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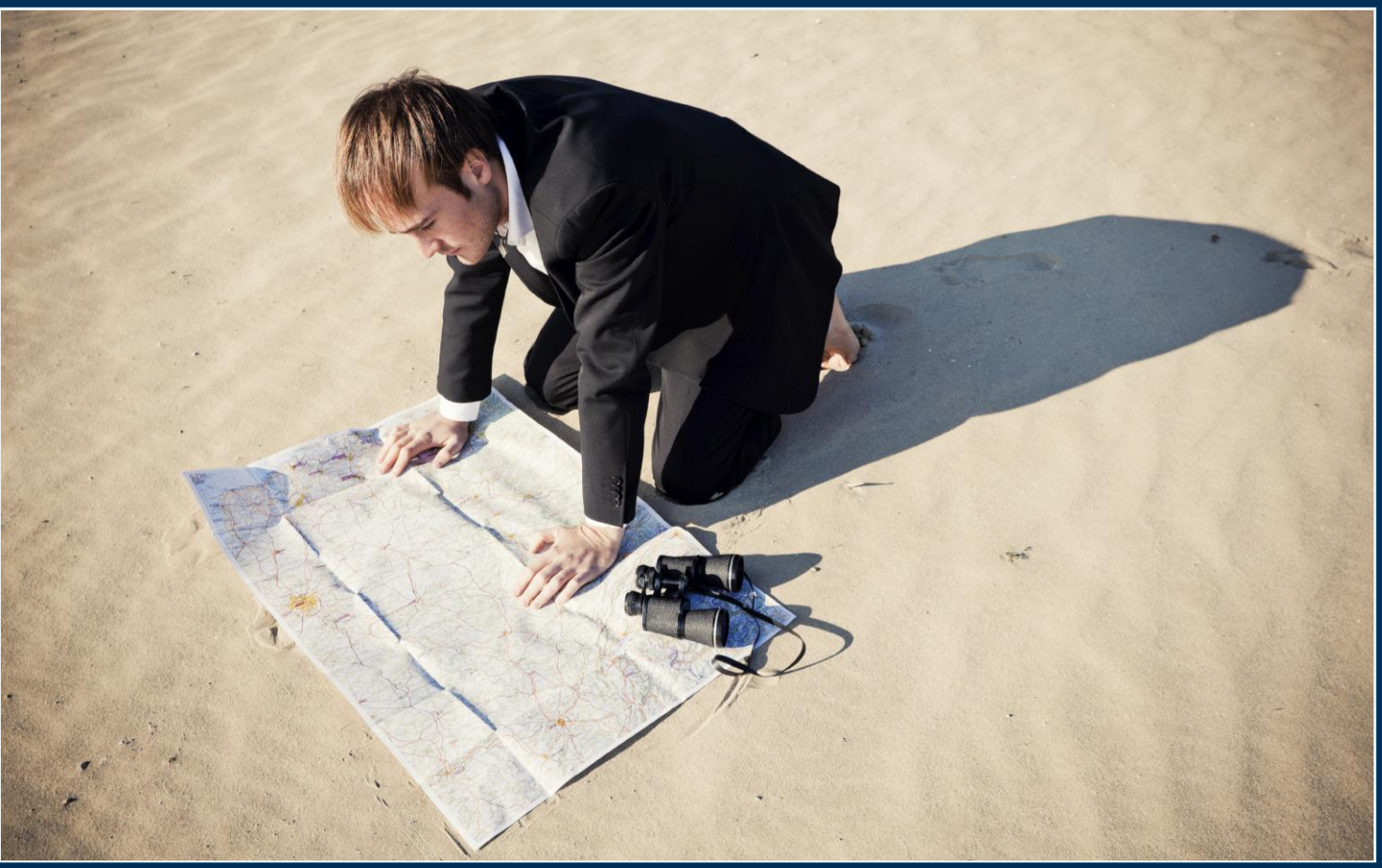
Quarterly Report

Where're we headed from here?



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READ FIRST THE DISCLOSURES SECTION FOR IMPORTANT DISCLOSURES AND ANALYST CERTIFICATION

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Executive summary

This summary provides a brief outline of our view on Ukraine's macroeconomic state during the rest of 2013 and from 2014-16.

Ukraine's geopolitical puzzle: Adding the missing parts. Ukraine is set to sign an EU association agreement next month, a development that we believe is very likely to take place. At the same time, the probability of a full-fledged trade war with Russia is low, and we believe trade disputes of short duration, albeit widely publicised, are a more likely scenario. In our view, the ongoing media debate on Ukraine's options in the matter of whether to sign a EU association agreement or join the Customs Union (CU) is not doing anything to help move along the process. In particular, it fails to acknowledge that these two options are not equal in scope nor outcome. They in fact have a substantial number of differences. Hence, it is no wonder that Ukraine's leadership ended up choosing the one with least burdensome political liabilities attached. Another flaw in the debate is the failure to take into consideration the current weakness of the Russian economy, in one of Ukraine's leading trading partners, which is struggling due to external competitiveness. Hence, Russia has effected a "beggar thy neighbour"[1] policy. More on this in "Politics and geopolitics", pp.13.

The economy: In poor shape, portending a higher public debt level going forward. Ukraine's economy has been struggling with growth issues since late 2011, as a range of factors from contraction in external demand to restrictive domestic policies (ie, a lacklustre policy of maintaining high real interest rates in the economy) have been in play. This year, real GDP is likely to be flat. Fiscal and monetary policies, which are so highly intertwined, each having its own set of issues to be addressed, have been strained to the utmost. A failure of the country's monetary policy to produce a low level of real interest rates puts brakes on economic growth, as bank lending is costly. As a result, state revenues are under pressure; hence, the budget deficit of the central government is projected to be at 4.2% of GDP for 2013, pushing the public debt level to increase from 37% GDP beyond the 40% level. Given the approaching presidential elections in March 2015, authorities are committed to support state expenditures, allowing a 5% YoY increase in 2014, albeit in nominal terms. While next year's real GDP growth is seen at +1.5% YoY, due to weak external demand and domestic complexities, the budget deficit issue will be a top priority for the authorities. Financing it would also bring up the public debt level towards 48%, in our view.

Key trading partners to undertake adjustments, Ukraine to follow reluctantly. Among Ukraine's key trading partners, the EU and Russia both have issues with competitiveness (Chart 2 and Chart 3 on pp.9 highlight this situation). In the EU, this is especially true for the fiscally constrained members of the Eurozone. Both of Ukraine's key trading partners, in our view, are struggling and will continue to struggle in 2014. In the Eurozone, despite a slow recovery from a lengthy and deep recession, the single currency's recent appreciation up to 1.38 in US dollar terms is a negative growth factor. Similarly, in Russia, economic growth has ground to a halt in year-on-year terms (while in quarter-on-

[1] From Wikipedia: "In economics, a beggar-thy-neighbour policy is an economic policy through which one country attempts to remedy its economic problems by means that tend to worsen the economic problems of other countries." (See http://en.wikipedia.org/wiki/Beggar_thy_neighbour).

quarter terms it is in recession). In our view, Russia's economy is failing to generate a meaningful growth rate because of weak competitiveness, and this requires an adjustment known as internal devaluation. In our view, the necessary adjustments in Eurozone and Russia are likely to start, and then accelerate when the US Fed renews its QE tapering efforts (likely in late 4Q13 or early 1Q14). Hence, when Russia's ruble and the Eurozone's single currency undergo real adjustment that will aid economic growth, their many dependent trading partners will also be forced to adjust, as they would serve to lose in terms of competitiveness if they failed to do so. This is of significant concern to Ukraine, as both the EU and Russia account for more than 50% of its exports. Hence, Ukraine itself is being forced to adjust too, in our view.

Why UAH flexibility? For most of the 9M13, the UAH's real rate, which we track via ICU's family of FX trade-weighted indices (see pp.37 and 71), has been appreciating quite substantially. The Fed's talk of QE tapering, which has overshadowed the markets from May through August this year, has been the primary reason. Since September, the real rate has depreciated, but only modestly. In our view, the appreciation trend of the UAH's real TWIs is set to renew with new impetus, once the financial markets recognise that the Fed is becoming more committed to rolling back its super-easy monetary policy. In our view, this may happen as early as December, unless the NBU allows the UAH more exchange-rate flexibility. If authorities keep defending UAH's nominal value, hence allowing real appreciation, this would be harmful for the economy (read: recession). Moreover, it would the last nail in the coffin for sovereign creditworthiness (read: all credit rating agencies—not only Moody's—would likely downgrade the country to a (near) default level). All in all, in our view, the authorities' survival instinct would force them to add flexibility to their economic policymaking toolbox.

Flexibility, and the IMF as a supportive guide, is our base-case scenario. By making domestic economic policymaking more flexible in terms of regulated tariffs and FX policy, authorities would ease trade- and capital-related strains, not only opening up access to financial support from the IMF, but also in terms of restricting deterioration of the ex-minerals trade balance, which would be supportive to economic growth. They could also force the sovereign cost of borrowing assigned by global bond markets to decline. The latter factor would open up access to the Eurobond markets not only by the Ministry of Finance, but also other quasi-sovereign issuers, as well as privately owned borrowers. Hence, once the IMF programme is agreed upon, then the capital inflows would be sufficient to cover the current account deficit and stage a gradual build-up of FX reserves. We see the UAH's nominal exchange rate tending to be at 8.90/USD at year-end 2014 and at 9.25/USD over 2015-16.

Global economy

We re-iterate our key assumption made in our *Quarterly Report* on August 14th that the global economy is facing a number of macroeconomic challenges now and over next three-, six- and 12-months. There is a great deal of risk over what financial markets' reaction will be to the first steps by the Fed of policy normalisation, which was postponed in September to late 4Q13. Apart from this, there are several other macro risks that financial markets have not yet discounted. In particular, we underline that the weak members of the Eurozone are still uncompetitive in real, trade-weighted terms. To the extent that they have made adjustments, it has been both painful and quite risky in social and political terms. Furthermore, Russia, too, is uncompetitive in real, trade-weighted terms, unlike its net-oil-exporter peers. Hence, to re-ignite growth these two main trade partners of Ukraine are more likely to undertake macro adjustments. Both economies have started this process recently with more to come. Hence, as these economies likely make pro-growth adjustments, Ukraine's currency will appreciate in real terms, unless Ukraine's authorities initiate counter, growth-positive adjustments of their own.

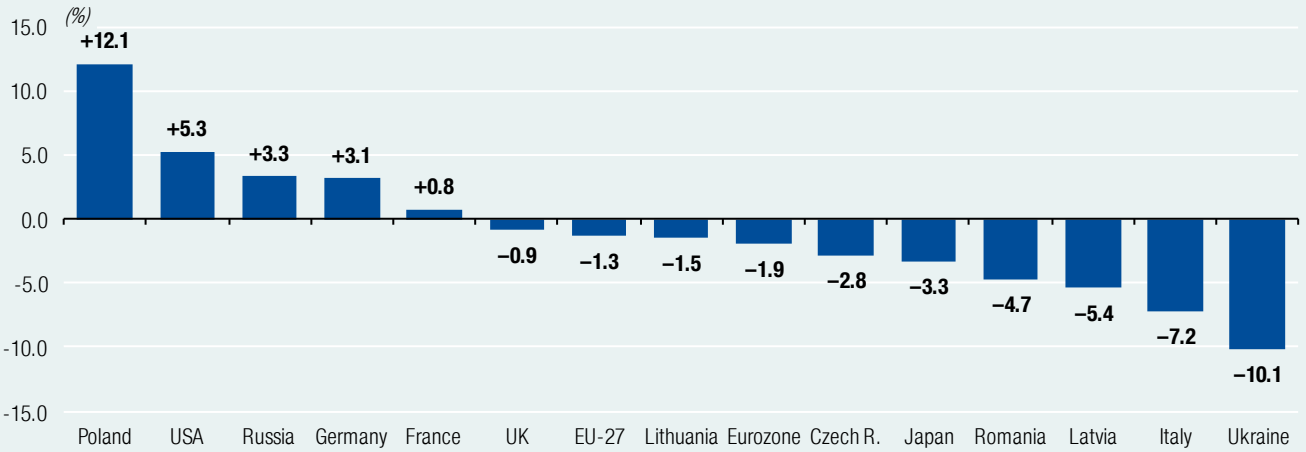
Fast-paced world: Economies face the growth challenge

The number of economies that face a growth dilemma has increased, not decreased…

An anomaly in the global macroeconomic environment today is that despite the fact that the US, a still-leading economic power, has been recovering from the 2007-08 economic and financial crisis, a number of emerging and developed market economies are struggling to re-ignite growth.

Out of a number of selected DM and EM economies that we list in the bar chart below, only a few economies have fully recovered above the pre-2008 crisis level. The majority of these economies, both emerging and developed, are still short of the size they were nearly five years ago.

Chart 1. Selected DM and EM economies by their GDP size[1] in 2Q13 over the size of GDP in the pre-2008 crisis period[2] (%)



Notes: [1] quarterly volume of GDP at constant prices; [2] the quarterly volume of GDP at constant prices in 3Q08.
Sources: Bloomberg, Investment Capital Ukraine LLC.

…even recently successful ones, like Russia, are in this group

Despite the above mentioned past divergence of growth, a greater challenge now faces these economies, whether or not they have grown above their pre-2008 crisis peak. And this challenge is the current sluggishness of economic growth and the vital need of finding new growth engines instead than relying on the old ones.

In our view, this is especially the case for economies that abandoned their monetary independence[2] and now cannot allow their central bank to devalue their way to prosperity.[3] (No doubt, Ukraine is in this group, as well.)

In this regard, it is interesting to note that two regions vital for Ukraine's foreign trade— the Eurozone and Russia—currently are faced with a nasty macroeconomic dilemma regarding future sources of growth.

In Eurozone, the still gapping external competitiveness is a simmering issue…

In the Eurozone, the Germany-led policymaking squad is focused on the need for macroeconomic adjustments in the weaker members, ie, limiting domestic demand by cutting state expenditures. This is the key policy theme the Eurozone has been adhering to and, indeed, it has born some fruit (albeit quite painful ones due to social disruption it caused).

…as highly competitive Germany enjoys growth, while weaker members remain less competitive

The ongoing and gradual recovery of the Eurozone economy overall hides the still-problematic issue of the gapping divergence between the external competitiveness of different Eurozone members (see Chart 2). In this regard, in our view, growth prospects for such countries as Italy and Spain, to name just two, are quite dismal[4] given the recent increase in the EUR rate towards 1.35. And the national, real trade-weighted indices (depicted on the Chart 2) need to converge in order to provide better growth prospects for the weaker Eurozone members (we note that over past few years they have shown little tendency of converging). Germany has been the most competitive member of Eurozone since early 2000s, and now enjoys the best growth prospects.

Hence, we retain a bearish view on EUR

Social tensions are a real risk to maintaining the current composition of macroeconomic conditions in the Eurozone. In our view, the EUR versus the US dollar is likely to move back down to 1.30 and a bit lower to relieve the difficult macro conditions of the periphery countries[5]. That is why our macroeconomic forecast takes somewhat of bearish view on EUR (see Table 1 on pp.12Table 1 on pp.12 with our forecast on EUR/USD for 2014-16).

[2] This is due to delegating the monetary policy to a central bank that is outside the control of the government. In this case, the economy is said is a part of a monetary union. Another case is when central bank pegs its currency to a foreign one and defends the nominal exchange rate at certain level, because of domestic constraints.

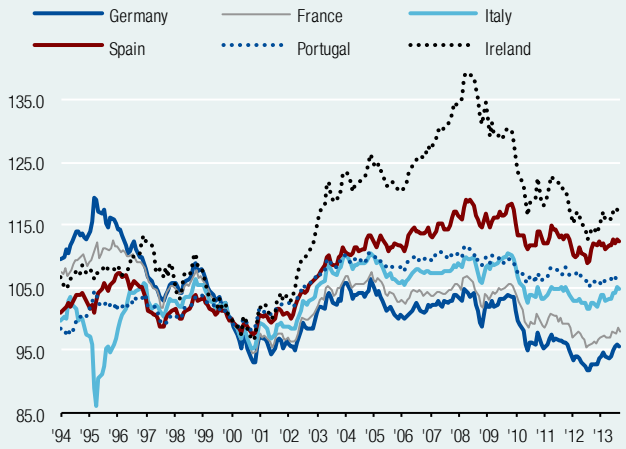
[3] Here, we borrowed the term from the book *Devaluing to Prosperity* by Surjit Bhalla (15 August 2012).

[4] Even if Spain, as PM Rajoy states in interview with WSJ, is recovering from recession in 3Q13. See "Spain Emerges From Recession but Sees More Austerity Ahead" *Wall Street Journal*, 23 September 2013.

[5] A much better medicine for the Eurozone growth prospects could be reforms inside Germany on increasing domestic demand that would shift up, in relative terms, the inflation level in Germany versus the inflation levels in the other members of the monetary union. However, the prevailing German public view (and, hence, the view of policymakers) is to achieve a balanced state budget, which eliminates the possibility for inflation pick-up.

Chart 2. External competitiveness of some Eurozone members

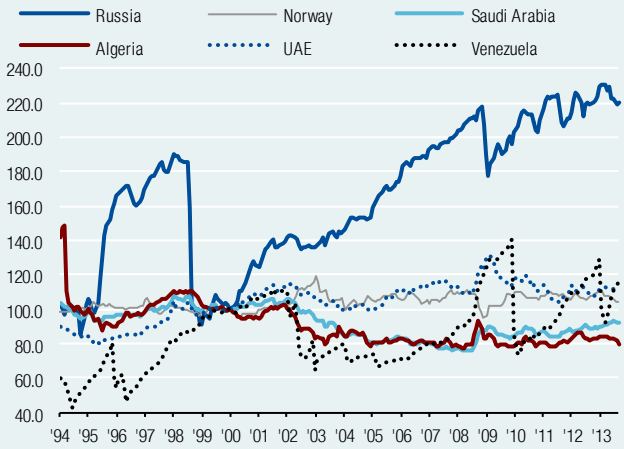
Real trade-weighted indices are rebased at 100 points as of January 2000



Sources: BIS, Investment Capital Ukraine LLC.

Chart 3. External competitiveness of net oil exporters

Real trade-weighted indices are rebased at 100 points as of January 2000



Sources: BIS, Investment Capital Ukraine LLC.

In Russia, the economy is in recession, while authorities and markets call it a slowdown

In Russia, the economic slowdown has been a key concern this year and it is likely to remain a top priority for authorities. The official view is that the economy thinly escaped recession in 2Q13. (Rosstat, the state statistical agency, has issued a seasonally-adjusted series of quarterly GDP that explicitly points out onto two consecutive quarters of declining GDP in quarter-on-quarter terms in 1Q13 and 2Q13. However, we observe that Russia-based economists tend to question Rosstat accuracy of seasonal-adjusted GDP numbers, hence, they rely on their own SA[6] numbers that appear in line with official view of "no recession").

Authorities are likely to allow monetary policy to be more supportive of growth…

Authorities are keenly searching for an effective fix to restore the real GDP growth rate towards a more acceptable level of 4% YoY. A scheduled change of the central bank governor this summer widened speculation of possible policy mixes to be employed. And one of them is a gradual move towards monetary stimulus that would spur business lending (especially aimed at raising the level of fixed investments in the economy).

However, in our view, there is one characteristic of the Russian economy that goes a long way to explain the slowdown this year when crude oil prices are well above the US$100 threshold. And this is the sizable real appreciation of the national currency in the trade-weighted terms. As Chart 3 above shows, of the net oil exporters, Russia's currency is the least competitive. The other net oil exporters—from Norway to Algeria (except Venezuela)—have been adhering to a policy mix that eliminates loss of external competitiveness (in other words, they did not allow the real trade-weighted index of their own currency to over-appreciate), Russian authorities noticeably lost control over this macro indicator.

[6] SA stands for seasonally adjusted.

…moreover, external competiveness of RUB is a weak macro feature in Russia, hence, our view on RUB is bearish

Hence, in our view, for the Russian economy to grow at a sustainable level it will have to let its currency weaken in nominal terms, which would translate into devaluation of the real rate to a more sustainable level[7]. That is why we maintain a bearish view on RUB's exchange rate versus USD in nominal terms (see Table 1 on pp.12 with our forecast on USD/RUB for 2014-16).

Fed delays taper

The Fed postponed its "taper" in September...

In last quarter's macro report[8] we took into account the Fed's announcement that it would taper QE by decreasing the monthly volume of bond purchases. This did not materialise, as the Fed decided at its September meeting to leave the programme unchanged.

...which forced up Ukraine's sovereign risk

The postponement impacted Ukraine's macroeconomic fundamentals, as daily data on UAH's real trade-weighted indices reveal that Ukraine's currency real rate declined by 3.5% from the peak seen in early September. This was a noticeable correction of the indices that had been on the rise since early February 2013 (see "Ukraine's hryvnia (UAH): Input data and the indices", pp.71).

In the financial markets, the Fed's decision produced a two-day spike in sovereign Eurobond prices, as bond investors went on a knee-jerk search for yield. Then a more sober realisation of the prospects of the Fed tapering (that tapering is not totally eliminated by the Fed; hence, it was a matter of time when it is launched), and the very recent sovereign-credit-rating revision by Moody's (which yielded a downgrade to Caa1) pushed Ukraine's sovereign credit risk decisively up by nearly 200bp beyond the 1000bp threshold in terms of CDS market quotes.

However, we tend to assume that Fed starts "tapering" in 4Q13…

We expect the Fed to taper this year due to a number of factors: economic growth in the US is relatively better than in other developed nations (see Chart 1 above on pp.7), the unemployment rate is declining, and the stock market—a key beneficiary of the Fed's QE programmes since 2009—has hit numerous all-time highs. Hence, we expect in 4Q13 financial markets will be bracing for an imminent move of the Fed to "taper" its QE3 programme.

…this should put upward pressure on UAH's real rate …

For Ukraine, Fed tapering would translate into renewed pressure through: 1) appreciation of UAH's real rate[9] (through weakness of the national currencies of Ukraine's key trade partners versus the US dollar); and 2) pressure on Ukraine's sovereign risk premium (due to the high, positive correlation between the UAH real rate and Ukraine's sovereign risk premium, see section "Empirical research: Testing the FX real rate vs. sovereign credit risk" on pp.38).

[7] Moreover, Russian authorities' hard-line stance on countries like Ukraine, Moldova, Belarus, the Baltic states and Poland over a number of trade-related issues (like alleged poor quality of Moldova-made wine, Polish food goods, Ukraine-made candies, etc) and highly publicised statements by Russian leadership, as well as TV pundits, over looming economic hardship in such neighbouring countries as Ukraine and Belarus, is a show to draw the attention of their population away from domestic issues to foreign ones. The same logic applies to the alleged hard-line action by Russian authorities to cut trade, for example, with Ukraine, if it signs an association agreement with the EU. We chalk this up to the simple fact that the Russian economy is in recession and authorities are finding it difficult to re-ignite growth, hence, they implicitly provide support to domestic producers via trade restrictions.

[8] See *Quarterly Report* "Muddling through no more" published on 14 August 2013 (http://ib.icu.ua/files/ICUQtlyReport-20130814-print.pdf)

[9] Herein we refer to UAH's real rate, which is the same as UAH's real trade-weighted index (either CPI- or PPI-based one).

…and keep Ukraine's sovereign credit risk elevated

Hence, in the CDS market, we do not expect to see Ukraine's sovereign risk premium approach 800bp, where it was very recently, even if Ukraine gets a loan from an official lender. Unless, that is, Ukraine's drops its USD peg and institute a more flexible regime that would smooth fluctuations in the real rate (ie, eliminate sizable deviations from its so-called fundamental value or, in other words, eliminates sizable over- and under-valuation of the currency). Moreover, the CDS market view on Ukraine's sovereign risk default, being inside the 1,000-1,100bp range, implies that the market expects real-rate deterioration due to expected future action by the Fed and what this move implies to other assets in financial markets.

In our view, when the Fed actually tapers, it will force financial markets to re-price the base interest rates and exchange rate of the USD. A stronger USD historically has been a factor behind lower commodity prices. Hence, downward pressure on crude oil prices due to a Fed taper will add pressure on a now-struggling-with-growth Russia, which would be squeezed for more radical measures to re-ignite the growth. Hence, we do not exclude that pressure on RUB could become a serious matter, not just a flicker in the financial markets daily performance.

Furthermore, if commodity-dependent nations like Russia cut domestic demand due to weak commodity markets, their demand for exports from Germany will decrease. In that case, we do not exclude that financial markets will turn a bit more demanding towards Eurozone assets—the euro and the sovereign bonds—by lowering their prices.

Global macro indicators vital to Ukraine's economy

Growth globally and in Russia

Despite the fact that some economies—notably the Eurozone and Japan—are showing signs of recovery, we are reducing our global growth assumptions from those in our *Quarterly Report:* "Muddling through no more," published on 14 August 2013. Thus, growth projections for the global economy are now 3.0% YoY in 2013 down from 3.1% YoY, while in 2014-16, we see it accelerating from there towards the 3.5-4.0% YoY range (while our previous assumption was a 3.8-4.5% YoY range for 2014-15). As we mentioned above, the expected taper by the Fed and eventual normalisation of the monetary policy in the US will put pressure on the nations that became accustomed to past engines of growth, such as high commodity prices or demand from high-growth EM nations. In our view, these factors could hamper economies still deemed relatively safe by the bond market. That is why we are more cautious on global economic growth next year.

As far as the Russian economy is concerned, we follow the IMF recent revision of real GDP growth for 2013 by lowering our forecast, only more aggressively than the Fund – to 1.0% YoY from 2.3% YoY (the figure included in our August macroeconomic update). In 2014-16, we expect gradual acceleration of growth, as a more flexible monetary policy would allow the needed macro adjustment to take place via lower inflation, as well as via a nominal weakening of the RUB's exchange rate.

Crude oil

Despite the geopolitical risks in the Middle East, notably over Syria, we stick to our WTI crude oil price forecast for the rest of 2013 (that is, 4Q13) at US$100/bbl. As regards the first half of 2014, we have adjusted our forecast to US$100/bbl and US$99/bbl -- up from US$99/bbl and US$98/bbl -- in 1Q and 2Q, respectively. At year-end 2014, we forecast

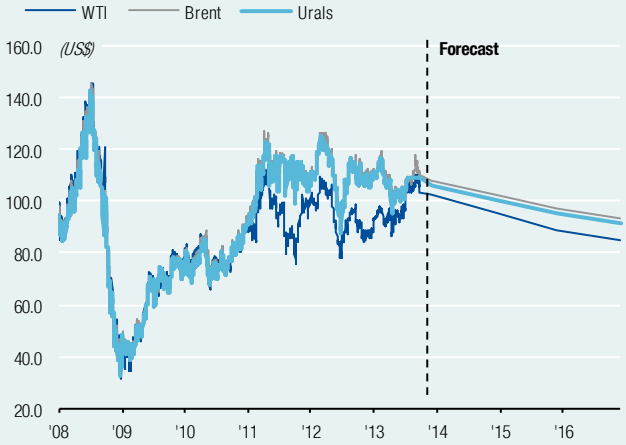
US$95/bbl, nearly the same level as our previous assessment of 14 August 2013. By end-2015, our assumption of US$87.5/bbl differs slightly from the one made in August of US$88/bbl. Our forecast for year-end 2016 is US$83.5/bbl. See Chart 4 and Table 1 on pp.12. These assumptions are a proxy for two factors: geopolitical risk (mention above) and Fed's pace of QE3 tapering.

Steel

The steel market has shown some signs of revival, such as a price rebound (albeit quite sluggish) over 3Q13, see Chart 5 below. Still, the factor of China's ongoing (and quite lengthy) rebalancing from investment- into consumption-led growth should keep a lid on steel-price increases. Hence, we expect to see steel prices falling over 2014-16 (see Table 1 below).

Chart 4. Crude oil price (US$ per barrel)

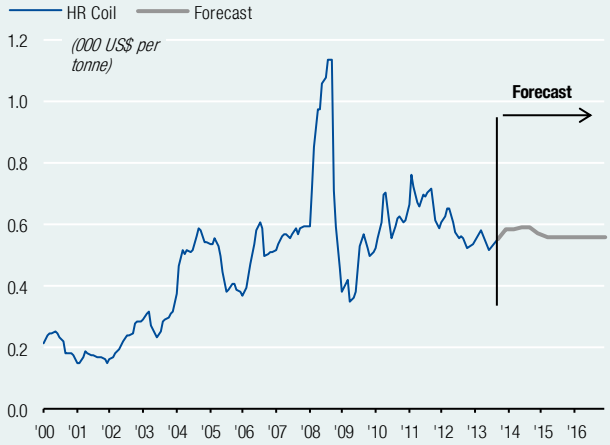
Spot and futures market daily quotations



Sources: Bloomberg, Investment Capital Ukraine LLC.

Chart 5. CIS export steel prices (US$ 000s per tonne)

Quarterly averages



Sources: Bloomberg, Investment Capital Ukraine LLC.

Table 1. 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			
	3Q13E	4Q13F	1Q14F	2Q14F	3Q14F	4Q14F	1Q15F	2Q15F	3Q15F	4Q15F	1Q16F	2Q16F	3Q16F	4Q16F	2013F	2014F	2015F	2016F
World real GDP[1]	3.0	3.0	3.5	3.5	3.5	3.5	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0	3.5	4.0	4.0
Russia real GDP[1]	0.0	1.0	1.5	1.0	1.5	2.5	2.5	3.0	3.0	3.0	2.0	4.0	4.0	3.5	1.0	1.6	2.9	3.4
Crude oil (US$[2])	106.2	100.0	99.0	98.0	97.0	95.0	93.5	92.0	90.5	87.5	86.7	85.9	85.1	83.5	98.6	97.3	90.9	85.3
Steel (US$[3])	534.0	498.0	505.0	512.0	519.0	505.0	491.0	491.0	491.0	491.0	491.0	491.0	491.0	491.0	536.3	510.3	491.0	491.0
EUR/USD (eop)	1.33	1.30	1.28	1.25	1.25	1.28	1.30	1.30	1.28	1.28	1.28	1.28	1.28	1.28	1.30	1.28	1.28	1.28
USD/RUB (eop)	32.57	33.00	33.50	34.00	34.50	34.50	35.00	35.00	35.50	35.50	36.00	36.50	37.00	37.00	33.00	34.50	35.50	37.00

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

Sources: Company data.

Politics and geopolitics

Ukraine's leadership appears ready to sign the association agreement with the EU. In considering its available options regarding foreign cooperation, ie, deciding whether to side with the EU or the Kremlin, with its Customs Union, Ukraine's leadership ended up choosing the one with least burdensome political liabilities. Over the long run, Ukraine is making an effort to preserve its authority over monetary and fiscal policy, which is a valuable asset for the authorities, in our view, in ensuring smoother macroeconomic conditions going forward. Over the short run, we consider the risk of trade disputes with Russia as quite real, for a number of reasons listed below; however, in many cases this would likely amount to grandstanding. Hence, the probability of a full-fledged trade war is low, with trade disputes of short duration as a more likely scenario.

What's in store: EU association versus Customs Union membership

It is highly probable that Ukraine will sign a EU association agreement this November

While there is more than a year is left before the next presidential elections are held (at the end of March 2015), Ukraine's leadership is making a grand move in terms of its foreign-policy orientation. It looks as if there is a more than a 90% probability that Ukraine will sign an association agreement with the EU[10], while the probability of Ukraine joining the Kremlin-run Customs Union on a full-membership basis has diminished to a low single-digit figure.

The issue of Ukraine's foreign alignment has draw much attention from the public eye, especially in the media (with substantial help from the Kremlin propaganda machine). One of the most pervasive theories that was cultivated through public opinion and the mainstream media is that Ukraine has had to choose between an association agreement with the EU or a Customs Union membership, implying that the two entities are equals[11] in terms of all forthcoming rights and liabilities. Moreover, both sides involved, the EU and Customs Union officials, made nearly identical statements on the subject while urging Ukraine's leadership to decide which side to join, in that it would be impossible for Ukraine to share memberships in both organisations.

In our view, this notion misses the point that the EU association and Customs Union membership are not equals. In fact, there are gaping differences, at least as concerns Ukraine's case.

First of all, the EU association agreement comprises a range of a legal frameworks to be embraced by Ukraine through different spheres, including foreign trade, the domestic financial market, etc. Under the EU association, Ukraine's prospects of joining the EU are still remote, as are its chances of joining the Eurozone. After all, the latter is not a club with

[10] This is also conditional on the EU's stance, which, more explicitly, is about allowing Yulia Tymoshenko to leave jail . The ruling in this case in Ukraine, which has been under question not only by Ms Tymoshenko herself, but also the opposition parties, as well as the EU, refers to the jailing of the former prime-minister of Ukraine as "selective justice," a judgment that is humiliating to the incumbent leadership of Ukraine, which appears prepared to swallow its pride and find a solution to the "free Tymoshenko" issue. It is understood that the EU leadership as well as that of Ukraine are in discussion to resolve the issue by allowing Ms Tymoshenko medical treatment in Germany via so-called medical sabbatical and/or official pardon.

