	Sovereign fccy domestic bonds <sup>1</sup>	IMF loan <sup>2</sup>	VTB loan	Quasi-sovereign Eurobonds <sup>3</sup>	Naftogaz pay-ments to Gazprom <sup>4</sup>	Total
<b>Quarterly</b>							
1Q10	21	0	40	0	94	1,994	<b>2,149</b>
2Q10	137	0	40	0	29	1,859	<b>2,065</b>
3Q10	21	0	40	0	109	2,206	<b>2,376</b>
4Q10	556	0	48	67	60	3,184	<b>3,915</b>
1Q11	696	0	53	0	109	4,250	<b>5,108</b>
2Q11	151	0	53	67	83	2,758	<b>3,112</b>
3Q11	135	0	53	0	836	1,831	<b>2,855</b>
4Q11	790	0	53	67	108	2,980	<b>3,998</b>
1Q12	135	12	629	0	108	2,973	<b>3,858</b>
2Q12	670	112	627	1,067	108	2,326	<b>4,910</b>
3Q12	135	86	997	1,016	32	2,876	<b>5,143</b>
4Q12	175	526	1,394	0	684	2,511	<b>5,290</b>
1Q13	255	324	1,389	0	32	1,754	<b>3,755</b>
2Q13	1,242	328	1,384	0	190	1,722	<b>4,865</b>
3Q13	255	1,002	1,619	0	108	1,632	<b>4,616</b>
4Q13	204	537	1,613	0	114	1,620	<b>4,087</b>
1Q14	255	4	1,223	0	108	1,638	<b>3,228</b>
2Q14	1,204	235	1,218	0	114	1,693	<b>4,464</b>
3Q14	255	4	849	0	1,703	1,721	<b>4,532</b>
4Q14	164	379	438	0	114	1,704	<b>2,799</b>
<b>Yearly</b>							
2010	735	0	169	67	292	9,243	<b>10,505</b>
2011	1,771	0	213	134	1,136	11,819	<b>15,073</b>
2012	1,114	736	3,647	2,083	933	10,686	<b>19,200</b>
2013	1,956	2,191	6,004	0	445	6,728	<b>17,323</b>
2014	1,878	622	3,728	0	2,040	6,755	<b>15,024</b>
<b>Yearly avg</b>							
2011-12	1,443	368	1,930	1,108	1,034	11,253	<b>17,137</b>
2013-14	1,917	1,406	4,866	0	1,242	6,741	<b>16,173</b>
<b>External obligations load per year</b>							
<b>Increase (decrease)</b>	475	1,038	2,936	-1,108	208	-4,511	<b>-963</b>

Notes: [1] sovereign foreign-currency bonds issued in the domestic bond market, including USD-denominated retail bonds called Treasury Obligations; [2] IMF loans to the MoF and NBU, net of the incoming loans from the IMF to be received in the 2013-14 period, in accordance with above mentioned assumptions; [3] quasi-sovereign Eurobonds issued by city of Kyiv, state-run banks and non-bank entities; [4] historical data is based upon Interfax-Ukraine news, while 2013-14 data is ICU forecast.

Sources: Ministry of Finance of Ukraine, Bloomberg, Investment Capital Ukraine LLC.

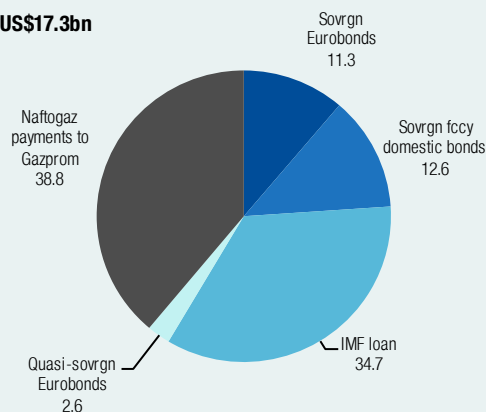
**Chart 77. Quarterly volume of sovereign external obligations in 2010-12 and forecast for 2013-14 (US\$bn)**

**Kremlin option #2:** Naftogaz imports 33bcm of natural gas each year. Loans due in 2013-14 previously received from the IMF are not refinanced. The Kremlin provides an additional discount to the natural gas price formula of US\$200 per 1,000 m3.

**Chart 78. Yearly volume of sovereign external obligations in 2010-12 and forecast for 2013-14 (US\$bn)****Chart 79. Breakdown of yearly volumes of sovereign external obligations in 2013 and 2014 (% of total)**

Forecast for 2013

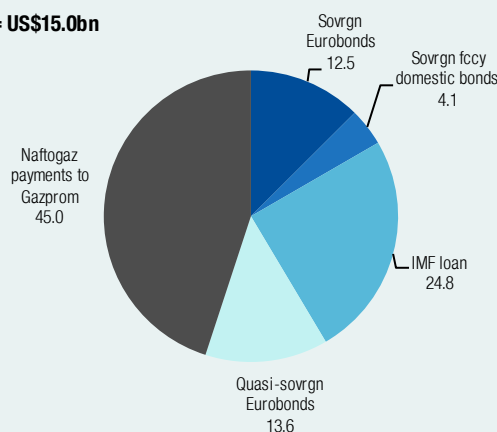
100% = US\$17.3bn



Source: Investment Capital Ukraine LLC.

Forecast for 2014

100% = US\$15.0bn



Source: Investment Capital Ukraine LLC.

## Kremlin Option #3

**Key assumptions for 2013-14:** Naftogaz imports **25bcm** of natural gas each year. Loans due in 2013-14 previously received from the IMF are not refinanced. The Kremlin provides 1) an additional **discount** to the natural gas price formula of **US\$100** per 1,000 m<sup>3</sup>; and 2) a **US\$7.0bn loan** via VTB to refinance a 75% share of the IMF loan due in 2013-14.

**Table 24. Breakdown of quarterly and yearly volume of sovereign external obligations in 2010-12 and forecast for 2013-14 (US\$m)**

By type of sovereign external obligation

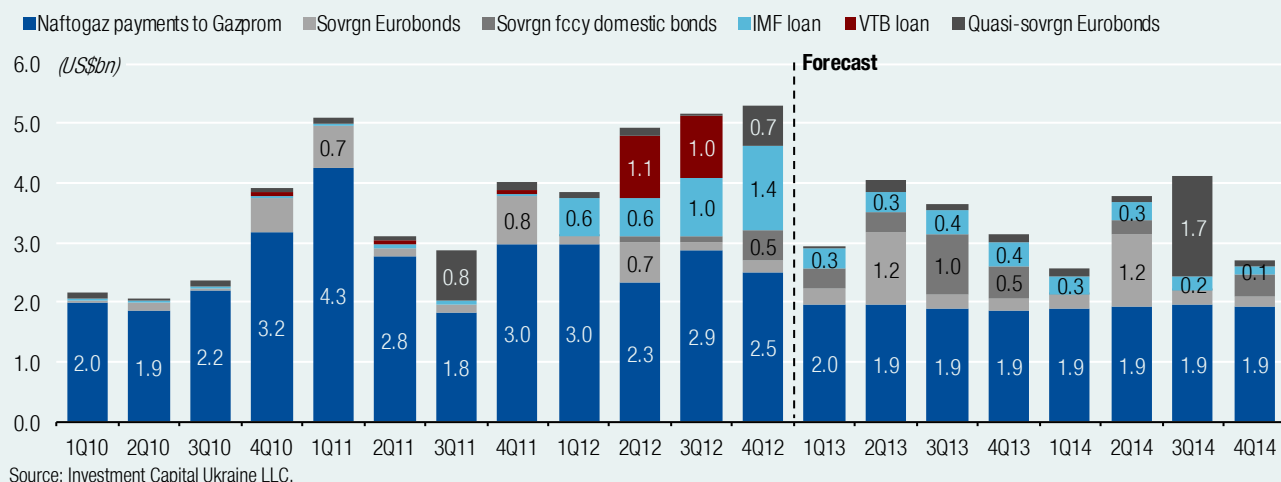
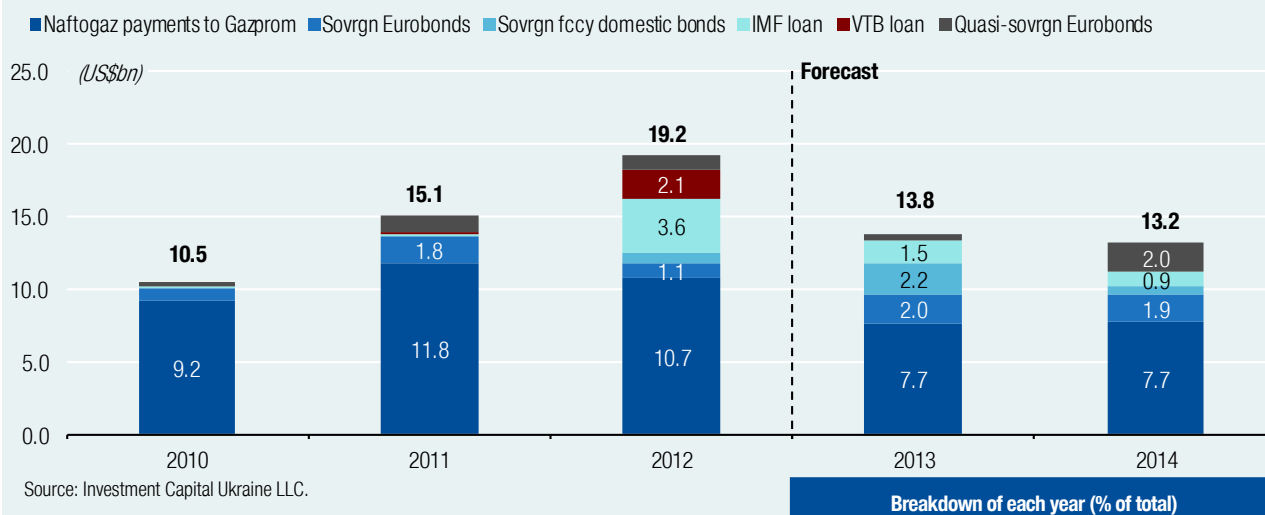
Period	Sovereign Eurobonds	Sovereign fccy domestic bonds <sup>1</sup>	IMF loan <sup>2</sup>	VTB loan	Quasi-sovereign Eurobonds <sup>3</sup>	Naftogaz payments to Gazprom <sup>4</sup>	Total
<b>Quarterly</b>							
1Q10	21	0	40	0	94	1,994	<b>2,149</b>
2Q10	137	0	40	0	29	1,859	<b>2,065</b>
3Q10	21	0	40	0	109	2,206	<b>2,376</b>
4Q10	556	0	48	67	60	3,184	<b>3,915</b>
1Q11	696	0	53	0	109	4,250	<b>5,108</b>
2Q11	151	0	53	67	83	2,758	<b>3,112</b>
3Q11	135	0	53	0	836	1,831	<b>2,855</b>
4Q11	790	0	53	67	108	2,980	<b>3,998</b>
1Q12	135	12	629	0	108	2,973	<b>3,858</b>
2Q12	670	112	627	1,067	108	2,326	<b>4,910</b>
3Q12	135	86	997	1,016	32	2,876	<b>5,143</b>
4Q12	175	526	1,394	0	684	2,511	<b>5,290</b>
1Q13	255	324	347	0	32	1,970	<b>2,930</b>
2Q13	1,242	328	346	0	190	1,945	<b>4,051</b>
3Q13	255	1,002	405	0	108	1,877	<b>3,647</b>
4Q13	204	537	403	0	114	1,868	<b>3,125</b>
1Q14	255	4	306	0	108	1,882	<b>2,554</b>
2Q14	1,204	235	305	0	114	1,923	<b>3,781</b>
3Q14	255	4	212	0	1,703	1,945	<b>4,120</b>
4Q14	164	379	110	0	114	1,932	<b>2,698</b>
<b>Yearly</b>							
2010	735	0	169	67	292	9,243	<b>10,505</b>
2011	1,771	0	213	134	1,136	11,819	<b>15,073</b>
2012	1,114	736	3,647	2,083	933	10,686	<b>19,200</b>
2013	1,956	2,191	1,501	0	445	7,661	<b>13,753</b>
2014	1,878	622	932	0	2,040	7,682	<b>13,154</b>
<b>Yearly avg</b>							
2011-12	1,443	368	1,930	1,108	1,034	11,253	<b>17,137</b>
2013-14	1,917	1,406	1,216	0	1,242	7,671	<b>13,454</b>
<b>External obligations load per year</b>							
<b>Increase (decrease)</b>	475	1,038	-714	-1,108	208	-3,581	<b>-3,683</b>

Notes: [1] sovereign foreign-currency bonds issued in the domestic bond market, including USD-denominated retail bonds called Treasury Obligations; [2] IMF loans to the MoF and NBU, net of the incoming loan from VTB to be received in the 2013-14 period, in accordance with above mentioned assumptions; [3] quasi-sovereign Eurobonds issued by city of Kyiv, state-run banks and non-bank entities; [4] historical data is based upon Interfax-Ukraine news, while 2013-14 data is ICU forecast.

Sources: Ministry of Finance of Ukraine, Bloomberg, Investment Capital Ukraine LLC.

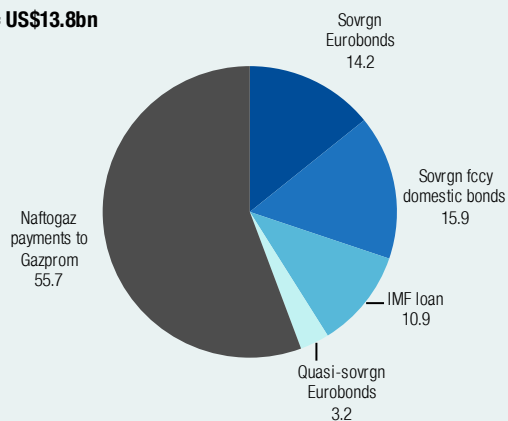
**Chart 80. Quarterly volume of sovereign external obligations in 2010-12 and forecast for 2013-14 (US\$bn)**

**Kremlin option #3:** Naftogaz imports 25bcm of natural gas each year. Loans due in 2013-14 previously received from IMF are not refinanced. Kremlin provides 1) additional discount to natural gas price formula of US\$100 per 1,000 m<sup>3</sup>, and 2) a US\$7.0bn loan via VTB to refinance a 75% share of the IMF loan due in 2013-14.

**Chart 81. Yearly volume of sovereign external obligations in 2010-12 and forecast for 2013-14 (US\$bn)****Chart 82. Breakdown of yearly volumes of sovereign external obligations in 2013 and 2014 (% of total)**

Forecast for 2013

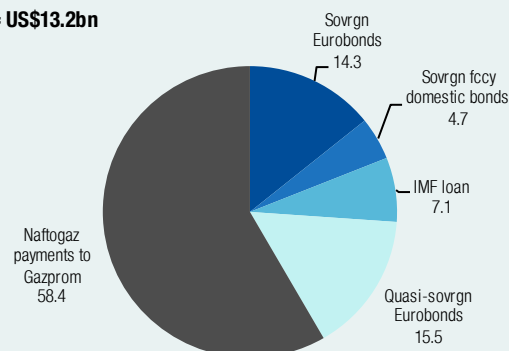
100% = US\$13.8bn



Source: Investment Capital Ukraine LLC.

Forecast for 2014

100% = US\$13.2bn



Source: Investment Capital Ukraine LLC.

## Kremlin Option #4

**Key assumptions for 2013-14:** Naftogaz imports **33bcm** of natural gas each year. Loans due in 2013-14 previously received from the IMF and VTB are not refinanced. Kremlin provides 1) an additional **discount** to the natural gas price formula of **US\$100** per 1,000 m<sup>3</sup>; and 2) a **US\$7.0bn loan** via VTB to refinance a 75% share of the IMF loan due in 2013-14.