[11] The idea (hugely misguided, in our view) that the association with the EU and Customs Union membership are equal in terms of institutional set-up, conditions of engagement in decision making, etc.

mandatory participation by a EU member[12]. Still, the EU does not require (at least yet) its member nations to concede national authority over their fiscal policies to the Brussels-based EU officials.

The Customs Union appears much more demanding in terms of burdensome political liabilities

On the contrary, Customs Union membership implies that a number of additional strings would be attached to the member state. It is no secret that the founding father(s) of the organisation had much larger ideals and goals at its inception. Just recently, Russian PM Dmitriy Medvedev proclaimed[13] (after failing to persuade his Ukrainian counterpart, PM Mykola Azarov, about the EU association agreement in late November) that the Kremlin "[with all its partners] would develop the Customs Union into a full-fledged Eurasian Union." All previous public talk about the proposed Eurasian Union resulted in the following conclusions.

First, it would be a union "like the EU," one, but a better one, in which all the flaws of the existing EU set-up would ameliorated. Second, it would be a union with mandatory participation in the monetary union, with Russian ruble used as the regional currency (no other option, or other currency, has been considered, and will not be). Hence, the Moscow-based central bank would take over the monetary policy of the member states. Third, in order to eliminate the EU's major shortcoming, in which a monetary union functions without the framework of a fiscal union, the Kremlin would attach a liability for Customs Union members to become part of the fiscal union on top of the monetary union. Hence, both monetary and fiscal unions would be, first, mandatory, and, second, effectively run by the Kremlin, even if monetary and fiscal authorities of the Eurasian Union are assigned a token residence of Brest (Belarus) or Astana (of Kazakhstan).

Hence, we tend to consider the EU association as such a totally different entity than Customs Union membership, especially with regard to the fact that political liability is light in the former and heavy in the latter. Hence, Ukraine's leadership has effectively made a decision that is less burdensome in terms of overall political liability.

Why so serious?

The Kremlin is playing hardball, while lecturing the "near abroad" to keep away from the foreign politics arena

Indeed, there is a risk that the Kremlin's concern over Ukraine's independence in the foreign policy realm could manifest into some ugly retaliatory measures. The recent, mutual trade spat over candies produced by one of the major local confectionaries was emblematic of the prospect of other cases that may follow if Ukraine continues on this path (ie, signs the EU association agreement, then takes other bold steps in order to become more visible in the foreign politics arena). In the past, the Kremlin has waged hard-line tactics to drum out the required outcome from the "near-abroad" states, including Belarus and Ukraine. It is no surprise, then, that the Kremlin is now talking about the high risk of trade protectionism against the Ukrainian goods to be sold in Russia. It would also be no surprise if new claims by the Kremlin arose that it felt posed risks to economic and financial stability or viability in Ukraine.

On the other hand, Kremlin's current hyperactive propaganda outburst against Ukraine's independence in terms of foreign policy, highlighted by its producers who sell goods abroad, including Russia, in our view, is a merely sideshow to mask the latter's poor domestic macroeconomic performance. Economic growth in Russia has came to a standstill

[12] Indeed, while Latvia and Lithuania, as EU members, are striving to become Eurozone members, their counterparts by EU membership such as the UK, Denmark, Czech Republic, and Poland are not in the Eurozone, and have own domestic policies in place, thus preserving their independence in the monetary sphere.

[13] From *Interfax-Ukraine* news on 15 October 2013: "Medvedev and Azarov to discuss issues on integration processes, including the natural gas theme". (www.interfax.kiev.ua).

in year-on-year terms, while in seasonally adjusted terms, quarter-on-quarter growth was reported by Rosstat as seeing two consecutive negative quarters in 1Q13 and 2Q13. While most private sector economists and politicians focusing on the region refer to it as a slowdown, very few, if any, call it a recession (a "technical recession" is the preferred phrase among those few who dare to mention the “R-word”).

Our Chart 3 on pp.9 depicts a sizable divergence in competitiveness between Russia (which has experienced a sizable appreciation of the real rate of its currency) and other net oil exporters (who managed to prevent their currencies from real appreciation), suggesting that one of the key flaws on the part of the economic policymakers in Moscow has been negligence of the internal appreciation that has taken place in the economy over the past several years. Hence, to steer the economy back toward meaningful growth Russian authorities need, among other goals, to effect so-called internal devaluation. To undertake this in an orderly fashion will takes time. This could also unfold in a disorderly fashion, ie, by force of financial market participants, but not without social discontent and hence heightened politically opposition. Hence, Russian authorities, in our view, are under huge pressure to devise the tools that instead covertly bring about internal devaluation and then reignite economic growth.

Therefore, it is reasonable to consider one, although well outdated, way to relieve the economic duress in the domestic economy, if it interferes with competitiveness, in the form of trade protectionism. That is one of key elements of the current policy undertaken by the Kremlin, in dealing with the "near abroad" situation

A fight against the lowered relevance trend

The evolution of CIS economies has been characterised by a widening in their trade links worldwide, especially with China and the EU; ...

Another part of the story about Kremlin's possessive view on Ukraine's movement towards the EU lies behind the evolution of the CIS economies over the past decade. Table 2 (pp.17) and Chart 6-Chart 11 (pp.16-19) provide a perspective of this. The key issue of the matter is how the trade links of the key countries of the CIS—Ukraine and the troika of countries that form the Customs Union, Russia, Belarus and Kazakhstan—have evolved.

The data depicted in these table and charts is based upon the raw foreign trade figures of these countries. The data is not adjusted for inflation, however, or any non-cyclical factors (like price changes in the Naftogaz-Gazprom contract on natural gas deliveries from Russia to Ukraine).

In our view, there is a trend in foreign trade developments of the major countries of the CIS region, which could be viewed as a gradual reduction in relevance of each country in terms of trade.

... trade between the CIS countries has been slowly proving less relevant, ...

Even for Russia, which has been an epicentre of socioeconomic and political integration in the region for decades, the countries of Customs Union account for a lower share of the total turnover in goods than was the case more than ten years ago. Now, Belarus and Kazakhstan combined have a 7.1% share of Russia's total turnover in goods, down 2.2ppt from January 2003, when these countries accounted for 9.3% share.

A more dramatic decline was observed in the other countries of the Customs Union: Belarus' share of turnover with Russia and Kazakhstan slid 9.4ppt, from 58.2% in January 2003 to 48.8% in December 2012; for Kazakhstan, there was a decline of 6ppt, from 25% in January 2003 to 19% in July 2013.

For Ukraine, this relationship was inverse; its turnover with Customs Union countries rose 3.2ppt, from 30.6% in January 2003 to 33.8% in August 2013. However, the increase is to some extent a result of the change in how Ukraine and Russia have placed a value on the

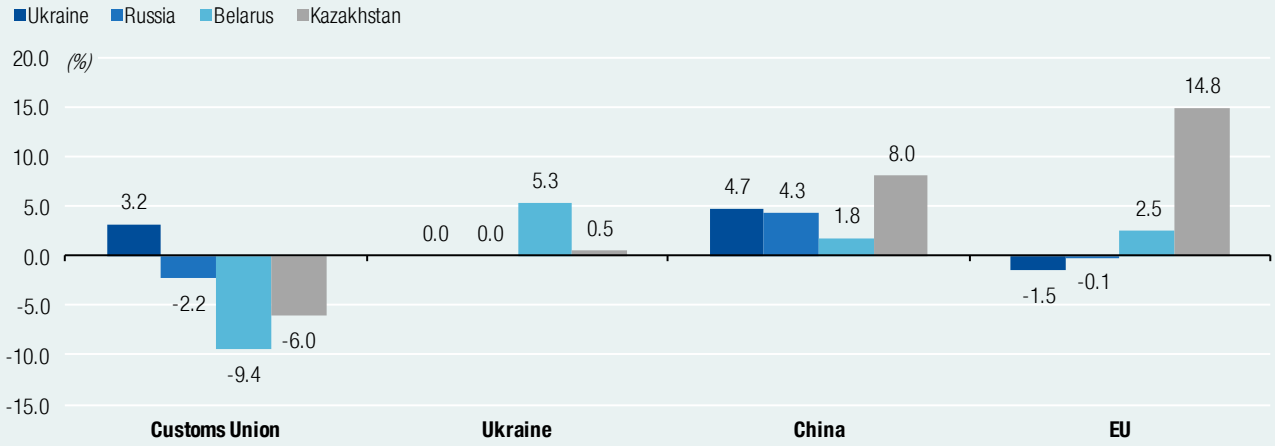
natural gas imported by the former from the latter. Yet, while back in 2003, the price was fixed at US$50, now it is linked to the crude oil price and hovers above the US$400 level.

... which pits the Kremlin at odds with the so-called "near abroad"

Every country mentioned above saw a more dramatic increase in trade that took place with countries outside the CIS region. More specifically, China was a key market with which trade expanded across the board. For Belarus and Kazakhstan, another fast-growing trading partner appeared in the form of the EU.

In this regard, this trend is particularly noteworthy, and should be taken into account alongside with others in assessing the Kremlin's logic in dealing with so-called "near-abroad" nations. Hence, as this trend has been unfolding more slowly due to the evolution of national economies, but is expected to resume, Kremlin's struggle against this trend will be lengthy and drawn out. However, for the most part, this effort will be rhetorical by nature, while effecting a full-fledged trade war would be a more dire, albeit possible, extreme[14].

Chart 6. Key trade partners to Ukraine and Customs Union members (Russia, Belarus and Kazakhstan): Change in share in total trade turnover between January 2003 and latest data available* (percentage point)



Note: * for Ukraine and Russia this is August 2013; for Kazakhstan it is July 2013; and for Belarus it is December 2012.
Sources: national statistic offices, United Nations, Investment Capital Ukraine LLC.

Russia as one of the key destinations for Ukraine exports

Ukraine and Russia's mutual trade sees US$16bn of goods flowing from the former to the latter; ...

As of August 2013, for which the most latest foreign trade data is available, Russia accounted for 24.8% of Ukraine's total exports of goods, valued at US$65bn in the last 12-month period. Europe and Asia account for larger shares of total exports, at 26.7% and 25.2%, respectively (see Chart 7, pp.17). Russia's share makes up US$16bn in volume terms and represents a quite diversified flow of goods between the businesses of the two countries. From the Russian side, this volume accounts for a 5.2% share of imports of goods.

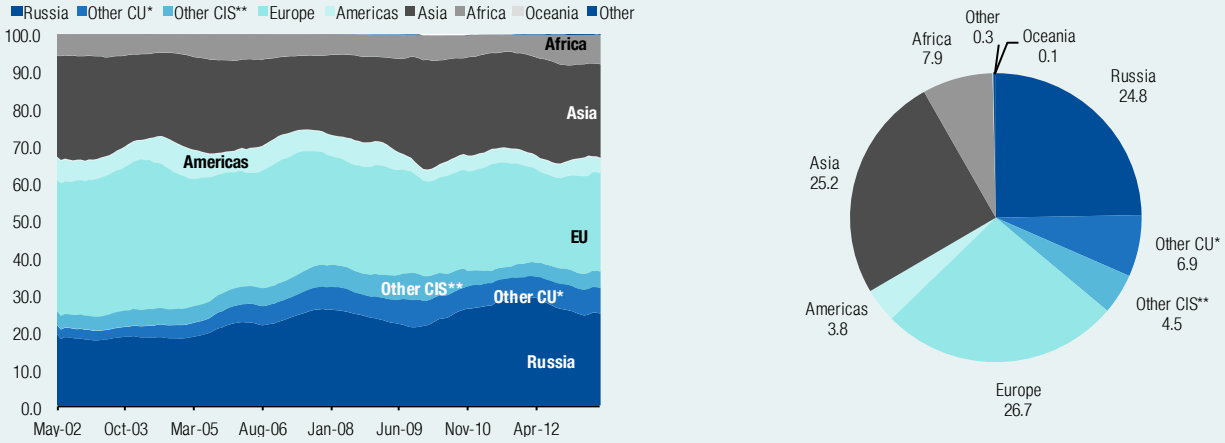
At first glance, it seems that Russia's economy is well capable of discounting the Kremlin's ban of Ukraine's exports in full or in some sizable portion. However, at the micro level, a trade war with Ukraine, if waged by Russia, in our opinion would lead to a disruption of trade flow to privately run businesses in the latter country, and hence have a negative impact on their operations.

[14] In our view, the probability ratio ranges from 5 to 10% in this regard.

… this volume accounts for a 25% share of Ukraine's exports of goods, and 5% of Russia's imports of goods

This is not to say that there could be public discontent because of a shortage of, for instance, Ukraine-made candies in Russian shops. As we noted above, Russian domestic producers of candies, for example, as well as other goods, would benefit from such a ban (due to import substitution effect). Overall, Ukraine's goods in Russia are just a tiny portion of its overall trade flows. At the same time, the Russian economy, being relatively weak its own, and furthermore, likely to enjoy weak growth next year, has limited scope for public discontent. Hence, summarising all the pros and cons of the trade ban (read: the trade war between Ukraine and Russia), we consider it as having a low probability. Hence, trade wars, which have become a near ordinary occurrence in mutual trade, have a higher probability.

Chart 7. Breakdown of Ukraine's merchandise exports from May 2002 through August 2013 (% of total)
Left chart depicts historical breakdown by countries; right chart depicts breakdown as of August 2013



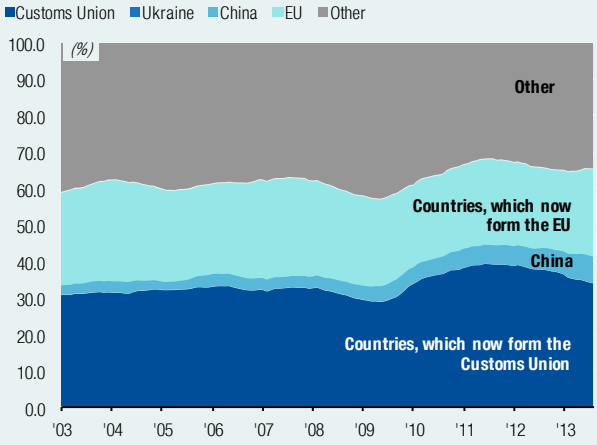
Note: * CU – Customs Union countries (Belarus and Kazakhstan); ** CIS – Commonwealth of Independent States.
Sources: State Statistics Committee of Ukraine, Investment Capital Ukraine LLC.

Table 2. Key trade partners to Ukraine and Customs Union members (Russia, Belarus and Kazakhstan): Evolution of merchandise trade turnover[1] from January 2003 till latest data available[2]

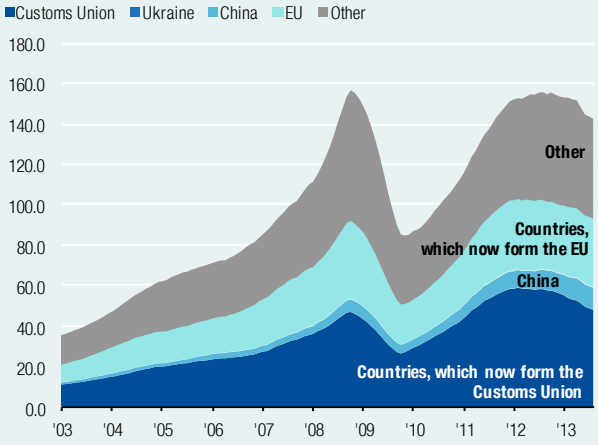
				Customs Union members								
	Ukraine			Russia			Belarus			Kazakhstan		
	Jan-03	Aug-13	Change	Jan-03	Aug-13	Change	Jan-03	Dec-12	Change	Jan-03	Jul-13	Change
Share (%)												
Customs Union	30.6%	33.8%	3.2ppt	9.3%	7.1%	-2.2ppt	58.2%	48.8%	-9.4ppt	25.0%	19.0%	-6.0ppt
Ukraine	…	…		4.8%	4.8%	0.0ppt	3.3%	8.6%	5.3ppt	3.1%	3.6%	0.5ppt
China	2.8%	7.5%	4.7ppt	6.1%	10.4%	4.3ppt	1.7%	3.5%	1.8ppt	9.4%	17.4%	8.0ppt
EU	25.5%	24.0%	-1.5ppt	49.8%	49.7%	-0.1ppt	24.2%	26.7%	2.5ppt	20.0%	34.9%	14.8ppt
Other	41.0%	34.6%	-6.4ppt	30.0%	28.1%	-0.8ppt	12.6%	12.4%	-0.2ppt	42.5%	25.1%	-17.4ppt
Total	**100.0%**	**100.0%**		**100.0%**	**100.0%**		**100.0%**	**100.0%**		**100.0%**	**100.0%**	
Volume (US$bn)												
Customs Union	10,881	48,181	4.4x	14,550	59,566	4.1x	10,171	45,077	4.4x	4,151	25,026	6.0x
Ukraine	…	…		9,252	40,167	4.3x	574	7,917	13.8x	520	4,759	9.1x
China	996	10,709	10.8x	9,489	86,987	9.2x	261	2,827	10.8x	1,578	23,027	14.6x
EU	9,068	34,237	3.8x	77,560	417,216	5.4x	4,230	24,694	5.8x	3,503	49,690	14.2x
Other	14,582	49,358	3.4x	45,037	235,946	5.2x	2,243	11,869	5.3x	6,890	29,526	4.3x
Total	**35,527**	**142,486**	**4.0x**	**155,888**	**839,882**	**5.4x**	**17,479**	**92,384**	**7.9x**	**16,643**	**132,028**	**7.9x**

Notes: [1] exports plus imports in the last 12-month period; [2] for Ukraine and Russia this is August 2013; for Kazakhstan it is July 2013; and for Belarus it is December 2012.
Sources: national statistic offices, United Nations, Investment Capital Ukraine LLC.

Chart 8. Ukraine's merchandise turnover (exports plus imports): Evolution since 2003, breakdown by key trade partners
Left chart depicts evolution in terms of trade share, right chart depicts evolution in terms of volume in current US dollars (US$bn)

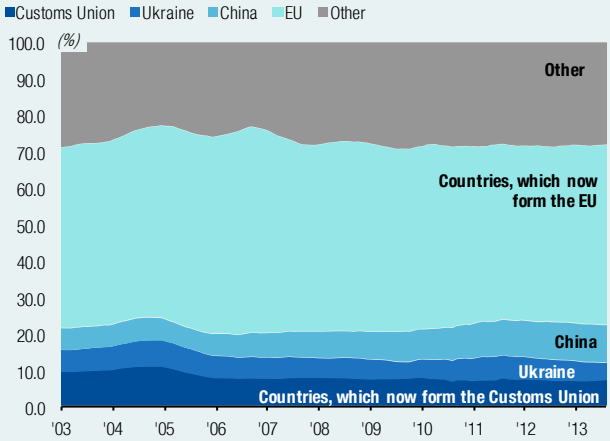


Sources: State Statistics Committee of Ukraine, Investment Capital Ukraine LLC.

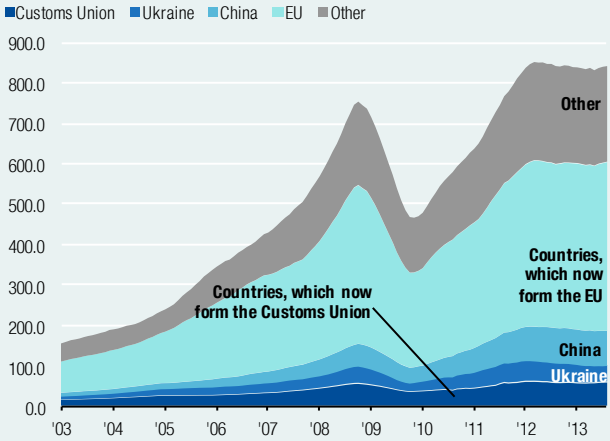


Sources: State Statistics Committee of Ukraine, Investment Capital Ukraine LLC.

Chart 9. Russia's merchandise turnover (exports plus imports): Evolution since 2003, breakdown by key trade partners
Left chart depicts evolution in terms of trade share, right chart depicts evolution in terms of volume in current US dollars (US$bn)

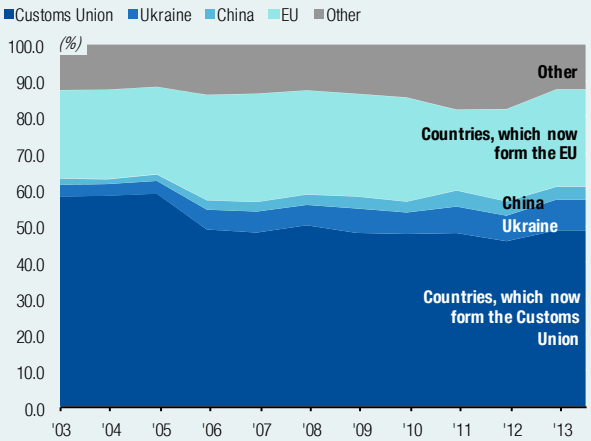


Sources: Rosstat of Russia, Investment Capital Ukraine LLC.

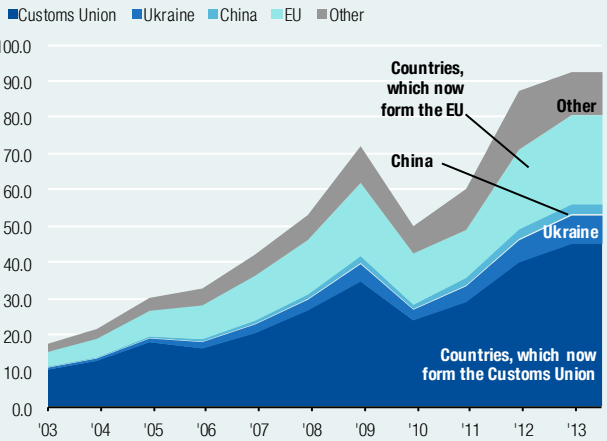


Sources: Rosstat of Russia, Investment Capital Ukraine LLC.

Chart 10. Belarus's merchandise turnover (exports plus imports): Evolution since 2003, breakdown by key trade partners
Left chart depicts evolution in terms of trade share, right chart depicts evolution in terms of volume in current US dollars (US$bn)

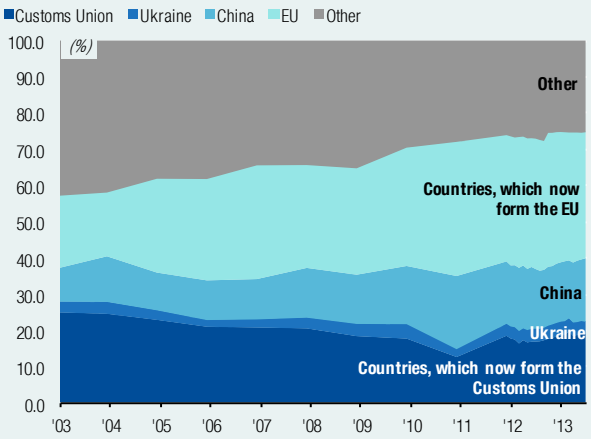


Sources: State statistics agency of Belarus, United nations, Investment Capital Ukraine LLC.

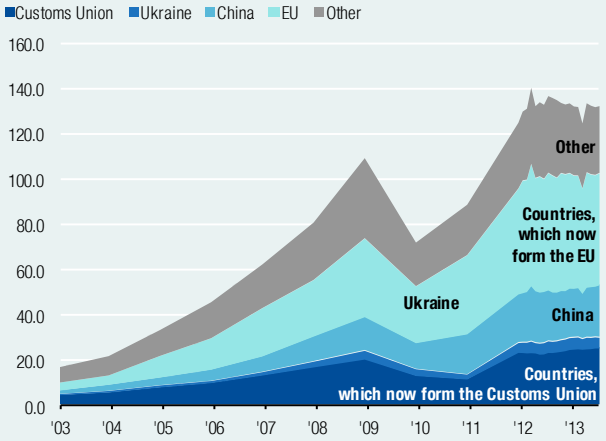


Sources: State statistics agency of Belarus, United nations, Investment Capital Ukraine LLC.

Chart 11. Kazakhstan's merchandise turnover (exports plus imports): Evolution since 2003, breakdown by key trade partners
Left chart depicts evolution in terms of trade share, right chart depicts evolution in terms of volume in current US dollars (US$bn)



Sources: State statistics agency of Kazakhstan, United nations, Investment Capital Ukraine LLC.



Sources: State statistics agency of Kazakhstan, United nations, Investment Capital Ukraine LLC.

Ukraine's economy update

Growth pattern: Still zero this year, sluggish afterwards

A gradual rebound expected for 2H13 is likely to lead to a zero-real GDP growth rate this year

The available 3Q13 statistical data on the key sectors of the economy from the supply side shows that real GDP growth was nearly flat in year-on-year terms. However, we believe the economy is likely to post a positive real GDP growth rate of +0.5% YoY for the period, thanks to an active build-up of inventories, which usually turns into a sizable positive volume in third quarter of the year (likely due to the effect of the substantial grain harvest this and it is being stored in silos). Our outlook for 4Q13 is that a gradual rebound in the economy will continue, resulting in +1.8% YoY real GDP growth for this quarter and turning the contraction of 1H13 into a flat change in GDP in real terms for the full-year 2013 versus the previous one[15].

This rebound is likely to take place thanks to a record grain harvest (of nearly 60m tonnes) and the gradual unfolding of the government's revival programme on economic growth in 2013-14. Household consumption, as in the past few years, remains in an expansionary phase, with wages growth has been supportive[16] (see Chart 13 on pp.21 for evidence of hourly wage increases over past few years and until recently).

Hence, the key sectors that make a visible contribution to the rebound this year are agriculture (thanks to the record harvest), services (thanks to the likely turnaround of the recent slowdown into growth again in 4Q), and to some extent, construction (thanks to government support), and retail.

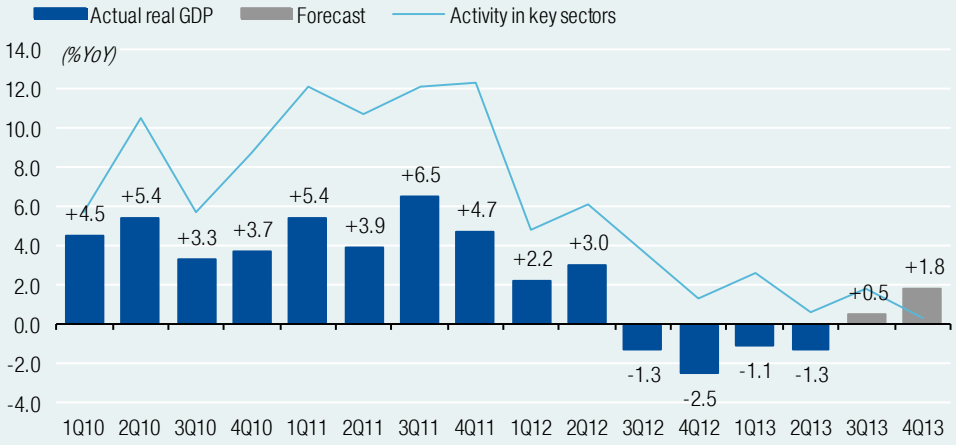
See Chart 12 below for our revised forecast for this year's remaining quarters' real GDP growth, now at +0.5% and +1.8%, respectively, in year-on-year terms (versus the +0.6% and +1.7% we noted in early August).

[15] It should be noted that our assessment of the services sector shows signs of bottoming out after the recent slowdown, very likely to occur in 4Q13 with state budget expenditures slated to produce the largest payouts in the year. Moreover, a restocking effect is likely to support real GDP growth in 2H13, because over the past three quarters (from 4Q12 through 2Q13), the economy has undergone a sizable de-stocking, reaching a 3.8% share of annualised GDP, a record high level since the 4Q01, when the history of quarterly GDP data became available.

[16] In our view, household consumption will not be a key element in the future growth of the economy in the near term, as wages peaked in 3Q13. See Chart 13 on pp.2. A steadily declining trend was seen alongside the number of wage earners (see Chart 14, pp.2), and if this trend is reversed (which, in our view, is possible via an increase in investment spending by the government and businesses), then real growth of meaningful magnitude in household consumption could resume. For the time being, however, these two factors are supportive to our view that household consumption's contribution to GDP growth is set to diminish. The latter of these, in our view, explains the sluggish consumer inflation in the economy.

Chart 12. Quarterly real GDP expected growth in 2013 (% YoY)

History from 1Q10 through 1Q13; forecast from 2Q13 through 4Q13



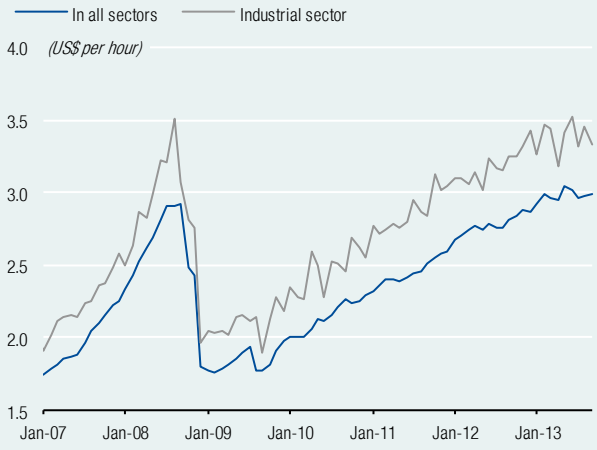
Note: Activity in key sectors – this represents an aggregation of key sectors of Ukraine's economy: agriculture, industrial production, construction, transport, and trade. Sources: State Statistics Committee of Ukraine, Investment Capital Ukraine LLC.

Recent developments in the Eurobond market bring downside pressure on growth forecast in 2014

The Eurobond market-related developments of late September—Moody's one-notch downgrade of the sovereign credit rating and subsequent sovereign risk premium spike beyond 1,000bp in CDS terms—did have an impact on our forecast of economic growth in the 2014 and beyond. These developments have been striking reminders about growth risks that could materialise going forward.

Chart 13. Monthly average hourly wages (US$)

Seasonally adjusted data. History from January 2007 to September 2013



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

Chart 14. Number of wage earners (m)

History from January 2007 to September 2013

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

Our scenarios for future macroeconomic growth are built upon the premise that higher borrowing costs in US dollars now observed in the Ukraine's sovereign Eurobond market are not a temporary shock that could reverse organically until external factors would improve.

As explained in the sections[17] above, we link this spike in sovereign borrowing costs with the market's reaction (read: overreaction) to the fair expectation that Ukraine's sovereign creditworthiness is at (and this is no exaggeration) a material risk of further decline over the next three-to-six-month period, unless Ukraine's authorities' *status quo* in terms of economic policymaking is shifted to accommodate a more flexible approach.

[17] For more details, please, refer to the section "Empirical research: Testing the FX real rate vs. sovereign credit risk" on pp.38 and section "Global economy" on pp.7.

Another viewpoint, factored into our all three of our scenarios (base-case, worst-case, and best-case) for economic growth going forward is that global macro conditions are changing in such a way going forward, that no multi-billion loan from an official lender (eg, from China, the EU, the IMF, or Russia) would persuade bond investors to lower their dim expectations over Ukraine's sovereign creditworthiness in the near future, unless, we emphasise, Ukraine's authorities decide to abandon their rigid macroeconomic stance in favour of a more flexible one. This is because the bond market investors' view is deeply rooted in macro fundamentals, and much less about possible incoming hard-currency credit flows[18].

Base-case scenario (40% probability, retained[19])

Base-case scenario envisages a more pragmatic stance and strike a deal with IMF before mid-1H14

According to our base-case scenario, 2014's full year growth rate will be reduced by 1ppt, to 2.0% YoY from 3.0% YoY, which we assumed back in early August. This is because higher borrowing costs for the EM world in general is a result of increased US Treasury yields (due to recent spark of political deadlock of the debt ceiling increase and later on due to rolling back of the Fed's monetary policy). This would affect Ukraine's economy via trade and capital flows. Key trading partners would limit their purchasing abroad, including in Ukraine, because of the more costly USD funding they still depend upon. As Ukraine's business does rely quite extensively upon US dollar funding, this would also undercut their wiliness to invest; hence, there will likely be a postponement effect in place at the end of 2013 as well as in early 2014. As an initial response to the higher USD borrowing cost, Ukraine's authorities will likely increase their rhetoric on possible counteractions to calm down market speculation of local-currency devaluation. This could add more pressure to business confidence, and hence, become a factor that restrains business spending and therefore GDP growth.

However, our key assumption under this scenario is that authorities, facing the above-mentioned challenge of even further deterioration of sovereign creditworthiness, have adopted a more pragmatic stance toward the situation, and hence gradually change the way they deal with issues in both the monetary and the fiscal spheres (like the state budget deficit and Naftogaz deficit). These changes are being made not just to meet IMF requirements, but rather to increase the economy's resilience and survival of the incumbent political party in power ahead of the March 2015 elections, as the latter development does not come without the former.