**Table 25. Breakdown of quarterly and yearly volume of sovereign external obligations in 2010-12 and forecast for 2013-14 (US\$m)**

By type of sovereign external obligation

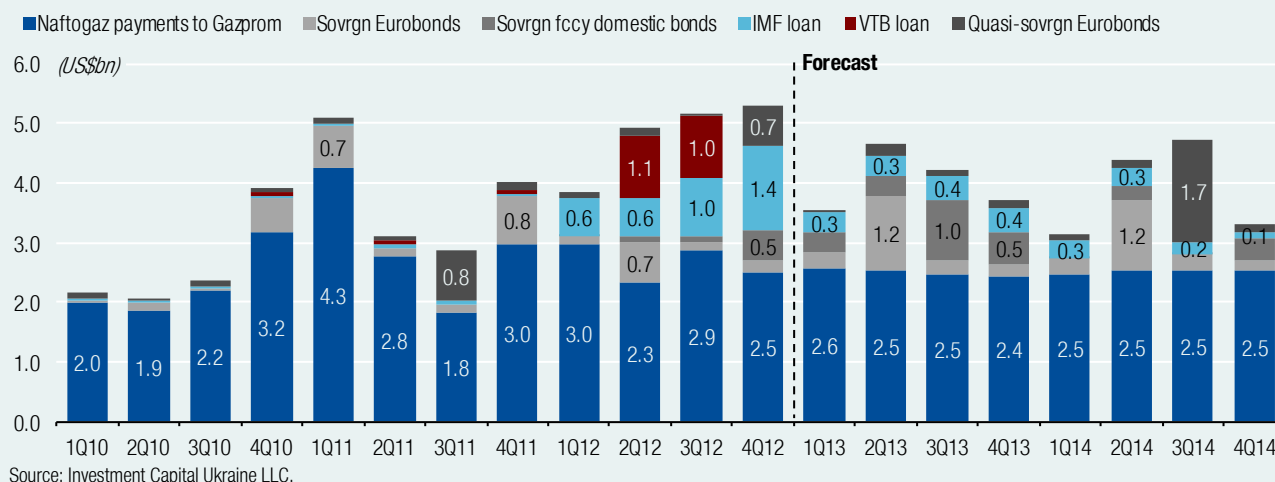
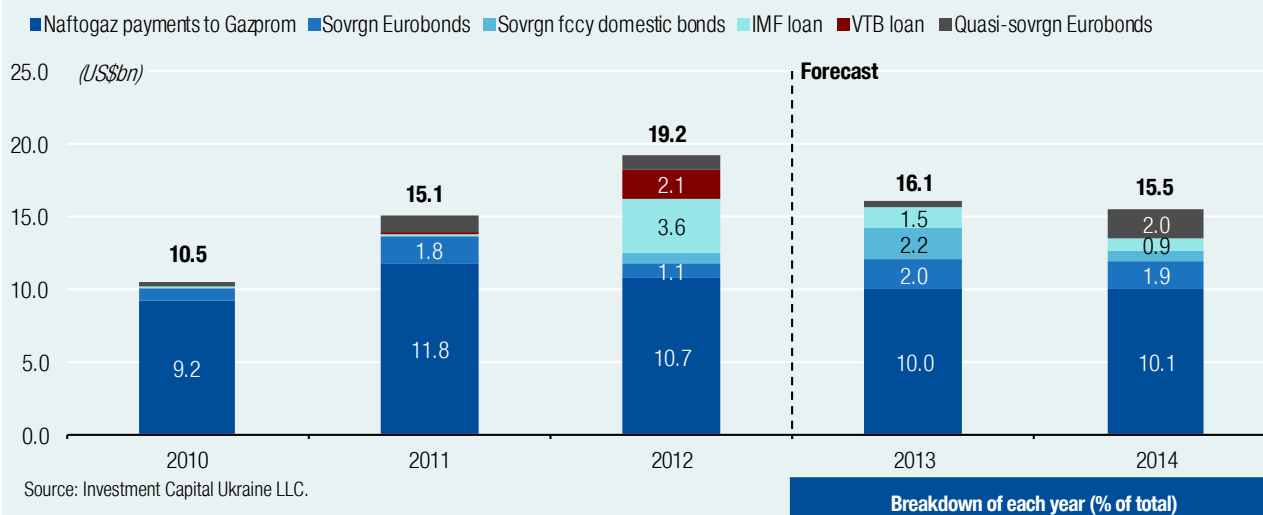
Period	Sovereign Eurobonds	Sovereign fccy domestic bonds <sup>1</sup>	IMF loan <sup>2</sup>	VTB loan	Quasi-sovereign Eurobonds <sup>3</sup>	Naftogaz payments to Gazprom <sup>4</sup>	Total
<b>Quarterly</b>							
1Q10	21	0	40	0	94	1,994	<b>2,149</b>
2Q10	137	0	40	0	29	1,859	<b>2,065</b>
3Q10	21	0	40	0	109	2,206	<b>2,376</b>
4Q10	556	0	48	67	60	3,184	<b>3,915</b>
1Q11	696	0	53	0	109	4,250	<b>5,108</b>
2Q11	151	0	53	67	83	2,758	<b>3,112</b>
3Q11	135	0	53	0	836	1,831	<b>2,855</b>
4Q11	790	0	53	67	108	2,980	<b>3,998</b>
1Q12	135	12	629	0	108	2,973	<b>3,858</b>
2Q12	670	112	627	1,067	108	2,326	<b>4,910</b>
3Q12	135	86	997	1,016	32	2,876	<b>5,143</b>
4Q12	175	526	1,394	0	684	2,511	<b>5,290</b>
1Q13	255	324	347	0	32	2,579	<b>3,538</b>
2Q13	1,242	328	346	0	190	2,547	<b>4,652</b>
3Q13	255	1,002	405	0	108	2,457	<b>4,227</b>
4Q13	204	537	403	0	114	2,445	<b>3,703</b>
1Q14	255	4	306	0	108	2,463	<b>3,136</b>
2Q14	1,204	235	305	0	114	2,518	<b>4,376</b>
3Q14	255	4	212	0	1,703	2,546	<b>4,721</b>
4Q14	164	379	110	0	114	2,529	<b>3,295</b>
<b>Yearly</b>							
2010	735	0	169	67	292	9,243	<b>10,505</b>
2011	1,771	0	213	134	1,136	11,819	<b>15,073</b>
2012	1,114	736	3,647	2,083	933	10,686	<b>19,200</b>
2013	1,956	2,191	1,501	0	445	10,028	<b>16,120</b>
2014	1,878	622	932	0	2,040	10,055	<b>15,528</b>
<b>Yearly avg</b>							
2011-12	1,443	368	1,930	1,108	1,034	11,253	<b>17,137</b>
2013-14	1,917	1,406	1,216	0	1,242	10,041	<b>15,824</b>
<b>External obligations load per year</b>							
<b>Increase (decrease)</b>	475	1,038	-714	-1,108	208	-1,211	<b>-1,313</b>

Notes: [1] sovereign foreign-currency bonds issued in the domestic bond market, including USD-denominated retail bonds called Treasury Obligations; [2] IMF loans to the MoF and NBU, net of the incoming loan from VTB to be received in the 2013-14 period, in accordance with above mentioned assumptions; [3] quasi-sovereign Eurobonds issued by city of Kyiv, state-run banks and non-bank entities; [4] historical data is based upon Interfax-Ukraine news, while 2013-14 data is ICU forecast.

Sources: Ministry of Finance of Ukraine, Bloomberg, Investment Capital Ukraine LLC.

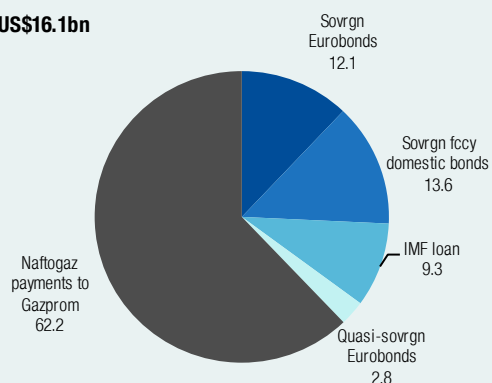
**Chart 83. Quarterly volume of sovereign external obligations in 2010-12 and forecast for 2013-14 (US\$bn)**

**Kremlin option #4:** Naftogaz imports 33bcm of natural gas each year. Loans due in 2013-14 previously received from the IMF and VTB are not refinanced. Kremlin provides 1) an additional discount to the natural gas price formula of US\$100 per 1,000 m3; and 2) a US\$7.0bn loan via VTB to refinance a 75% share of the IMF loan due in 2013-14.

**Chart 84. Yearly volume of sovereign external obligations in 2010-12 and forecast for 2013-14 (US\$bn)****Chart 85. Breakdown of yearly volumes of sovereign external obligations in 2013 and 2014 (% of total)**

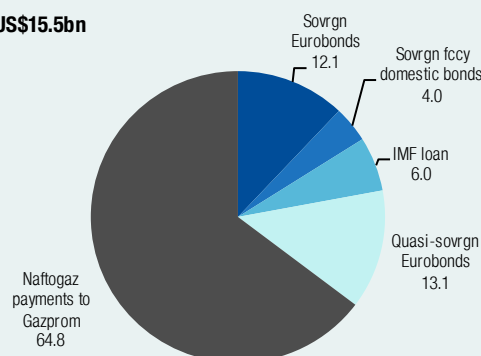
Forecast for 2013

100% = US\$16.1bn



Forecast for 2014

100% = US\$15.5bn



Source: Investment Capital Ukraine LLC.

Source: Investment Capital Ukraine LLC.

## Kremlin Option #5

**Key assumptions for 2013-14:** Naftogaz imports **25bcm** of natural gas each year. Loans due in 2013-14 previously received from the IMF are not refinanced. Kremlin provides 1) an additional **discount** to the natural gas price formula of **US\$200** per 1,000 m<sup>3</sup>; and 2) a **US\$7.0bn loan** via VTB to refinance a 75% share of the IMF loan due in 2013-14.

**Table 26. Breakdown of quarterly and yearly volume of sovereign external obligations in 2010-12 and forecast for 2013-14 (US\$m)**

By type of sovereign external obligation

Period	Sovereign Eurobonds	Sovereign fccy domestic bonds <sup>1</sup>	IMF loan <sup>2</sup>	VTB loan	Quasi-sovereign Eurobonds <sup>3</sup>	Naftogaz payments to Gazprom <sup>4</sup>	Total
<b>Quarterly</b>							
1Q10	21	0	40	0	94	1,994	<b>2,149</b>
2Q10	137	0	40	0	29	1,859	<b>2,065</b>
3Q10	21	0	40	0	109	2,206	<b>2,376</b>
4Q10	556	0	48	67	60	3,184	<b>3,915</b>
1Q11	696	0	53	0	109	4,250	<b>5,108</b>
2Q11	151	0	53	67	83	2,758	<b>3,112</b>
3Q11	135	0	53	0	836	1,831	<b>2,855</b>
4Q11	790	0	53	67	108	2,980	<b>3,998</b>
1Q12	135	12	629	0	108	2,973	<b>3,858</b>
2Q12	670	112	627	1,067	108	2,326	<b>4,910</b>
3Q12	135	86	997	1,016	32	2,876	<b>5,143</b>
4Q12	175	526	1,394	0	684	2,511	<b>5,290</b>
1Q13	255	324	347	0	32	1,340	<b>2,299</b>
2Q13	1,242	328	346	0	190	1,315	<b>3,421</b>
3Q13	255	1,002	405	0	108	1,247	<b>3,017</b>
4Q13	204	537	403	0	114	1,237	<b>2,495</b>
1Q14	255	4	306	0	108	1,251	<b>1,924</b>
2Q14	1,204	235	305	0	114	1,293	<b>3,151</b>
3Q14	255	4	212	0	1,703	1,315	<b>3,489</b>
4Q14	164	379	110	0	114	1,301	<b>2,068</b>
<b>Yearly</b>							
2010	735	0	169	67	292	9,243	<b>10,505</b>
2011	1,771	0	213	134	1,136	11,819	<b>15,073</b>
2012	1,114	736	3,647	2,083	933	10,686	<b>19,200</b>
2013	1,956	2,191	1,501	0	445	5,139	<b>11,232</b>
2014	1,878	622	932	0	2,040	5,161	<b>10,633</b>
<b>Yearly avg</b>							
2011-12	1,443	368	1,930	1,108	1,034	11,253	<b>17,137</b>
2013-14	1,917	1,406	1,216	0	1,242	5,150	<b>10,933</b>
<b>External obligations load per year</b>							
<b>Increase (decrease)</b>	-35	942	1,201	-67	208	-6,163	<b>-3,915</b>

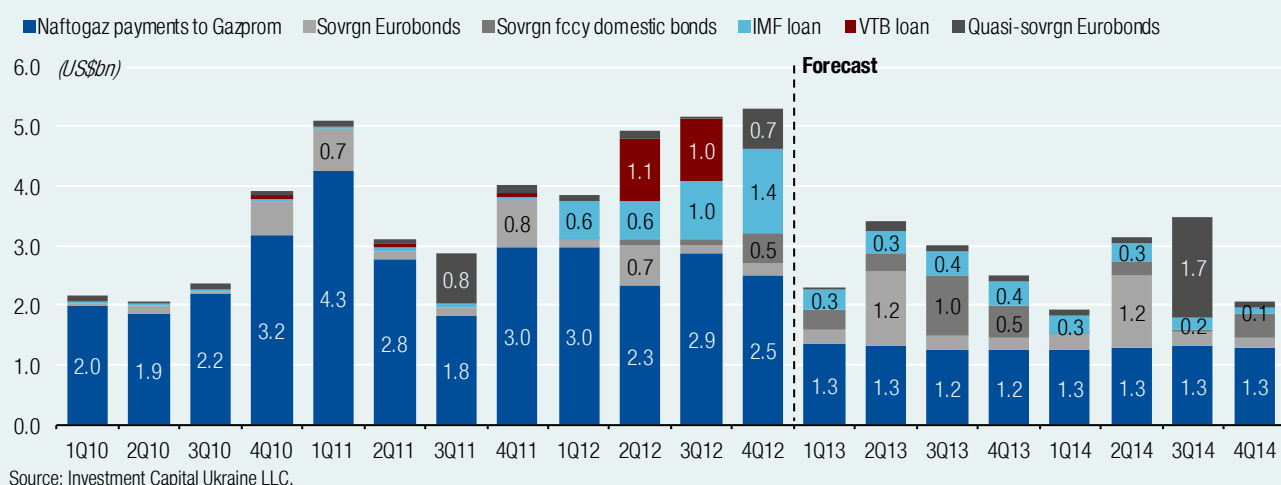
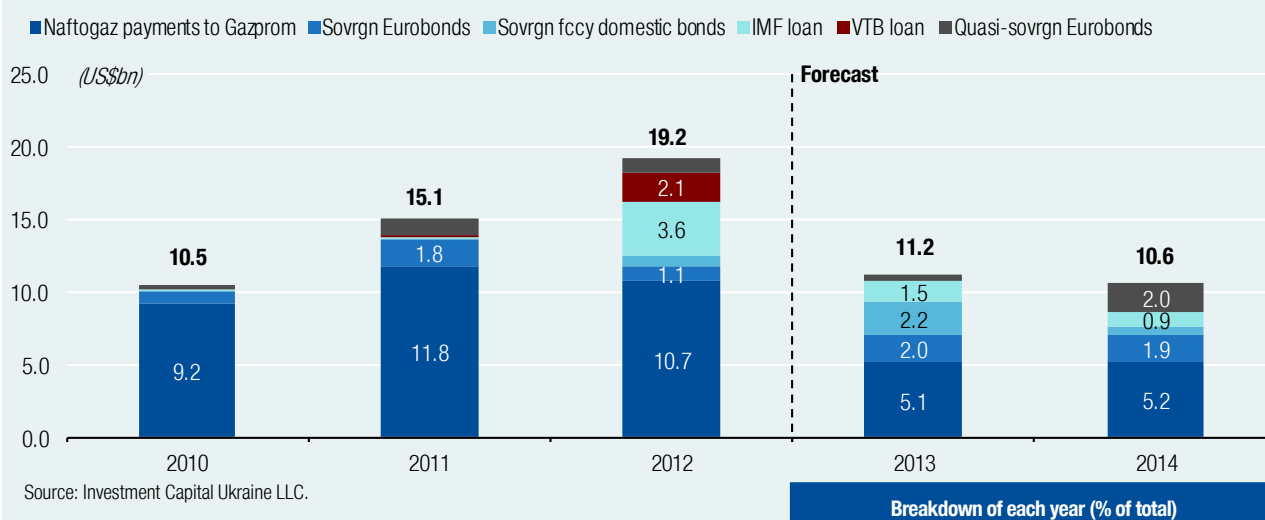
Notes: [1] sovereign foreign-currency bonds issued in the domestic bond market, including USD-denominated retail bonds called Treasury Obligations; [2] IMF loans to the MoF and NBU, net of the incoming loan from VTB to be received in the 2013-14 period, in accordance with above mentioned assumptions; [3] quasi-sovereign Eurobonds issued by city of Kyiv, state-run banks and non-bank entities; [4] historical data is based upon Interfax-Ukraine news, while 2013-14 data is ICU forecast.

Sources: Ministry of Finance of Ukraine, Bloomberg, Investment Capital Ukraine LLC.



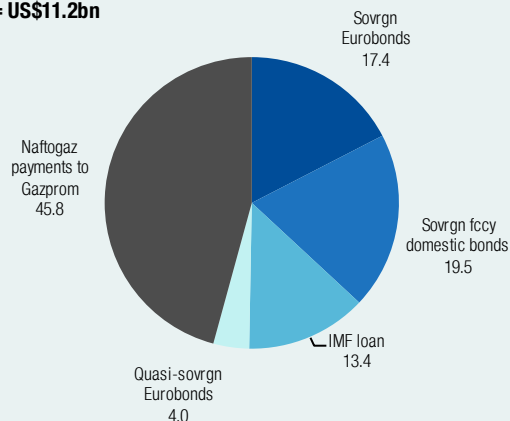
**Chart 86. Quarterly volume of sovereign external obligations in 2010-12 and forecast for 2013-14 (US\$bn)**

**Kremlin option #5:** Naftogaz imports 26bcm of natural gas each year. Loans due in 2013-14 previously received from IMF and VTB are not refinanced. Kremlin provides 1) additional discount to natural gas price formula of US\$200 per 1,000 m<sup>3</sup>, and 2) a US\$7.3bn loan via VTB to refinance a 75% share of the IMF loan due in 2013-14.

**Chart 87. Yearly volume of sovereign external obligations in 2010-12 and forecast for 2013-14 (US\$bn)****Chart 88. Breakdown of yearly volumes of sovereign external obligations in 2013 and 2014 (% of total)**

Forecast for 2013

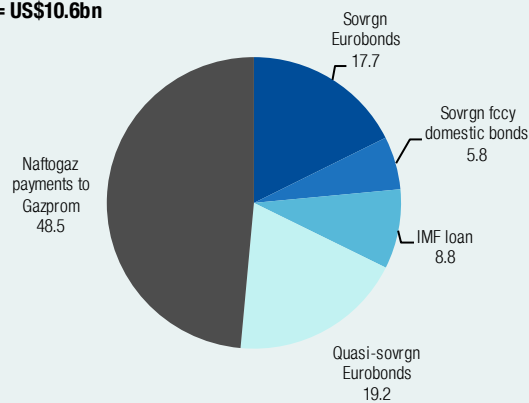
100% = US\$11.2bn



Source: Investment Capital Ukraine LLC.

Forecast for 2014

100% = US\$10.6bn



Source: Investment Capital Ukraine LLC.

## Going it alone Option #1

**Key assumptions for 2013-14:** Naftogaz imports **25bcm** of natural gas each year, and it has no additional natural gas price discount from Gazprom. Loans due in 2013-14 previously received from the IMF are not refinanced by these lenders.

**Table 27. Breakdown of quarterly and yearly volume of sovereign external obligations in 2010-12 and forecast for 2013-14 (US\$m)**

By type of sovereign external obligation

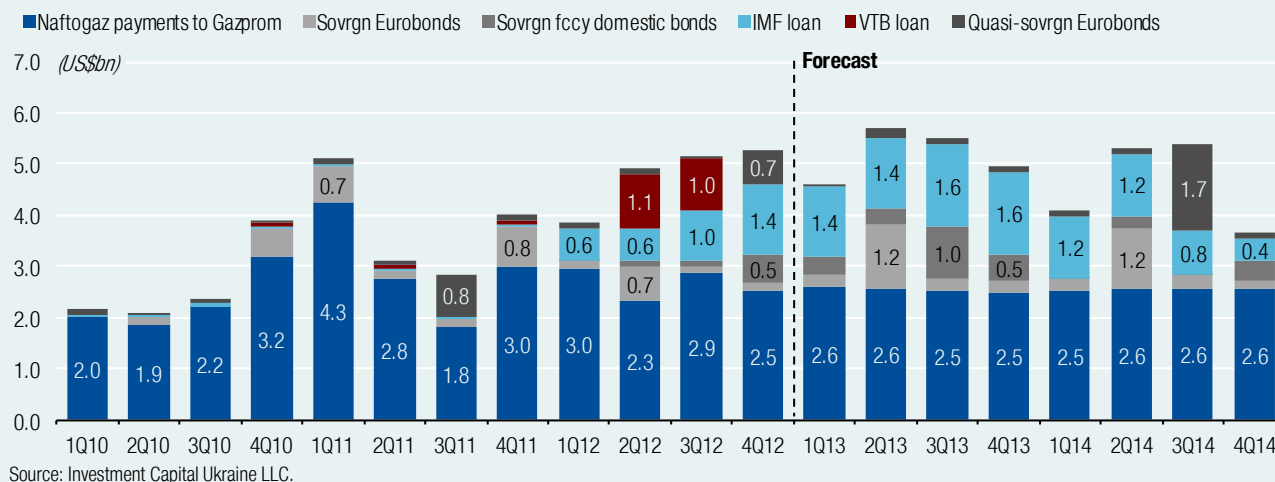
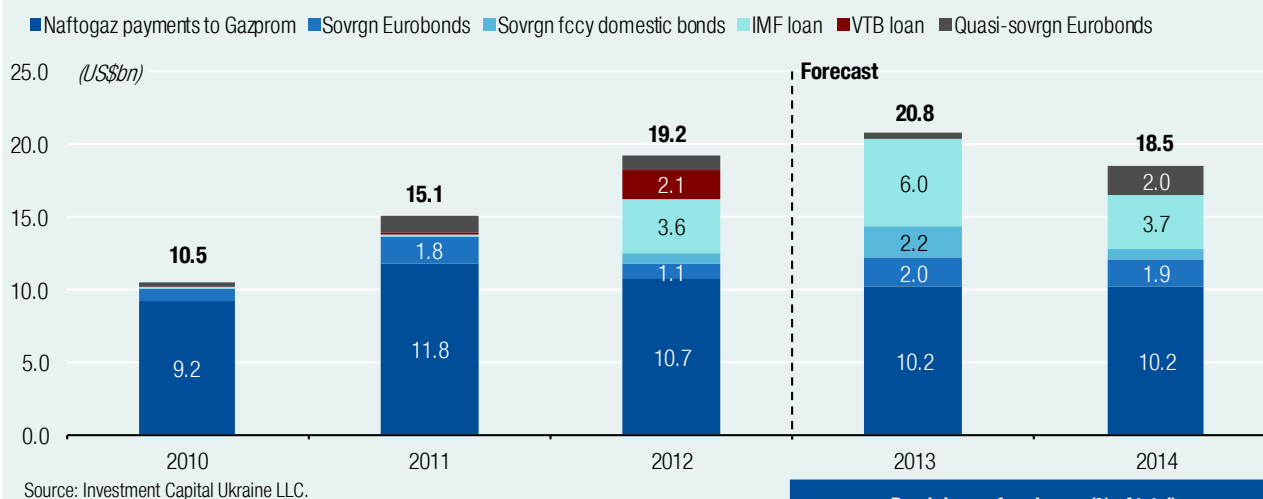
Period	Sovereign Eurobonds	Sovereign fccy domestic bonds <sup>1</sup>	IMF loan <sup>2</sup>	VTB loan	Quasi-sovereign Eurobonds <sup>3</sup>	Naftogaz payments to Gazprom <sup>4</sup>	Total
<b>Quarterly</b>							
1Q10	21	0	40	0	94	1,994	<b>2,149</b>
2Q10	137	0	40	0	29	1,859	<b>2,065</b>
3Q10	21	0	40	0	109	2,206	<b>2,376</b>
4Q10	556	0	48	67	60	3,184	<b>3,915</b>
1Q11	696	0	53	0	109	4,250	<b>5,108</b>
2Q11	151	0	53	67	83	2,758	<b>3,112</b>
3Q11	135	0	53	0	836	1,831	<b>2,855</b>
4Q11	790	0	53	67	108	2,980	<b>3,998</b>
1Q12	135	12	629	0	108	2,973	<b>3,858</b>
2Q12	670	112	627	1,067	108	2,326	<b>4,910</b>
3Q12	135	86	997	1,016	32	2,876	<b>5,143</b>
4Q12	175	526	1,394	0	684	2,511	<b>5,290</b>
1Q13	255	324	1,389	0	32	2,600	<b>4,601</b>
2Q13	1,242	328	1,384	0	190	2,576	<b>5,719</b>
3Q13	255	1,002	1,619	0	108	2,508	<b>5,491</b>
4Q13	204	537	1,613	0	114	2,498	<b>4,965</b>
1Q14	255	4	1,223	0	108	2,512	<b>4,102</b>
2Q14	1,204	235	1,218	0	114	2,554	<b>5,325</b>
3Q14	255	4	849	0	1,703	2,575	<b>5,386</b>
4Q14	164	379	438	0	114	2,562	<b>3,658</b>
<b>Yearly</b>							
2010	735	0	169	67	292	9,243	<b>10,505</b>
2011	1,771	0	213	134	1,136	11,819	<b>15,073</b>
2012	1,114	736	3,647	2,083	933	10,686	<b>19,200</b>
2013	1,956	2,191	6,004	0	445	10,182	<b>20,777</b>
2014	1,878	622	3,728	0	2,040	10,203	<b>18,471</b>
<b>Yearly avg</b>							
2011-12	1,443	368	1,930	1,108	1,034	11,253	<b>17,137</b>
2013-14	1,917	1,406	4,866	0	1,242	10,192	<b>19,624</b>
<b>External obligations load per year</b>							
<b>Increase (decrease)</b>	475	1,038	2,936	-1,108	208	-1,060	<b>2,488</b>

Notes: [1] Sovereign foreign-currency bonds issued in the domestic bond market, including USD-denominated retail bonds called Treasury Obligations; [2] IMF loans to the MoF and NBU; [3] quasi-sovereign Eurobonds issued by city of Kyiv, state-run banks and non-bank entities; [4] historical data is based upon Interfax-Ukraine news, while 2013-14 data is ICU forecast.

Sources: Ministry of Finance of Ukraine, Bloomberg, Investment Capital Ukraine LLC.

**Chart 89. Quarterly volume of sovereign external obligations in 2010-12 and forecast for 2013-14 (US\$bn)**

**Crawling alone option #1:** Naftogaz imports 26bcm/year of natural gas, it has no additional natural gas price discount. Loans due in 2013-14 previously received from IMF and VTB are not refinanced by these lenders.

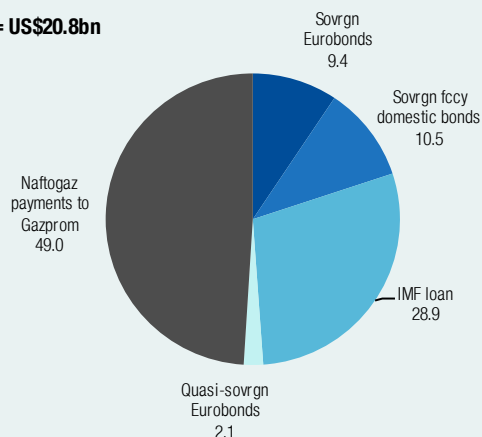
**Chart 90. Yearly volume of sovereign external obligations in 2010-12 and forecast for 2013-14 (US\$bn)**

Breakdown of each year (% of total)

**Chart 91. Breakdown of yearly volumes of sovereign external obligations in 2013 and 2014 (% of total)**

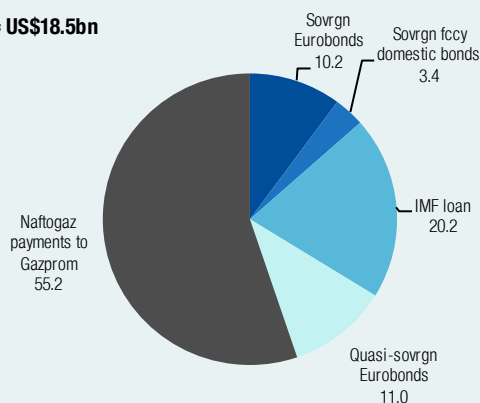
Forecast for 2013

100% = US\$20.8bn



Forecast for 2014

100% = US\$18.5bn



Source: Investment Capital Ukraine LLC.

Source: Investment Capital Ukraine LLC.

## Going it alone Option #2

**Key assumptions for 2013-14:** Naftogaz imports **18bcm** of natural gas each year, and it has no additional natural gas price discount from Gazprom. Loans due in 2013-14 previously received from the IMF are not refinanced by these lenders.

**Table 28. Breakdown of quarterly and yearly volume of sovereign external obligations in 2010-12 and forecast for 2013-14 (US\$m)**

By type of sovereign external obligation

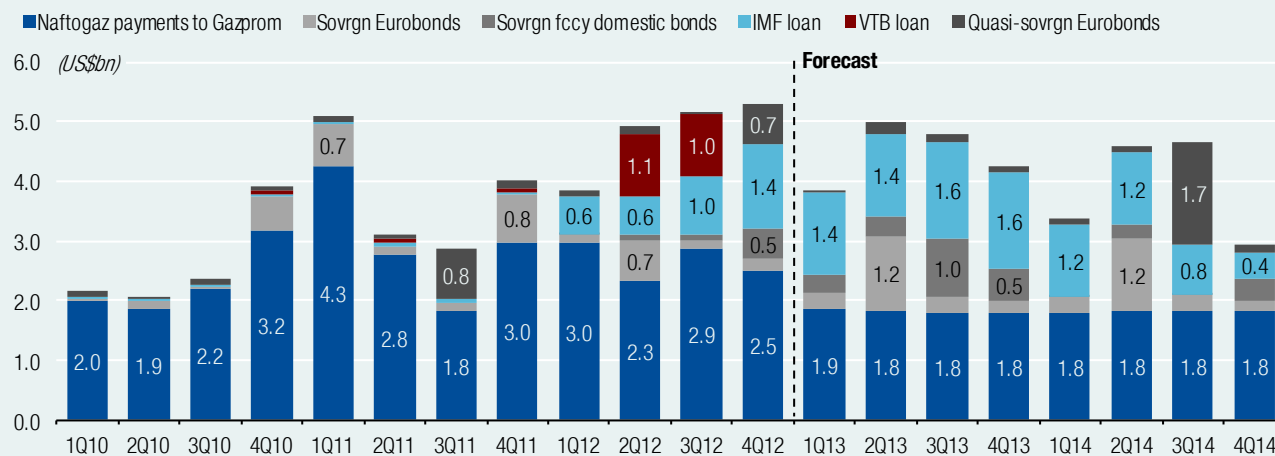
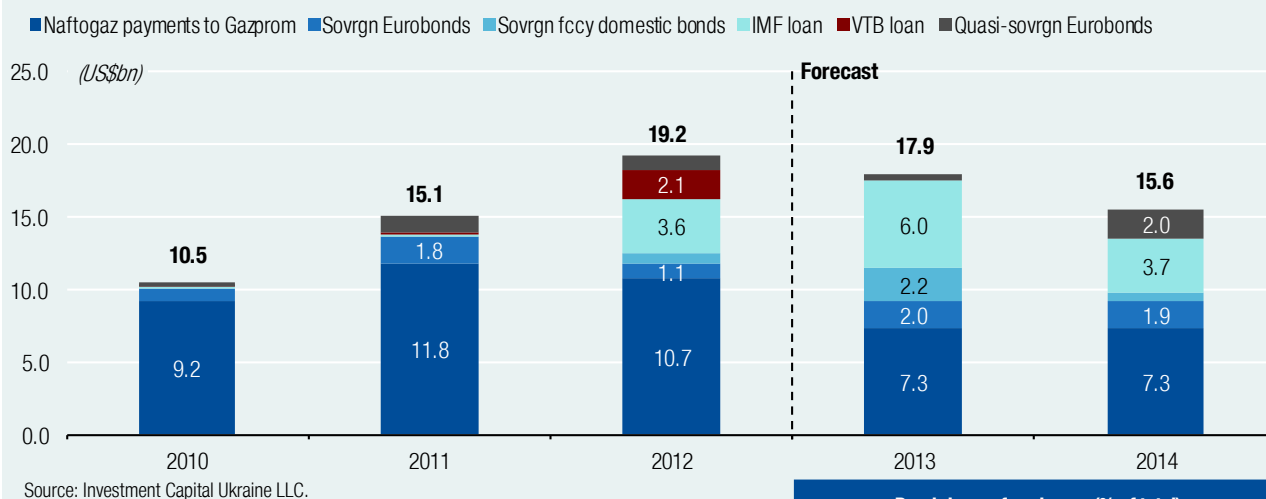
Period	Sovereign Eurobonds	Sovereign fccy domestic bonds <sup>1</sup>	IMF loan <sup>2</sup>	VTB loan	Quasi-sovereign Eurobonds <sup>3</sup>	Naftogaz payments to Gazprom <sup>4</sup>	Total
<b>Quarterly</b>							
1Q10 <b>History</b>	21	0	40	0	94	1,994	<b>2,149</b>
2Q10	137	0	40	0	29	1,859	<b>2,065</b>
3Q10	21	0	40	0	109	2,206	<b>2,376</b>
4Q10	556	0	48	67	60	3,184	<b>3,915</b>
1Q11	696	0	53	0	109	4,250	<b>5,108</b>
2Q11	151	0	53	67	83	2,758	<b>3,112</b>
3Q11	135	0	53	0	836	1,831	<b>2,855</b>
4Q11	790	0	53	67	108	2,980	<b>3,998</b>
1Q12	135	12	629	0	108	2,973	<b>3,858</b>
2Q12	670	112	627	1,067	108	2,326	<b>4,910</b>
3Q12	135	86	997	1,016	32	2,876	<b>5,143</b>
4Q12	175	526	1,394	0	684	2,511	<b>5,290</b>
1Q13 <b>F'cast</b>	255	324	1,389	0	32	1,857	<b>3,858</b>
2Q13	1,242	328	1,384	0	190	1,839	<b>4,983</b>
3Q13	255	1,002	1,619	0	108	1,790	<b>4,774</b>
4Q13	204	537	1,613	0	114	1,783	<b>4,251</b>
1Q14	255	4	1,223	0	108	1,793	<b>3,383</b>
2Q14	1,204	235	1,218	0	114	1,823	<b>4,595</b>
3Q14	255	4	849	0	1,703	1,839	<b>4,650</b>
4Q14	164	379	438	0	114	1,829	<b>2,925</b>
<b>Yearly</b>							
2010 <b>History</b>	735	0	169	67	292	9,243	<b>10,505</b>
2011	1,771	0	213	134	1,136	11,819	<b>15,073</b>
2012	1,114	736	3,647	2,083	933	10,686	<b>19,200</b>
2013 <b>F'cast</b>	1,956	2,191	6,004	0	445	7,270	<b>17,865</b>
2014	1,878	622	3,728	0	2,040	7,285	<b>15,553</b>
<b>Yearly average</b>							
2011-12	1,443	368	1,930	1,108	1,034	11,253	<b>17,137</b>
2013-14	1,917	1,406	4,866	0	1,242	7,277	<b>16,709</b>
<b>External obligations load per year</b>							
<b>Increase (decrease)</b>	475	1,038	2,936	-1,108	208	-3,975	<b>-427</b>

Notes: [1] Sovereign foreign-currency bonds issued in the domestic bond market, including USD-denominated retail bonds called Treasury Obligations; [2] IMF loans to the MoF and NBU; [3] quasi-sovereign Eurobonds issued by city of Kyiv, state-run banks and non-bank entities; [4] historical data is based upon Interfax-Ukraine news, while 2013-14 data is ICU forecast.