Hence, assuming that the political commitment to policymaking changes is out of the question (in the same way as Ukraine's authorities now indicating that the signing of an EU association agreement this November is also off the table), this clears the path for the IMF programme earlier than we had previously thought (in our *Quarterly Report* published on 14 August, 2014). In our view, this is now feasible before mid-1H14, while our previous assumption stated just "in 1H14."

[18] External payouts in 2014 (or principal and interest) amount to more than US$9bn as of end-September 2013. Hence, Ukraine needs steady access to private investors in order to proceed smoothly through 2014.

[19] Compared to our previous forecast published in the *Quarterly Report* "Muddling through no more" on 14 August, 2013.

Worst-case scenario (35% probability, increased[20])

Worst-case scenario assumes "muddling through" stance with some official funding from China/Russia…

Our worst-case scenario, as stated in the previous *Quarterly Report,* assumes that Ukraine's authorities' decision to maintain the *status quo.* It means that economic policymaking remains unchanged. Alongside, authorities succeed in obtaining official funding from one of such official lenders as China (thanks to China's interest in the Ukraine's agriculture sector), the EU (thanks to Ukraine signing the EU association agreement), or Russia (thanks to Ukraine joining the Kremlin-run Customs Union, with all implied political commitments). However, this leads to a gradual, lengthy, and quite predictable loss of the creditworthiness due to UAH appreciation in real terms (as measured by ICU's real trade-weighted indices). Hence, the trade deficit and fiscal deficit issues in 2014-onward are to become an even bigger problem than in the past.

…which culminates with deterioration of competitiveness…

In an attempt to maintain its own version of stability, authorities would impose more control over businesses and households in dealing with FX, including the taxation of these operations. A postponement in business investment, volatility of UAH interest rates due to policy decisions by authorities to combat ongoing devaluation speculations, and partial limitations to bank operations by the authorities would spread economic stagnation from 2013 into 2014. Moreover, this would very likely force the economy into a protracted recession later on, which would further dampen business and consumer sentiment.

…hence, new administration in 2015 steers adjustment in the economy

In terms of politics, the realisation of such a plan would turn the incumbent people in power into lame ducks. Hence, the incumbent president will have only a very slim, chance (or none at all) of being re-elected in March 2015. Then, with a new administration in place, authorities are left to undertake macroeconomic adjustment in first half 2015. This assumption is retained from our previous *Quarterly Report.*

Best-case scenario (15% probability, decreased[21])

In a best-case scenario, authorities adopt as soon as possible the policies that inject flexibility and sustainability into economy

Under this scenario, the changes depicted in the base-case scenario are taking place faster and, hence, policy credibility is started to be re-gained in the eyes of private lenders already in late 4Q13 or in 1Q14. Presumably, this coincides with IMF programme agreed inside this period. Also, implementation of the IMF programme is dubbed as success by both market participants and IMF itself. Hence, credibility materializes. This would aid to restore sovereign credit ratings, then access to the private lenders at Eurobond markets and a gradual rebuilding of FX reserves (which would no longer be one of the key priorities of the authorities). Under such a scenario, economic growth should accelerate as business and consumer sentiment improves and IMF support to FX reserves allows a smoother functioning of the FX market, where market participants gradually embrace greater flexibility of the UAH exchange rate, and authorities carry out limited interventions in order to eliminate a sizable deviation of the market rate from its fundamentals (ie, to avoid sizable over- and under-valuation of the currency).

[20] See previous footnote.

[21] See previous footnote.

Fiscal position of the government: Straining the already strained

Due to economic stagnation, state revenues have been underperforming year to date, …

Due to the stagnating economy, state revenues have been underperforming year to date, pushing the budget deficit level up from 3.8% of GDP in December 2012 to 4.6% of GDP as of the end of September 2013 (see Chart 16, pp.26).

Growth in state revenues (in year-on-year terms of 12-month rolling volume) slowed to as low as 2-5% YoY in the summer and in September[22]. At the same time, total expenditures and primary expenditures outperformed revenues by far, growing to above the 12% YoY level, although slowing from the near 20% seen earlier this year.

Ukraine's authorities appear to be hostage to their own policy of maintaining popularity among voters via economically driven policymaking which ultimately failed to result in sustainable growth. As a result, the level of state budget expenditures (measured as a share of GDP on a 12-month rolling basis) rose to 29% during the 2Q13, and has been maintained at this level through September (for which the most recent data is available; See Chart 17 on pp.26).

… causing the upward trend in the public debt level to firm up

Due to zero real growth of the economy and quite sluggish nominal growth of GDP, the state budget deficit has proven burdensome to economic performance, resulting in an upward trend in the public debt level, to 38.5% of GDP as of August from 36.6% at year-end 2012. In our view, due to the significantly sluggish real GDP growth expected next year, budget deficits to the tune of 4-5%, and still-elevated borrowing costs for the government expected to stay in place, an upward trend in the public debt-to-GDP ratio is set to resume, reaching 48%, 49% and 48% of GDP respectively at the year end of 2014, 2015, and 2016 under our base-case scenario.

Due to growth challenges, signs of stabilsation in the public debt level will not evident until well into 2016

While the public debt level remains lower than in other EM economies, some of are above 60%, the key problem of the authorities from a fiscal viewpoint is the low cash reserves, as the government continues to operate its finances with a cash balance on its accounts that is quite thin.

Thus, the NBU's data on the financial sector liabilities for central government show that as of the end of August, the government's cash cushion stood at a total of UAH9.2bn (0.7% of GDP), of which UAH4.0bn was in local-currency funds on the government account with the State Treasury (the rest, or US$0.65bn, we assume was the foreign-currency cash balance).

In our view, this is an exceedingly narrow cash reserve for the government, which is carrying quite high borrowing costs, and at the same time, an intense debt principal repayment schedule. The government's fiscal position is even more precarious as far as its foreign-currency liabilities are concerned.

[22] In confirmation of state revenues' underperformance, media reports cited an MoF official saying that the NBU's funds transfer to the state budget year to date amounted to UAH24bn (see http://forbes.ua/news/1360037-nacbank-perechislil-v-gosbyudzhet-24-mlrd-griven). Our previous *Quarterly Report*, published August 2013, *Muddling through no more*, assumed that total transfers from the NBU in 2013 would amount to UAH28.7bn, implying UAH19.4bn for the January-October period. Hence, this source of state revenues was ahead of our expectations, implying weaker-than-expected state revenues performance.

Despite the continued low public debt, Ukraine's authorities are running public finances on a thin cash cushion, …

Thus, Chart 19 on pp.26 gives a glimpse of how many months (or more effectively, days) the MoF would have to be able to service the current state budget expenditures and debt repayments, if the government were to shut down (a hypothetical assumption). This chart depicts the January-September period, with historical data on reported cash balances at the end of each month for the rest of the year (for which no data has been yet reported) during which the government shutdown hypothesis is tested.

As far as UAH liabilities of the government are concerned, it will run out of cash in a month (as the UAH cash balance is thin, the MoF has actively been borrowing, both domestically and externally, to cover the deficit between revenues and expenditures as well as debt principal repayments). As far as FX liabilities, the government is likely to run out of cash[23] by the end of the year,[24] as interest and principal repayments on FX debt come due.

… heightening the risk of default on FX liabilities

Similarly, Chart 20 on pp.26 shows four scenarios, depending on the MoF's FX borrowing options, on how many months the government would function until its FX cash cushion erodes. The first scenario (as mentioned above) assumes no FX borrowings; hence, the government will run out of FX cash as soon as this year. Under the second one, when the EU provides loans to Ukraine[25] after the EU Vilnius summit this November, the government will run out of FX cash as soon as 23 April, 2014. Under the third, when China provides a US$1.5bn loan,[26] the FX cash will run out on 25 April, 2014. And lastly, if Ukraine's authorities obtain EU and China loans, then the government will run out of FX cash on 4 June, 2014.

The above-mentioned scenarios underlines just how precarious the Ukrainian government situation is. Obviously, it desperately needs to establish an inflow of foreign-currency capital to the government coffers. This is also reflected by the increased sovereign risk premium on Ukraine's sovereign debt tradable on the Eurobond market.

[23] According to our assessments, this was at US$1.2bn as of the end of September, 2013 thanks to a US$0.75bn loan from Russian banks.

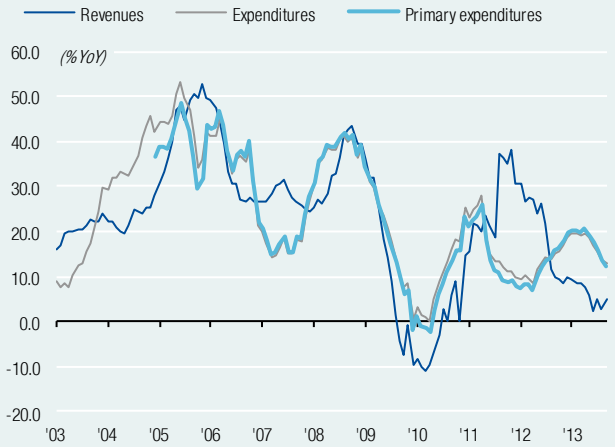
[24] On 29 December, 2013.

[25] Consists of two loans: one provided by the EU to Ukraine's government, amounting to €600m, and a second one of €200m is provided by the European Investment Bank to state-owned bank Oschadbank. Hence, the total volume of loans is €600m.

[26] The second tranche of the US$3bn loan agreement between China's export-import bank and state-run entity, the "State Food and Grain Corporation." The first tranche was obtained in December 2012.

Chart 15. Change of State budget revenues and expenditures (% YoY)

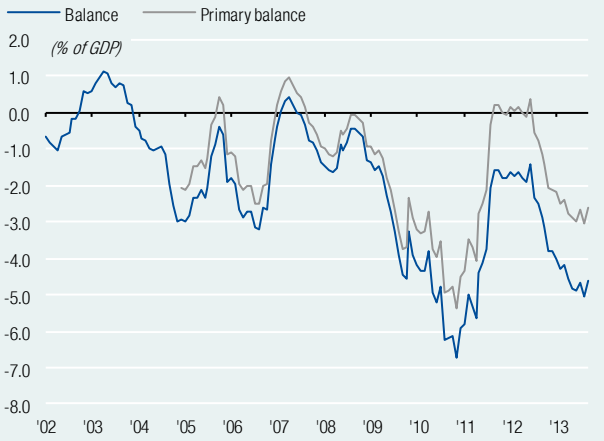
History from January 2003 through September 2013



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

Chart 16. State budget balance: overall & primary balance (% of GDP)

History from January 2002 through September 2013



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

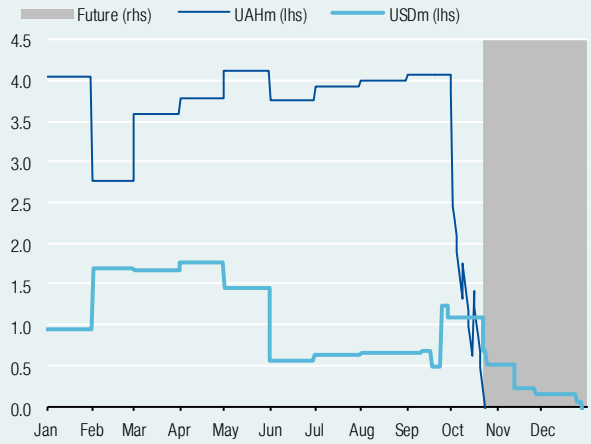
Chart 17. State budget revenues and expenditures (% of GDP)

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

Chart 18. Effective cost of debt of the government (% per year)

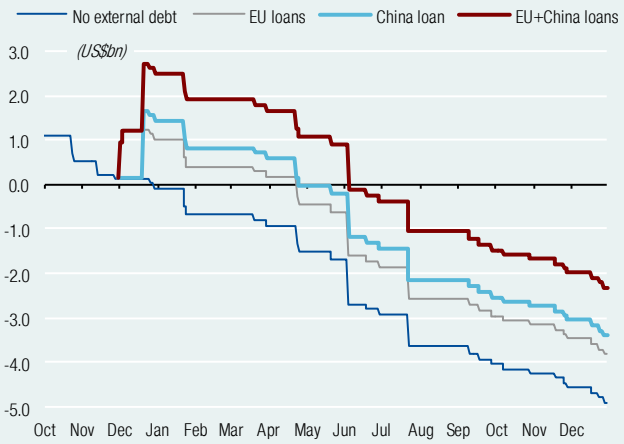
Source: Ministry of Finance of Ukraine, Investment Capital Ukraine LLC.

Chart 19. Government's balance at UAH and FX in 2013* (UAHbn and US$bn, respectively)



Note: * History for Jan-Sep; in 1-22 October current spending and debt principal repayments are covered by gross borrowings; since 23 October till end of December it is assumed zero gross borrowings. Sources: Ministry of Finance of Ukraine, Investment Capital Ukraine LLC.

Chart 20. What if? How the MoF's FX account balance evolves in late 2013 and over 2014, given the MoF's FX borrowing options*



Note: * there are four options considered: 1) no borrowings; 2) the EU's €600m loan to MoF and EIB's EUR200m loan to Oschadbank, total of €800m; 3) China loan of US$1.5bn; 4) EU and China loans combined.
Source: Investment Capital Ukraine LLC.

Guarantees: Postponed debt

Evaluating Ukraine's debt burden takes into account state debt, including all borrowings received for the budget and those which have to be repaid by the government. But, a significant segment of Ukrainian debt is also issued by quasi-sovereign institutions, repayments of which are guaranteed by the government and should be repaid from the state budget if the issuer will not repay it. This debt now amounts to approximately UAH100bn, or nearly 18% of the total debt outstanding, most of which is denominated in FX and has to be repaid abroad. Thus, current sovereign public debt amounting to UAH450bn could rise to UAH552bn at any time when potential problems with repayments arise.

Guaranteed debt, which has been issued for many years, could create new problems for the government

The Ukrainian government has issued debt guarantees for different borrowings for quite a number of years since Ukraine's independence. Parliament's debut approval for the Cabinet of Ministers of Ukraine to issue guarantees was issued in 1992. In 2001, Parliament included these rights in the Budget Code and unified rules on the issuing of guarantees. During its more than 20 years of independence, Ukraine has issued a lot of guarantees, some which did not take effect, and some of the loans were repaid by the government, but a large amount of guarantees could take effect at any time in the near future, which would increase the government's debt burden. As a result, this type of debt could become public debt, according to its current status of contingent liabilities.

Risks of guaranteeing debt are high, due to the recent Naftogaz problems

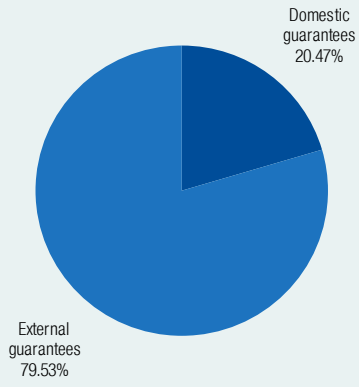
As of the end of September, 2013, guaranteed debt amounted to UAH101.05bn (US$12.64bn), or 18.31% of the total debt held by the Ukrainian government, which could become direct debt at any time. The recent possibility of default by Naftogaz on its Eurobond when its funds were committed at the payments agent account supports this premise; payments on this NAFTO 9.5% '14 bond were guaranteed by the government, and could have been repaid from the state budget if Naftogaz had not found the resources to solve the problem a few days before the deadline.

Guarantees are mostly issued for FX borrowings

Currently, the structure of the state guarantees is as follows: guarantees for domestic borrowing amount to UAH20.68bn (US$2.59bn), while guarantees to the foreign creditors amount to UAH80.36bn (US$10.05bn; see left-hand chart below).

Chart 21. Structure of guaranteed debt as of 30 September, 2013

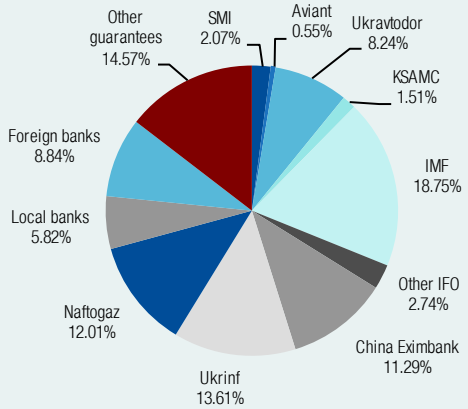
Guarantees issued for domestic and external borrowings



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

Chart 22. Main borrowers or creditors as of 30 September, 2013

Names of borrowers or creditors requested and received guarantees



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

Domestic guarantees are issued mostly for quasi-sovereign bonds, while external guarantees are made on loans and Eurobonds

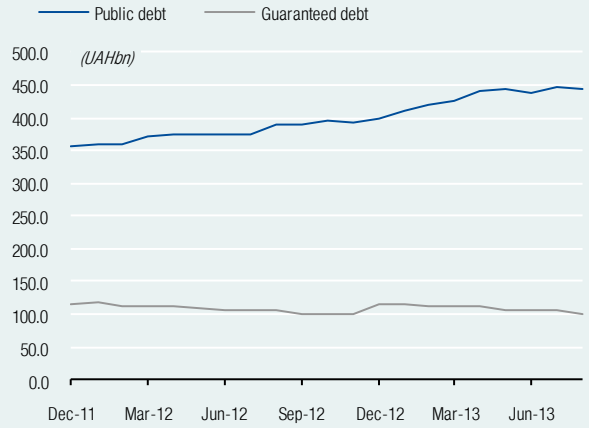
A more detailed structure of guarantees is depicted in the right-hand chart above, where we can see that UAH13.14bn, or more than 50% of domestic guarantees, are guarantees on bond issues made by state-owned companies or government institutions such as State Mortgage institutions and Ukravtodor. A total of UAH19.90bn of guarantees for external borrowings were issued to the NBU in IMF loans; UAH11.99bn in guarantees on Chinese loans received last year for agrisector development, UAH14.45bn in guaranteed repayments on UKRINF Eurobonds; and UAH12.75bn for the NAFTO 9.5% '14.

The volume of guaranteed debt is stable, but its share out of total debt has slightly declined

The dynamics of guaranteed debt are not critical. During the last two years, the total volume of guaranteed debt was quite stable, at slightly above UAH100bn, and its share of total government debt was about 20-25%, slightly down from 24.49% seen at the beginning of 2012 to 18.31% at the end of September, 2013. However, this decline in the share of guaranteed debt of the total debt was the result of an increase in the government's direct debt during this period, from UAH357bn to UAH451bn, at the same dates as mentioned above. For more details, please see the charts below.

Chart 23. Dynamic of government debt (UAHbn)

2012-9M13



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

Chart 24. Share of government debt (%)

2012-9M13

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

While one debt was repaid over the last two years, three new guarantees were issued

Also during this period, part of the government's guaranteed debt was redeemed by borrowers without support from the MoF, eg, the NBU's repayments of IMF loans (the volume of this debt declined to UAH19.90bn, from UAH58.82bn at the end of 2011). But at the same time, new guarantees were issued in the amount of UAH11.99bn for Chinese Eximbank, UAH4.40bn for UKRINF, and UAH7.20bn for Ukravtodor.

Guarantee cases are unpredictable, and could be made any time, for any scheduled payment, …

So, we can assume that despite some redemption, the government of Ukraine issued new guarantees but did not decrease the total amount of this particular debt, which is substantially riskier than direct debt issued by the MoF, due to unforeseen, negative macroeconomic events, resulting in possible new cases of guarantees.

… but, the largest risks are in the possible cross-default on other debt or guarantees

The MoF's data do not include the maturities of guaranteed debt, but this is not very important for the MoF, as guarantee cases could take place at any time for any regular payment by a debt issuer. As in the case of the recent Naftogaz payment, if the company is going into default, its debt, guaranteed by the government, could be called to be repaid, and the guarantor, which is the government, represented by the MoF, would have to repay this debt, and as a result of this repayment, a possible cross-default could take place for other debt issues, direct or guaranteed. But, the most pertinent part of analysing this risk could be in examining the periods during which the largest risks to these guarantee cases and subsequent guarantees could take place.

A total of UAH3.91bn of domestic guarantees will follow for redemption next year, and UAH4.73bn in 2015

So, looking at the MoF's data, and comparing it with the conditions of bonds issues or other public information, we can assume the period when the guarantee cases will most likely happen. Guarantees on domestic bond issues by KSAMC[27], SMI[28], SP Antonov,[29] and Ukravtodor[30], currently amount to UAH13.14bn, including UAH3.91bn with a maturity next year and UAH4.73bn in 2015..

FX guarantees will be larger than domestic guarantees next year

But, we are assessing only domestic debt above, and according to our assumption, UAH15.97bn has to be repaid by the NBU to the IMF next year, and UAH12.75bn has to be repaid by Naftogaz for its Eurobonds redemption. It is important to note, however, that,these figures do not represent the final debt burden for next year, due to the lack of available public information.

Economic problems could give rise to guarantee cases

As a result, taking into account the large volumes of principal repayments scheduled for the next year, which could carry risks of guarantee cases, if economic problems continue next year, sovereign debt could rise significantly, causing new problems with debt repayments.

Central bank policies: Patching here and there, but missing the primary rupture

The central bank has been successful in year to date in containing the financial stability, which has suited well to the current economic policymaking mix. Thus, the central bank has been pressing hard in several fronts (as was allowed by the top decision-makers of the incumbent authorities).

NBU has been pressing hard to limit usage of US dollars by the households…

One of them has been an implementation of the measures to further de-dollarize the banking sector. Especially this was evident in the aim to encourage households to reply more on the UAH savings and, hence, eliminate a possibility of the currency run. Also, the central bank strengthened its grip on the interbank FX market by fixing the supply channel via widening the base of business operations with FX money, which are eligible to surrender requirement (now stands at 50% of the volume).

Another was an support of economic activity by liquidity injection into the banking sector. While staging two steps of lowering the official policy rate from 7.5% to 7.0% (this June) and then again to 6.5% (this August). Moreover, since 3Q13 NBU accepts as collateral the banks' loans to business projects with a government guarantee. Also, NBU has been supporting banks with liquidity buying out from the (quite narrow in terms of participants) government bond market a total of UAH36.1bn in year-to-date terms. Hence, 2013 is likely to become a year of record high yearly volume of NBU's net accumulation of domestic government bonds; last time 2012 was a record holder, when NBU's portfolio of government bonds added UAH33.9bn.

…while accelerated growth rates of base money and M3 to multi-year high…

In this regard, NBU's efforts on supporting economic activity in the country this year are the most strongest one since 2008 crisis. As Chart 25 and Chart 26 show that both base money and M3 growth rates in price-adjusted terms has been on the multi-year highs as of September 2013 (the most latest statistical data available). Thus, price-adjusted base money growth rate reached 15.4% YoY, up from 6.6% YoY in December 2012 and the fastest pace of growth since March 2008. And price-adjusted M3 growth rate accelerated to

[27] Kharkiv State Aircraft Manufacturing Company

[28] State Mortgage Institution

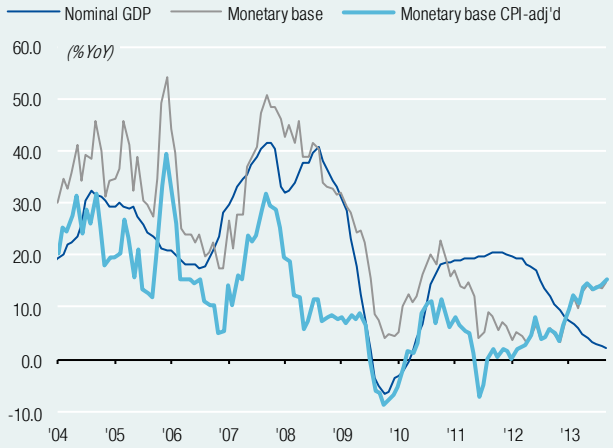
[29] ANTONOV Serial Plant / Branch of ANTONOV Company

[30] State Road Administration "Ukravtodor"

19.3% YoY as of September 2013 from 13.3% YoY last December (moreover, currently M3 is growing at the fastest rate since April 2008).

Chart 25. Base money growth (nominal and price adjusted) versus nominal GDP growth (% YoY)

History from January 2004 through September 2013



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

Chart 26. Monetary aggregates price adjusted growth (% YoY)

History from January 2004 through September 2013

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

…in order to engineer a sensible growth rate of the economy

We consider such a monetary push by the authorities as an attempt, actually a quite desperate one, to re-ignite growth of real GDP. However, under current macro conditions this would bring just sluggish growth rates and surely a prudent undertaken to support the economy from sliding into protracted recession. Indeed, the banks and their clients have become more risk-friendly if judged by the monthly volumes of new loans extended to the economy in relation to new deposits taken onto banks' books, the so called flow-based loan-to-deposit ratio rose to 1.3x in August 2013, the highest level since March 2008 (see Chart 27).

However, the fact, that growth has been stagnant still, hints there are obstacles…

At the same the said above faces a contradiction. While maintaining the financial stability, authorities have vaguely possess the idea on how reduce real interest rates (Chart 28), which albeit declining over past summer remain at significantly elevated levels.

For example, latest data for August on the lending rate for non-financial businesses for a time tenor of 1-5 years (read: one year and more, while less than 5 years) was at 14.25%, down from 15.00% in the previous month. However, if adjusted for current inflation, -0.4%, this represents a hefty positive real rate of 14.65% (also, if adjusted for inflation rate one year from now, 2.2%, it would still be quite high at 12.25%).

…like high real interest rates

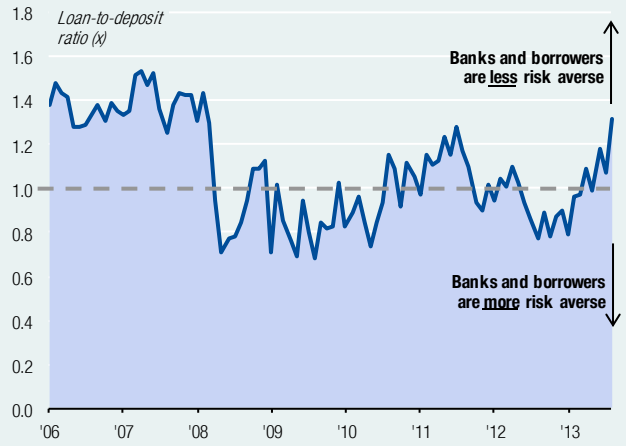
Low level of trust to the exchange rate policy by businesses and households creates a fertile soil for the high interest rate environment. This is at the core of the contradiction between monetary and fiscal policy, and in general inside the current economic policymaking mix. While economy has been stagnating and requires stimulus, monetary tools appear a not-working-quite-well toolbox. Because interest rates banks charge from the clients are, in fact, discouraging economic activity.

On one hand, authorities play a game with "stability", aiming to keep voters happy with utilities tariffs frozen and US dollar rate (in UAH terms) stable, too. On the other hand, authorities have been spending all the ammunition they had to keep the *status quo*. At the moment, capacity to withstand future deterioration in macro fundamentals[31] has been wore thin.

[31] This deterioration is a key theme of our three macro base-, worst- and best-case scenarios for 2014-16.

Chart 27. Flow based* loan-to-deposit ratio (x, in gross terms)

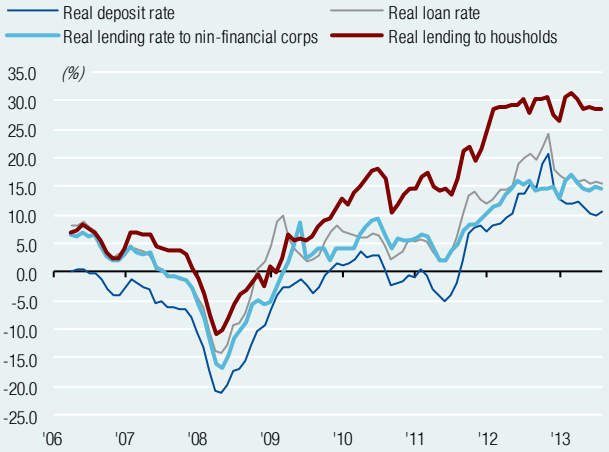
History from January 2006 through August 2013



Note: * Flow-based ratio means the coefficient between monthly volumes of loans extended to the businesses and households and deposits taken from the same group of clients. It differs from the stock-based loan-to-deposit ratio.
Source: National Bank of Ukraine, Investment Capital Ukraine LLC.

Chart 28. Real lending and deposit-taking rates (% per annum)

History from January 2006 through August 2013



Note: real lending rates for non-financial businesses and to households are for loans with maturities above one year (and less than five years).
Source: National Bank of Ukraine, Investment Capital Ukraine LLC.

External balance: Containing the deficit, and financing it

Ukraine's external balance has been undergoing both positive and negative developments this year, which are set to extend well in into the next.

Authorities expect to reduce natural gas imports this year from 33bcm in 2012 to 27bcm in 2013, …

In terms of trade flows, Ukraine's authorities have been keeping a close eye on reducing imports of natural gas as well as imported cars as much as possible. On natural gas imports, they have committed to a target of a yearly total of 27.3bcm, down from the previous year's total of 32.9bcm. Also, thanks to a reduction in price (see Chart 31, pp.34), this year's volume of natural gas imports is projected to be 22% lower, at US$11.1bn, down from US$14.2bn last year. In 2014-16, natural gas imports are subject to a further decline, albeit at a much slower pace than this year, thanks to price projections that reveal a favourable trajectory for Ukraine-as well as a gradual increase in the domestic efficiency in natural gas usage and domestic consumption.

… while measures aimed at limiting car imports have not yet resulted in a meaningful reduction

Authorities have also targeted a tapering off of car imports, directly by having introduced a higher import tariff early this year, and indirectly by limiting cash purchases of items with price tags above UAH15,000. Car imports have been lower year to date if compared to the pre-2008 crisis, however, reviving from the deep trough seen in 2009 and early 2010. However, domestic demand has reacted to the latter measure by ramping up imports, in order to front-load on purchases before the measure takes full effect; thus, the monthly volume of car imports rose a few months prior to the measure taking effect). This factor on its own has had an impact on the overall increase in imports volume.

Exports are expected to continue to remain under pressure well into 2014

On the exports side, these have been struggling this year, which will likely be repeated next year, as external markets are likely to remain sluggish on weak demand from Russia, due to recession and projected sub-par growth, and demand from Europe is also in question, despite the fact that some economies on the continent are gradually recovering from the lengthy recession.

Hence, next year should see a projected current deficit of US$10.4bn, or of a level similar to this year's (US$11.0bn).

The ex-minerals trade balance has been deteriorating this year, as the UAH's real TWI has risen

One of the key macro factors to watch going into 2014 is the ex-minerals trade balance, which has been holding steady above the US$4bn surplus after the deep recession of late 2008 and early 2009. However, this has dwindled down to just US$2bn, effectively halving over the course of 2013 (see Chart 32 on pp.34). By our own calculations, there is a strong negative correlation between the ex-minerals trade balance and the UAH's real TWIs[32] (see Chart 33 on pp.34). In other words, each time the UAH's real TWI appreciates, the mix of external and domestic demands interact to worsen the external balance.

If authorities restrain UAH flexibility, then ex-minerals trade deterioration will extend

Hence, ex-minerals trade is set to deteriorate, negatively affecting the economy, if authorities strive to preserve their economic policymaking *status quo* (our worst-case scenario), while still continuing to successfully lower imports of natural gas. However, a more flexible monetary policy (read: more flexible FX rate policy), if it engenders a real depreciation of the UAH's real to some extent, would support the ex-minerals trade balance and hence the broader economy.

In terms of financing the current account deficit, the current year is likely to witness a further reduction in the FX reserves that are used largely to pay back external debt due. Overall, this year's reduction of FX reserves is projected at US$4.6bn, bringing down its year-end volume to US$20.0bn.

Under our worst-case scenario, the FX reserves reduction in 2014 amounts to US$5bn, then worsens in 2015

Our worst-case scenario for the macro economic forecast for 2014-16, which assumes that authorities retain the *status quo* of their current economic policymaking, occasionally seeking out financial assistance from China and/or in Russia (EU financing is conditional to the IMF's terms), yielding: 1) a steep appreciation in the UAH's real rate (as the UAH nominal rate remains attached to the USD); 2) deterioration of the ex-minerals trade balance (as real appreciation erodes competitiveness); and 3) a punitively elevated cost of sovereign borrowing assigned by the global bond markets (Ukraine's sovereign 10-year Eurobond yield would hover beyond 10%; the inverted sovereign yield curve would complicate conditions).

Under this conditions, the flow of external capital into the economy could provide only official lenders China and Russia special interest. The former is said to provide US$3bn for land leases, while the latter could lend as much as US$2bn if compelled to do so. However, even pencilling in these loans into our assessment of the projected balance of payments in 2014-16, the result is lowering FX reserves because of high external debt repayments (US$7.5bn in principal and US$2.3bn in interest payments, or US$9.8bn in total[33]). If this scenario unfolds, authorities would be forced to spend US$4.7bn (slightly more than in 2013) to support the external balance in the economy, allowing FX reserves to diminish to US$15.3bn. The same story is likely to be repeated in 2015-16, reducing the FX reserves each year, to US$9.6bn and US$5.9bn respectively.