Sources: Ministry of Finance of Ukraine, Bloomberg, Investment Capital Ukraine LLC.

**Chart 92. Quarterly volume of sovereign external obligations in 2010-12 and forecast for 2013-14 (US\$bn)**

**Crawling alone option #2:** Naftogaz imports 18bcm of natural gas each year, and it has no additional natural gas price discount from Gazprom. Loans due in 2013-14 previously received from the IMF are not refinanced by these lenders.

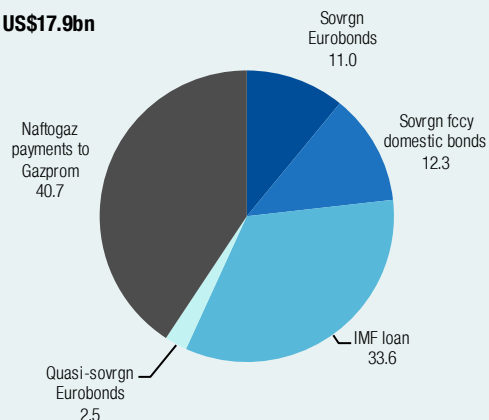
**Chart 93. Yearly volume of sovereign external obligations in 2010-12 and forecast for 2013-14 (US\$bn)**

Breakdown of each year (% of total)

**Chart 94. Breakdown of yearly volumes of sovereign external obligations in 2013 and 2014 (% of total)**

Forecast for 2013

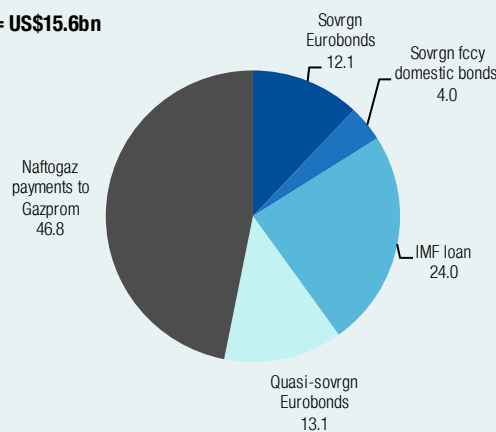
100% = US\$17.9bn



Source: Investment Capital Ukraine LLC.

Forecast for 2014

100% = US\$15.6bn

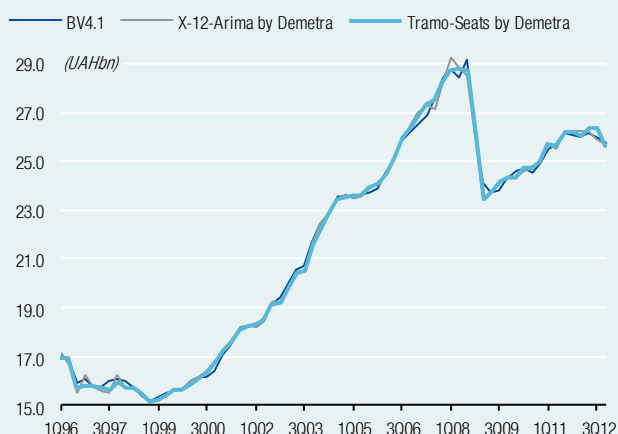


Source: Investment Capital Ukraine LLC.

## Quarterly GDP: Reported statistics and ICU's calculations

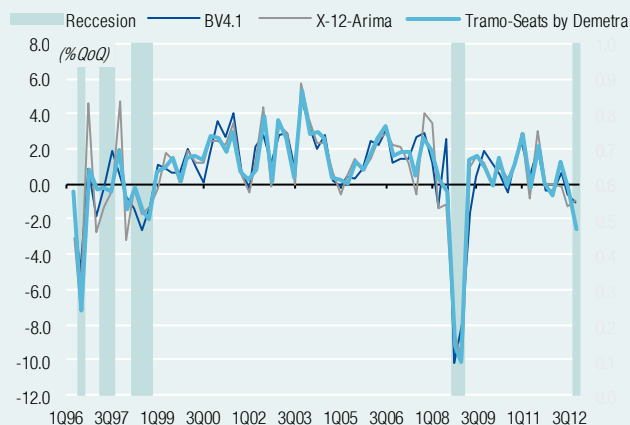
**Chart 95. Ukraine's economy from the perspective of quarterly GDP volumes (left) and on-quarter growth rates (right)**

History from 1Q96 till 4Q12. Data is adjusted for inflation and seasonal factors. data is seasonally adjusted by three methods BV4.1, X-12 Arima and Tramo-Seats  
Quarterly GDP size in constant prices of Dec-95



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

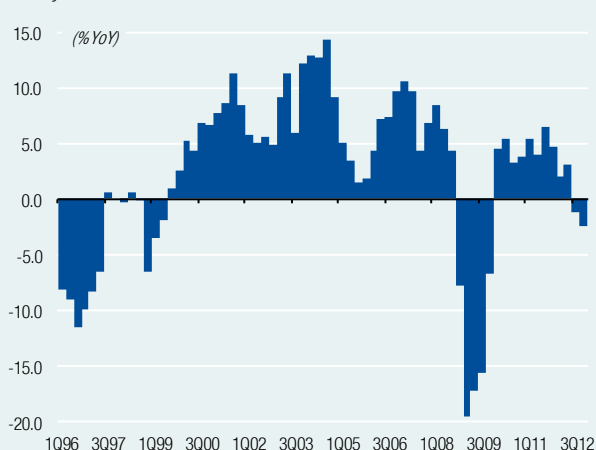
Quarterly GDP growth rates (% QoQ)



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

**Chart 96. Reported on-year quarterly GDP growth (% YoY)**

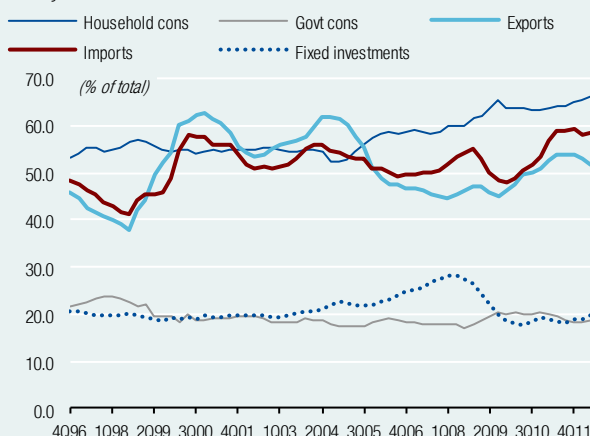
History from 1Q 1996 till 4Q 2012



Source: State Statistics Service of Ukraine.

**Chart 97. Demand-side components of GDP (% of total, LTM)**

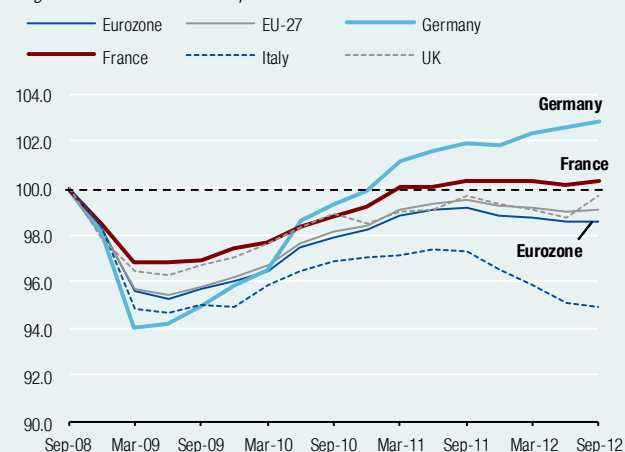
History from 4Q 1996 till 4 Q 2012



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

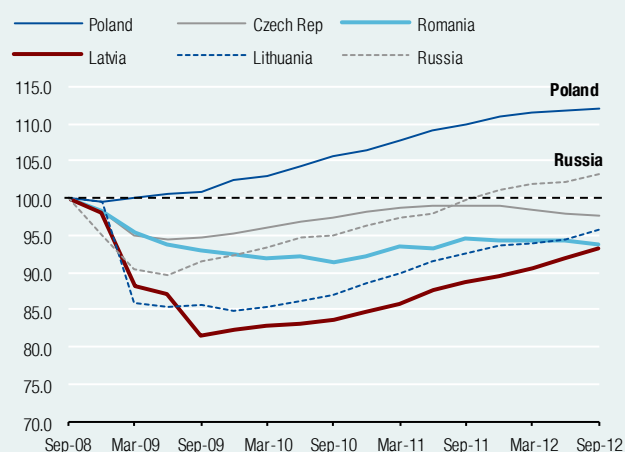
**Chart 98. Ukraine vs. selected economies of EU and Russia: How they recovery from the 2008 economic crisis**

Largest economies of the European Union



Note: Rebased at 100 points as of end of 3Q of 2008. Sources: Bloomberg, Investment Capital Ukraine LLC.

New member states of EU and Russia



**Table 29. Ukraine quarterly GDP size: History from 4Q96 till 4Q11 (UAHm, if not otherwise indicated)**

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

Period	Reported statistics on quarterly GDP						ICU calculations					
	GDP at current prices (UAHm)	Real growth (% YoY, qtly)	Real growth (% QoQ, SA)	Deflator (% YoY)	Real growth (% YoY, ann'd)	GDP at cons prices1 (UAHm, NSA)	GDP at cons prices <sup>1</sup> (UAHm, SA)			Real GDP growth (%QoQ, SA)		
							BV4.1	X-12- Arima by Demetra	Tramo- Seats by Demetra	BV4.1	X-12- Arima by Demetra	Tramo- Seats by Demetra
4Q96	24,454	-10.0		40.1	-9.7	17,404	16,075	16,228	15,824	0.8	4.6	0.8
1Q97	18,728	-8.3		22.3	-9.8	14,114	15,777	15,780	15,779	-1.9	-2.8	-0.3
2Q97	20,485	-6.6		22.7	-9.1	14,117	15,758	15,586	15,750	-0.1	-1.2	-0.2
3Q97	26,076	0.5		15.3	-6.2	17,544	16,049	15,531	15,687	1.8	-0.4	-0.4
4Q97	28,076	0.0		14.8	-3.7	17,405	16,122	16,258	15,984	0.5	4.7	1.9
1Q98	20,871	-0.3		11.8	-1.6	14,068	16,011	15,744	15,762	-0.7	-3.2	-1.4
2Q98	23,367	0.5		13.5	0.2	14,188	15,795	15,701	15,724	-1.4	-0.3	-0.2
3Q98	28,908	-0.1		10.9	0.0	17,538	15,379	15,435	15,479	-2.6	-1.7	-1.6
4Q98	29,447	-6.6		12.3	-1.7	16,256	15,177	15,236	15,165	-1.3	-1.3	-2.0
...	...	...	...	...	...	...	...	...	...	...	...	...
4Q04	100,120	9.1		17.4	12.2	24,800	23,578	23,615	23,531	0.2	0.7	0.4
1Q05	88,104	5.0		25.3	10.2	21,027	23,533	23,483	23,579	-0.2	-0.6	0.2
2Q05	101,707	3.5		25.1	7.9	21,484	23,641	23,570	23,585	0.5	0.4	0.0
3Q05	122,861	1.5		21.8	4.7	27,306	23,712	23,916	23,888	0.3	1.5	1.3
4Q05	128,780	1.9		26.3	3.0	25,257	23,908	24,087	24,082	0.8	0.7	0.8
1Q06	106,348	4.3		15.7	2.8	21,937	24,490	24,446	24,470	2.4	1.5	1.6
2Q06	126,319	7.2		15.9	3.7	23,023	25,027	25,082	25,115	2.2	2.6	2.6
3Q06	152,406	7.3		15.6	5.2	29,301	25,812	25,825	25,949	3.1	3.0	3.3
4Q06	159,080	9.6		12.8	7.1	27,659	26,130	26,411	26,380	1.2	2.3	1.7
1Q07	139,444	10.6		18.6	8.7	24,253	26,506	26,972	26,861	1.4	2.1	1.8
2Q07	166,869	9.7		20.4	9.3	25,260	26,892	27,309	27,353	1.5	1.2	1.8
3Q07	199,535	4.4		25.4	8.5	30,592	27,611	27,158	27,474	2.7	-0.6	0.4
4Q07	214,883	6.9		26.4	7.9	29,558	28,413	28,238	28,190	2.9	4.0	2.6
1Q08	191,459	8.5		26.6	7.4	26,303	28,752	29,204	28,728	1.2	3.4	1.9
2Q08	236,033	6.2		33.2	6.5	26,824	28,397	28,807	28,811	-1.2	-1.4	0.3
3Q08	276,451	4.3		32.9	6.5	31,892	29,118	28,467	28,701	2.5	-1.2	-0.4
4Q08	244,113	-7.8		23.3	2.6	27,233	26,169	26,041	26,069	-10.1	-8.5	-9.2
1Q09	189,028	-19.6		22.8	-4.8	21,148	24,109	23,460	23,419	-7.9	-9.9	-10.2
2Q09	214,103	-17.3		9.7	-10.6	22,181	23,723	23,704	23,739	-1.6	1.0	1.4
3Q09	250,306	-15.7		7.4	-15.2	26,886	23,831	24,060	24,133	0.5	1.5	1.7
4Q09	259,908	-6.7		14.1	-15.0	25,412	24,269	24,347	24,353	1.8	1.2	0.9
1Q10	217,286	4.5	0.7	10.7	-9.2	21,959	24,574	24,359	24,343	1.3	0.0	0.0
2Q10	256,754	5.4	1.4	15.1	-3.5	23,110	24,694	24,594	24,711	0.5	1.0	1.5
3Q10	301,251	3.3	0.4	17.5	1.5	27,539	24,563	24,657	24,692	-0.5	0.3	-0.1
4Q10	307,278	3.7	0.7	15.6	4.2	25,989	24,942	24,976	24,984	1.5	1.3	1.2
1Q11	261,878	5.4	2.9	14.3	4.4	23,155	25,536	25,689	25,703	2.4	2.9	2.9
2Q11	314,620	3.9	0.5	17.9	4.1	24,019	25,653	25,487	25,643	0.5	-0.8	-0.2
3Q11	376,019	6.5	2.2	17.2	4.9	29,329	26,178	26,243	26,197	2.0	3.0	2.2
4Q11	364,083	4.7	0.6	13.2	5.1	27,203	26,091	26,222	26,219	-0.3	-0.1	0.1
1Q12	296,970	2.0	-0.3	11.1	4.3	23,634	25,990	26,220	26,061	-0.4	0.0	-0.6
2Q12	351,777	3.0	1.9	8.6	4.0	24,739	26,156	26,194	26,384	0.6	-0.1	1.2
3Q12	392,080	-1.3	-1.2	5.7	2.1	28,933	26,001	25,875	26,312	-0.6	-1.2	-0.3
4Q12	359,375	-2.5	-1.0	1.2	0.3	26,523	25,736	25,623	25,640	-1.0	-1.0	-2.6

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

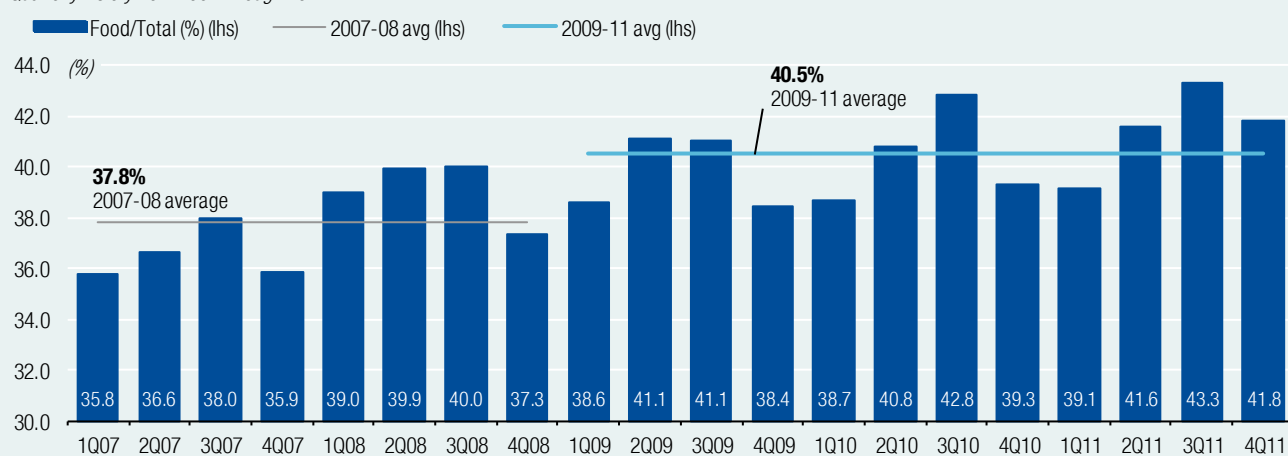
Sources: State Statistics Service of Ukraine, Investment Capital Ukraine LLC.



## Ukraine household consumption: Relative comparisons

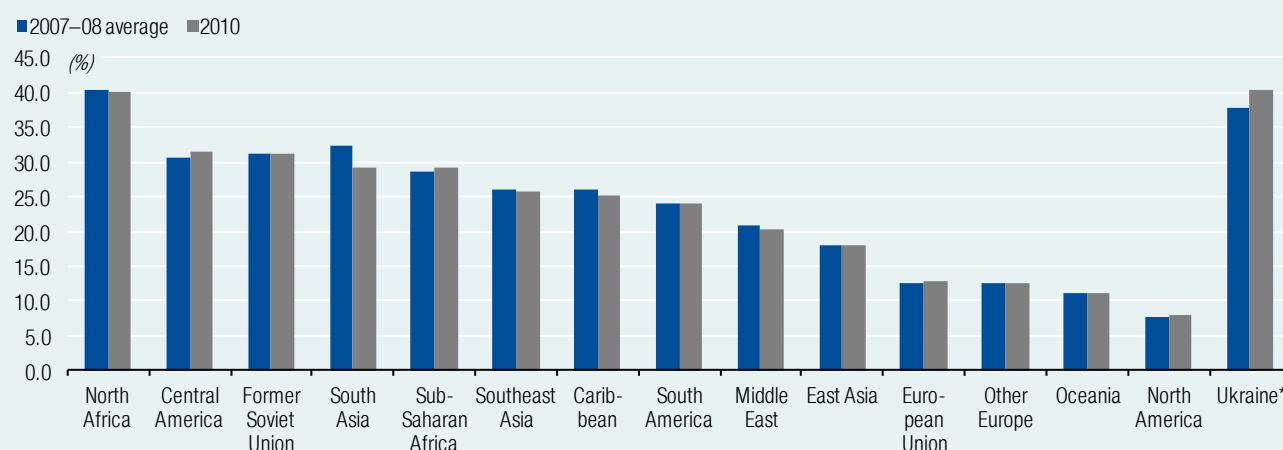
**Chart 99. Share of food<sup>1</sup> in final household consumption in Ukraine and its average level increase between 2007-08 and 2009-11 (%)**

Quarterly history from 2007 through 2011



Note: [1] includes beverages. Sources: State Statistics Service of Ukraine, Investment Capital Ukraine LLC.

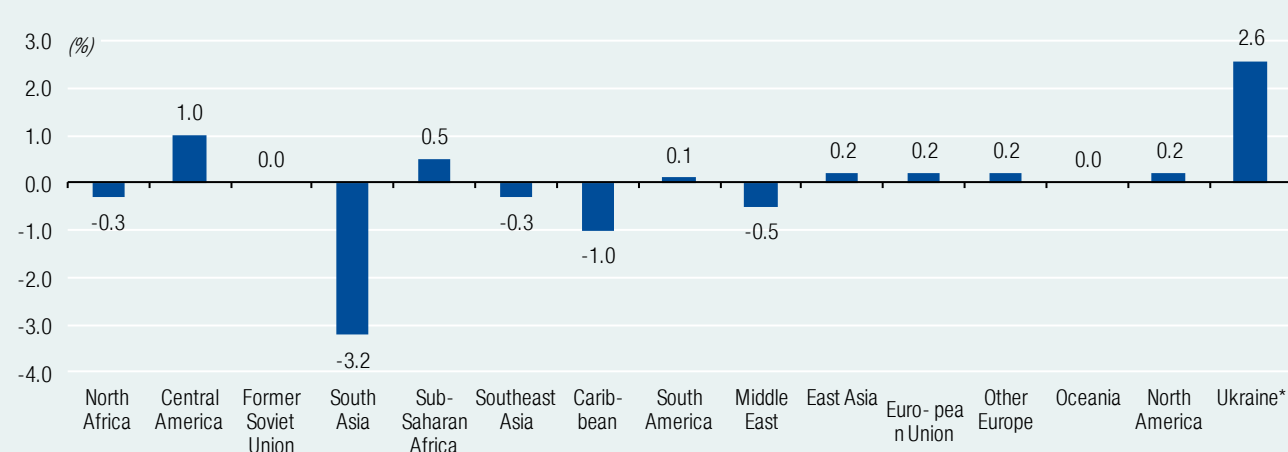
**Chart 100. Share of food<sup>1</sup> in final household consumption in 2010 versus a 2007-08 average: Ukraine against global pattern (%)**



Note: \* Ukraine data is calculated by ICU upon the available statistics on GDP published by State Statistics Service of Ukraine.

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

**Chart 101. Change in the share of food<sup>1</sup> in final household consumption between the 2007-08 average and the 2010 level**



Note: \* Ukraine data is calculated by ICU upon the available statistics on GDP published by State Statistics Service of Ukraine.

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

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

**Table 30. ICU consumer basket as of end of January 2013**

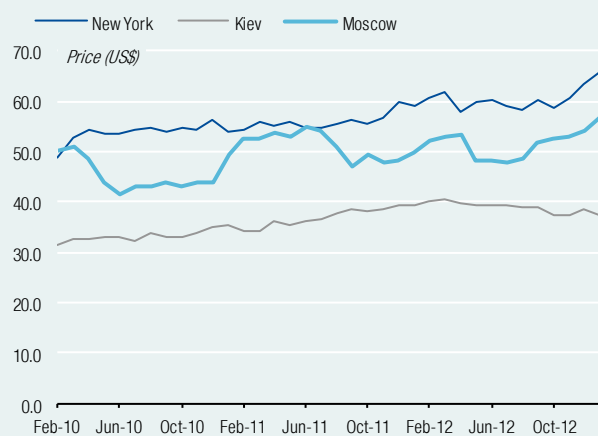
price observation in the urban areas of Ukraine, USA and Russia, i.e., in the countries' most populated cities – Kiev, New-York, and Moscow

Item of the basket	Description	Kiev, central district 31-Jan-13 Price (UAH)	New York metro- politan area 29-Jan-13 Price (US\$)	Moscow, central district 31-Jan-13 Price (RUR)
<b>Consumer goods</b>				
Coca-cola (0.5 litre, plastic bottle)	Non-alcohol beverages	6.76	1.50	39.90
Beer Corona Extra (0.33 litre, glass bottle)	Alcoholic beverages	14.25	1.58	112.77
Bunch of fresh bananas (1 kg)	From Ecuador	11.81	1.52	39.90
Pack of milk (1 litre)	Locally produced, soft package, i.e., not glass bottle	8.76	2.03	60.90
Chicken meat (1 kg pack)	Locally produced and branded package, boneless breast	42.50	14.72	149.00
Canned pineapple (0.85 kg, can)	Pineapple circles, Dole brand	22.45	2.39	155.00
Pasta (0.5 kg)	Soft package, produced in Italy	14.30	2.12	62.90
Sugar (1 kg)		7.13	3.17	33.90
Package of table salt (0.5 kg)		8.56	0.71	11.80
Chicken eggs (10 units pack)	White eggs, standard size	13.98	3.20	77.08
Chocolate (100 g)	Made by Craft Foods Corp, Milka brand	10.41	2.10	70.79
Toothpaste (100ml package)	Colgate	22.98	1.55	99.90
Shampoo (200ml package)	Head & Shoulders brand, for normal hair	28.46	3.11	169.00
Toilet paper (4 rolls package)	Kleenex Cottonelle brand, white paper, Regular toilet tissue	18.24	4.32	98.90
Magazine	Men's Health, local edition, A4 format (standard one, not a pocket book format)	28.27	4.99	119.90
Gasoline (1 litre)	Lukoil, regular	11.09	1.05	31.72
<b>Services</b>				
Underground commute ticket	Within the central part of the city	2.00	2.35	28.00
Cinema ticket	Thursday's night price for the seat with good location, Hollywood film	40.00	13.50	350.00
<b>Total basket value (in local currency)</b>		<b>311.95</b>	<b>65.91</b>	<b>1,711.36</b>
Exchange rate versus US dollar at spot market as of date of observation		8.050	8.125	1.000
<b>Total basket value (in US\$)</b>		<b>38.39</b>	<b>65.91</b>	<b>56.96</b>
<b>Overvalued "+" / undervalued "-" (%)</b>				
UAH vs. USD		<b>-41.75</b>		
UAH vs. RUR		<b>-32.59</b>		
<b>Fair value in the long-run as of observation date</b>				
UAH per USD		<b>4.733</b>		
UAH per RUR		<b>0.182</b>		

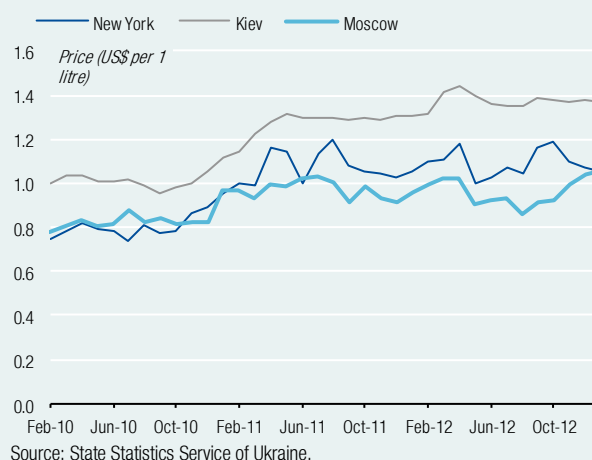
Source: Investment Capital Ukraine.

**Chart 102. ICU consumer basket value (US\$), from Feb-10 till Dec-12**

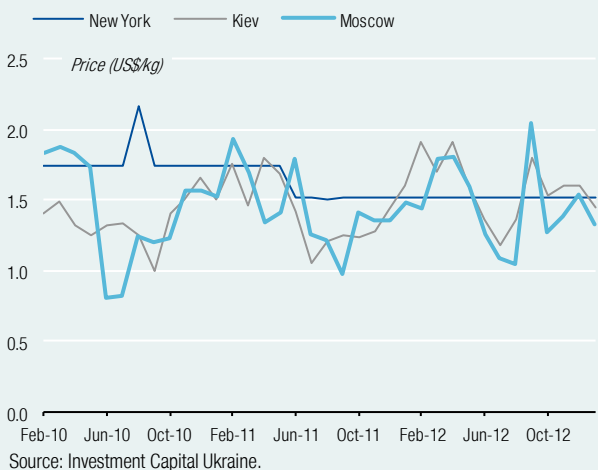
Total value of the ICU basket in US dollar terms


**Chart 103. Gasoline A95 equivalent 1 litre (US\$)**

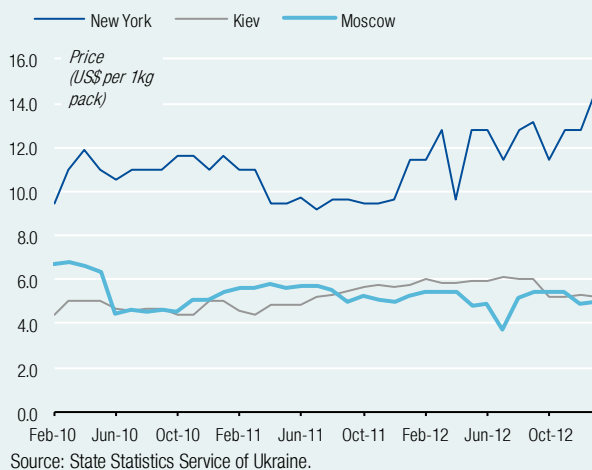
Price history from February 2010 till January 2013


**Chart 104. Fresh banana 1 kg bunch (US\$)**

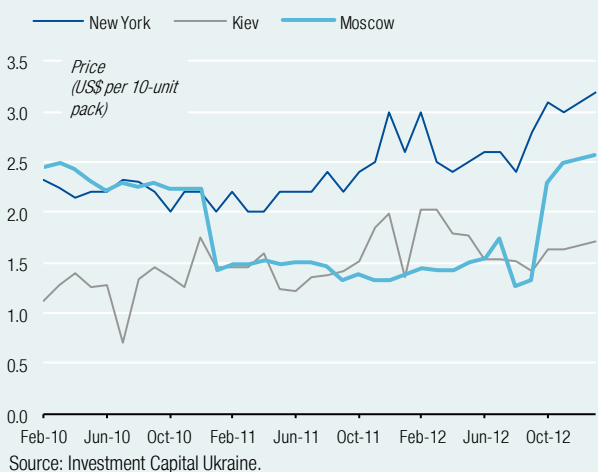
Price history from February 2010 till January 2013


**Chart 105. Chicken meat 1 kg pack of boneless breast (US\$)**

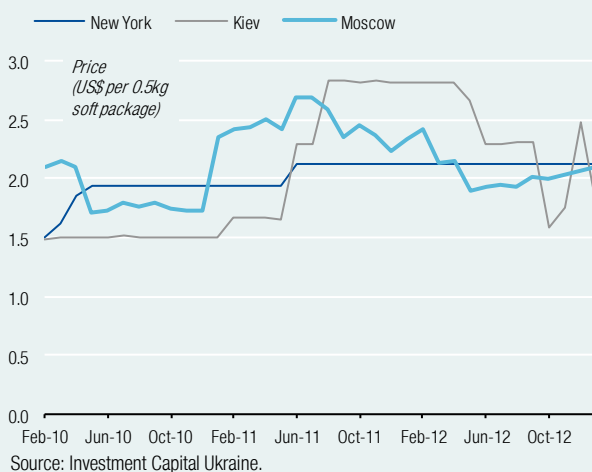
Price history from February 2010 till January 2013


**Chart 106. Chicken eggs 10-unit pack (US\$)**

Price history from February 2010 till January 2013

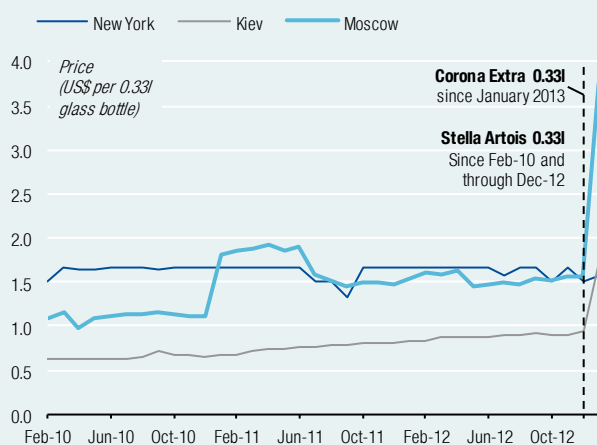

**Chart 107. Pasta 0.5 kg soft package Italy-made (US\$)**

Price history from February 2010 till January 2013



**Chart 108. Beer Corona Extra 0.33 litre glass bottle (US\$)**

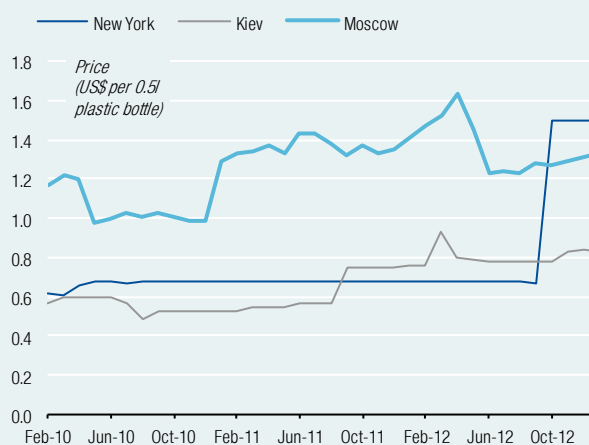
Price history from February 2010 till January 2013



Source: State Statistics Service of Ukraine.