In our view, the above-mentioned scenario appears to be hugely disruptive to the economy, as it would coincide with a considerable repression of domestic demand, due to fiscal and monetary policy being under severe strain.

[32] Thus, correlation with CPI-based real TWI is –65.4% and with CPI-based real TWI is –56.8%. The data series are for the period from January 2006 through August 2013.

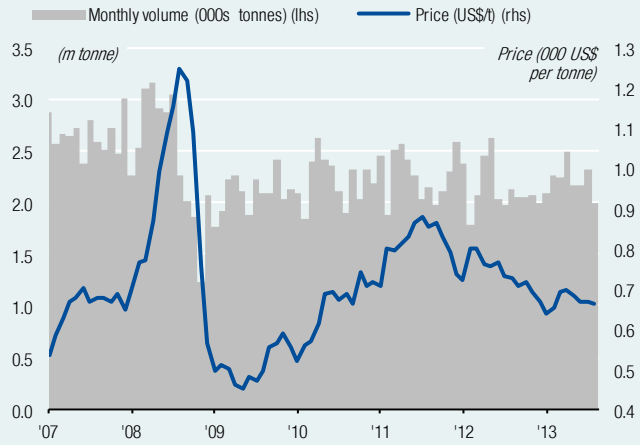
[33] Sovereign and quasi-sovereign debt, on which the MoF, NBU, and Naftogaz of Ukraine are the key debtors.

Our base-case scenario assumes economic flexibility that allows not only further funding from the IMF, but opens access to Eurobond markets; hence, no FX reserve loss occurs

Hence, a less stressful, base-case, scenario assumes the following. By making domestic economic policymaking more flexible in terms of regulated tariffs and FX policy, authorities could ease trade and capital-related constraints. To do so would not only open up access to further financial support from the IMF, but also restrict deterioration of the ex-minerals trade balance, which would be supportive to economic growth. Finally, officials could force the sovereign cost of borrowing assigned by global bond markets to decline. The latter factor would open access to the Eurobond markets by not only the Ministry of Finance, but also other quasi-sovereign issuers, as well as privately owned borrowers. Hence, once the IMF programme is agreed upon, then the new flow of capital would be sufficient to cover the deficit in 2014 and stage a US$5.7bn build-up of FX reserves that would amount to US$25.7bn, covering more than three months of imports.

Chart 29. Steel exports, monthly data on volume and price

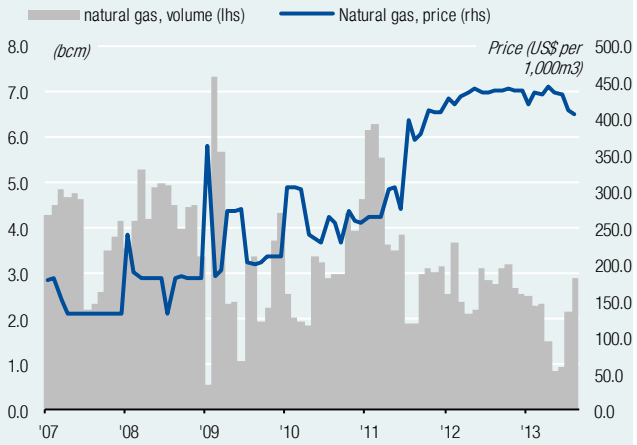
History from January 2007 through August 2013



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

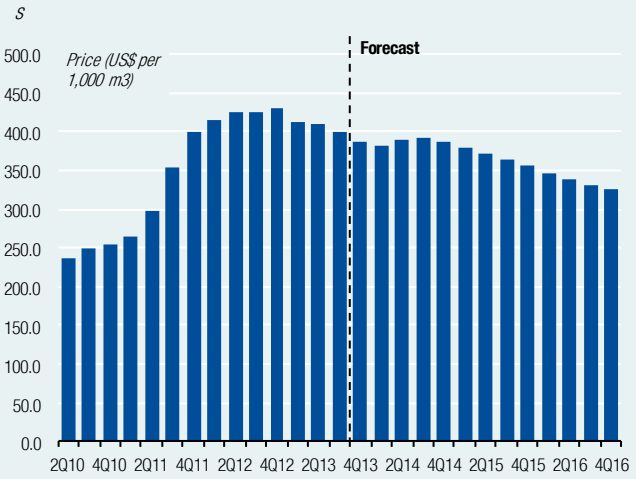
Chart 30. Natural gas imports, monthly data on volume and price

History from January 2007 through August 2013

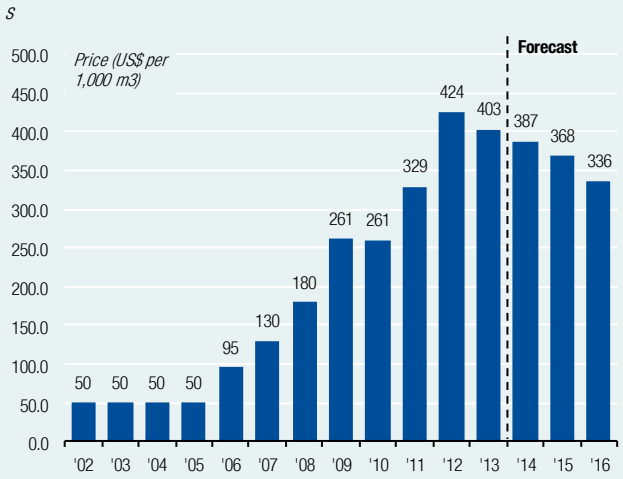


Source: State Statistics Committee of Ukraine, Investment Capital Ukraine LLC.

Chart 31. History and 2014-16 projections of natural gas price paid by Naftogaz of Ukraine to Gazprom of Russia (US$ per 1,000 m^3)



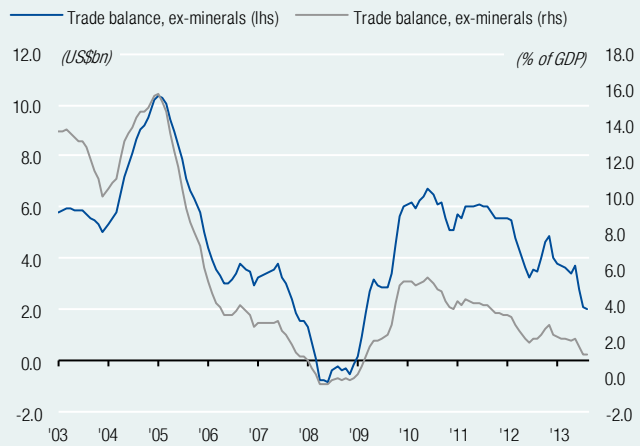
Source: State Statistics Committee of Ukraine, Investment Capital Ukraine LLC.



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

Chart 32. Ex-minerals merchandise trade balance: 12-month rolling volume (lhs) and as share of GDP (rhs)

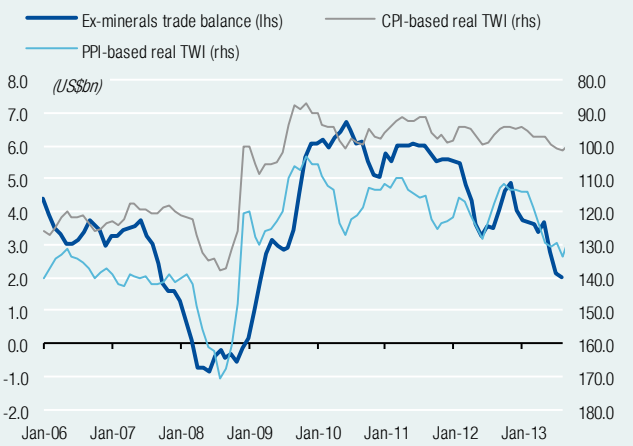
12-month rolling data. History from January 2003 through August 2013



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

Chart 33. Ex-minerals merchandise trade balance vs. ICU's real trade-weighted indices of UAH (inverted scale)

12-month rolling data. History from January 2006 through August 2013



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

Table 3. Ukraine's balance of payments assessment in 2013 and forecast for 2014-16 (US$bn)
Under ICU's **base-case scenario,** Ukraine's authorities agree on a new programme with IMF in mid 1H14

Balance of payments (US$m)	Forecast period					Rollover ratios					
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016	Comment
Current account balance	**-14,315**	**-10,775**	**-9,819**	**-8,257**	**-9,198**						
Short-term debt[1]	**-58,352**	**-63,419**	**-62,736**	**-67,111**	**-64,244**						
Government											
Official lenders (IMF)	-769	-2,598	-2,615	-764	0	0%	0%	0%	0%	0%	No IMF loans to MoF
Russian banks	-2,000	0	0	-750	0	0%	N/M[7]	0%	0%	0%	US$0.75bn loan in Sep13
Eurobonds	-500	-1,000	-1,000	-1,321	-2,250	970%	225%	300%	250%	250%	MoF issues Eurobonds
Domestic FX bonds[2]	-420	-1,920	-1,020	-1,867	-789	706%	226%	200%	200%	200%	Rollover ratios step down
Other	589	0	0	0	0	133%	0%	0%	0%	100%	ICU assumption
Central bank											
Official lenders (IMF)	-2,665	-3,235	-1,076	-489	0	0%	0%	515%	0%	0%	NBU gets IMF loans
Other	34	0	0	1	1	0%	0%	0%	0%	100%	ICU assumption
Banks											
Eurobonds	-1,065	-15	-770	-969	-986	0%	7878%	130%	0%	0%	IMF = Bank Eurobonds
Other lenders	-13,031	-11,708	-10,701	-10,242	-9,357	70%	81%	86%	91%	96%	Deleveraging extends
Corporations											
Eurobonds	-225	0	-1,645	-1,785	-750	244%	N/M[6]	200%	175%	0%	IMF=Corporate Eurobonds
Loans	-11,762	-11,160	-11,579	-12,902	-13,215	130%	125%	130%	120%	120%	All-time average roll-overs
Trade loans	-17,579	-21,140	-22,249	-24,792	-25,393	130%	125%	130%	120%	120%	Same as above
Other	-8,960	-10,644	-10,081	-11,233	-11,505	130%	125%	130%	120%	120%	Same as above
Other	-7,961	-6,901	-8,000	-7,000	-7,000						
Total financing needs[3]	**-80,628**	**-81,095**	**-80,555**	**-82,369**	**-80,442**						
FDI, inflows	6,788	4,521	5,592	6,010	6,556						
Borrowings											
Government	7,027	7,339	5,039	7,037	7,203						
Central bank	0	0	5,537	0	-1						
Banks	9,092	10,701	10,242	9,357	9,017						
Corporations	50,475	54,180	60,372	61,835	60,136						
Total financing[4]	**73,383**	**76,741**	**86,782**	**84,240**	**82,910**						
FX reserves change	**-7,245**	**-4,354**	**+6,227**	**+1,871**	**+2,469**						
FX reserves											
At the start of year	31,795	24,546	20,192	26,419	28,290						
At the end of year	24,549	20,192	26,419	28,290	30,758						
Change (%YoY)	-22.8	-17.7	30.8	7.1	8.7						
FX reserves (% of GDP)											
At the start of year	18.3	14.1	11.5	15.3	15.5						
At the end of year	14.1	11.5	15.3	15.5	15.5						
Change (ppt)	-4.2	-2.6	3.8	0.2	0.0						
FX res. imports coverage[5] (month)											
At the start of year	3.7	2.8	2.6	3.5	3.7						
At the end of year	2.8	2.6	3.5	3.7	3.9						
Change (months)	-0.8	-0.2	0.9	0.3	0.2						

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] 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;
[4] total financing equals to the sum of FDI and borrowings by all segments of the economy (government, central bank, banks and corporations);
[5] ratio of imports coverage by FX reserves, measured in months;
[6] N/M – not meaningful, this is because the rollover ratio cannot be applied to a volume that equals to zero, in fact we include into calculation the US$0.5bn Eurobonds issued by Ukrzaliznytsia in May 2013;
[7] the same as above, we include into calculation the US$0.75bn loan obtained by the MoF from Sberbank CIB (Russia) in September 2013.
Sources: National Bank of Ukraine, Investment Capital Ukraine LLC.

Table 4. Ukraine's balance of payments assessment in 2013 and forecast for 2014-16 (US$bn)
What if Ukraine's authorities **do not** agree new programme with IMF in mid 1H14 and stick to their current policy of maintaining *status quo*?

Balance of payments (US$m)	Forecast period					Rollover ratios					
	2012	2013	2014	2015	2016	2012	2013	2014	2015	2016	Comment
Current account balance	**-14,315**	**-10,775**	**-9,819**	**-8,257**	**-9,198**						
Short-term debt[1]	**-58,352**	**-63,419**	**-62,736**	**-63,445**	**-58,206**						
Government											
Official lenders (IMF)	-769	-2,598	-2,615	-764	0	0%	0%	0%	0%	0%	No IMF loans to MoF
Russian banks	-2,000	0	0	-750	0	0%	N/M[7]	0%	0%	0%	US$0.75bn loan in Sep13
Eurobonds	-500	-1,000	-1,000	-1,321	-2,250	970%	225%	300%	250%	250%	No access
Domestic FX bonds[2]	-420	-1,920	-1,020	-1,867	-789	706%	226%	200%	200%	200%	Rollover ratios step down
Other	589	0	0	0	0	133%	0%	0%	0%	100%	ICU assumption
Central bank											
Official lenders (IMF)	-2,665	-3,235	-1,076	-489	0	0%	0%	515%	0%	0%	No IMF loans to NBU
Other	34	0	0	1	1	0%	0%	0%	0%	100%	ICU assumption
Banks											
Eurobonds	-1,065	-15	-770	-969	-986	0%	7878%	130%	0%	0%	No access
Other lenders	-13,031	-11,708	-10,701	-9,242	-8,443	70%	81%	86%	91%	96%	Deleveraging extends
Corporations											
Eurobonds	-225	0	-1,645	-1,785	-750	244%	N/M[6]	200%	175%	0%	No access
Loans	-11,762	-11,160	-11,579	-12,199	-11,864	130%	125%	130%	120%	120%	All-time average roll-overs
Trade loans	-17,579	-21,140	-22,249	-23,441	-22,796	130%	125%	130%	120%	120%	The same as above
Other	-8,960	-10,644	-10,081	-10,621	-10,329	130%	125%	130%	120%	120%	The same as above
Other	-7,961	-6,901	-8,000	-7,000	-7,000						
Total financing needs[3]	**-80,628**	**-81,095**	**-80,555**	**-78,702**	**-74,404**						
FDI, inflows	6,788	4,521	5,592	6,010	6,556						
Borrowings											
Government	7,027	7,339	4,520	3,367	2,289						
Central bank	0	0	0	0	-1						
Banks	9,092	10,701	9,242	8,443	8,136						
Corporations	50,475	54,180	57,082	55,512	53,986						
Total financing[4]	**73,383**	**76,741**	**76,435**	**73,333**	**70,967**						
FX reserves change	**-7,245**	**-4,354**	**-4,120**	**-5,369**	**-3,437**						
FX reserves											
At the start of year	31,795	24,546	20,192	16,072	10,703						
At the end of year	24,549	20,192	16,072	10,703	7,266						
Change (%YoY)	-22.8	-17.7	-20.4	-33.4	-32.1						
FX reserves (% of GDP)											
At the start of year	18.3	14.1	11.5	9.3	5.9						
At the end of year	14.1	11.5	9.3	5.9	3.7						
Change (ppt)	-4.2	-2.6	-2.2	-3.4	-2.2						
FX res. imports coverage[5] (month)											
At the start of year	3.7	2.8	2.6	2.1	1.4						
At the end of year	2.8	2.6	2.1	1.4	0.9						
Change (months)	-0.8	-0.2	-0.5	-0.7	-0.5						

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] total financing needs equal to the sum of current account balance, short-term debt due next 12 months, and household demand for foreign currency;
[4] total financing equals to the sum of FDI and borrowings by all segments of the economy (government, central bank, banks and corporations);
[5] ratio of imports coverage by FX reserves, measured in months;
[6] N/M – not meaningful, this is because the rollover ratio cannot be applied to a volume that equals to zero, in fact we include into calculation the US$0.5bn Eurobonds issued by Ukrzaliznytsia in May 2013; and
[7] the same as above, we include into calculation the US$0.75bn loan obtained by MoF from Sberbank CIB (Russia) in September 2013.

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

View on UAH: Real appreciation is what matters

Macroeconomic conditions

Ukraine's economy has been struggling with growth issues since late 2011, as a range of factors, from external demand contraction to domestic restrictive policies (ie, a policy that is ineffective at maintaining high real interest rates in the economy) have been in play. The current developments in the global economy as well as in Ukraine as indicate that little has changed from the recurring refrain that external demand is likely to remain sluggish, and domestic policies are at risk of maintaining their humble *status quo*. High real interest rates in local currency also show limited growth prospects: fixed investments have not gained weight as a share of GDP, despite tax concessions from the authorities (a corporate tax rate reduction took place this year, with the final leg of reduction steps to fall in 2014), and household consumption, which has been supported by wage growth, is now is back at the ceiling of the pre-2008 crisis level.

Among Ukraine's key trading partners, the Eurozone is now recovering from the economic recession; however, for many countries which have struggled through the recession, this recovery has been at a huge coat to their social stability. Moreover, the single currency's recent appreciation to 1.38 in US dollar terms is a negative growth factor and will create macroeconomic problems for the Eurozone and the EU in general. Hence, EU demand for Ukraine's exports should be expected as sluggish for the rest of 2013 as well as in 2014. Similarly, in Russia, economic growth has moved to a halt in year-on-year terms (while in seasonally adjusted terms, quarter-on-quarter growth was negative in 1Q13 and in 2Q13, according to Rosstat and early indications on output of a likely the negative QoQ rate in 3Q13). In our view, Russia's economy is struggling to generate a positive economic growth rate because of weak competitive factors, which will require an upward adjustment in domestic demand. If Russia's ruble undergoes a real adjustment in order to aid economic growth, then the country's many trading partners who are dependent on Russian consumers would be forced to make adjustments themselves; otherwise they would risk losing in terms of competitiveness. This is subsequently of great concern to Ukraine.

ICU's trade-weighted indices

Our calculations show that the UAH's real TWI had been appreciating all way from early February 2013 through August, as Fed tapering talk overshadowed the markets. As of August, the UAH's real TWI moved into the so-called territory of positive misalignment, ie, the currency was deemed overvalued by a certain amount. This was especially true to PPI-based real TWI. However, macro developments in September and October proved that Fed tapering is not taking place again soon, but postponed till early next year. The UAH's real TWIs also declined during those months from this year's highs. However, they still remain in the territory of positive misalignment. Our projections for 2014-16 indicate that if the NBU keeps defending the UAH's nominal value at 8.20/USD, real appreciation will be reinforced, pressuring the economy even more than currently. That is why, in our view, Ukraine's authorities are likely to implement more flexibility as part of their toolbox.

Empirical research: Testing the FX real rate vs. sovereign credit risk

In this section we provide statistical evidence that the bond market differentiates between sovereign borrowers by the FX regimes they maintain. The credit risk of sovereigns that maintain pegged FX regimes is priced in line with changes in the real exchange rate[34] of the currencies of these countries. Hence, the correlation ratio between sovereign risk premium and the real rate is steadily positive. On the other hand, the bond market appears to pay much less attention to movements in a currency's real rate if a sovereign maintains a floating FX regime. In this case, the correlation ratio of the sovereign risk premium and real rate is steadily negative.

Ukraine is among the group of countries that we look at in this report that maintains a peg. Hence, there is a positive correlation ratio between changes in the UAH real rate and changes in its sovereign risk premium. Moreover, we found that pre-2008, as well as since early 2010, Ukraine's correlation ratio has been one of the strongest among its peers: Latvia, Lithuania and Venezuela. During the last several years, Ukraine's correlation ratio has been the highest (+65%) out of the group of countries that maintains a peg (ranging from +16 to +37%).

For Ukraine, the bond market attaches higher correlation ratios to the PPI-based real rate of UAH than to the CPI-based real rate. In Russia and Belarus, for which we calculate PPI-based TWI, correlation ratios are stronger when the CPI-based real rate is used.

Importantly, in many cases, although not all, reaction to the changes in macroeconomic conditions is reflected in changes to the real rate first. The bond market then re-prices sovereign risk premium accordingly. In times of distress, bond investors tend to overreact to certain developments in the markets, which manifests via a widening deviation of these two indicators.

General

We test the linkage between FX real rate and sovereign risk premium

Since mid-2009, ICU has been kept a daily record of the UAH's real trade-weighted indices[35]. The results, viewed against the backdrop of the behaviour of asset prices in the financial markets, provided food for thought. We have drawn the conclusion that the hryvnia's real trade-weighted indices react to changing conditions in the global financial markets earlier than the bond market's view on Ukraine's sovereign credit risk premium. Below we provide our methodology.

[34] Herein we interchangeably refer to the real rate as the real trade-weighted index (either CPI- or PP-based) and real effective exchange rate.

[35] ICU's trade-weighted indices are described in great detail in the update provided in the Appendix (see pp.13).

Determining the linkages between FX real rates and sovereign risk premiums

Data used in the calculations

We focus on Ukraine, and added selected EM economies to the sample

We focus on Ukraine, as well as on several selected EM economies, including the neighbouring nations of Russia, Turkey, Poland, Belarus, Hungary, and few others (see full list of nations in Table 5 on pp. 41 and the next section "Country cases", pp.42). Use of this peer group sheds light on the nuances of the bond market's approach to assessing the credit risk of a sovereign.

Five-year CDS used as sovereign credit risk premium...

... FX real rates from ICU and BIS

We use two series of data. First, the Bloomberg data on sovereign credit risk premium, as determined by credit-default swaps (CDS) market participants[36] (the assessment of the risk of default on sovereign five-year debt). Second, the currency's real rate, which is determined by BIS[37] or ICU[38] (see Appendix "ICU's family of FX trade-weighted indices: An update", pp.67). Both data series are daily. For those countries where the daily real rate history is lacking—Poland, Turkey, Hungary, South Korea, Brazil, Latvia, Lithuania, and Venezuela—we use monthly values from the same data series. The historical depth of the data varies from country to country. For instance, Ukraine's data series starts on 19 August 2004, the date Bloomberg begins a history of the CDS spread on Ukraine's sovereign debt. Belarus's data starts in July 2010.

Our approach is quite simple: we determine the correlation ratio between the two data series. The results are compiled into Table 5 on pp. 41.

For each country we determined several correlation ratios. One ratio is for entire history of data. Other ratios are for shorter time spans, dividing the history of data into sub periods. These sub periods are before the 2008 global financial crisis, a period inside the crisis-hit years from late 2008 through entire 2009, and to early 2010 and April 2010 to 18 September 2013.

In terms of foreign-exchange regimes, the countries are divided into two groups: those with a currency peg and those with a floating currency. The first group consists of Ukraine, Belarus, Latvia, Lithuania, and Venezuela. Those in the second group that maintain a floating-rate regime, albeit of different degrees of management by their central banks, are Russia, Poland, Turkey, Hungary, South Korea, and Brazil.

The results: conclusion and interpretation

We find little value in assessing the correlation ratios derived from the entire data history

Because of the extraordinary conditions around 2008, correlation ratios for the entire period that data is available has little value, in our view. The real value is in analysing the ratios for the sub-periods. The sub periods we choose were times of relative calm in the financial markets contrasted with the periods of wide-spread distress. We highlight the period that started in September 2008 with the Lehman bankruptcy, which lasted until early 2010, when financial markets settled. Therefore, our sub periods consist of data from: 1) mid-2000s to October 2008; 2) November 2008 until March 2010; and 3) April 2010 until 18 September 2013 (see Table 1).

[36] In case of Belarus, we use the yield spread of its Eurobonds over the US Treasuries.

[37] Bank of International Settlements (BIS), http:/www.bis.org.

[38] ICU's data is used for Ukraine's currency hryvnia (UAH), Russia's currency ruble (RUB), and Belarus' currency ruble (BYR). BIS data is used for other nations' currencies.

A FX peg yields a positive correlation with sovereign risk premium...

The results of the correlation ratio calculations yield the following conclusion. The countries with pegged currencies have a positive correlation with sovereign risk premium, as priced by the bond markets. The countries with floating currencies, even a managed float, have a negative correlation ratio between their currency's real rate and sovereign credit risk premium.

…and floating FX yields a negative correlation with sovereign risk premium

For countries with pegged currencies there is positive correlation, because when the currency's real rate appreciates, the economy's competiveness erodes. This creates a condition (or in many cases severs) where domestic demand shifts from domestically-produced goods to imported ones and external demand for domestically-produced goods declines. Thus, the current account worsens, economic activity slows, state revenues decline and, hence, the fiscal deficit increases. Consequently, the bond market becomes legitimately concerned about sovereign solvency and this results in a higher cost of debt for the sovereign borrower. And, of course, the reverse is true.

For countries that allow their currency to float, the above does not apply, because the economy adapts to changes in the macroeconomic environment much faster than when the currency is pegged. Moreover, in the eyes of the bond market, since the country is not associated with limitations of a currency peg, changes in the real rate have less consequence. In fact, as our data show, more weight is put on factors such as commodity prices (Russia is an example) or efficacy of domestic policies that affect growth and public finances (examples are Turkey, Brazil, South Korea). However, with a floating FX the market can overreact to changes in the macroeconomic environment, which, perhaps, results in less attention paid to currency issues (like misalignment).

Table 5. Ukraine and selected EM economies: Correlation between sovereign credit risk premium and currency's real rate

Country	FX regime	Time period	Correlation ratio of CDS on 5yr sovereign debt with	
			CPI-based TWI	PPI-based TWI
Ukraine	*De-facto* USD peg with	All history	-31.53	-26.60
	several episodes of re-pegging	Since 19-Aug-2004 to 1-Oct-08	32.11	68.39
	at new level	Since 1-Oct-08 to 1-Apr-10	36.75	39.42
		Since 1-Apr-10 to 25-Oct-13	53.46	65.38
Russia	Managed float	All history	-52.54	-55.07
		Since 12-Jct-00 to 1-Oct-08	-73.44	-69.47
		Since 1-Oct-08 to 1-Apr-10	-27.75	-22.03
		Since 1-Apr-10 to 10-Oct-13	-36.72	-34.66
Belarus	*De-facto* USD peg with	All history	-62.03	-67.77
	several episodes of re-pegging	Since 27-Jul-10 to 2-Feb-11	60.71	55.74
	at new level	Since 3-Feb-11 to 1-Dec-11	-72.96	-70.53
		Since 2-Dec-11 to 18-Sep-13	-71.64	-61.34
Kazakhstan	*De-facto* USD peg with	All history	21.09	-12.39
	several episodes of re-pegging	Since 1-Jan-2005 to 1-Oct-08	32.60	66.56
	at new level	Since 1-Oct-08 to 1-Apr-10	39.42	-29.86
		Since 1-Apr-10 to 10-Oct-13	6.55	13.15
Poland	Float	All history	-15.24	N/A
		Since Oct-00 to Oct-08	9.80	N/A
		Since Oct-08 to Mar-10	-64.25	N/A
		Since Mar-08 to Aug-13	-48.49	N/A
Turkey	Float	All history	-83.06	N/A
		Since Oct-00 to Oct-03	-71.50	N/A
		Since Oct-03 to Oct-08	-55.62	N/A
		Since Oct-08 to Mar-10	-64.68	N/A
		Since Mar-08 to Aug-13	-62.46	N/A
Hungary	Float	All history	13.83	N/A
		Since Oct-00 to Oct-08	35.17	N/A
		Since Oct-08 to Mar-10	-91.66	N/A
		Since Mar-08 to Aug-13	-66.71	N/A
Latvia	EUR peg	All history	81.62	N/A
		Since Jan-07 to Oct-08	69.04	N/A
		Since Oct-08 to Apr-10	80.00	N/A
		Since Apr-10 to Aug-13	37.06	N/A
Lithuania	EUR peg	All history	74.30	N/A
		Since Jan-07 to Oct-08	65.59	N/A
		Since Oct-08 to Apr-10	64.47	N/A
		Since Apr-10 to Aug-13	16.07	N/A
South Korea	Float	All history	-76.76	N/A
		Since Oct-01 to Mar-03	8.83	N/A
		Since Mar-03 to Oct-08	-72.30	N/A
		Since Oct-08 to Mar-10	-95.31	N/A
		Since Mar-08 to Aug-13	-76.95	N/A

Table 5. Ukraine and selected EM economies: Correlation between sovereign credit risk premium and currency's real rate

Country	FX regime	Time period	Correlation ratio of CDS on 5yr sovereign debt with	
			CPI-based TWI	PPI-based TWI
Brazil	Float	All history	-69.77	N/A
		Since Oct-01 to Mar-03	-80.75	N/A
		Since Mar-03 to Oct-08	-84.53	N/A
		Since Oct-08 to Mar-10	-96.97	N/A
		Since Mar-08 to Aug-13	-39.10	N/A
Venezuela	*De-facto* USD peg with	All history	50.28	N/A
	several episodes of re-pegging	Since Jan-03 to Oct-08	8.85	N/A
	at new level	Since Oct-08 to Mar-10	24.08	N/A
		Since Apr-10 to Aug-13	25.84	N/A

Sources: BIS, Investment Capital Ukraine LLC.

Country cases

Ukraine

Since April 2010, Ukraine's correlation ratio between the real rate and sovereign risk premium is +63%...

The charts on pp.44 depict the relationship between the UAH's real TWIs (CPI- and PPI-based trade-weighted indices) and Ukraine's 5yr CDS spread. The top chart shows the full history that starts from August 2004, the first month for which Bloomberg provides data. Our calculation of the correlation ratio yields a negative rate in both cases, when CPI-based and PPI-based real rates assessed versus the CDS rate. However, a more nuanced view free of distressed conditions of the financial markets, yields quite strong positive correlation ratios. Chart 38 shows the period leading up to the global financial and economic crisis in 2008. Chart 39 depicts the period since April 2010 to 18 September 2013. The CPI- and PPI-based real TWI clearly track Ukraine's sovereign risk premium.

…it is highest among such peers such as Latvia, Lithuania, and Venezuela

It is interesting to note three factors:

1) PPI-based TWI has higher correlation ratios with Ukraine's CDS than the CPI-based TWI. This implies that bond investors question the CPI reliability and tend to view Ukraine through the prism of PPI, which has been historically higher than CPI;

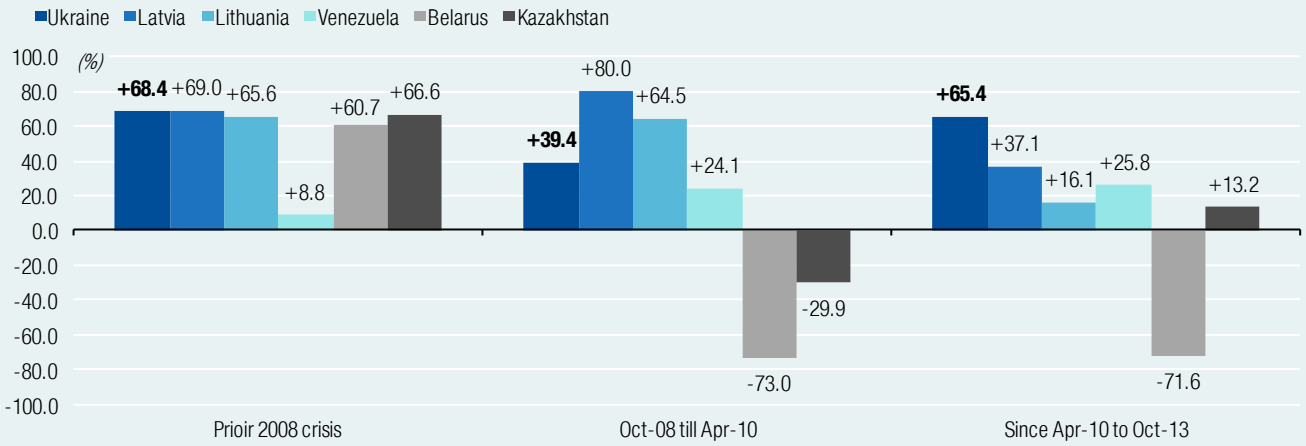
2) Ukraine's correlation ratio is higher than peers' in the period since April 2010 to 18 September 2013 (see chart below on next page);

For Ukraine, UAH's real rate serves as early predictor of moves in the sovereign risk premium

3) As Chart 38 and Chart 39 show, UAH's real TWI serves as an early indicator of changing market conditions. The bond market reacts to these changes with a lag. This feature works well during the time when markets are free of distress. As data from late 2008 and 2009 show, in the times of severe market distress, FX and bond markets alike overreact and this leads to mispricing.

Chart 34. Correlation ratios between sovereign risk premium and currency's real rate

Breakdown by periods: before the 2008 crisis, from October 2008 to April 2010, and since April 2010 to September 2013



Note: for Ukraine PPI-based ratios are used as they yielded better results than CPI-based ones.
Source: Bloomberg, Investment Capital Ukraine LLC.