**Chart 109. Coca-Cola 0.5 litre plastic bottle (US\$)**

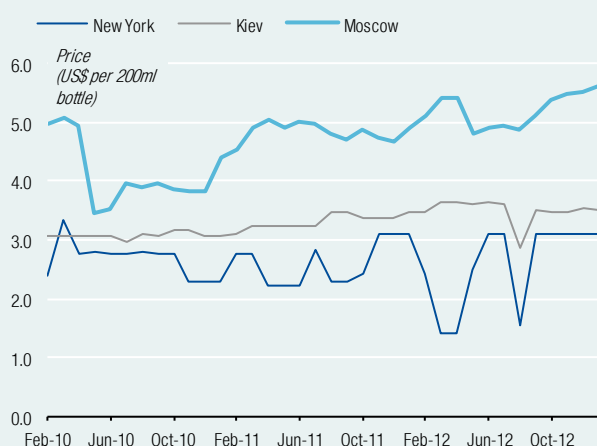
Price history from February 2010 till January 2013



Source: State Statistics Service of Ukraine.

**Chart 110. Shampoo 200ml bottle Head & Shoulders (US\$)**

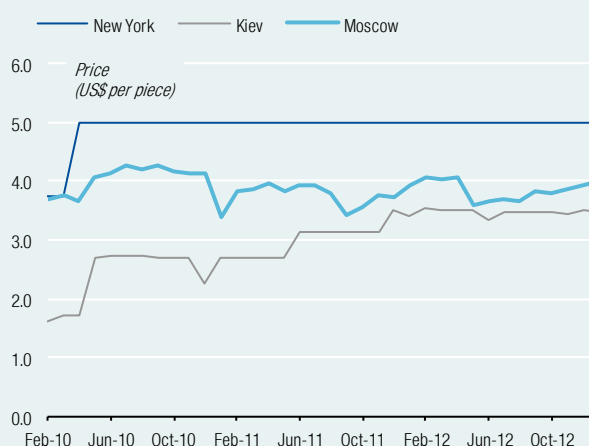
Price history from February 2010 till January 2013



Source: State Statistics Service of Ukraine.

**Chart 111. Magazine Men's Health, A4 format (US\$)**

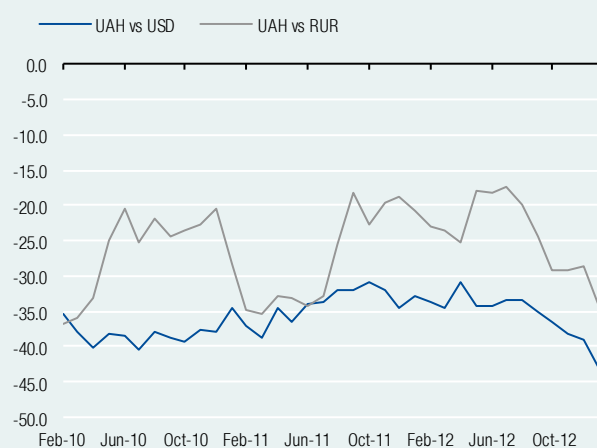
Price history from February 2010 till January 2013



Source: State Statistics Service of Ukraine.

**Chart 112. Value gap of ICU basket in UAH vs. USD and RUB (%)**

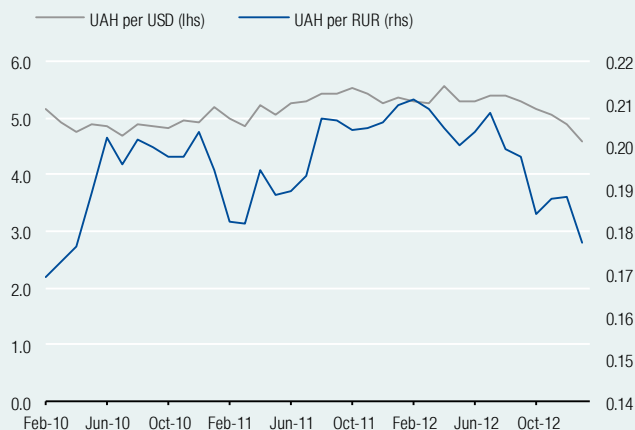
Price history from February 2010 till January 2013



Source: State Statistics Service of Ukraine.

**Chart 113. 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 till January 2013



Source: State Statistics Service of Ukraine.

# Methodology: UAH trade-weighted index (update)

**There are three reasons for our update, which follow below:**

First, since its inception on 22 July, 2009<sup>27</sup>, ICU's family of UAH trade-weighted indices (TWIs) included both a nominal TWI and real TWI. The latter was a CPI-based<sup>28</sup> real trade-weighted index. Later on, we realised there is a need to capture the broader price developments in Ukraine's economy. Hence, we have introduced an additional real trade-weighted index, which is PPI-based<sup>29</sup>.

Second, we updated our calculation methodology in the relevant part of the inflation data. To date, we have used a set of year-on-year percentage-based inflation data. While the real trade-weighted index showed a high level of correlation with similar indices produced by the NBU, IMF and Bruegel<sup>30</sup>, the level of correlation was unsatisfactory. Hence, we align our methodology in sync with these institutions. Now, we use a set of inflation-based indices data. The result is a better correlation with real indices produced by other economists. (See "The basics," pp.89. and "Correlation with indices produced by other institutions," pp.99)

Third, we extended our metrics for determining the misalignment in Ukraine hryvnia's exchange rate, which is derived from the calculated series of indices. To date, we have used one metric, which is an assessment of the deviation of the index from its long-term average. Now, on top of this metric, we have developed two others: 1) an index deviation from its 10-year rolling average; and 2) an index deviation from its 5-year rolling average. These last two metrics, which are used to capture the UAH's misalignment, are in line with the general rule that economic cycles tend to unfold over a time span of 5-10 years. (See "Approach to assessing UAH's misalignment," pp.96.)

In our view, these changes, which we refer to as improvements, will allow us to better comprehend the fundamentals of Ukraine's currency valuations.

**Brief description:** ICU's family of trade-weighted indices of Ukraine's currency, the hryvnia, consists of a nominal trade-weighted index (nominal TWI) and two real trade-weighted indices, of which the former is based upon Consumer Price data (CPI-based real TWI) and the latter is based upon Producer Price data (PPI-based real TWI).

The nominal TWI is a measurement of the hryvnia's trade weighted exchange-rate developments against Ukraine's key partner trading countries. The CPI- and PPI-based real TWIs are derived by adjusting, respectively, the nominal TWI by the CPIs and PPIs of Ukraine and its key partner trading countries. These indices could also be referred to interchangeably as nominal and real effective exchange rates. However, our preferred way is to name them as trade-weighted indices. Our calculation of the indices is made on a monthly and daily basis.

<sup>27</sup> Please refer to our first publication of the ICU's UAH trade-weighted index methodology made in the *Quarterly Report* "Ukrainian jigsaw puzzle," on 22 July, 2009.

<sup>28</sup> Based on consumer price indices (CPIs) of Ukraine and countries which are Ukraine's main trading partners.

<sup>29</sup> Based on producer price indices (PPIs) of Ukraine and countries which are Ukraine's main trading partners.

<sup>30</sup> Bruegel is a European think tank based in Brussels, specialising in economics. See <http://www.bruegel.org/>.

## The basics

Our in-house method of calculating the trade-weighted indices of Ukraine's currency, the hryvnia (UAH), takes into account the following inputs: first merchandise trade statistics published by the State Statistics Services of Ukraine on a monthly basis, which is used to determine a basket of key trading partners of Ukraine; second, foreign-exchange market data on the movements of national currencies of the key trading partners of Ukraine against the US dollar, the key anchor currency in the global FX market; and third, data on inflation, including Consumer Price indices (CPIs) and Producer Price indices (PPIs), which are the monthly CPIs and PPIs of those trading partners, presented as the percentage change in inflation versus the same month of the previous year.

The *monthly* TWIs—nominal index, CPI-based index, and PPI-based index—are calculated on the monthly data: trade and inflation data are reported on a monthly basis, and the data on the exchange rates are the monthly averages of Ukraine's hryvnia and of the national currencies of Ukraine's main trading partners versus the US dollar.

The *daily* TWIs—the nominal index, CPI-based index, and PPI-based index—are calculated using the monthly data on trade and inflation (these are the same data series as used in monthly TWIs' calculation), while the exchange rates represent the daily FX market closings.

### Trade partners

The calculation is based on a basket of 26 countries that are Ukraine's key trading partners, in total accounting for an 81.6% share of total merchandise trade turnover (exports and imports) for the last 12-month period to November 2012 (see Table 31 on page 91 and Chart 114-Chart 115 on page 92).

The trade weightings are calculated upon the following formula:

$$w_i = \frac{X_i + M_i}{\sum_{i=1}^n X_i + \sum_{i=1}^n M_i} \quad \sum_{i=1}^n w_i = 1,$$

where  $X_i$  and  $M_i$  are annualised volume of exports and imports respectively of  $i$  country and  $n=26$ .

There are following aspects regarding the available data on foreign merchandise trade and its usage in these calculations. Firstly, State Statistics Service reports merchandise trade data on a monthly data since year of 2001, to be more precise from May 2001. This allows us to operate with 12-month rolling data on foreign trade starting from May 2002. Secondly, there is available statistics on merchandise trade of earlier period, which is for 1995-2000. Due to lack of monthly trade data for this period our method of TWI calculations factors in the monthly average data for each year out of this period.

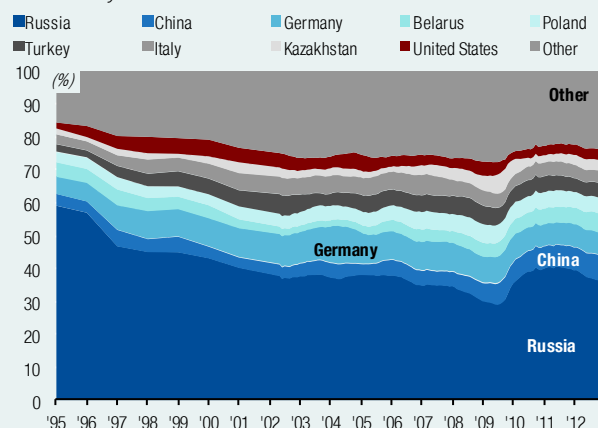
Taking account that monthly merchandise trade statistics is available since May 2001, hence annualised volume of trade is available since May 2002. As of previous periods, there is just yearly merchandise trade statistics for the period of 1995-2001. Then, monthly weights of 26 countries in merchandise trade with Ukraine for the period of 1995-2001 are derived from annual figures, for the period of January 2002 till April 2002 the weights are assume equal to the weights derived from annualised trade statistics as of May 2002.

**Table 31. Ukraine's key partners by merchandise trade turnover and their weights in the basket used for calculation of ICU's family of trade-weighted indices of Ukraine hryvnia, data as of November 2012**

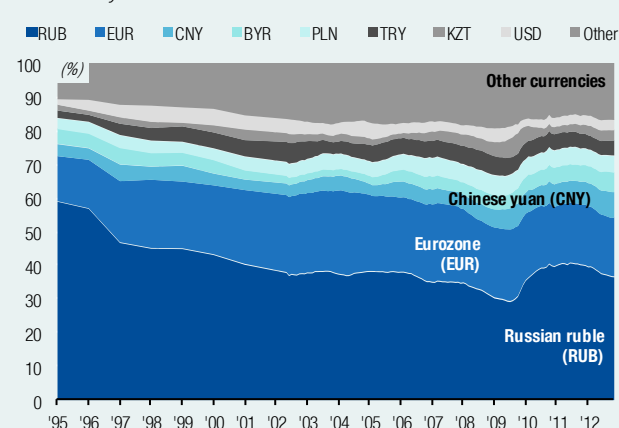
Country	Trade turnover* as of November 2012 (US\$bn)	Share in total turnover as of November 2012 (%)	Weight as of November 2012 (%)	Average weight, May 2002 till November 2012 (%)	Average weight, 1995-2012 (%)
Russia	45,717.30	29.63	36.48	36.47	40.46
China	9,491.60	6.15	7.57	5.11	4.59
Germany	8,504.80	5.51	6.79	8.51	8.28
Belarus	7,337.75	4.76	5.85	3.67	3.75
Poland	6,167.42	4.00	4.92	4.90	4.36
Turkey	5,633.60	3.65	4.50	4.88	4.51
Italy	4,740.88	3.07	3.78	4.91	4.58
Kazakhstan	4,054.69	2.63	3.24	2.98	2.61
United States	3,990.42	2.59	3.18	3.43	3.73
India	3,313.45	2.15	2.64	1.79	1.49
Egypt	2,975.69	1.93	2.37	1.32	1.12
Hungary	2,659.76	1.72	2.12	2.55	2.46
Spain	2,198.17	1.42	1.75	1.36	1.22
France	2,189.11	1.42	1.75	1.91	1.79
Korea, South	2,066.23	1.34	1.65	1.61	1.33
Czech Republic	2,014.53	1.31	1.61	1.66	1.63
Netherlands	1,866.23	1.21	1.49	1.91	1.68
United Kingdom	1,695.22	1.10	1.35	1.86	1.79
Japan	1,564.23	1.01	1.25	1.36	1.16
Romania	1,462.56	0.95	1.17	1.53	1.32
Slovakia	1,290.38	0.84	1.03	1.36	1.51
Austria	1,280.35	0.83	1.02	1.41	1.44
Moldova	951.89	0.62	0.76	1.23	1.21
Brazil	901.65	0.58	0.72	0.87	0.77
Sweden	649.44	0.42	0.52	0.90	0.79
Singapore	612.54	0.40	0.49	0.51	0.42
<b>Total basket</b>	<b>125,329.87</b>	<b>81.23</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>
<b>Total trade turnover</b>	<b>154,297.59</b>	<b>x</b>	<b>x</b>	<b>x</b>	<b>x</b>

Notes: \* total turnover is sum of annualised exports and imports as of November 2012.

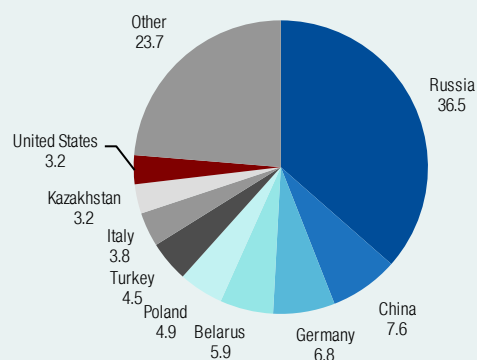
Sources: State Statistics Service of Ukraine, Investment Capital Ukraine LLC.

**Chart 114. Historical breakdown of the ICU trade basket – history from January 1995 through November 2012 (% of total)***Breakdown by countries*

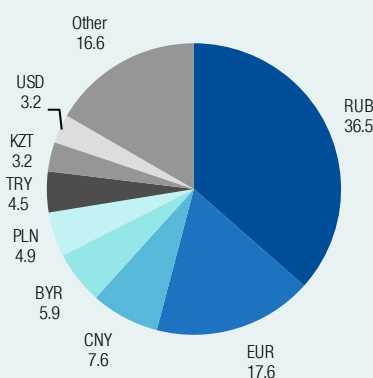
Sources: State Statistics Service of Ukraine, Investment Capital Ukraine LLC.

*Breakdown by currencies*

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

**Chart 115. Breakdown of the ICU trade basket as of November 2012 (% of total)***Breakdown by countries*

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

*Breakdown by currencies*

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

### Exchange rates

The history of exchange rates (national currencies against the US dollar) is sourced from Bloomberg. Then, the data on exchange rates is used to construct a chain of cross-rates (via the US dollar) of key trading partners' national currencies against the Ukrainian hryvnia (UAH).

The obtained cross-rates are used to calculate the exchange-rate index in the following formula:

$$I_i = \frac{R_i^t}{R_i^b},$$

where  $I_i$  – nominal exchange rate index of the currency of  $i$  country against the Ukrainian hryvnia;  $R_i^t$  – exchange rate of the currency of  $i$  country against the Ukrainian hryvnia at  $t$  period;  $R_i^b$  – exchange rate of the currency of  $i$  country against the Ukrainian hryvnia at base period (January 1995).

Monthly averages of exchange rates are used for monthly TWIs, while daily market closing data for the respective exchange rates is used for daily TWIs' calculation.



### Inflation

The monthly history series of CPI and PPI date (in month-on-month as well as in year-on-year terms) is maintained for the range of countries<sup>31</sup>, mentioned in the above table, and for Ukraine. This data is sourced from Bloomberg, and if not available at Bloomberg, it is retrieved from the national sources like the State Statistical service or central bank.

The on-month series of CPI and PPI data is used to calculate the inflation indices, which start at 100 points as of December, 1993 for each country in the basket and for Ukraine.

Upon the calculated data of monthly CPI and PPI indices, then, the following two adjusting factors are calculated.

First, the CPI-based adjusting factor:

$$P_i^{CPI} = \frac{CPI_i}{CPI_{ukr}},$$

where  $P_i^{CPI}$  – relative inflation level in  $i$  country against versus Ukraine;  $CPI_i$  – Consumer Price index of  $i$  country;  $CPI_{ukr}$  – Consumer Price index in Ukraine.

First, the PPI-based adjusting factor:

$$P_i^{PPI} = \frac{PPI_i}{PPI_{ukr}},$$

where  $P_i^{PPI}$  – relative inflation level in  $i$  country against versus Ukraine;  $PPI_i$  – Producer Price index of  $i$  country;  $PPI_{ukr}$  – Producer Price index in Ukraine.

### Nominal trade-weighted index

Nominal trade-weighted index of the Ukrainian hryvnia is calculated upon the following formula:

$$Nominal\ TWI = \prod_{i=1}^n (I_i)^{w_i}$$

### Real trade-weighted index

The CPI-based real trade-weighted index of the Ukrainian hryvnia is calculated using the following formula:

$$Real\ TWI^{CPI} = \prod_{i=1}^n \left( \frac{I_i}{P_i^{CPI}} \right)^{w_i}$$

The PPI-based real trade-weighted index of the Ukrainian hryvnia is calculated using the following formula:

$$Real\ TWI^{PPI} = \prod_{i=1}^n \left( \frac{I_i}{P_i^{PPI}} \right)^{w_i}$$

### Results

The following tables and charts provide the results of calculations of the trade-weighted indices of the local currency hryvnia in nominal and real terms. The indices are rebased at 100 points as of the end of 1999 (see Table 32-Table 33 and Chart 116-Chart 117 on pp.95).

<sup>31</sup> Month-on-month data is maintained since January 1994. While the year-on-year data is calculated upon the month-on-month data and, hence, starts from January 1995.

**Lagging statistical data and revisions**

The inflation data on Ukraine is retrieved from State Statistics Service of Ukraine, and the inflation data on the countries, which are Ukraine's main trade partners, is from Bloomberg or from national sources like The State Statistics service or central bank. As a rule, this data set is published with a one-month lag.

The foreign trade data, which is retrieved from State Statistics Serviced of Ukraine, is published with a two-month lag.

There is no lag for the data on the exchange rates, as it is available on a daily basis.

Hence, on a rolling basis, the last two-month period of the indices is subject to revision in the future, ie when official statistical data on inflation and foreign trade is published.

In the periods for which the official statistics on foreign trade is lagging, the following approach is applied:

- 1) Calculation of the monthly indices assumes: a) trade data for the lagging (and future periods) remains constant to the latest published official data; and b) inflation and exchange rates data for the lagging (and future periods) is forecasted<sup>32</sup>.
- 2) Calculation of the daily indices assumes for the lagging data that the most recently published foreign trade and inflation remains constant. It does not extend into the future periods.

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<sup>32</sup> For Ukraine, ICU's own forecast on inflation and USD/UAH exchange rates is used. For other countries and currencies, we use inflation forecasts by the IMF in its most recent *World Economic Outlook*, and for exchange rates, we combine Bloomberg's data from the NDF markets and forecasts by the most proficient FX research houses (ie, the bulge-brackets investment banks).

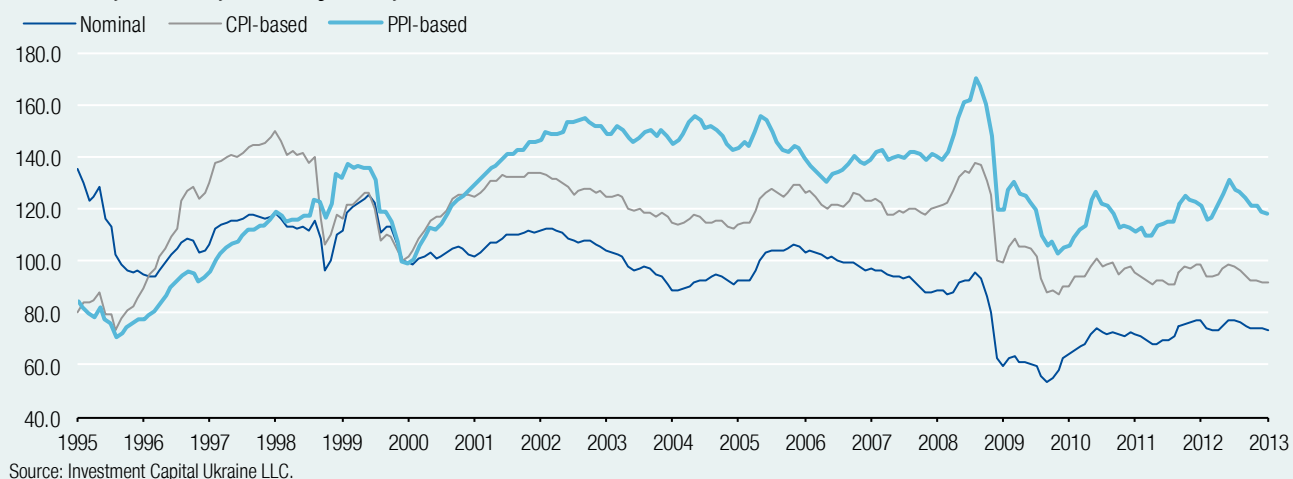
**Table 32. Selected values of the ICU's monthly trade-weighted indices of Ukrainian hryvnia**

Date	Jan-95	Dec-99	Dec-03	Dec-07	Dec-11	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13
<b>Nominal</b>	135.9	100.0	90.8	88.2	77.3	77.4	77.3	76.3	74.7	74.1	74.3	74.0	73.6
<b>CPI-based</b>	80.4	100.0	116.8	120.1	98.8	99.1	98.2	96.2	93.9	92.7	92.6	92.0	91.7
<b>PPI-based</b>	84.8	100.0	148.4	141.3	123.0	131.5	127.6	126.4	124.2	121.3	121.5	119.2	117.9

Source: Investment Capital Ukraine LLC.

**Chart 116. Monthly data of ICU's family of UAH trade-weighted indices**

All-time history from January 1995 through January 2013

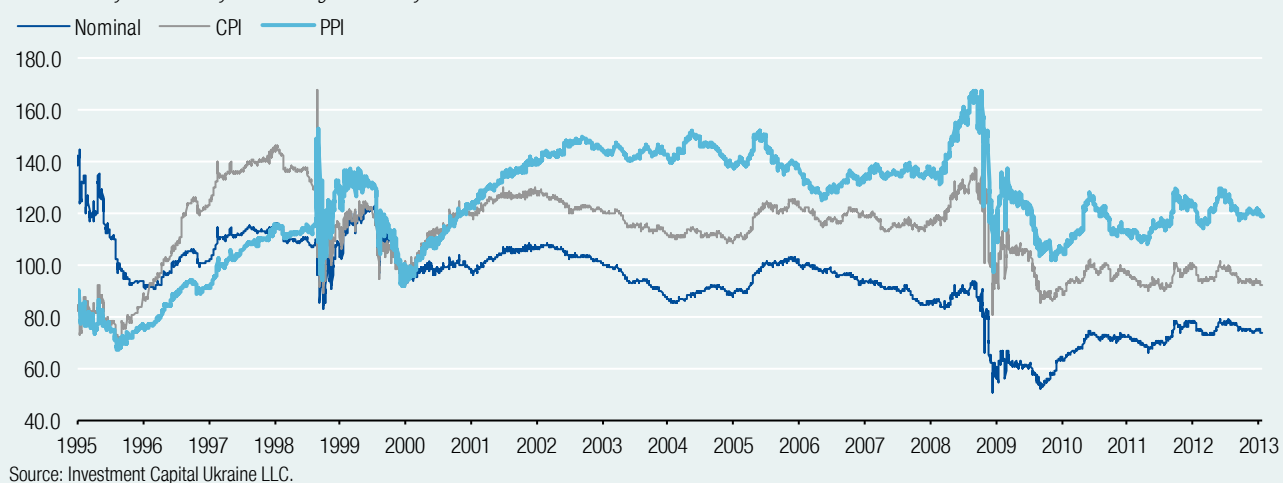
**Table 33. Selected values of the ICU's daily trade-weighted indices of Ukrainian hryvnia**

Date	2-Jan-95	...	31-Dec-99	3-Jan-00	4-Jan-00	5-Jan-00	...	17-Jan-13	18-Jan-13	21-Jan-13	22-Jan-13	23-Jan-13	24-Jan-13	25-Jan-13
<b>Nominal</b>	138.5	...	100.0	99.1	99.4	95.4	...	73.6	73.8	73.8	73.8	73.6	73.4	73.4
<b>CPI-based</b>	81.9	...	100.0	101.4	101.7	97.6	...	92.2	92.4	92.4	92.4	92.1	91.9	91.9
<b>PPI-based</b>	86.4	...	100.0	99.4	99.7	95.7	...	118.9	119.2	119.2	119.2	118.8	118.6	118.6

Source: Investment Capital Ukraine LLC.

**Chart 117. Daily data of ICU's family of UAH trade-weighted indices**

All-time history from January 1995 through 25 January 2013



## Approach to assessing UAH's misalignment

Our approach to determining whether Ukraine hryvnia's value at the FX spot market is misalignment with its trade-weighted value consists of the following steps.

### Averages

First, given the obtained data series of ICU's nominal and real TWIs, the mid- and long-term averages are calculated. These include the long-term averages, the 10-year averages and the 5-year averages.

The long-term averages span from 31 December 1999 (at this point the indices are rebased at 100 points) and through the last data point in the series of indices (see Chart 118, pp.97).

The 10-year averages are the 10-year rolling averages, which starts at the beginning of 2004 (see Chart 119, pp. 97).

The 5-year averages are the 5-year rolling averages, which starts at the beginning of 2000 (see Chart 119, pp. 97).

### Trade-weighted indices vs. their averages

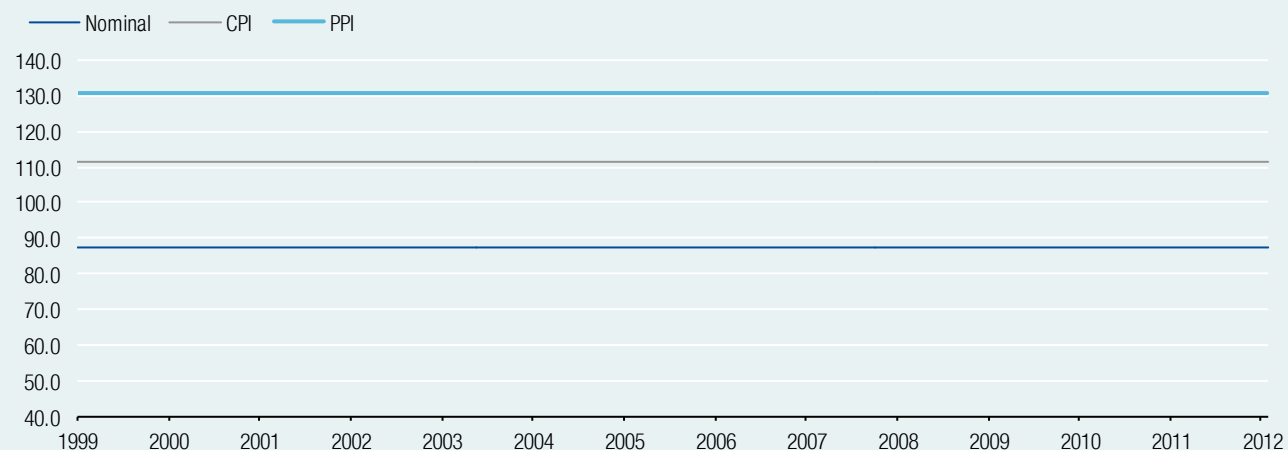
Then each of trade-weighted indices is measured versus its average (long-term, 10-year and 5-year) via subtracting the average value from the index's value. The results of this exercise are depicted on Chart 121-Chart 123 on pp.98.

If a result of subtraction of the average from the index is positive, then it means that UAH's is misaligned from its trade-weighted value and being overvalued.

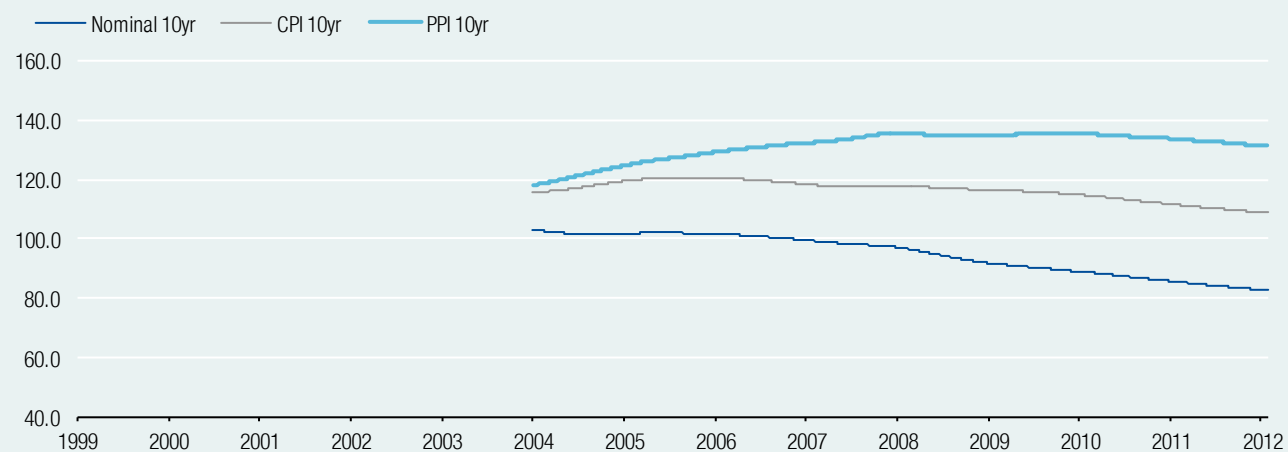
Otherwise, if a result of subtraction is negative, then UAH is treated as misaligned and undervalued.

Going forward these misalignments tend to narrow via interaction of inflation and changes in the nominal exchange rates in Ukraine as well as in its main trade partners. This narrowing may take a lengthy time period. However, literature on exchange rate economics concludes that such period fall between 5 and 10 years. This is because an economy tends to undergo structural shifts and changes through the cycles that observed to last 5-10 years.

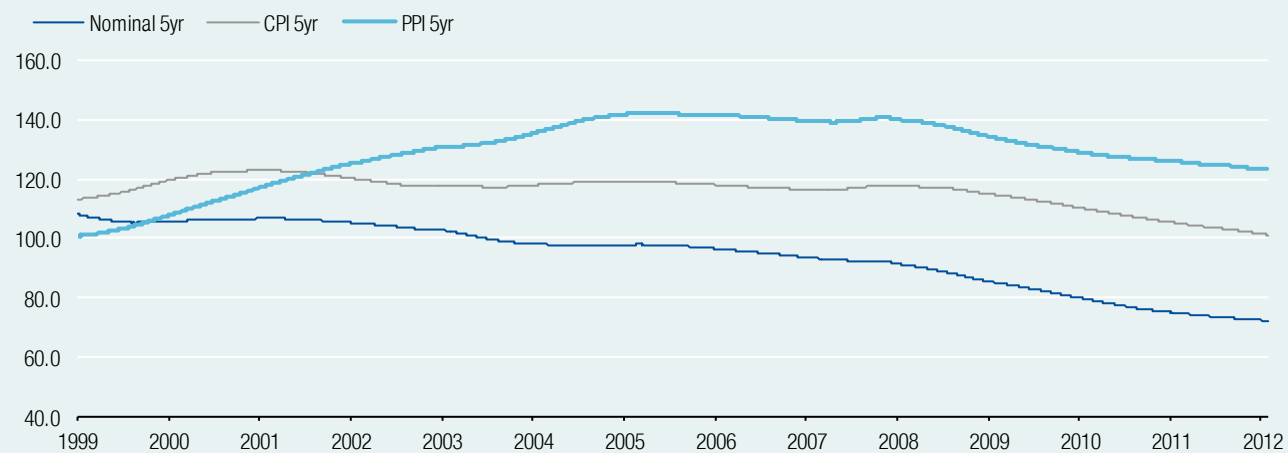
As far as Ukraine's hryvnia is concerned, we tend to rely on the view that Ukraine's economy is undergoing changes through a 5-year time span. Hence, we consider UAH's misalignment via 5-year averages of trade-weighted indices as more close to actual developments taking place in the Ukraine's economy (See Chart 123, pp.98).