Russia

In Russia, the correlation is negative, as the market pays more attention to other factors like the crude oil price

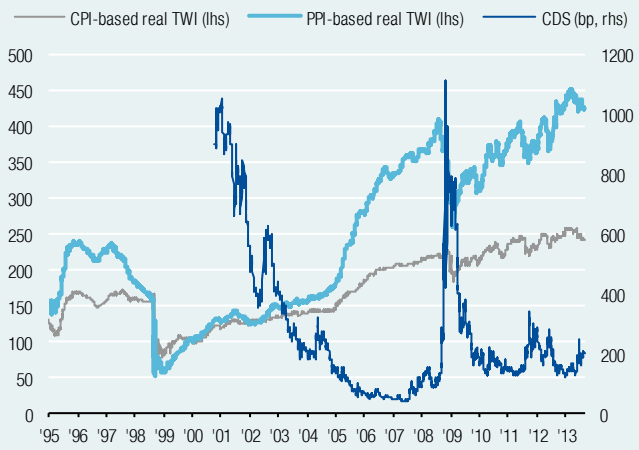
The charts below depict the relationship between Russia's sovereign risk premium and its currency real rates (ICU's CPI- and PPI-based trade-weighted indices, see "Russia's ruble (RUB): Input data and the indices" on pp.77.)

Throughout the history of available data, the correlation ratio between these two indicators was steadily negative. It implies that the bond market views Russia's sovereign credit risk through the prism of the prospects of the crude oil prices. If there are signs of weakness in the future price of oil, the market reacts by selling Russian sovereign risk.

Russian authorities have been gradually moving from a managed floating FX regime, (it currently has limited interventions in the FX market) towards a free floating regime.

Chart 35. Russia's 5yr CDS and RUB's real TWIs

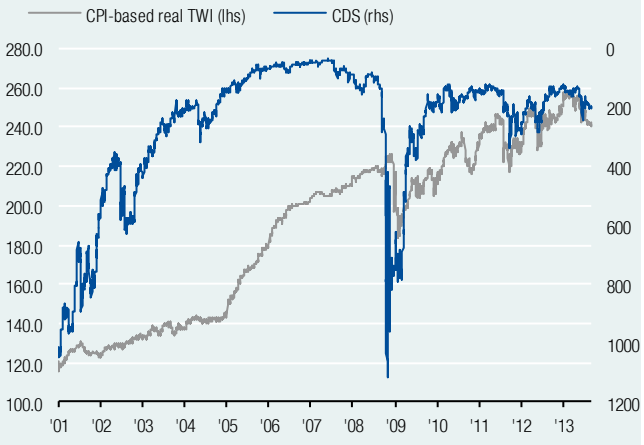
All time-history



Source: Bloomberg, Investment Capital Ukraine LLC.

Chart 36. RUB's CPI-based TWI and Russia 5yr CDS (inverted) have negative correlation ratio

History from 2001 through present



Source: Bloomberg, Investment Capital Ukraine LLC.

Chart 37. Ukraine's currency trade-weighted indices versus Ukraine's sovereign risk premium: Full history

CPI-based TWI versus CDS on sovereign 5yr debt

Source: Bloomberg, Investment Capital Ukraine LLC.

PPI-based TWI versus CDS on sovereign 5yr debt

Source: Bloomberg, Investment Capital Ukraine LLC.

Chart 38. Ukraine's currency trade-weighted indices versus Ukraine's sovereign risk premium: Pre-2008 crisis period (Aug-04 till Sep-08)

CPI-based TWI versus CDS on sovereign 5yr debt

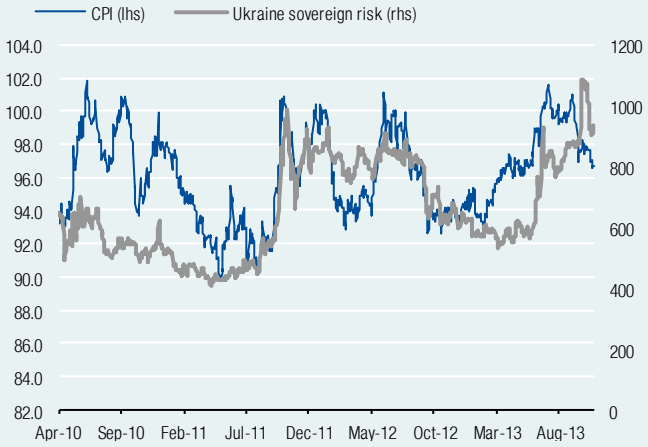
Source: Bloomberg, Investment Capital Ukraine LLC.

PPI-based TWI versus CDS on sovereign 5yr debt

Source: Bloomberg, Investment Capital Ukraine LLC.

Chart 39. Ukraine's currency trade-weighted indices versus Ukraine's sovereign risk premium: Post-2008 crisis period (Apr-10 to Sep-13)

CPI-based TWI versus CDS on sovereign 5yr debt



Source: Bloomberg, Investment Capital Ukraine LLC.

PPI-based TWI versus CDS on sovereign 5yr debt

Source: Bloomberg, Investment Capital Ukraine LLC.

Belarus

In Belarus, authorities have been gradually weakening the BYR since 2012…

In Belarus, the FX regime has been evolving. In the past, monetary authorities have re-pegged the currency several times, most recently in 2011. However, the country did withstand the 2008 crisis relatively unscathed, as its currency was defended.

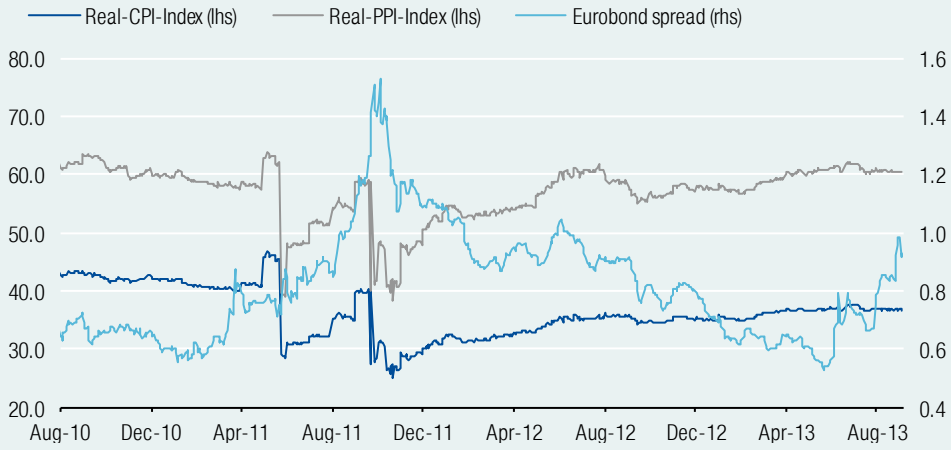
Our calculations of Belarus's correlation ratios show quite high coefficients between the Eurobond yield spread over US Treasuries and BYR's real rates (ICU's CPI- and PPI-based trade-weighted indices, see "Belarus' ruble (BYR): Input data and the indices" on pp.83.) for the quite short period from July 2010 to February 2011. Other than that period, the correlation ratios were positive, at 60.7% and 55.7%, respectively, for CPI- and PPI-based real TWIs.

…it is not yet a managed float, but it took the correlation ratios of real rates and sovereign credit risk into negative territory

However, through multiple nominal devolutions of the exchange rate over 2011, the correlation ratios turned strongly negative. When markets are in distress, credit spreads spike and the real rate of the currency drops, which was the case for most of 2011.

Since 2012, Belarus authorities have been fighting high inflation by (pushing up the real rate of the currency if other factors stay constant), which allowed a gradually weakening of the currency in nominal terms. In effect, the real-rate changes were trimmed. And at the same time, credit risk premium was declining through the end of 1Q13, although it has risen sharply since. Hence, the correlation ratio turned negative.

Chart 40. Belarus' BYR real TWIs and yield spread of Eurobond over US Treasuries



Source: Bloomberg, Investment Capital Ukraine LLC.

Kazakhstan

Kazakhstan, like many of its CIS-country peers, excluding Russia, has had its currency under a managed pegged to the US dollar. It allowed the currency to appreciate marginally during the boom years of 2003-06 (ie, towards 120/USD from 155/USD). During the crisis of 2008-09, it made a single devaluation of the tenge, the national currency, re-pegging it at new level of 150/USD from 120/USD.

In the summer of 2013, the central bank of Kazakhstan announced that it would start smoothing FX rate fluctuations by using a currency basket consisting of 70% USD, 20% EUR, and 10% RUB.

Our data on Kazakhstan's real trade-weighted currency indices (see more on pp.89) and their subsequent correlation with its sovereign credit risk (5yr CDS) yielded the following results. In the pre-2008 crisis period (from 1 January 2005 to 1 October 2008), the correlation ratio was positive at +32.6% and +66.6% respectively for the CPI- and PPI-

based real TWIs (these ratios are similar to Ukraine's of +32.1% and 68.4%, for the same period). During the crisis period (from October 2008 to April 2010) the linkage broke when the ratio of PPI-based TWI turned negative (-29.9%), and the correlation ratio for CPI-based TWI strengthened reaching +39.4%.

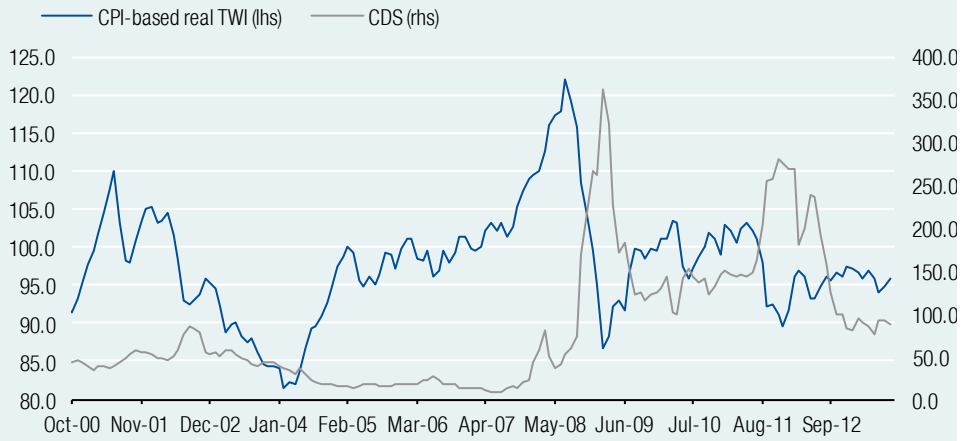
Since April 2010, when the financial markets' stress of late 2008 and full-year 2009 passed, the positive correlation ratio for the PPI-based TWI recovered to +13.2%. However, the CPI-based TWI correlation ratio for the same period—from 1 April 2010 to 10 October 2013—weakened to just +6.6%.

In our view, the relative collapse of positive correlation ratios—from the high double-digit figures seen in the pre-2008 period towards the low of single- or very low, double-digit figures since 2010—is partially explained by the change from the pure pegged regime (albeit one that allowed only marginal appreciation in the boom times) towards a less rigid FX regime of pegging to a basket of currencies. This change, effectively, will assist the authorities in mitigating undesirable real appreciation of the national currency.

Poland

Poland has a floating FX regime and our data on correlation ratios show negative coefficients. Movements of the real rate and the country's CDS rate have a slight relationship, as depicted on the Chart 41 on pp.46; however, in quantitative terms, it is considerably less than the strong and positive correlation in Ukraine's case.

Chart 41. Polish zloty real TWI and 5yr CDS rate



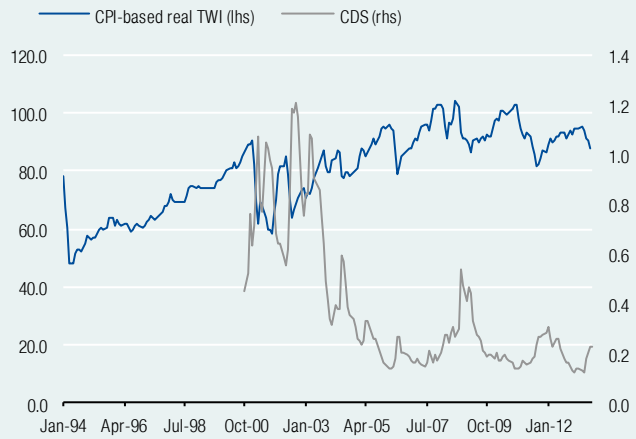
Source: BIS, Bloomberg, Investment Capital Ukraine LLC.

Turkey

The economy went through a financial and economic crisis in the early 2000s and since has adopted a range of economic policies that increased its resilience and flexibility. One of these measures was a FX floating regime, which yields a negative correlation coefficient between country's risk premium and the currency's real rate (see Table 5, pp.41).

Chart 42. Turkey's 5yr CDS and its currency's CPI-based real TWI

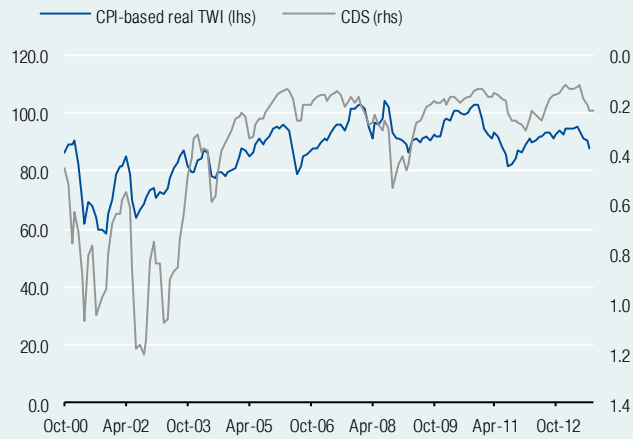
All time-history



Source: Bloomberg, BIS, Investment Capital Ukraine LLC.

Chart 43. Turkish lira CPI-based TWI and 5yr CDS (inverted) have negative correlation ratio

History from 2000 through present

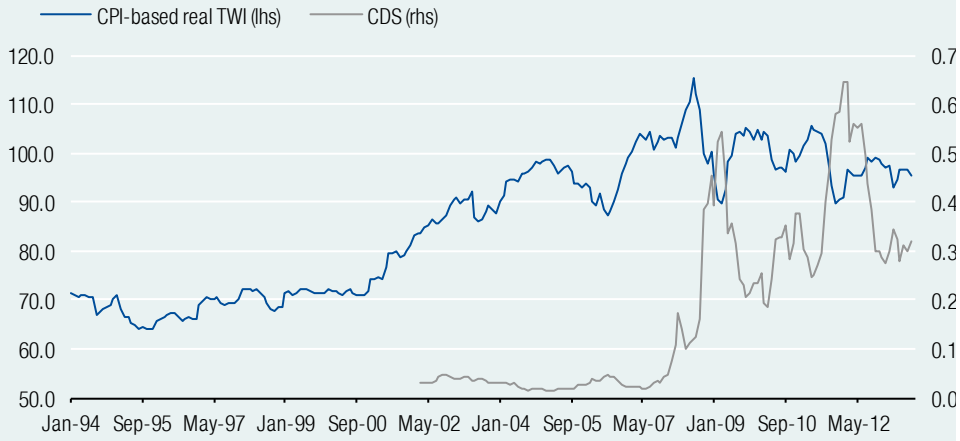


Source: Bloomberg, BIS, Investment Capital Ukraine LLC.

Hungary

Hungary's economic experience is similar to Poland and Turkey (see above). Again, the FX regime is flexible; hence, the bond markets do not pay much attention to moves in the real rate (or the reaction is considerably lagged, as the chart below could suggest).

Chart 44. Hungary's forint real TWI and 5yr CDS rate



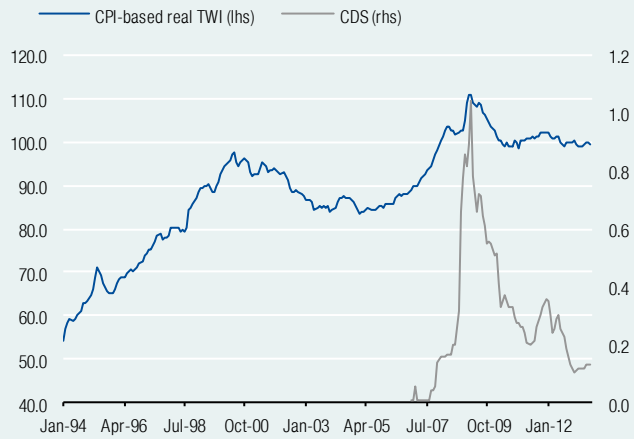
Source: Bloomberg, Investment Capital Ukraine LLC.

Latvia

Latvia maintains a EUR-peg regime and hopes to enter the Eurozone officially on 1 January 2014. As in Ukraine, Latvia's sovereign risk premium is closely correlated to the real rate of its currency—the CPI-based real TWI ratio was high for its entire history at +81.6%. Recently, since April 2010 to August 2013, the ratio declined to +37.0%, perhaps because the bond market felt Latvia is on the right track by joining the Eurozone.

Chart 45. Latvia's 5yr CDS and its currency's CPI-based real TWI

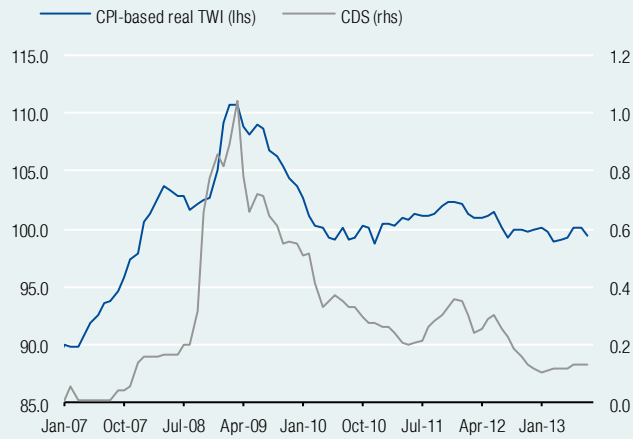
All time-history



Source: Bloomberg, BIS, Investment Capital Ukraine LLC.

Chart 46. Latvia's currency CPI-based TWI and 5yr CDS (inverted) have positive correlation ratio

History from 2007 through present



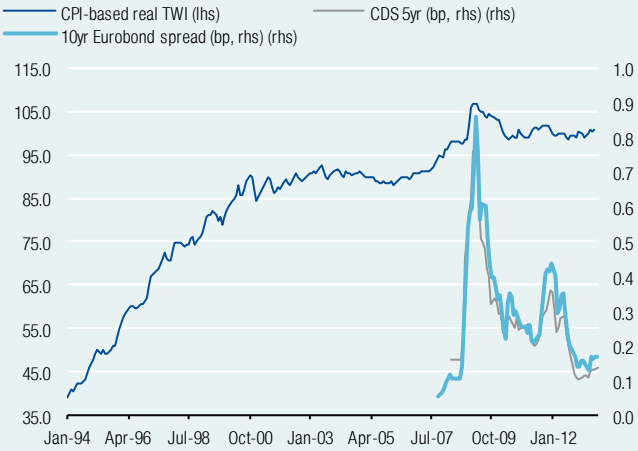
Source: Bloomberg, BIS, Investment Capital Ukraine LLC.

Lithuania

Using Latvia as a role model, Lithuania, which is not currently on track to become a member of the Eurozone, but strives to qualify, is likely to follow its Baltic neighbour. Thus, similar to Latvia, Lithuania's correlation ratio was also strongly positive at +74.3% (in terms of complete-history data) and it dropped sizably recently (for the period of April 2010 to August 2013) to as low as +16.1%.

Chart 47. Lithuania's 5yr CDS and its currency's CPI-based real TWI

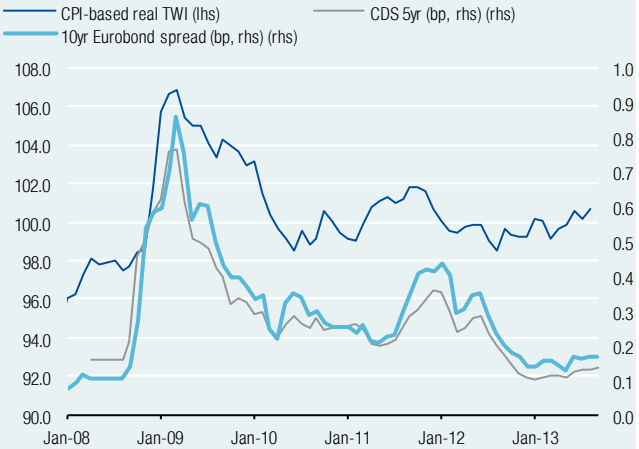
All time-history



Source: Bloomberg, BIS, Investment Capital Ukraine LLC.

Chart 48. Lithuania's currency CPI-based TWI and 5yr CDS (inverted) have positive correlation ratio

History from 2008 through present



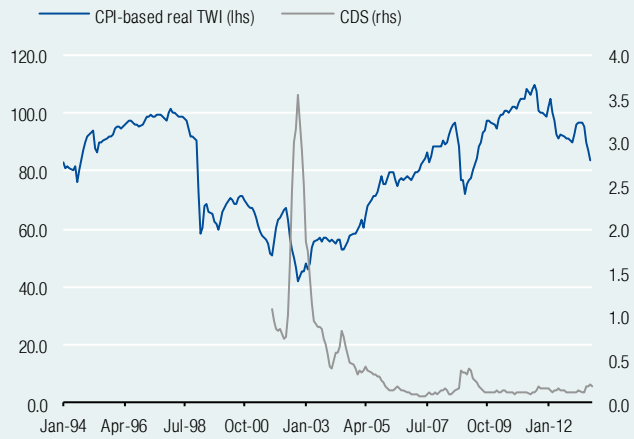
Source: Bloomberg, BIS, Investment Capital Ukraine LLC.

Brazil

Brazil's case is similar to Turkey (see above). Macroeconomic conditions during the late 1990s and early 2000s were tough. There were currency devaluations in both nominal and real terms, and sovereign credit risk premium spiked by as much as 35%. Economic reforms and the introduction of an FX floating regime upgraded the sovereign risk profile in the bond markets' perception. Hence, the correlation between the real rate and sovereign default risk has been strongly negative (see Table 5, pp.41).

Chart 49. Brazil's 5yr CDS and its currency's CPI-based real TWI

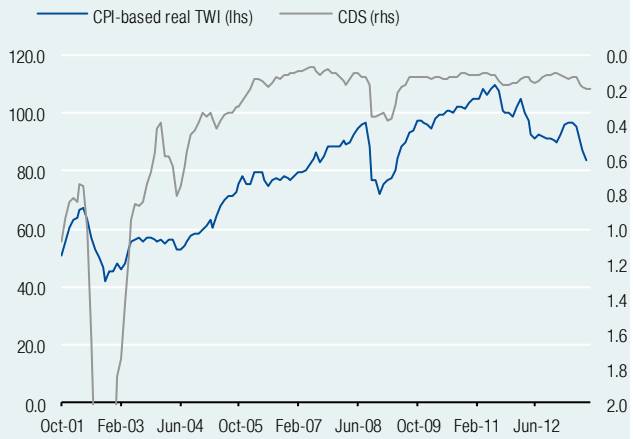
All time-history



Source: Bloomberg, BIS, Investment Capital Ukraine LLC.

Chart 50. Brazil's currency CPI-based TWI and 5yr CDS (inverted) have negative correlation ratio

History from 2003 through present



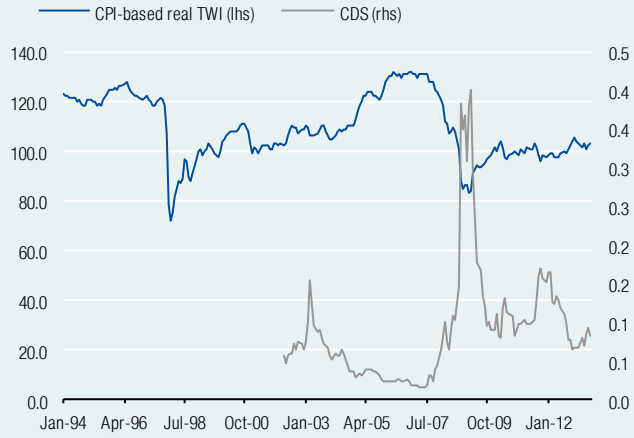
Source: Bloomberg, BIS, Investment Capital Ukraine LLC.

South Korea

South Korea, too, went through a painful economic crisis in the late 1990s. It has a floating FX regime (with elements of a managed float, ie, rare central bank interventions or explicit indication by the central bank to intervene if FX market moves in an undesired way) and, hence, there is a strong negative correlation between currency's real rate and sovereign risk premium (see Table 5, pp.41).

Chart 51. South Korea's 5yr CDS and currency's real TWIs

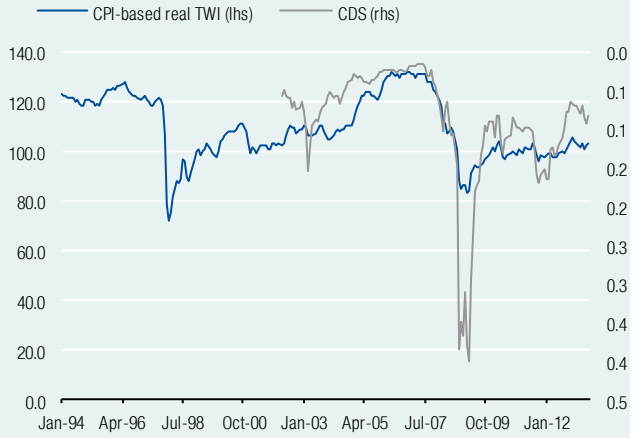
All time-history



Source: Bloomberg, BIS, Investment Capital Ukraine LLC.

Chart 52. South Korea's currency CPI-based TWI and 5yr CDS (inverted) have negative correlation ratio

History from 2003 through present



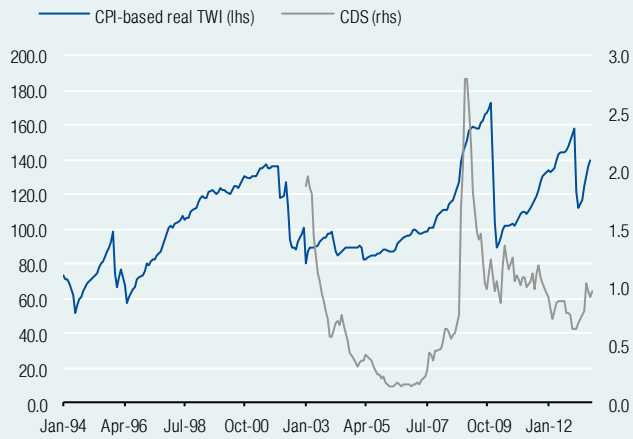
Source: Bloomberg, BIS, Investment Capital Ukraine LLC.

Venezuela

The country maintains a USD peg. As a net exporter of oil, its economic policies have been quite shaky and have resulted in series of nominal devaluations over the last 20 years, re-pegging the nominal rate each time when real rate became too expensive. Hence, there is a positive correlation ratio between the national currency's real rate and sovereign risk premium, which is +50.3% for the full-history data (see Table 5, pp.41).

Chart 53. Venezuela's 5yr CDS and its currency's CPI-based real TWI

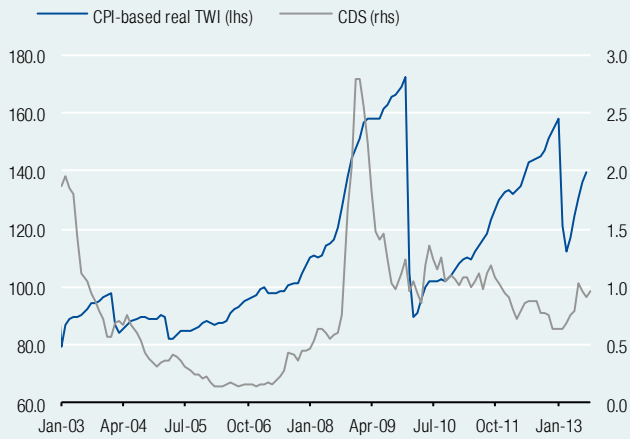
All time-history



Source: Bloomberg, BIS, Investment Capital Ukraine LLC.

Chart 54. Venezuela's currency CPI-based TWI and 5yr CDS (inverted) have positive correlation ratio

History from 2003 through present



Source: Bloomberg, BIS, Investment Capital Ukraine LLC.

Estimation for 2013 and forecast for 2014-16

The following two pages of statistics provide ICU's detailed view on future key macroeconomic indicators in the yearly and quarterly perspectives.

Yearly forecast for 2014-16, base-case scenario

Table 6. Forecast of key macroeconomic indicators for 2013-16 (annual)

	Historical data for 2004-12									Forecast by ICU			
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013F	2014F	2015F	2016F
Activity													
Real GDP (%YoY)	12.1	2.7	7.3	7.9	2.3	-14.8	4.1	5.2	0.2	**0.0**	**1.6**	**2.3**	**3.2**
Nominal GDP (UAHbn)	345	441	544	721	948	913	1,083	1,302	1,409	**1,439**	**1,529**	**1,667**	**1,836**
Nominal GDP (US$bn)	65	87	108	143	184	114	136	163	174	**175**	**173**	**183**	**199**
GDP per capita (US$, ann)	1,371	1,850	2,319	3,091	3,982	2,474	2,978	3,572	3,824	**3,853**	**3,803**	**4,020**	**4,386**
Unemployment rate (%)	8.6	7.2	6.2	6.4	6.4	8.8	8.1	7.9	7.5	**8.0**	**7.8**	**7.8**	**0.0**
Prices													
CPI headline (%YoY, eop)	12.3	10.3	11.6	16.6	22.3	12.3	9.1	4.6	-0.2	**0.3**	**3.0**	**5.2**	**5.4**
CPI headline (%YoY, average)	9.0	13.6	9.1	12.8	25.3	16.0	9.4	8.0	0.6	**-0.3**	**1.8**	**4.2**	**5.4**
PPI (%YoY, eop)	24.3	9.6	15.4	23.2	21.1	15.3	18.8	17.4	0.4	**4.0**	**6.6**	**6.2**	**6.2**
PPI (%YoY, average)	20.3	17.0	9.6	20.5	33.6	7.4	21.4	19.9	6.0	**0.3**	**5.1**	**6.5**	**6.2**
Fiscal balance													
Consolidated budget bal. (UAHbn)	-9.9	-7.5	-3.5	-6.1	-11.3	-34.4	-63.3	-18.3	-46.9	**-71.9**	**-91.9**	**-78.7**	**-63.0**
Consolidated budget bal. (% of GDP)	-2.9	-1.7	-0.6	-0.8	-1.2	-3.8	-5.9	-1.4	-3.3	**-5.0**	**-6.0**	**-4.7**	**-3.4**
Budget balance (UAHbn)	-10.2	-7.9	-3.8	-9.8	-12.5	-35.5	-64.3	-23.6	-53.4	**-60.6**	**-77.9**	**-68.3**	**-56.9**
Budget balance (% of GDP)	-3.0	-1.8	-0.7	-1.4	-1.3	-3.9	-5.9	-1.8	-3.8	**-4.2**	**-5.1**	**-4.1**	**-3.1**
External balance													
Exports (US$bn)	41.3	44.4	50.2	64.0	85.6	54.3	69.3	88.8	90.0	**82.9**	**82.0**	**83.2**	**84.9**
Imports (US$bn)	36.3	43.7	53.3	72.2	100.0	56.2	73.2	99.0	104.4	**93.1**	**91.2**	**90.9**	**93.6**
Trade balance (US$bn)	5.0	0.7	-3.1	-8.2	-14.4	-2.0	-4.0	-10.2	-14.3	**-10.2**	**-9.2**	**-7.7**	**-8.7**
Trade balance (% of GDP)	7.7	0.8	-2.8	-5.7	-7.8	-1.7	-2.9	-6.2	-8.2	**-5.8**	**-5.3**	**-4.2**	**-4.4**
Current account balance (US$bn)	6.9	2.5	-1.6	-5.3	-12.8	-1.7	-3.0	-10.2	-14.3	**-10.8**	**-9.8**	**-8.3**	**-9.2**
Current account balance (% of GDP)	10.6	2.9	-1.5	-3.7	-6.9	-1.5	-2.2	-6.3	-8.2	**-6.1**	**-5.7**	**-4.5**	**-4.6**
Net FDI (US$bn)	1.7	7.5	5.7	9.2	9.9	4.7	5.8	7.0	6.8	**4.5**	**5.6**	**6.0**	**6.6**
Net FDI (% of GDP)	2.6	8.7	5.3	6.4	5.4	4.1	4.2	4.3	3.9	**2.6**	**3.2**	**3.3**	**3.3**
C/A bal. + net FDI (% of GDP)	13.3	11.6	3.8	2.8	-1.6	2.6	2.0	-2.0	-4.3	**-3.6**	**-2.4**	**-1.2**	**-1.3**
External debt (US$bn, eop)	30.6	39.6	54.5	80.0	101.7	103.4	117.3	126.2	135.1	**140.2**	**142.9**	**144.1**	**144.1**
External debt (% of ann'd GDP, eop)	47.2	45.6	50.4	55.8	55.3	90.9	86.1	77.4	77.4	**79.4**	**82.6**	**78.8**	**72.6**
FX reserves (US$bn, eop)	9.5	19.4	22.3	32.5	31.5	26.5	34.6	31.8	24.5	**20.2**	**26.4**	**28.3**	**30.8**
FX reserves (% of ann'd GDP, eop)	14.7	22.3	20.6	22.6	17.2	23.3	25.4	19.5	14.1	**11.5**	**15.3**	**15.5**	**15.5**
External debt / FX reserves (x, eop)	3.2	2.0	2.4	2.5	3.2	3.9	3.4	4.0	5.5	**6.9**	**5.4**	**5.1**	**4.7**
FX reserves imports cov (months)	3.8	6.4	6.1	6.4	4.5	7.1	6.8	4.5	3.3	**2.6**	**3.5**	**3.7**	**3.9**
Interest rates													
Central bank key rate (%, eop)	9.00	9.50	8.50	8.00	12.00	10.25	7.75	7.75	7.50	**6.50**	**6.50**	**6.50**	**6.50**
3-month rate (%, eop 4Q)	15.03	11.46	9.90	7.58	21.60	17.59	6.12	19.72	25.52	**6.00**	**6.00**	**6.00**	**6.00**
Exchange rates													
UAH trade-weighted index (nominal)	91.29	105.76	96.33	88.22	62.35	62.62	72.39	77.27	74.23	**69.02**	**66.94**	**64.78**	**65.33**
UAH trade-weighted index (real)	112.78	129.21	123.61	120.06	100.21	90.26	97.73	98.76	94.72	**98.53**	**94.28**	**92.09**	**94.02**
UAH/US$ (eop)	5.31	5.05	5.05	5.05	7.80	8.00	7.94	8.00	8.05	**8.40**	**8.90**	**9.25**	**9.25**
UAH/US$ (average)	5.32	5.10	5.03	5.03	5.25	8.03	7.95	8.42	8.93	**8.20**	**8.84**	**9.10**	**9.25**
UAH/€ (eop)	6.71	7.20	5.97	6.66	7.36	10.90	11.45	10.66	10.36	**10.92**	**11.39**	**11.84**	**11.84**
UAH/€ (average)	6.62	6.35	6.32	6.89	7.67	11.19	10.54	11.06	11.45	**10.77**	**11.18**	**11.74**	**11.84**
US$/€ (eop)	1.36	1.18	1.32	1.46	1.40	1.43	1.34	1.30	0.00	**1.30**	**1.28**	**1.28**	**1.28**
US$/€ (average)	1.24	1.24	1.26	1.37	1.47	1.39	1.33	1.32	1.28	**1.31**	**1.27**	**1.29**	**1.28**
Population													
Population (million, eop)	47.3	47.0	46.6	46.4	46.1	46.0	45.8	45.6	45.5	**45.5**	**45.5**	**45.5**	**45.3**
Population (%YoY)	-1.4	-0.8	-0.7	-0.6	-0.5	-0.4	-0.4	-0.3	-0.2	**-0.1**	**0.0**	**0.0**	**-0.5**

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 2014-16, base-case scenario

Table 7. c

		Quarterly forecast by ICU												
	3Q13E	4Q13F	1Q14F	2Q14F	3Q14F	4Q14F	1Q15F	2Q15F	3Q15F	4Q15F	1Q16F	2Q16F	3Q16F	4Q16F
Activity														
Real GDP (%YoY)	0.5	1.8	1.5	1.5	1.5	2.0	2.0	2.0	2.5	2.8	3.0	3.5	3.5	3.0
Nominal GDP (UAHbn)	390.6	394.5	320.3	367.2	416.1	425.7	345.1	398.5	456.8	466.7	379.3	439.9	504.4	513.0
Nominal GDP (US$bn)	48.0	47.0	36.6	41.7	46.8	47.8	38.8	44.3	49.4	50.5	41.0	47.6	54.5	55.5
GDP per capita (US$, ann)	3,839	3,852	3,841	3,809	3,783	3,802	3,849	3,905	3,962	4,019	4,073	4,151	4,269	4,385
Unemployment rate (%)	8.2	8.2	8.3	8.4	8.0	7.9	7.7	7.8	7.6	7.5	7.4	7.4	7.4	7.4
Prices														
CPI headline (%YoY, eop)	-0.5	0.3	1.1	1.4	2.4	3.0	3.7	4.3	4.6	5.2	5.4	5.4	5.4	5.4
CPI headline (%YoY, average)	-0.3	0.0	0.9	1.4	2.1	2.9	3.3	4.2	4.4	5.0	5.4	5.4	5.4	5.4
PPI (%YoY, eop)	-0.9	4.0	6.2	1.2	5.9	6.6	5.1	8.8	7.2	6.2	6.2	6.2	6.2	6.2
PPI (%YoY, average)	-1.1	2.3	6.1	2.1	5.4	6.6	5.6	6.5	7.8	6.3	6.2	6.2	6.2	6.2
Fiscal balance														
Consolidated budget bal. (UAHbn)	-23.5	-20.3	-2.6	-20.7	-26.5	-42.1	-0.1	-18.0	-22.4	-38.1	4.0	-13.9	-18.4	-34.8
Consolidated budget bal. (% of GDP)	-6.0	-5.1	-0.8	-5.6	-6.4	-9.9	0.0	-4.5	-4.9	-8.2	1.1	-3.2	-3.6	-6.8
Budget balance (UAHbn)	-20.3	-17.6	-3.5	-17.6	-22.2	-34.6	-1.7	-15.7	-19.2	-31.7	1.4	-12.7	-16.2	-29.3
Budget balance (% of GDP)	-5.2	-4.5	-1.1	-4.8	-5.3	-8.1	-0.5	-3.9	-4.2	-6.8	0.4	-2.9	-3.2	-5.7
External balance														
Exports (US$bn)	21.3	21.0	19.9	19.6	21.0	21.5	20.5	19.9	21.0	21.8	21.1	20.3	21.3	22.2
Imports (US$bn)	24.6	22.7	22.8	22.1	21.9	24.5	22.6	21.8	22.2	24.3	23.0	22.8	22.9	24.9
Trade balance (US$bn)	-3.3	-1.7	-2.9	-2.4	-0.9	-3.0	-2.1	-1.9	-1.2	-2.5	-1.9	-2.5	-1.6	-2.7
Trade balance (% of GDP)	-6.9	-3.6	-7.8	-5.9	-1.9	-6.4	-5.4	-4.3	-2.4	-5.0	-4.6	-5.2	-2.9	-4.9
Current account balance (US$bn)	-3.8	-1.8	-2.9	-2.6	-1.2	-3.2	-2.2	-2.0	-1.4	-2.6	-2.0	-2.6	-1.8	-2.8
Current account balance (% of GDP)	-7.9	-3.9	-7.8	-6.1	-2.6	-6.6	-5.6	-4.6	-2.9	-5.2	-4.8	-5.4	-3.3	-5.1
Net FDI (US$bn)	1.6	1.7	1.3	1.3	1.5	1.6	1.4	1.5	1.5	1.6	1.6	1.6	1.7	1.7
Net FDI (% of GDP)	3.3	3.5	3.4	3.1	3.1	3.3	3.7	3.3	3.1	3.2	3.8	3.4	3.0	3.1
C/A bal. + net FDI (% of GDP)	-4.6	-0.4	-4.4	-3.0	0.5	-3.3	-1.9	-1.3	0.2	-2.1	-1.0	-2.0	-0.2	-2.0
External debt (US$bn, eop)	138.9	140.2	140.4	141.4	141.2	142.9	143.2	142.0	142.5	144.1	144.1	144.1	144.1	144.1
External debt (% of ann'd GDP, eop)	79.4	79.4	79.7	81.0	81.4	82.6	81.8	79.9	79.1	78.8	77.9	76.5	74.5	72.6
FX reserves (US$bn, eop)	21.3	20.2	21.7	23.3	24.9	26.4	26.9	27.4	27.8	28.3	28.8	29.2	29.7	30.8
FX reserves (% of ann'd GDP, eop)	12.2	11.5	12.4	13.5	14.4	15.3	15.4	15.4	15.4	15.5	15.5	15.5	15.3	15.5
External debt / FX reserves (x, eop)	6.5	6.9	6.5	6.1	5.7	5.4	5.3	5.2	5.1	5.1	5.0	4.9	4.9	4.7
FX reserves imports cov (months)	2.6	2.6	2.8	3.0	3.3	3.5	3.5	3.6	3.7	3.7	3.8	3.8	3.8	3.9
Interest rates														
Central bank key rate (%, eop)	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50
3-month rate (%, eop 4Q)	7.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
Exchange rates														
UAH trade-weighted index (nominal)	69.95	69.02	67.00	67.39	66.96	66.94	67.17	66.50	65.29	64.78	65.19	65.57	65.94	65.33
UAH trade-weighted index (real)	100.00	98.53	94.84	95.29	93.85	94.28	94.36	93.86	91.84	92.09	92.51	93.54	93.83	94.02
UAH/US$ (eop)	8.19	8.40	8.75	8.80	8.90	8.90	8.90	9.00	9.25	9.25	9.25	9.25	9.25	9.25
UAH/US$ (average)	8.15	8.40	8.75	8.80	8.90	8.90	8.90	9.00	9.25	9.25	9.25	9.25	9.25	9.25
UAH/€ (eop)	11.08	10.92	11.20	11.00	11.13	11.39	11.57	11.70	11.84	11.84	11.84	11.84	11.84	11.84
UAH/€ (average)	10.81	10.92	11.20	11.00	11.13	11.39	11.57	11.70	11.84	11.84	11.84	11.84	11.84	11.84
US$/€ (eop)	1.35	1.30	1.28	1.25	1.25	1.28	1.30	1.30	1.28	1.28	1.28	1.28	1.28	1.28
US$/€ (average)	1.33	1.30	1.28	1.25	1.25	1.28	1.30	1.30	1.28	1.28	1.28	1.28	1.28	1.28
Population														
Population (million, eop)	45.50	45.49	45.49	45.48	45.48	45.47	45.51	45.51	45.50	45.49	45.29	45.28	45.28	45.26
Population (%YoY)	-0.1	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.5	-0.5	-0.5	-0.5

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.

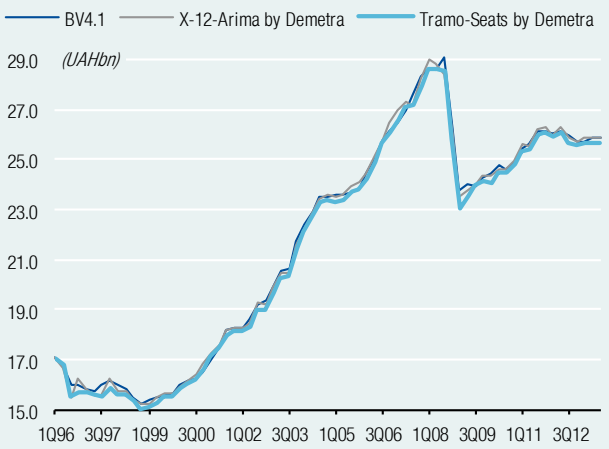
Appendices: Thematic charts & tables

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

Quarterly GDP: Reported statistics and ICU's calculations

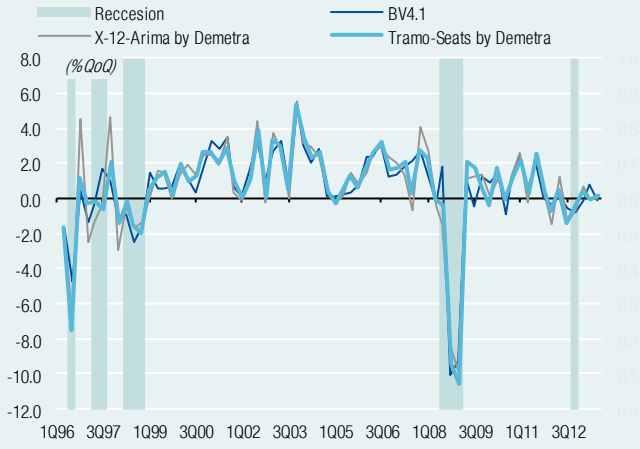
Chart 55. Ukraine's economy from the perspective of quarterly GDP volumes (left) and on-quarter growth rates (right)
History from 1Q96 till 3Q13
Data is adjusted for inflation and seasonal factors. data is seasonally adjusted by three methods BV4.1, X-12 Arima and Tramo-Seats

Quarterly GDP size in constant prices of Dec-95



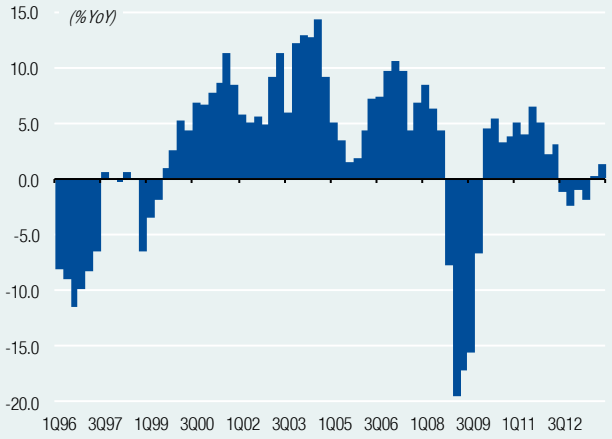
Sources: State Statistics Service of Ukraine, Investment Capital Ukraine LLC.

Quarterly GDP growth rates (% QoQ)



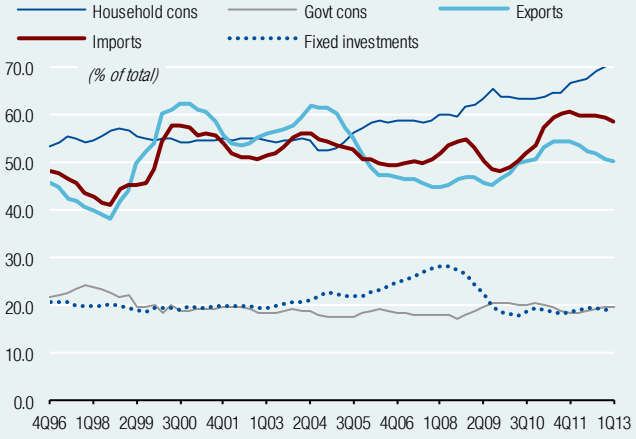
Sources: State Statistics Service of Ukraine, Investment Capital Ukraine LLC.

Chart 56. Reported on-year quarterly GDP growth (% YoY)
History from 1Q 1996 till 1Q 2013; forecast for 2Q-4Q of 2013



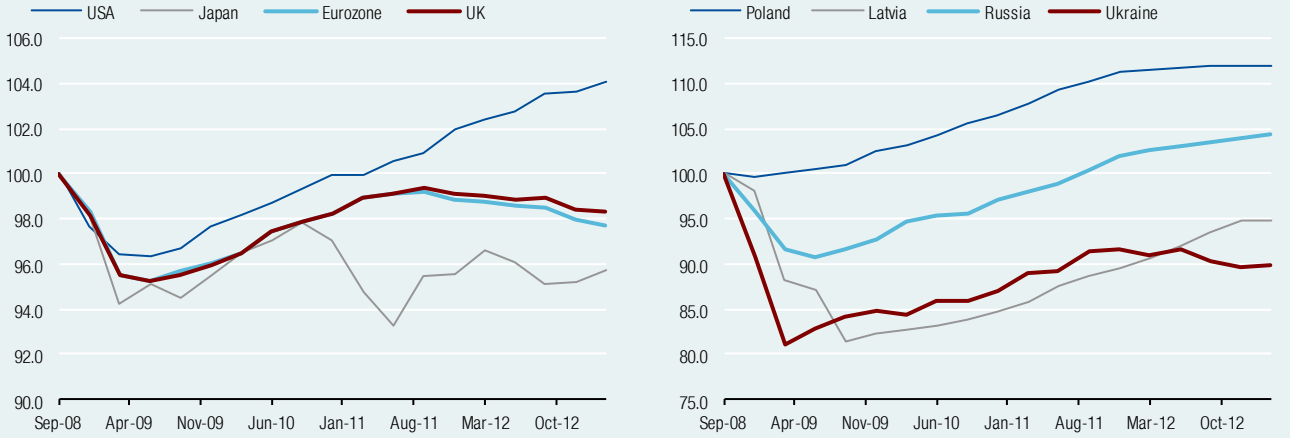
Source: State Statistics Service of Ukraine.

Chart 57. Demand-side components of GDP (% of total, LTM)
History from 4Q 1996 till 1Q 2013



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

Chart 58. Ukraine vs. selected economies of: How they have been recovering from the 2008 economic crisis



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

Table 8. Ukraine quarterly GDP size: History from 4Q96 till 3Q13 (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 cons prices[1] (UAHm, SA)			Real GDP growth (%QoQ, SA)		
	GDP at current prices (UAHm)	Real growth (% YoY, qtly)	Real growth (% QoQ, SA)	Deflator (% YoY)	Real growth (% YoY, ann'd)	GDP at cons prices[1] (UAHm, NSA)	BV4.1	X-12-Arima by Demetra	Tramo-Seats by Demetra	BV4.1	X-12-Arima by Demetra	Tramo-Seats by Demetra
4Q96	24,454	-10.0		40.1	-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
…	…	…	…	…	…	…	…	…	**…**	…	…	**…**
3Q05	122,861	1.5		21.8	4.7	27,306	23,691	23,910	**23,706**	0.3	1.4	1.3
4Q05	128,780	1.9		26.3	3.0	25,257	23,890	24,106	**23,851**	0.8	0.8	0.6
1Q06	106,348	4.3		15.7	2.8	21,937	24,450	24,469	**24,255**	2.3	1.5	1.7
2Q06	126,319	7.2		15.9	3.7	23,023	25,025	25,099	**24,903**	2.4	2.6	2.7
3Q06	152,406	7.3		15.6	5.2	29,301	25,827	25,836	**25,699**	3.2	2.9	3.2
4Q06	159,080	9.6		12.8	7.1	27,659	26,154	26,446	**26,128**	1.3	2.4	1.7
1Q07	139,444	10.6		18.6	8.7	24,253	26,510	26,989	**26,589**	1.4	2.1	1.8
2Q07	166,869	9.7		20.4	9.3	25,260	26,994	27,339	**27,146**	1.8	1.3	2.1
3Q07	199,535	4.4		25.4	8.5	30,592	27,573	27,158	**27,231**	2.1	-0.7	0.3
4Q07	214,883	6.9		26.4	7.9	29,558	28,307	28,246	**27,985**	2.7	4.0	2.8
1Q08	191,459	8.5		26.6	7.4	26,303	28,652	28,996	**28,643**	1.2	2.7	2.4
2Q08	236,033	6.2		33.2	6.5	26,824	28,591	28,846	**28,635**	-0.2	-0.5	0.0
3Q08	276,451	4.3		32.9	6.5	31,892	29,118	28,426	**28,525**	1.8	-1.5	-0.4
4Q08	244,113	-7.8		23.3	2.6	27,233	26,193	26,050	**25,839**	-10.0	-8.4	-9.4
1Q09	189,028	-19.6		22.8	-4.8	21,148	23,770	23,489	**23,092**	-9.3	-9.8	-10.6
2Q09	214,103	-17.3		9.7	-10.6	22,181	24,049	23,748	**23,583**	1.2	1.1	2.1
3Q09	250,306	-15.7		7.4	-15.2	26,886	23,950	24,029	**23,988**	-0.4	1.2	1.7
4Q09	259,908	-6.7		14.1	-15.0	25,412	24,241	24,346	**24,168**	1.2	1.3	0.7
1Q10	217,286	4.5	0.7	10.7	-9.2	21,959	24,457	24,380	**24,078**	0.9	0.1	-0.4
2Q10	256,754	5.4	1.4	15.1	-3.5	23,110	24,804	24,657	**24,503**	1.4	1.1	1.8
3Q10	301,251	3.3	0.4	17.5	1.5	27,539	24,578	24,624	**24,500**	-0.9	-0.1	0.0
4Q10	307,278	3.7	0.7	15.6	4.2	25,989	24,888	24,965	**24,797**	1.3	1.4	1.2
1Q11	257,682	5.1	2.0	12.9	4.4	23,066	25,482	25,609	**25,341**	2.4	2.6	2.2
2Q11	311,022	3.9	0.3	16.6	4.0	24,009	25,627	25,561	**25,397**	0.6	-0.2	0.2
3Q11	369,818	6.5	2.5	15.2	4.8	29,347	26,153	26,216	**26,033**	2.1	2.6	2.5
4Q11	363,557	5.0	0.3	12.6	5.1	27,309	26,157	26,345	**26,120**	0.0	0.5	0.3
1Q12	293,493	2.2	-0.8	11.4	4.4	23,584	26,068	25,954	**25,930**	-0.3	-1.5	-0.7
2Q12	349,212	3.0	0.5	9.0	4.2	24,731	26,107	26,264	**26,066**	0.1	1.2	0.5
3Q12	387,620	-1.3	-1.5	6.2	2.2	28,963	25,953	25,899	**25,701**	-0.6	-1.4	-1.4
4Q12	378,564	-2.5	-0.8	6.8	0.3	26,626	25,746	25,715	**25,572**	-0.8	-0.7	-0.5
1Q13	301,598	-1.1	0.6	3.9	-0.5	23,324	25,713	25,890	**25,665**	-0.1	0.7	0.4
2Q13	351,896	-1.3	-0.4	2.1	-1.6	24,409	25,916	25,890	**25,659**	0.8	0.0	-0.02
3Q13	390,644	0.5	0.0	0.3	-1.1	29,108	25,889	25,881	**25,709**	-0.1	0.0	0.2

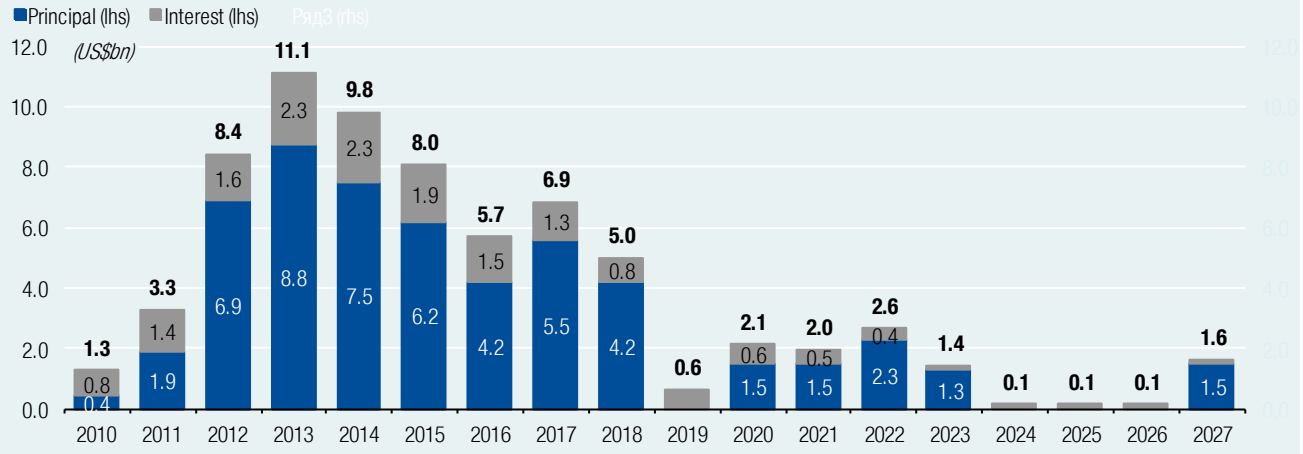
Notes: [1] at constant prices of December 1995; SA – seasonally adjusted data; NSA --- non-seasonally adjusted data; [2] estimated by ICU.

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

Sovereign external debt: Yearly data on debt due in 2013-27

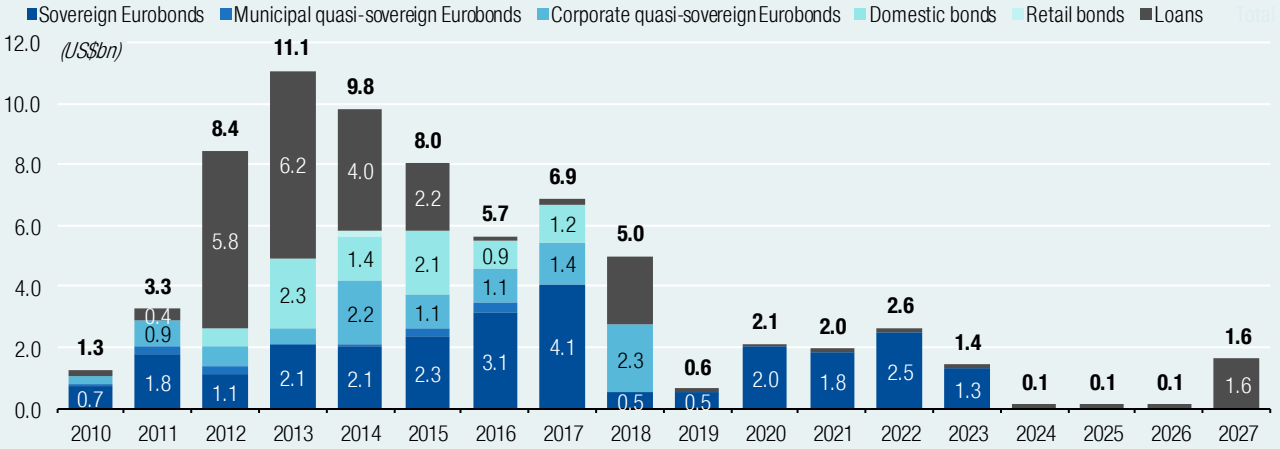
Yearly breakdown of sovereign and quasi-sovereign external debt (charts)

Chart 59. Ukraine's sovereign and quasi-sovereign external debt due in 2010-27: Breakdown by cash flow type (US$bn)



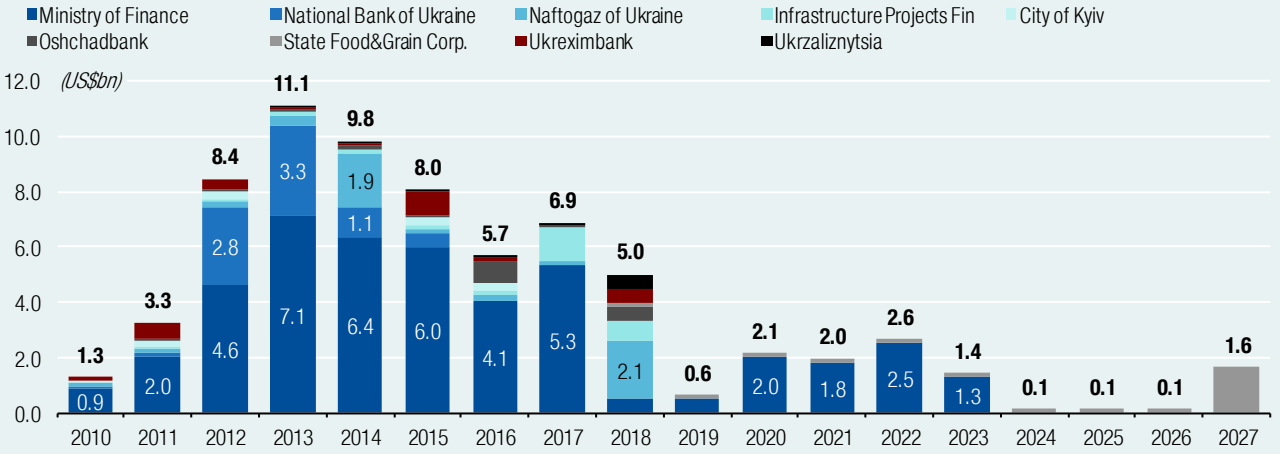
Source: Ministry of Finance of Ukraine, Bloomberg, Investment Capital Ukraine LLC.

Chart 60. Ukraine's sovereign and quasi-sovereign external debt due in 2010-27: Breakdown by ultimate borrower (US$bn)



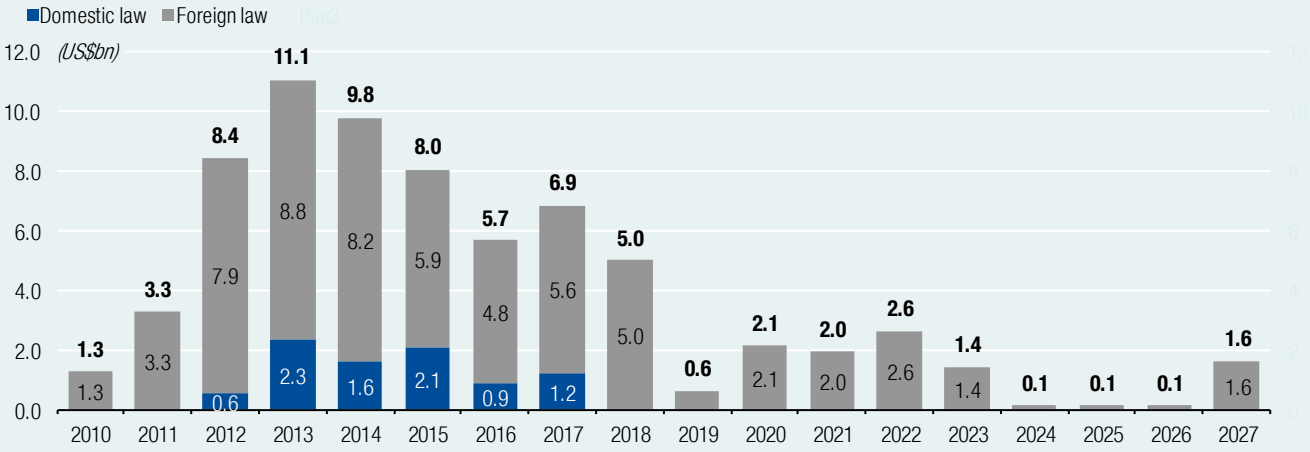
Source: Ministry of Finance of Ukraine, Bloomberg, Investment Capital Ukraine LLC.

Chart 61. Ukraine's sovereign and quasi-sovereign external debt due in 2010-27: Breakdown by ultimate borrower (US$bn)



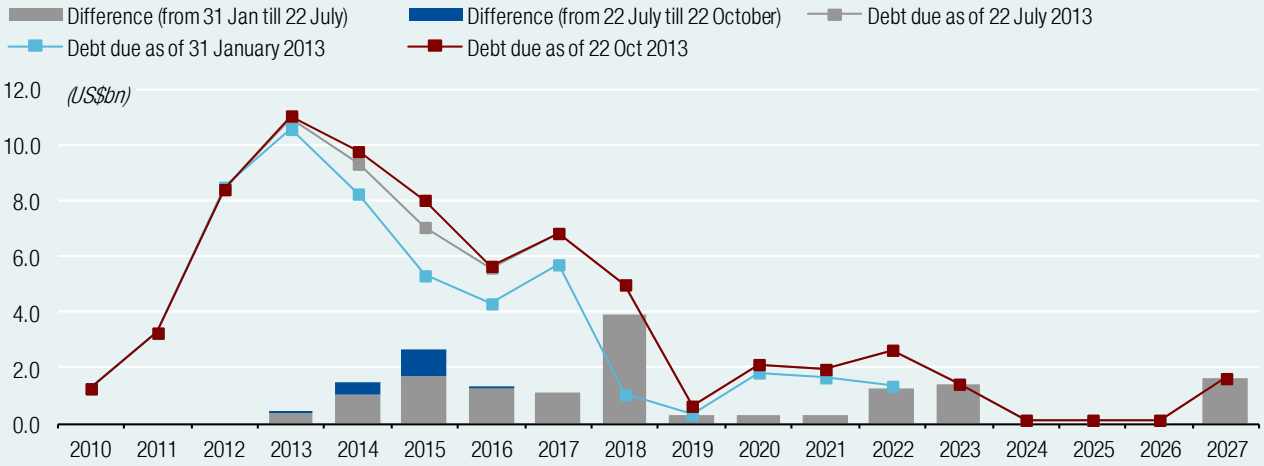
Source: Ministry of Finance of Ukraine, Bloomberg, Investment Capital Ukraine LLC.

Chart 62. Ukraine's sovereign and quasi-sovereign external debt due in 2010-27: Breakdown by governing law (US$bn)



Notes: Debt raised under domestic law means government bonds in foreign currencies issued at the domestic bond market.
Sources: Ministry of Finance of Ukraine, Bloomberg, Investment Capital Ukraine LLC.