**Chart 118. Long-term averages of the ICU's family of UAH trade-weighted indices (based on daily indices)***All-time history through 25 January 2013*

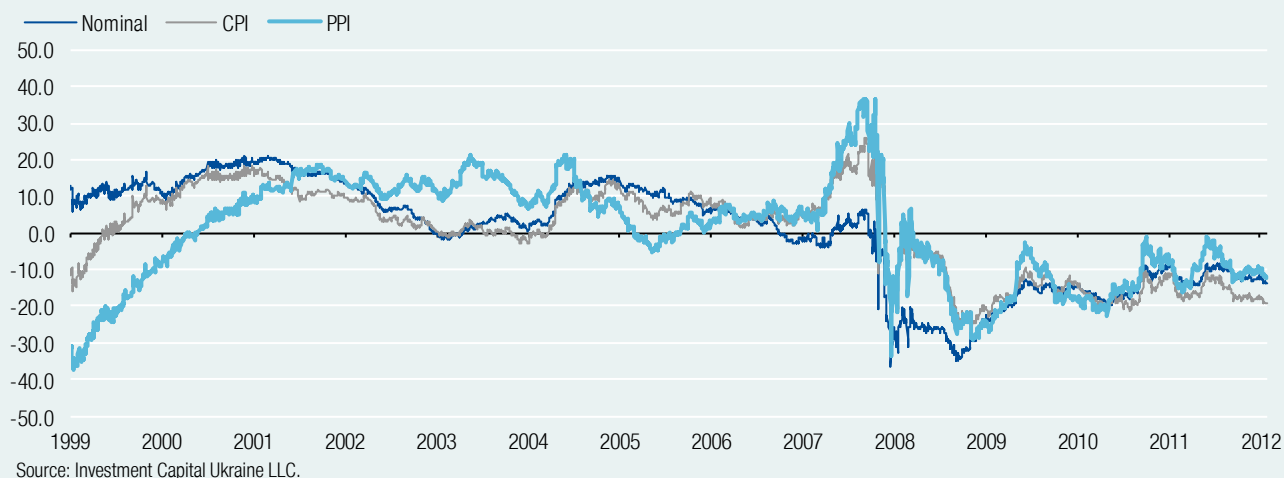
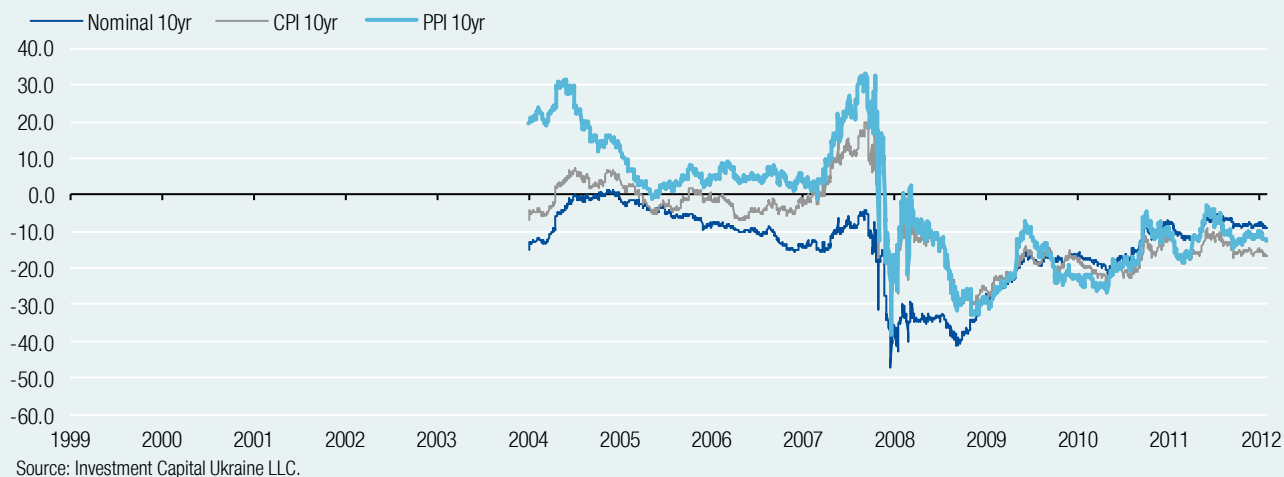
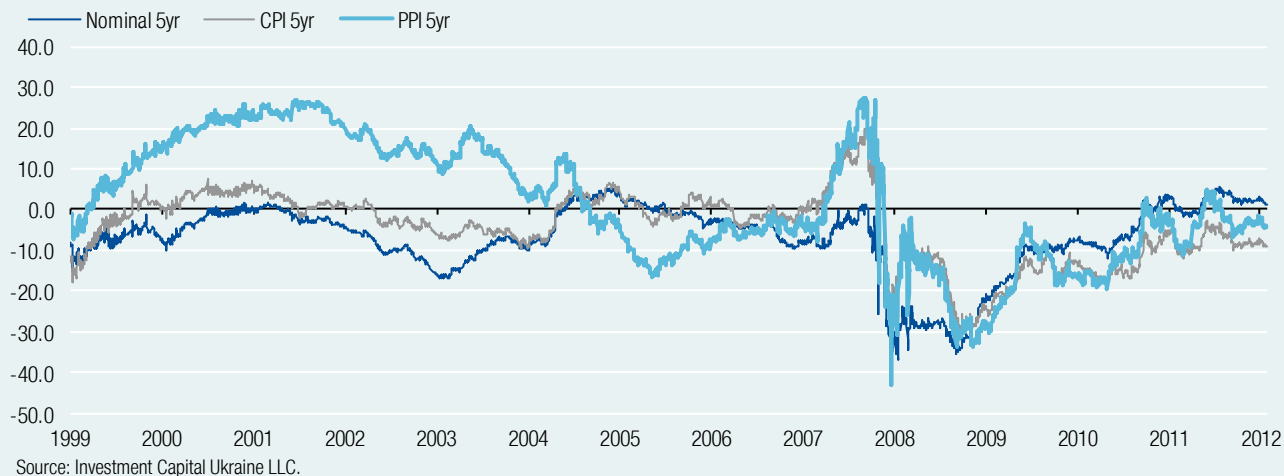
Source: Investment Capital Ukraine LLC.

**Chart 119. 10-year averages of the ICU's family of UAH trade-weighted indices (based on daily indices)***All-time history through 25 January 2013*

Source: Investment Capital Ukraine LLC.

**Chart 120. 5-year averages of the ICU's family of UAH trade-weighted indices (based on daily indices)***All-time history through 25 January 2013*

Source: Investment Capital Ukraine LLC.

**Chart 121. Long-term averages of the ICU's family of UAH trade-weighted indices (based on daily indices)***All-time history through 25 January 2013***Chart 122. 10-year averages of the ICU's family of UAH trade-weighted indices (based on daily indices)***All-time history through 25 January 2013***Chart 123. 5-year averages of the ICU's family of UAH trade-weighted indices (based on daily indices)***All-time history through 25 January 2013*

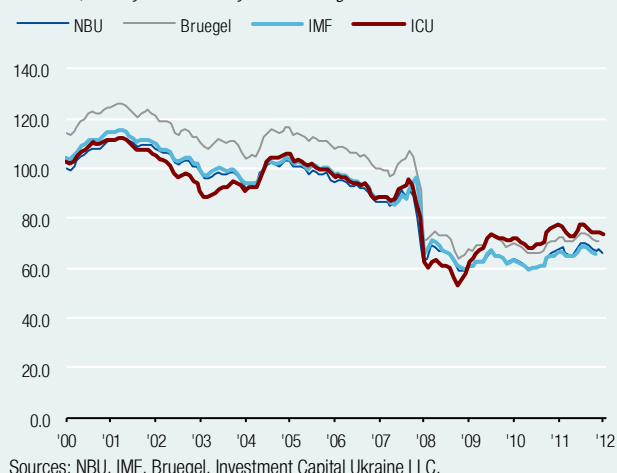
## Correlation with indices produced by other institutions

For the purpose of determining the level of correlation of ICU's hryvnia indices, we use the data on UAH trade-weighted indices (or effective exchange rates) from these sources: the National Bank of Ukraine; the IMF; and Bruegel. For determining the level of correlation of real indices, ICU's CPI-based indices are considered, and the base time spans from December 2000 through December 2012.

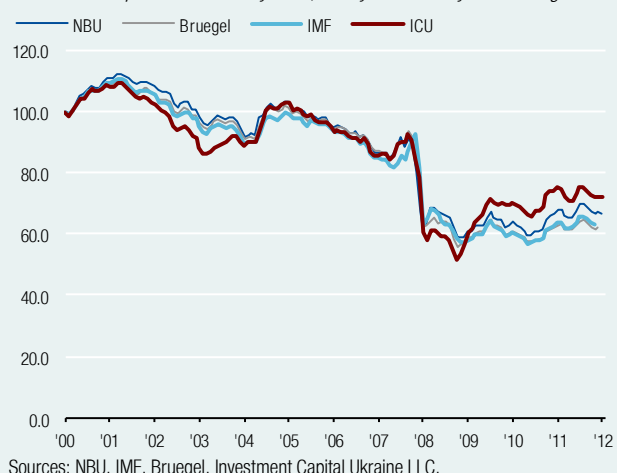
The correlation of ICU's nominal index (see Chart 124 below and Table 34 on pp.100) yields a 95.9-96.4% range, which is a bit lower than the correlation between the two indices calculated by the IMF and Bruegel (99.6%) and lower than the correlation of the index produced by the NBU with that of the IMF's and Bruegel's (99.2% and 99.4%, respectively). The correlation of ICU's CPI-based real index is higher if compared with NBU (80.0%), while being marginally lower than that of the IMF and Bruegel (48.6% and 45.3%, respectively). ICU's current (updated) methodology did provide an increase, albeit marginal, in its current correlation compared with our previous methodology. The correlation does improve if the time span narrows to September 2008 through December 2012 (see Chart 126, pp.100).

**Chart 124. The UAH's nominal trade-weighted indices (or nominal effective exchange rates) as calculated by the NBU, IMF, Bruegel, and ICU**

*Raw data, History from January 2000 through 2012*

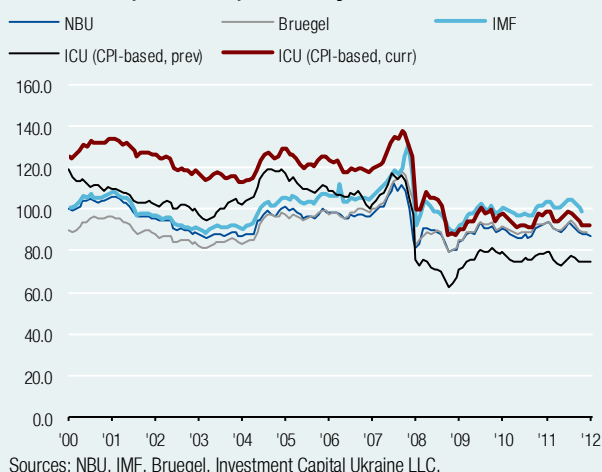


*Rebased at 100 points as of January 2000, History from January 2000 through 2012*

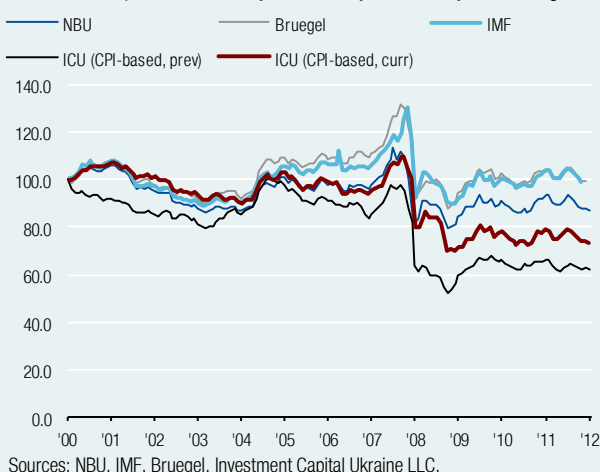


**Chart 125. The UAH's CPI-based real trade-weighted indices (or nominal effective exchange rates) as calculated by the NBU, IMF, Bruegel, and ICU's two indices (calculated under the previous and current approach)**

*Raw data, History from January 2000 through 2012*



*Rebased at 100 points as of January 2000, History from January 2000 through 2012*



**Table 34. Correlation matrix between the UAH's nominal trade-weighted indices (or nominal effective exchange rates) calculated by the NBU, IMF, Bruegel and ICU**

Data from December 2000 through December 2012

Nominal	NBU	Bruegel	IMF	ICU
<b>NBU</b>	<b>100.0%</b>	99.4%	99.2%	96.4%
<b>Bruegel</b>	99.4%	<b>100.0%</b>	99.6%	96.3%
<b>IMF</b>	99.2%	99.6%	<b>100.0%</b>	95.9%
<b>ICU</b>	96.4%	96.3%	95.9%	<b>100.0%</b>

Sources: NBU, IMF, Bruegel, Investment Capital Ukraine LLC.

**Table 35. Correlation matrix between the UAH's PCI-based nominal trade-weighted indices (or nominal effective exchange rates) calculated by the NBU, IMF, Bruegel, and ICU**

Data from December 2000 through December 2012

Real	NBU	Bruegel	IMF	ICU prev	ICU curr
<b>NBU</b>	<b>100.0%</b>	78.9%	77.2%	74.7%	80.0%
<b>Bruegel</b>	78.9%	<b>100.0%</b>	94.3%	47.2%	48.6%
<b>IMF</b>	77.2%	94.3%	<b>100.0%</b>	38.3%	45.3%
<b>ICU prev</b>	74.7%	47.2%	38.3%	<b>100.0%</b>	93.7%
<b>ICU curr</b>	80.0%	48.6%	45.3%	93.7%	<b>100.0%</b>

Sources: NBU, IMF, Bruegel, Investment Capital Ukraine LLC.

**Table 36. Correlation matrix between the UAH's PCI-based nominal trade-weighted indices (or nominal effective exchange rates) calculated by the NBU, IMF, Bruegel, and ICU**

Data from September 2008 through December 2012

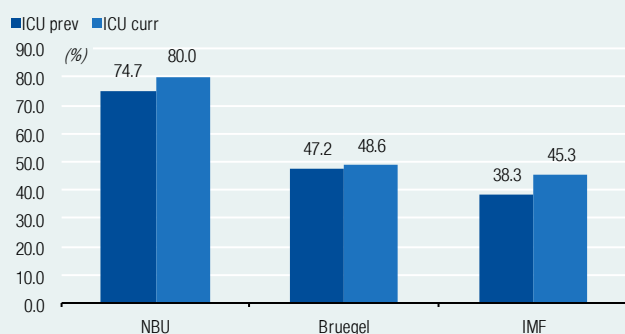
Real	NBU	Bruegel	IMF	ICU prev	ICU curr
<b>NBU</b>	<b>100.0%</b>	86.7%	81.0%	75.8%	67.0%
<b>Bruegel</b>	86.7%	<b>100.0%</b>	94.3%	94.8%	82.9%
<b>IMF</b>	81.0%	94.3%	<b>100.0%</b>	90.6%	89.2%
<b>ICU prev</b>	75.8%	94.8%	90.6%	<b>100.0%</b>	84.0%
<b>ICU curr</b>	67.0%	82.9%	89.2%	84.0%	<b>100.0%</b>

Sources: NBU, IMF, Bruegel, Investment Capital Ukraine LLC.

**Chart 126. Correlation matrix between the UAH's PCI-based nominal trade-weighted indices (or nominal effective exchange rates) as calculated by the NBU, IMF, Bruegel, and ICU**

All history:

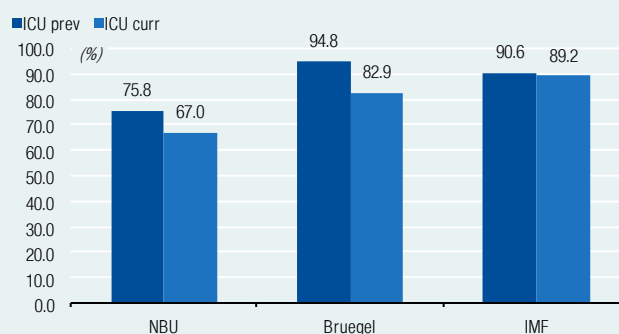
data from December 2000 through December 2012



Source: Investment Capital Ukraine LLC.

Post September 2008 history:

data from September 2008 through December 2012



Source: Investment Capital Ukraine LLC.







## Disclosures

### ANALYST CERTIFICATION

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



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