Chart 63. Ukraine's sovereign and quasi-sovereign external debt due in 2013-27: Increase of debt over past 6 months (US$bn)



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

Yearly breakdown of sovereign and quasi-sovereign external debt (tables)

Table 9. 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 29 October 2013

Year	Principal re-payments							Interest payments							Grand Total
	Sovrgn Euro-bonds[1]	Muni-cipal Euro-bonds[2]	Corpo-rate Euro-bonds[3]	Local bonds[4]	Local retail bonds[5]	Loans[6]	Total	Sovrgn Euro-bonds[1]	Muni-cipal Euro-bonds[2]	Corpo-rate Euro-bonds[3]	Local bonds[4]	Local retail bonds[5]	Loans[6]	Total	
2013	1,000	0	0	1,920	0	5,833	8,752	1,081	20	493	382	17	334	2,328	**11,080**
2014	1,000	0	1,595	1,020	200	3,692	7,506	1,051	20	561	372	17	267	2,288	**9,794**
2015	1,321	250	750	1,867	0	2,002	6,191	1,011	20	378	228	0	216	1,853	**8,044**
2016	2,250	300	825	789	0	0	4,164	897	0	314	123	0	170	1,504	**5,668**
2017	3,300	0	1,088	1,155	0	0	5,543	793	0	281	64	0	170	1,308	**6,851**
2018	0	0	2,190	0	0	2,000	4,190	505	0	93	0	0	212	811	**5,001**
2019	0	0	0	0	0	0	0	505	0	0	0	0	127	632	**632**
2020	1,500	0	0	0	0	0	1,500	505	0	0	0	0	128	633	**2,133**
2021	1,500	0	0	0	0	0	1,500	329	0	0	0	0	127	456	**1,956**
2022	2,250	0	0	0	0	0	2,250	269	0	0	0	0	127	397	**2,647**
2023	1,250	0	0	0	0	0	1,250	47	0	0	0	0	127	174	**1,424**
2024	0	0	0	0	0	0	0	0	0	0	0	0	128	128	**128**
2025	0	0	0	0	0	0	0	0	0	0	0	0	127	127	**127**
2026	0	0	0	0	0	0	0	0	0	0	0	0	127	127	**127**
2027	0	0	0	0	0	1,500	1,500	0	0	0	0	0	127	127	**1,627**
Total	**15,371**	**550**	**6,448**	**6,751**	**200**	**15,027**	**44,346**	**6,993**	**60**	**2,119**	**1,169**	**34**	**2,518**	**12,894**	**57,240**

Notes: [1] sovereign Eurobonds; [2] municipal Eurobonds issued by City of Kyiv, which are considered as quasi-sovereign external debt; [3] corporate Eurobonds issued by state-run banks and non-bank entities, which are considered as quasi-sovereign external debt; [4] 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; [6] IMF loans extended to MoF and NBU.

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

Table 10. Breakdown of the sovereign and quasi-sovereign external debt, including interest payments and principal re-payments (US$m)
By ultimate borrower, data as of 29 October 2013

Year	Principal re-payments										Interest payments										Total
	MoF	NBU	Kyiv[1]	Nafto-gaz	Ukr-Inf[2]	Osch-ad-bank	Ukr-exim-bank	Ukr-zaliz-nytsia	Food& Grain[3]	Total	MoF	NBU	Kyiv[1]	Nafto-gaz	Ukr-Inf[2]	Osch-ad-bank	Ukr-exim-bank	Ukr-zaliz-nytsia	Food& Grain[3]	Total	
2013	5,517	3,235	0	0	0	0	0	0	0	8,752	1,591	54	20	322	146	80	92	24	0	2,328	**11,080**
2014	4,835	1,076	0	1,595	0	0	0	0	0	7,506	1,522	16	20	322	146	102	114	48	0	2,288	**9,794**
2015	4,702	489	250	0	0	0	750	0	0	6,191	1,282	4	20	170	146	102	82	48	0	1,853	**8,044**
2016	3,039	0	300	0	0	700	125	0	0	4,164	1,020	0	0	170	146	73	47	48	0	1,504	**5,668**
2017	4,455	0	0	0	1,088	0	0	0	0	5,543	857	0	0	170	146	44	44	48	0	1,308	**6,851**
2018	0	0	0	2,000	690	500	500	500	0	4,190	505	0	0	85	26	22	22	24	127	811	**5,001**
2019	0	0	0	0	0	0	0	0	0	0	505	0	0	0	0	0	0	0	127	632	**632**
2020	1,500	0	0	0	0	0	0	0	0	1,500	505	0	0	0	0	0	0	0	128	633	**2,133**
2021	1,500	0	0	0	0	0	0	0	0	1,500	329	0	0	0	0	0	0	0	127	456	**1,956**
2022	2,250	0	0	0	0	0	0	0	0	2,250	269	0	0	0	0	0	0	0	127	397	**2,647**
2023	1,250	0	0	0	0	0	0	0	0	1,250	47	0	0	0	0	0	0	0	127	174	**1,424**
2024	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	128	128	**128**
2025	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	127	127	**127**
2026	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	127	127	**127**
2027	0	0	0	0	0	0	0	0	1,500	1,500	0	0	0	0	0	0	0	0	127	127	**1,627**
Total	**29,049**	**4,800**	**550**	**3,595**	**1,778**	**1,200**	**1,375**	**500**	**1,500**	**44,346**	**8,430**	**74**	**60**	**1,238**	**754**	**424**	**401**	**238**	**1,276**	**12,894**	**57,240**

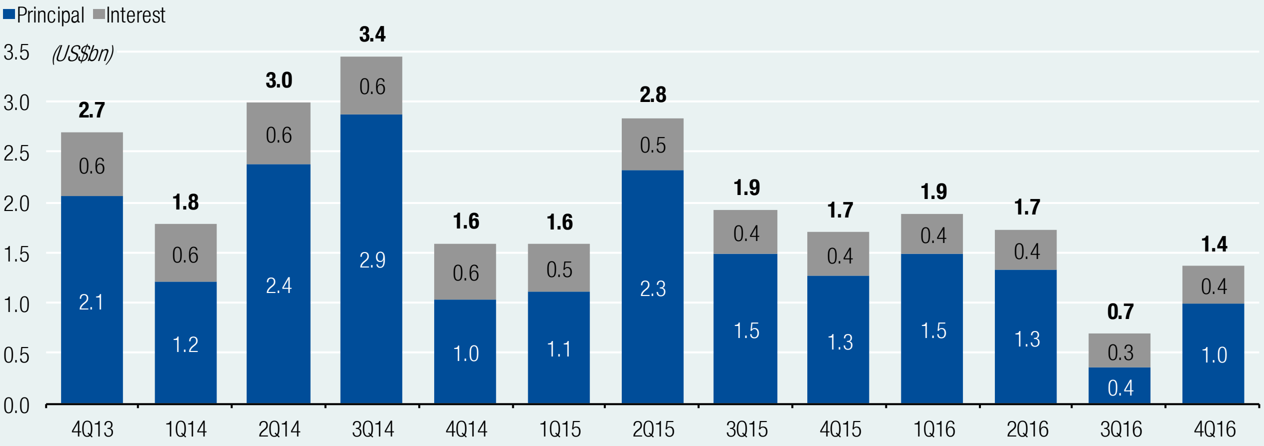
Notes: Notes: [1] City of Kyiv; [2] Financing of Infrastructural Projects (Bloomberg code: UKRINF); [3] State Food and Grain Corporation.

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

Sovereign external debt: Quarterly data on debt due in 2014-16

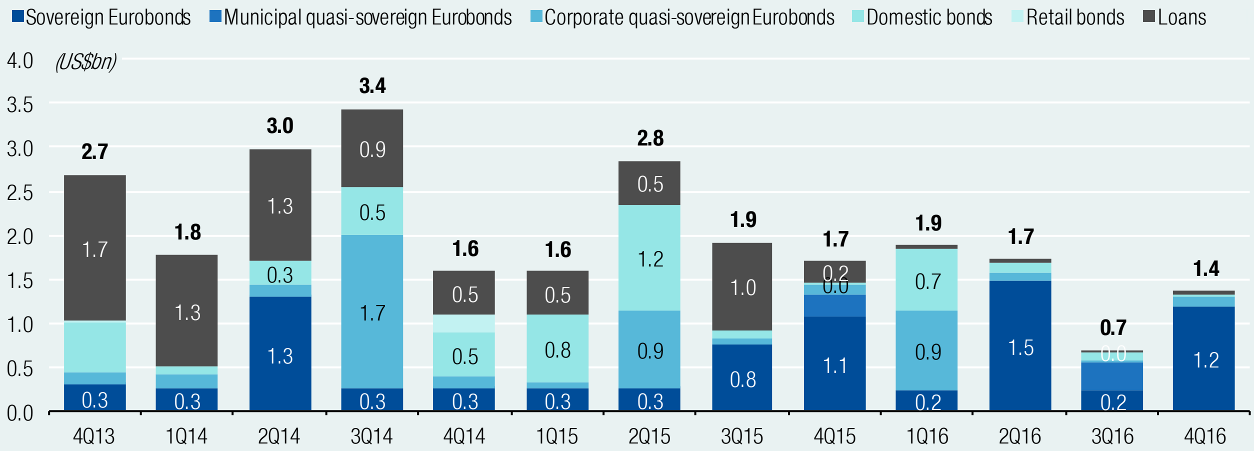
Yearly breakdown of sovereign and quasi-sovereign external debt (charts)

Chart 64. Ukraine's sovereign and quasi-sovereign external debt due in 2014-16: Qtly breakdown by type of cash flow (US$bn)



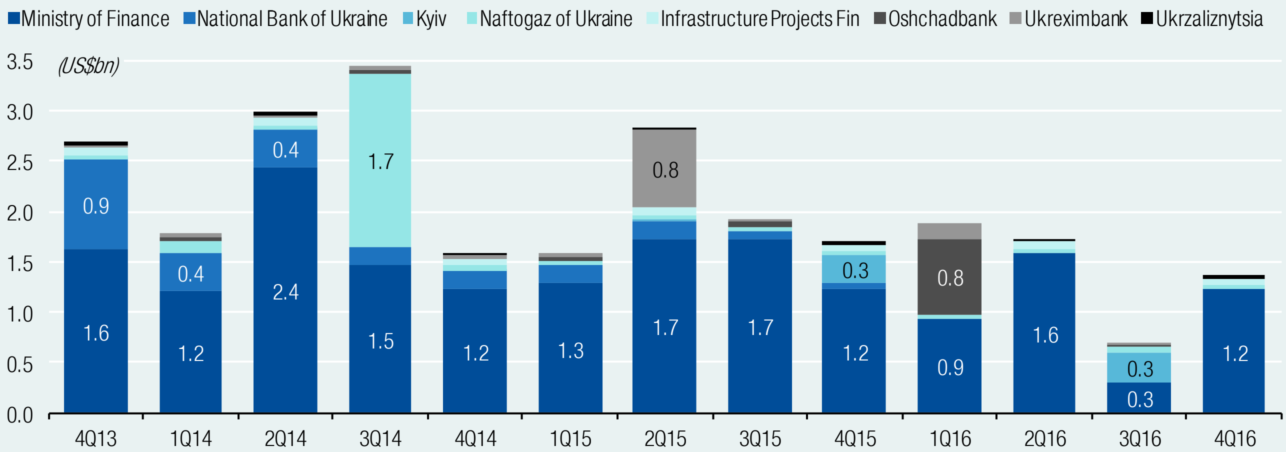
Note: Qtly stands for quarterly. Sources: Ministry of Finance of Ukraine, Bloomberg, Investment Capital Ukraine LLC.

Chart 65. Ukraine's sovereign and quasi-sovereign external debt due in 2013-15: Qtly breakdown by type of debt instrument (US$bn)



Note: Qtly stands for quarterly. Sources: Ministry of Finance of Ukraine, Bloomberg, Investment Capital Ukraine LLC.

Chart 66. Ukraine's sovereign and quasi-sovereign external debt due in 2013-15 : Qtly breakdown by ultimate borrower (US$bn)



Note: Qtly stands for quarterly. Sources: Ministry of Finance of Ukraine, Bloomberg, Investment Capital Ukraine LLC.

Quarterly breakdown of sovereign and quasi-sovereign external debt (tables)

Table 11. 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 29 October 2013

	Principal re-payments							Interest payments							Grand
Year	Sovrgn Euro-bonds[1]	Muni Euro-bonds[2]	Corp Euro-bonds[3]	Local bonds[4]	Local retail bonds[5]	Loans[6]	Total	Sovrgn Euro-bonds[1]	Muni Euro-bonds[2]	Corp Euro-bonds[3]	Local bonds[4]	Local retail bonds[5]	Loans[6]	Total	Total
1Q13	0	0	0	261	0	1,350	1,611	255	0	32	51	0	83	422	**2,033**
2Q13	1,000	0	0	235	0	1,323	2,558	281	10	180	88	9	77	645	**3,203**
3Q13	0	0	0	964	0	1,566	2,530	255	0	152	122	0	95	625	**3,155**
4Q13	0	0	0	460	0	1,593	2,053	290	10	128	121	9	79	637	**2,690**
Ttl 2013	**1,000**	**0**	**0**	**1,920**	**0**	**5,833**	**8,752**	**1,081**	**20**	**493**	**382**	**17**	**334**	**2,328**	**11,080**
1Q14	0	0	0	0	0	1,208	1,208	255	0	152	88	0	73	569	**1,777**
2Q14	1,000	0	0	171	0	1,208	2,379	290	10	128	102	9	69	608	**2,986**
3Q14	0	0	1,595	446	0	842	2,882	255	0	152	88	0	64	560	**3,442**
4Q14	0	0	0	403	200	434	1,037	251	10	128	94	9	61	552	**1,589**
Ttl 2014	**1,000**	**0**	**1,595**	**1,020**	**200**	**3,692**	**7,506**	**1,051**	**20**	**561**	**372**	**17**	**267**	**2,288**	**9,794**
1Q15	0	0	0	686	0	434	1,120	255	0	77	71	0	59	462	**1,581**
2Q15	0	0	750	1,133	0	434	2,317	251	10	128	79	0	58	525	**2,842**
3Q15	500	0	0	48	0	943	1,491	255	0	77	43	0	56	431	**1,921**
4Q15	821	250	0	0	0	193	1,264	251	10	97	35	0	43	435	**1,699**
Ttl 2015	**1,321**	**250**	**750**	**1,867**	**0**	**2,002**	**6,191**	**1,011**	**20**	**378**	**228**	**0**	**216**	**1,853**	**8,044**
1Q15	0	0	825	659	0	0	1,484	238	0	77	41	0	43	398	**1,882**
2Q15	1,250	0	0	74	0	0	1,324	230	0	97	35	0	43	404	**1,729**
3Q15	0	300	0	55	0	0	355	238	0	44	15	0	43	339	**694**
4Q15	1,000	0	0	0	0	0	1,000	191	0	97	32	0	43	362	**1,362**
Ttl 2015	**2,250**	**300**	**825**	**789**	**0**	**0**	**4,164**	**897**	**0**	**314**	**123**	**0**	**170**	**1,504**	**5,668**

Notes: [1] sovereign Eurobonds; [2] municipal Eurobonds issued by City of Kyiv, which are considered as quasi-sovereign external debt; [3] corporate Eurobonds issued by state-run banks and non-bank entities, which are considered as quasi-sovereign external debt; [4] 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; [6] IMF loans extended to MoF and NBU.

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

Table 12. Breakdown of the sovereign and quasi-sovereign external debt, including interest payments and principal re-payments (US$m)
By ultimate borrower, data as of 29 October 2013

	Principal re-payments									Interest payments									Grand
Year	MoF	NBU	Kyiv[1]	Nafto-gaz	Ukr-Inf[2]	Osch-ad-bank	Ukr-exim-bank	Ukr-zaliz-nytsia	Total	MoF	NBU	Kyiv[1]	Nafto-gaz	Ukr-Inf[2]	Osch-ad-bank	Ukr-exim-bank	Ukr-zaliz-nytsia	Total	Total
1Q13	851	760	0	0	0	0	0	0	1,611	329	18	0	43	0	29	4	0	422	**2,033**
2Q13	1,812	746	0	0	0	0	0	0	2,558	397	15	10	118	73	0	31	0	645	**3,203**
3Q13	1,674	857	0	0	0	0	0	0	2,530	418	12	0	118	0	51	25	0	625	**3,155**
4Q13	1,181	872	0	0	0	0	0	0	2,053	447	9	10	43	73	0	31	24	637	**2,690**
Ttl 2013	**5,517**	**3,235**	**0**	**0**	**0**	**0**	**0**	**0**	**8,752**	**1,591**	**54**	**20**	**322**	**146**	**80**	**92**	**24**	**2,328**	**11,080**
1Q14	847	361	0	0	0	0	0	0	1,208	368	6	0	118	0	51	25	0	569	**1,777**
2Q14	2,018	361	0	0	0	0	0	0	2,379	423	5	10	43	73	0	31	24	608	**2,986**
3Q14	1,110	178	0	1,595	0	0	0	0	2,882	362	3	0	118	0	51	25	0	560	**3,442**
4Q14	859	178	0	0	0	0	0	0	1,037	369	2	10	43	73	0	31	24	552	**1,589**
Ttl 2014	**4,835**	**1,076**	**0**	**1,595**	**0**	**0**	**0**	**0**	**7,506**	**1,522**	**16**	**20**	**322**	**146**	**102**	**114**	**48**	**2,288**	**9,794**
1Q15	942	178	0	0	0	0	0	0	1,120	341	2	0	43	0	51	25	0	462	**1,581**
2Q15	1,389	178	0	0	0	0	750	0	2,317	344	1	10	43	73	0	31	24	525	**2,842**
3Q15	1,424	67	0	0	0	0	0	0	1,491	311	0	0	43	0	51	25	0	431	**1,921**
4Q15	947	67	250	0	0	0	0	0	1,264	286	0	10	43	73	0	0	24	435	**1,699**
Ttl 2015	**4,702**	**489**	**250**	**0**	**0**	**0**	**750**	**0**	**6,191**	**1,282**	**4**	**20**	**170**	**146**	**102**	**82**	**48**	**1,853**	**8,044**
1Q15	659	0	0	0	0	700	125	0	1,484	279	0	0	43	0	51	25	0	398	**1,882**
2Q15	1,324	0	0	0	0	0	0	0	1,324	265	0	0	43	73	0	0	24	404	**1,729**
3Q15	55	0	300	0	0	0	0	0	355	253	0	0	43	0	22	22	0	339	**694**
4Q15	1,000	0	0	0	0	0	0	0	1,000	223	0	0	43	73	0	0	24	362	**1,362**
Ttl 2015	**3,039**	**0**	**300**	**0**	**0**	**700**	**125**	**0**	**4,164**	**1,020**	**0**	**0**	**170**	**146**	**73**	**47**	**48**	**1,504**	**5,668**

Notes: Notes: [1] City of Kyiv; [2] Financing of Infrastructural Projects (Bloomberg code: UKRINF).
Sources: Ministry of Finance of Ukraine, Bloomberg, Investment Capital Ukraine LLC.

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

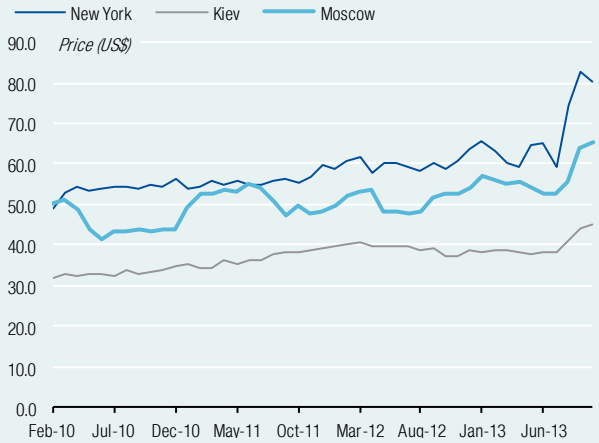
Table 13. ICU consumer basket as of end of October 2013
price observation in the urban areas of Ukraine, USA and Russia, i.e., in the countries' most populated cities – Kiev, New-York, and Moscow

Item of the basket	Description	Kiev, central district 28-Oct-13 Price (UAH)	New York metro-politan area 27-Oct-13 Price (US$)	Moscow, central district 28-Oct-13 Price (RUR)
Consumer goods				
Coca-cola (0.5 litre, plastic bottle)	Non-alcohol beverages	6.76	1.75	40.90
Beer Corona Extra (0.33 litre, glass bottle)	Alcoholic beverages	15.90	1.66	94.40
Bunch of fresh bananas (1 kg)	From Ecuador	8.99	1.08	57.90
Pack of milk (1 litter)	Locally produced, soft package, i.e., not glass bottle	8.48	2.03	67.90
Chicken meat (1 kg pack)	Locally produced and branded package, boneless breast	44.36	12.08	179.00
Canned pineapple (0.85 kg, can)	Pineapple circles, Dole brand	23.82	2.40	130.00
Pasta (0.5 kg)	Soft package, produced in Italy	14.30	2.12	62.90
Sugar (1 kg)		7.64	3.88	42.90
Package of table salt (0.5 kg)		8.29	0.71	11.90
Chicken eggs (10 units pack)	White eggs, standard size	14.30	2.80	87.90
Chocolate (100 g)	Made by Craft Foods Corp, Milka brand	9.63	1.80	64.90
Toothpaste (100ml package)	Colgate	24.24	1.62	120.00
Shampoo (200ml package)	Head & Shoulders brand, for normal hair	25.61	3.11	180.00
Toilet paper (4 rolls package)	Kleenex Cottonelle brand, white paper, Regular toilet tissue	18.99	4.33	98.90
Magazine	Men's Health, local edition, A4 format (standard one, not a pocket book format)	28.27	7.99	120.00
Gasoline (1 litre)	Lukiol, regular	11.14	0.99	32.52
Batteries (AA x 4 pack)	A 4-pack of AA Duracell batteries, Alkaline	22.14	5.49	109.00
Coffee (250 g, vacuum pack)	Jacobs Monarch, brick-like vacuum pack	35.07	7.99	190.00
Services				
Underground commute ticket	Within the central part of the city	2.00	2.50	30.00
Cinema ticket	Thursday's night price for the seat with good location, Hollywood film	40.00	14.00	350.00
Total basket value (in local currency)		**369.93**	**80.33**	**2,071.02**
Exchange rate versus US dollar at spot market as of date of observation		8.175	1.000	31.747
Total basket value (in US$)		**45.25**	**80.33**	**65.24**
Overvalued "+" / undervalued "-" (%)				
UAH vs. USD		**-43.67**		
UAH vs. RUR		**-30.64**		
Fair value in the long-run as of observation date				
UAH per USD		**4.605**		
UAH per RUR		**0.179**		

Source: Investment Capital Ukraine.

Chart 67. ICU consumer basket value (US$), from Feb-10 till Oct-13

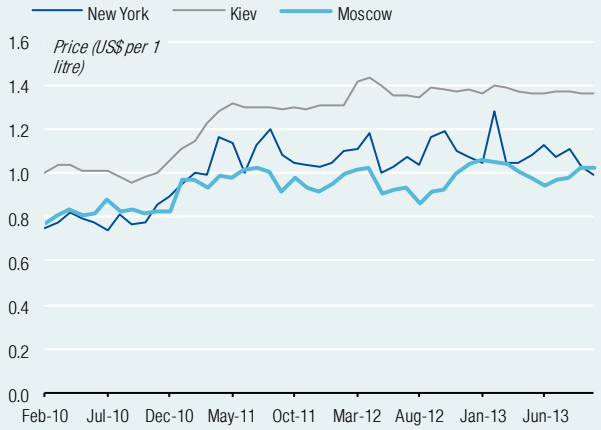
Total value of the ICU basket in US dollar terms



Source: Investment Capital Ukraine.

Chart 68. Gasoline A95 equivalent 1 litre (US$)

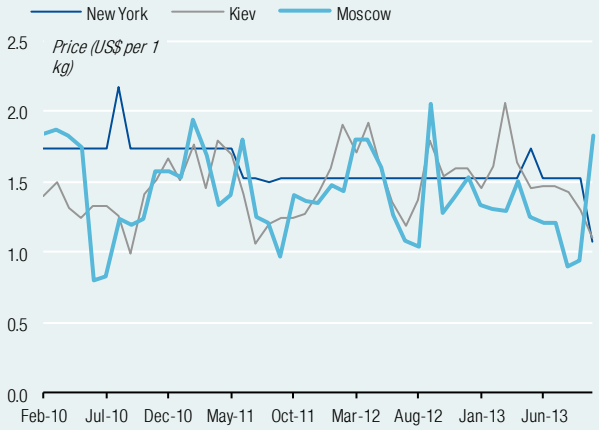
Price history from February 2010 till October 2013



Source: State Statistics Service of Ukraine.

Chart 69. Fresh banana 1 kg bunch (US$)

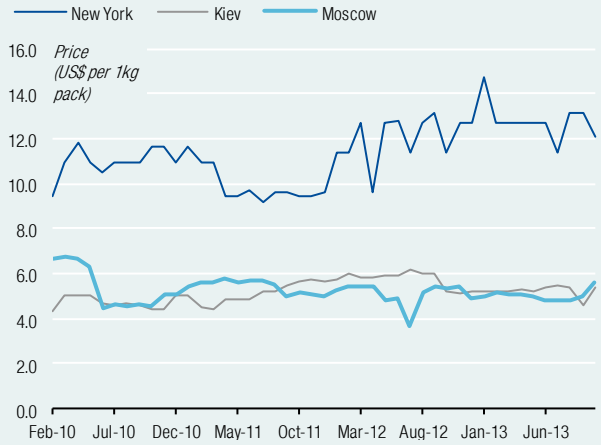
Price history from February 2010 till October 2013



Source: Investment Capital Ukraine.

Chart 70. Chicken meat 1 kg pack of boneless breast (US$)

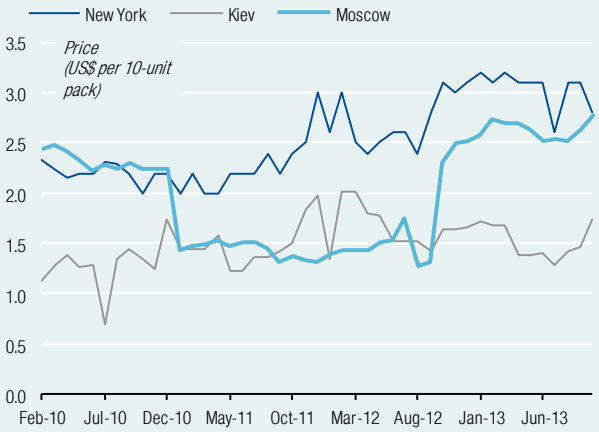
Price history from February 2010 till October 2013



Source: State Statistics Service of Ukraine.

Chart 71. Chicken eggs 10-unit pack (US$)

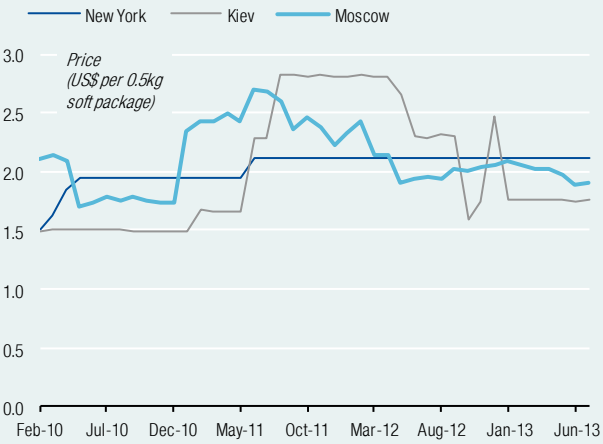
Price history from February 2010 till October 2013



Source: Investment Capital Ukraine.

Chart 72. Pasta 0.5 kg soft package Italy-made (US$)

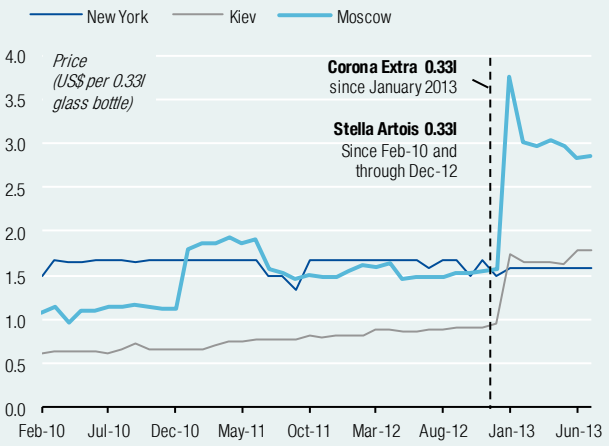
Price history from February 2010 till October 2013



Source: Investment Capital Ukraine.

Chart 73. Beer Corona Extra 0.33 litre glass bottle (US$)

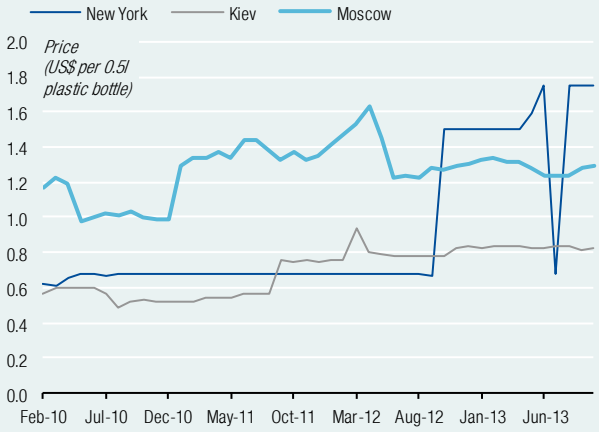
Price history from February 2010 till October 2013



Source: State Statistics Service of Ukraine.

Chart 74. Coca-Cola 0.5 litre plastic bottle (US$)

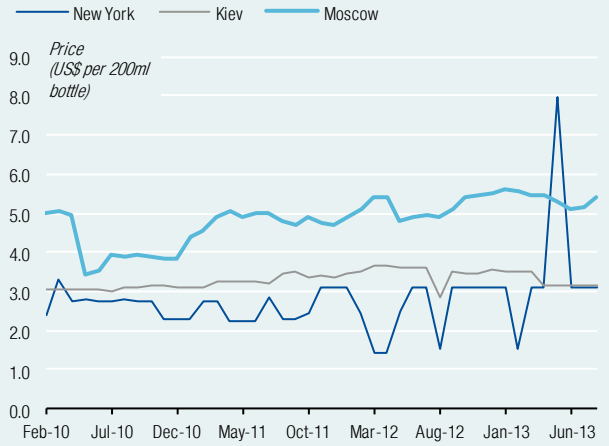
Price history from February 2010 till October 2013



Source: State Statistics Service of Ukraine.

Chart 75. Shampoo 200ml bottle Head & Shoulders (US$)

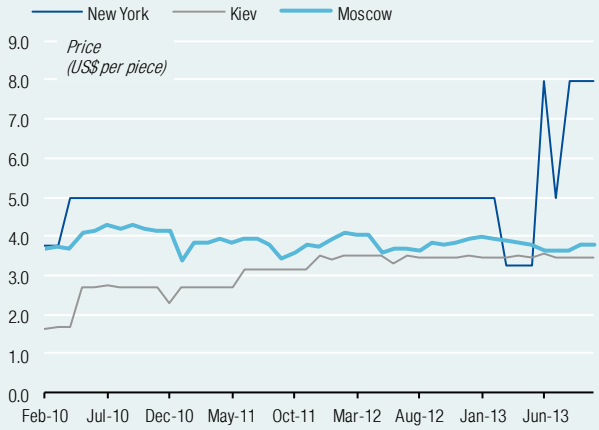
Price history from February 2010 till October 2013



Source: State Statistics Service of Ukraine.

Chart 76. Magazine *Men's Health,* A4 format (US$)

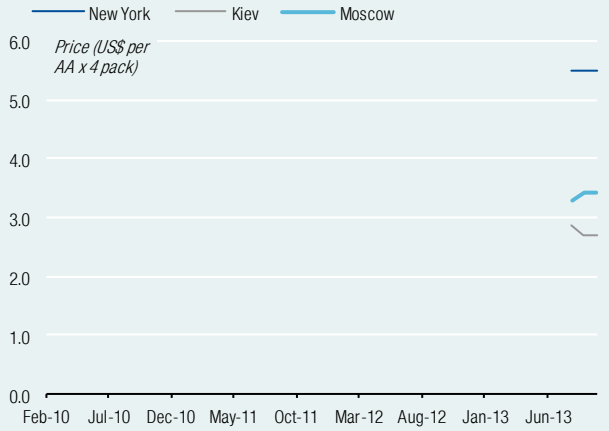
Price history from February 2010 till October 2013



Source: State Statistics Service of Ukraine.

Chart 77. Duracell batteries (AA x 4 pack) (US$)

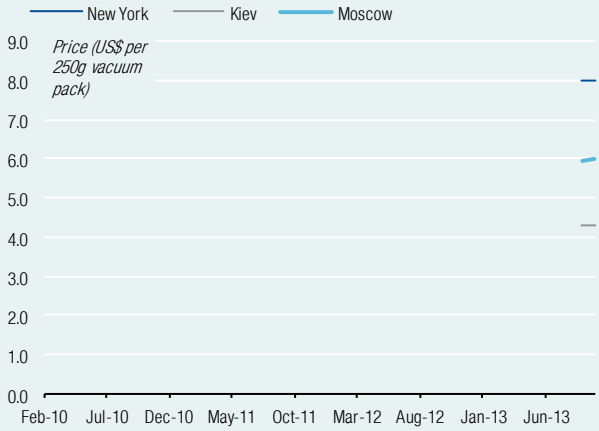
Price history from August 2013 till October 2013



Source: State Statistics Service of Ukraine.

Chart 78. Jacobs Monarch coffee, 250 g vacuum pack (US$)

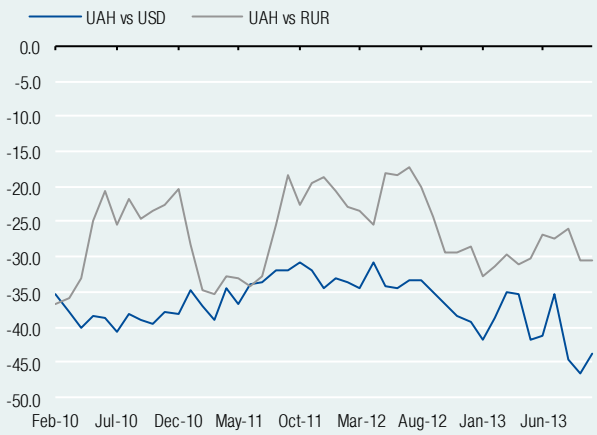
Price history from September 2010 till October 2013



Source: State Statistics Service of Ukraine.

Chart 79. Value gap of ICU basket in UAH vs. USD and RUB (%)

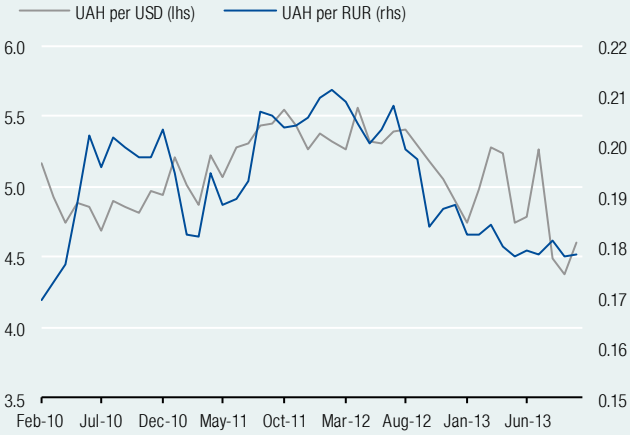
Price history from February 2010 till October 2013



Source: State Statistics Service of Ukraine.

Chart 80. 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 October 2013



Source: State Statistics Service of Ukraine.

ICU's family of FX trade-weighted indices: An update

The reasons for our update are given below:

Since inception on 22 July, 2009[39], ICU's family of trade-weighted indices (TWIs) was primarily devoted to Ukraine's hryvnia (UAH). We have extended our calculations to include Russia's ruble (RUB), Belarus' ruble (BYR) and Kazakhstan's tenge (KZT). Below, while describing the indices' methodology, we refer to the countries of these currencies as the home-countries of the currencies, for which we calculate the TWIs.

In our view, these improvements, will allow us to better analyse the fundamentals of valuations of these currencies: Ukraine's hryvnia (UAH), Russia's ruble (RUB), Belarus' ruble (BYR) and Kazakhstan's tenge (KZT).

Brief description: ICU's family of currency trade-weighted indices (TWIs) consists of TWIs for Ukraine's hryvnia (UAH), Russia's ruble (RUB), Belarus' ruble (BYR) and Kazakhstan's tenge (KZT). For each currency, the indices consist 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 currency's trade weighted exchange-rate developments against the key trade partners of the home-country, for which currency the indices are calculated. The CPI- and PPI-based real TWIs are derived by adjusting, respectively, the nominal TWI by the CPIs and PPIs of the home country and its key partner trading countries. These indices could also be referred to, interchangeably, as nominal and real effective exchange rates (NEER and REER). 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 for each currency.

The basics of index compilation

Our in-house method of calculating the currency trade-weighted indices takes into account the following inputs. First, merchandise trade statistics published by the official statistics agency of the home-country 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 the home-country against the US dollar, the key anchor currency in the global FX market. And third, data on inflation rates, including Consumer Price indices (CPIs) and Producer Price indices (PPIs), which are the monthly CPIs and PPIs of the home-country and its main trading partners, presented as the percentage change in inflation versus the previous month (ie the month-on-month inflation rates).

The *monthly* TWIs—nominal index, CPI-based index, and PPI-based index—are calculated on the monthly data. They use the trade and inflation data are reported on a monthly basis as an input data. In addition, the data on the exchange rates are the monthly averages of

[39] 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.

exchange rates versus the US dollar of the home-country currency as well as of the national currencies of the main trade partners to the home-country.

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 closing rates versus US dollar of the home-country currency as well as the currencies of the main trade partners to the home-country.

Trade partners

For each home-country a basket of main trade partners is determined upon the official statistics on merchandise trade. The basket includes as many trade partners as to represent at least 75-80% share of total trade turnover in the US dollar terms.

The trade weightings are calculated upon the following formula:

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

where X_i and M_i are annualised volume of exports and imports respectively of i country and n is a number of main trade partners that form the basket.

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 home-country currency.

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 currency of the home-country; R_i^t – exchange rate of the currency of i country against the home-country's currency at t period; R_i^b – exchange rate of the currency of i country against the home-country's currency 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 data (in month-on-month as well as in year-on-year terms) is maintained for the range of countries[40], which form the basket (see above). This data is sourced from Bloomberg, and if not available at Bloomberg, it is retrieved from the national sources like the state statistical agency or central bank.

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

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

First, the CPI-based adjusting factor:

[40] 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.

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

where P_i^{CPI} – relative inflation level in i country versus the home-country; CPI_i – Consumer Price Index of i country; CPI_{home} – Consumer Price Index in the home-country.

First, the PPI-based adjusting factor:

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

where P_i^{PPI} – relative inflation level in i country against versus the home-country; PPI_i – Producer Price index of i country; PPI_{home} – Producer Price index in the home-country.

Nominal trade-weighted index

Nominal trade-weighted index of a currency 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 a currency 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 a currency 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 sections provide the results of the calculations of the trade-weighted indices of the two currencies—Ukraine's hryvnia (UAH) and Russia's ruble (RUB)— in nominal and real terms. The indices are rebased at 100 points as of the end of 1999.

Lagging statistical data and revisions

The inflation data is retrieved from national statistical agencies and from Bloomberg. As a rule, this data set is published with a one-month lag. Moreover, every country has its own publication date of the price statistics (for instance, Ukraine publishes inflation statistics in early days of the month, while USA and UK publish it in the midst of the month).

The foreign trade data of each home-country—Ukraine and Russia—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[41].

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.

Approach to assessing currency misalignment

Our approach to determining whether the nominal value of the currency at the FX spot market is in 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. The 10-year averages are the 10-year rolling averages, which starts at the beginning of 2004. The 5-year averages are the 5-year rolling averages, which starts at the beginning of 2000.

Trade-weighted indices versus their averages

Then each of the 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.

If the result is positive, the currency is positively misaligned from its trade-weighted value and is being overvalued.

If the result is negative, then UAH is treated as negatively misaligned and undervalued.

Going forward, these misalignments tend to narrow via the effect of inflation and changes in the nominal exchange rates in the home-country 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, which are observed to last 5-10 years.

As far as Ukraine's hryvnia (UAH) and Russia's ruble (RUB) are concerned, we tend to rely on the view that each economy is undergoing fundamental changes through a 5-year time span. Hence, we measure currency misalignment via the 5-year averages of the trade-weighted indices due to an assumption that Ukraine and Russia tend to have 5-year economic cycles.

[41] 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).

Ukraine's hryvnia (UAH): Input data and the indices

Input data: Trade partners, inflation and FX rates

This calculation is based on a basket of 26 countries that are Ukraine's key trading partners, which account for a 81.2% share of total merchandise trade turnover (exports and imports) for the last 12-month period to August 2013 (see Table 14 on page 71).

Inflation and exchange rates data are also used for the same 26 countries (see Chart 81-Chart 82 on page 72)

The UAH trade-weighted indices

Calculation results are presented in the tables and charts on pp.73. Averages of the indices are depicted on pp.74. UAH's misalignment is depicted on pp.75.

Lastly, the range of TWI-implied USD/UAH rates is depicted in the Chart 91 on pp.76. The same page contains the charts depicting the linkage between the UAH's real TWIs with Ukraine's sovereign credit risk (Chart 92-Chart 93).

Table 14. 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 July 2013

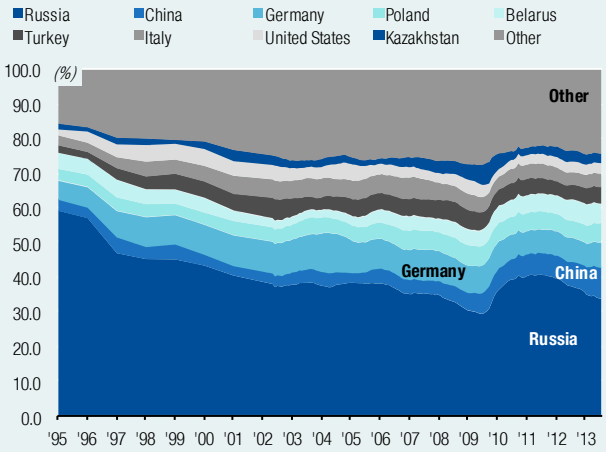
Country	Trade turnover* as of August 2013 (US$m)	Share in total turnover as of August 2013 (%)	Weight as of August 2013 (%)	Average weight, May 2002 till August 2013 (%)	Average weight, 1995-2013 (%)
Russia	38,819.80	27.24	33.55	36.47	40.46
China	10,709.05	7.52	9.26	5.11	4.59
Germany	8,477.09	5.95	7.33	8.51	8.28
Poland	6,326.94	4.44	5.47	4.90	4.36
Belarus	6,135.85	4.31	5.30	3.67	3.75
Turkey	5,651.78	3.97	4.89	4.88	4.51
Italy	4,597.41	3.23	3.97	4.91	4.58
United States	3,603.02	2.53	3.11	3.43	3.73
Kazakhstan	3,225.42	2.26	2.79	2.98	2.61
India	3,017.32	2.12	2.61	1.79	1.49
Hungary	2,809.47	1.97	2.43	2.55	2.46
Egypt	2,747.97	1.93	2.38	1.32	1.12
France	2,391.91	1.68	2.07	1.91	1.79
Spain	2,163.42	1.52	1.87	1.36	1.22
Netherlands	2,070.08	1.45	1.79	1.91	1.68
Czech Republic	1,820.20	1.28	1.57	1.66	1.63
United Kingdom	1,663.38	1.17	1.44	1.86	1.79
Romania	1,383.03	0.97	1.20	1.53	1.32
Austria	1,368.99	0.96	1.18	1.41	1.44
Slovakia	1,328.65	0.93	1.15	1.36	1.51
Japan	1,253.72	0.88	1.08	1.36	1.16
Korea, South	1,217.94	0.85	1.05	1.61	1.33
Moldova	1,008.39	0.71	0.87	1.23	1.21
Brazil	715.27	0.50	0.62	0.87	0.77
Singapore	634.47	0.45	0.55	0.51	0.42
Sweden	550.16	0.39	0.48	0.90	0.79
Total basket	**115,690.69**	**81.19**	**100.00**	**100.00**	**100.00**
Total trade turnover	**142,485.56**	**x**	**x**	**x**	**x**

Notes: * total turnover is sum of annualised exports and imports.

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

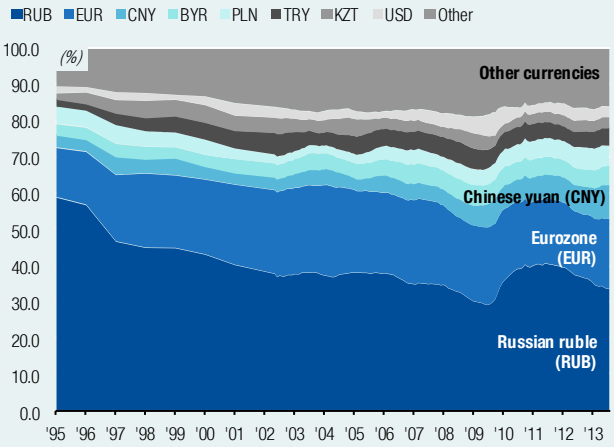
Chart 81. Historical breakdown of the ICU trade basket – history from January 1995 through August 2013 (% of total)

Breakdown by countries



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

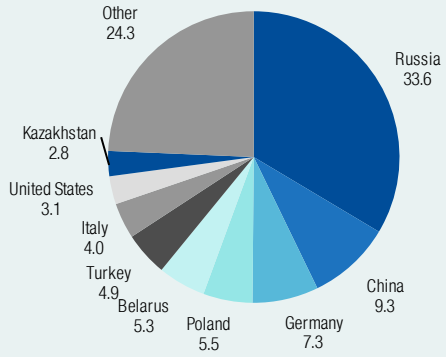
Breakdown by currencies



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

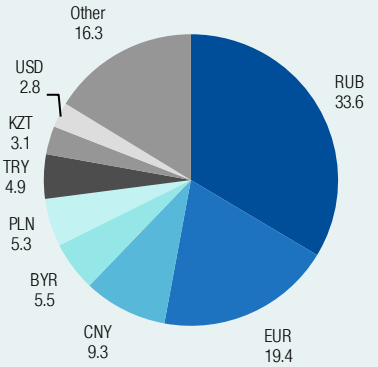
Chart 82. Breakdown of the ICU trade basket as of August 2013 (% of total)

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.

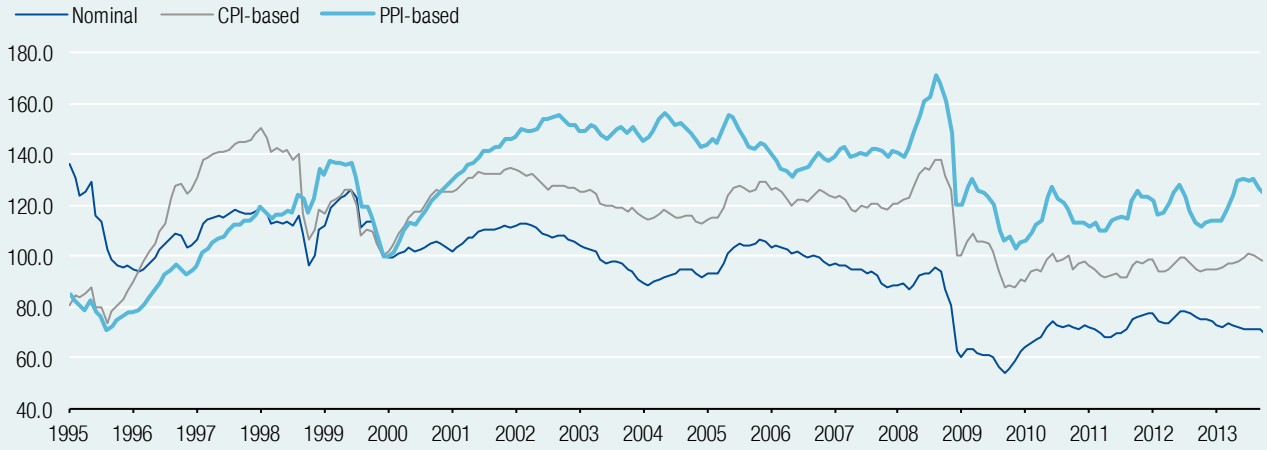
Table 15. Selected values of the ICU's monthly trade-weighted indices of Ukrainian hryvnia (UAH)

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	Sep-13
Nominal	135.9	100.0	90.8	88.2	77.3	77.4	77.3	76.3	74.7	74.1	74.3	74.0	70.6
CPI-based	80.4	100.0	116.8	120.1	98.8	99.1	98.2	96.2	93.9	92.7	92.6	92.0	98.7
PPI-based	84.8	100.0	148.4	141.3	123.0	131.5	127.6	126.4	124.2	121.3	121.5	119.2	126.5

Source: Investment Capital Ukraine LLC.

Chart 83. Monthly data of ICU's family of UAH trade-weighted indices

All-time history from January 1995 through June 2013



Source: Investment Capital Ukraine LLC.

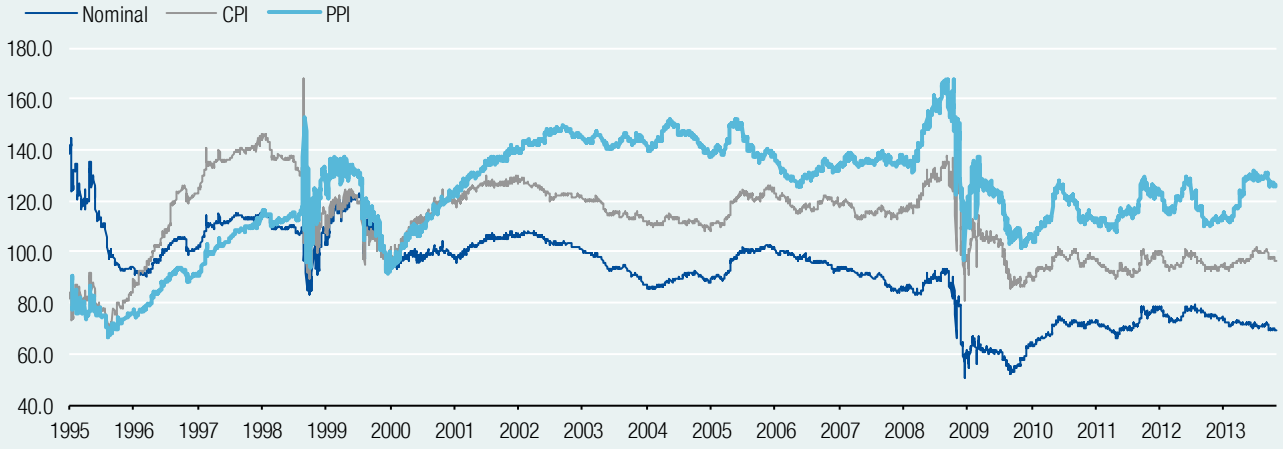
Table 16. Selected values of the ICU's daily trade-weighted indices of Ukrainian hryvnia (UAH)

Date	2-Jan-95	…	31-Dec-99	3-Jan-00	4-Jan-00	5-Jan-00	…	17-Oct-13	18-Oct-13	21-Oct-13	22-Oct-13	23-Oct-13	24-Oct-13	25-Oct-13
Nominal	138.5	…	100.0	99.1	99.4	95.4	…	69.1	69.1	69.2	68.8	69.0	68.9	68.9
CPI-based	81.9	…	100.0	101.4	101.7	97.6	…	96.9	96.9	97.1	96.6	96.7	96.7	96.7
PPI-based	86.4	…	100.0	99.4	99.7	95.7	…	126.0	125.9	126.1	125.5	125.7	125.6	125.7

Source: Investment Capital Ukraine LLC.

Chart 84. Daily data of ICU's family of UAH trade-weighted indices

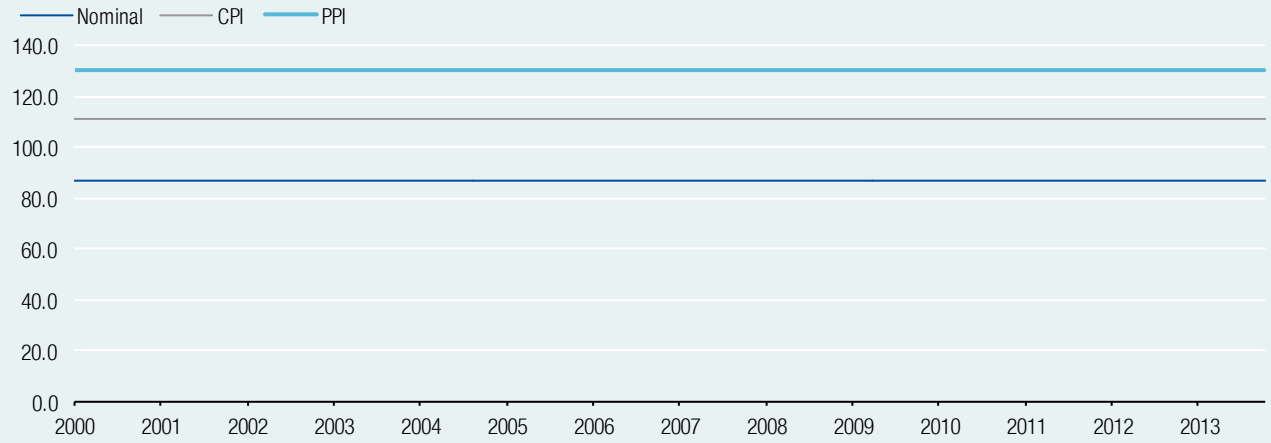
All-time history from January 1995 through 12 August 2013



Source: Investment Capital Ukraine LLC.

Chart 85. Long-term averages of the ICU's family of UAH trade-weighted indices (based on daily indices)

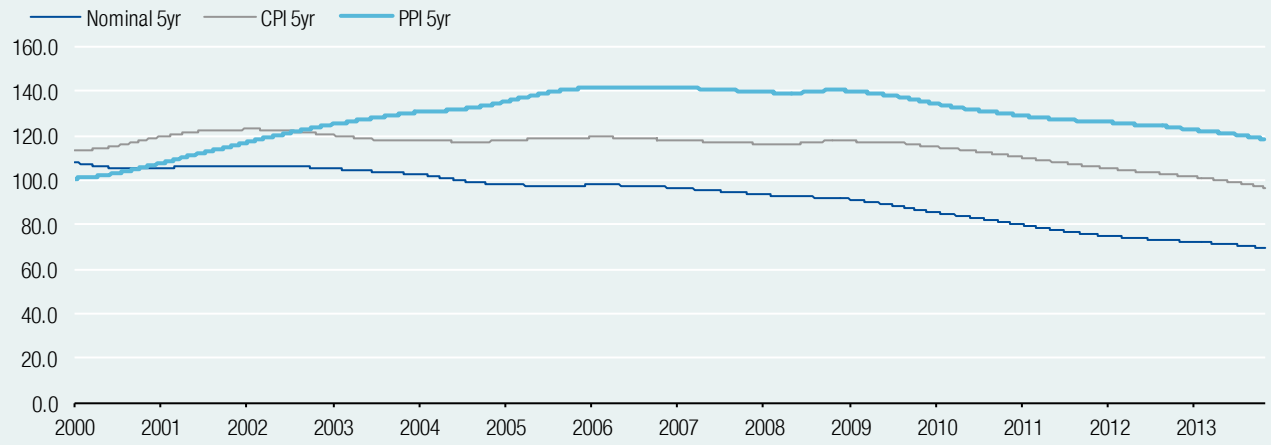
All-time history through 12 August 2013



Source: Investment Capital Ukraine LLC.

Chart 86. 5-year averages of the ICU's family of UAH trade-weighted indices (based on daily indices)

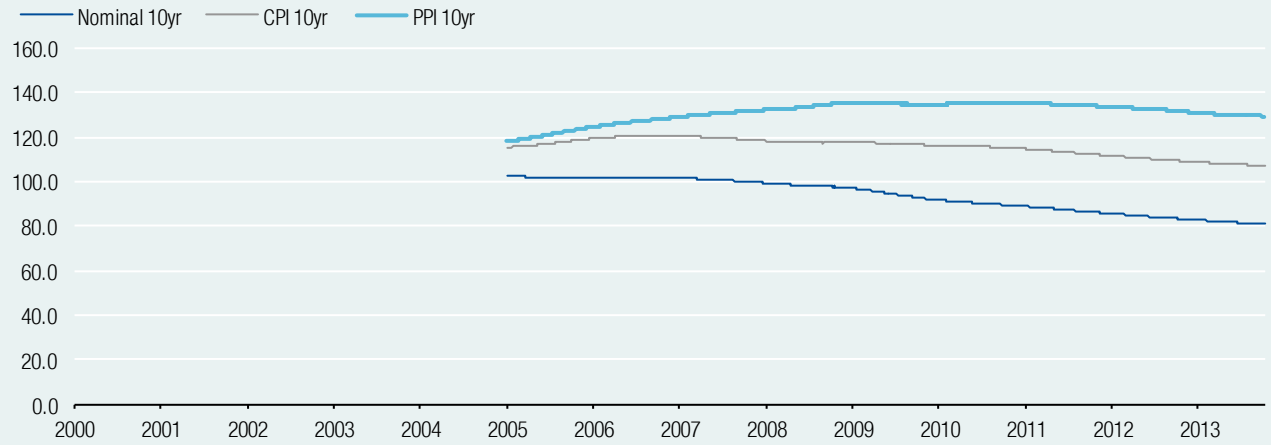
All-time history through 12 August 2013



Source: Investment Capital Ukraine LLC.

Chart 87. 10-year averages of the ICU's family of UAH trade-weighted indices (based on daily indices)

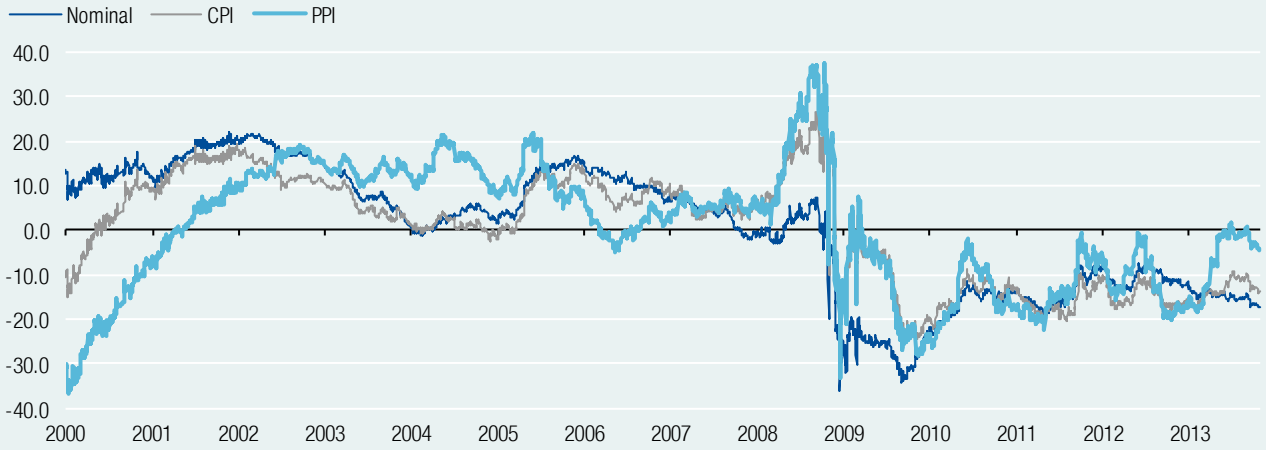
All-time history through 12 August 2013



Source: Investment Capital Ukraine LLC.

Chart 88. UAH misalignment vs. long-term averages of the ICU's UAH TWIs (based on daily indices)

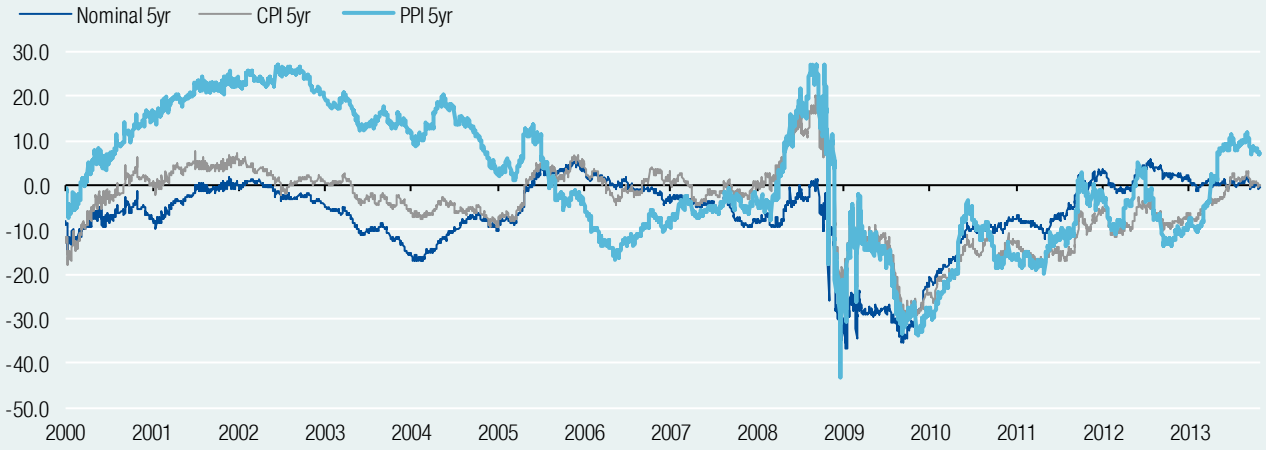
All-time history through 25January 2013



Source: Investment Capital Ukraine LLC.

Chart 89. UAH misalignment vs. 5-year averages of the ICU's UAH TWIs (based on daily indices)

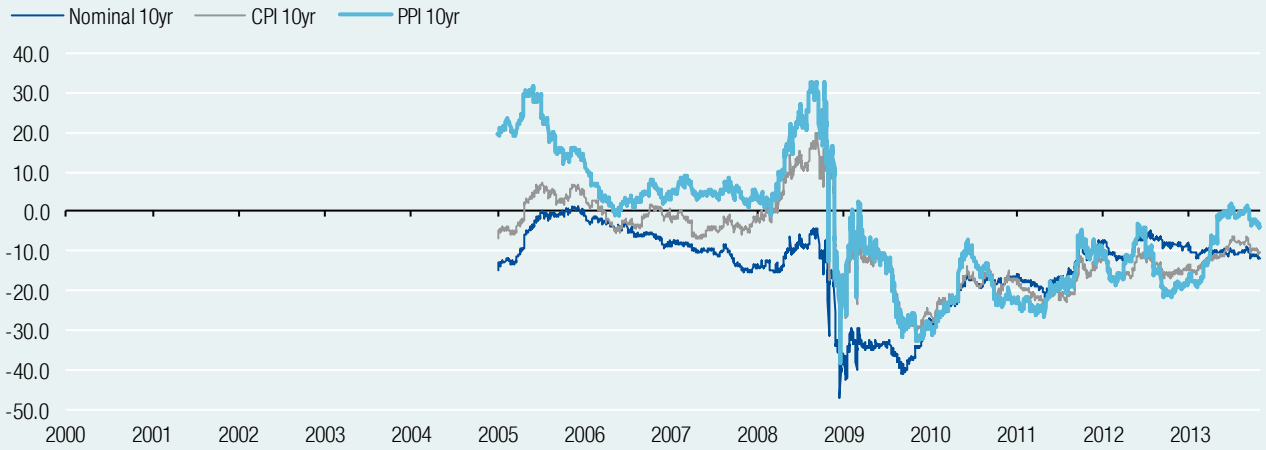
All-time history through 25January 2013



Source: Investment Capital Ukraine LLC.

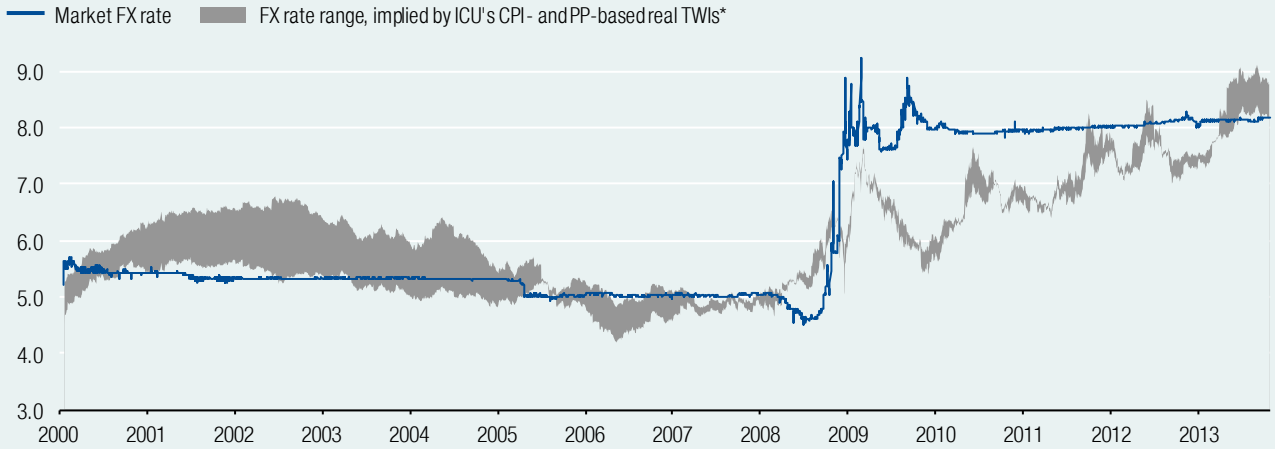
Chart 90. UAH misalignment vs. 10-year averages of the ICU's UAH TWIs (based on daily indices)

All-time history through 25January 2013



Source: Investment Capital Ukraine LLC.

Chart 91. USD/UAH market FX rate vs. the FX rate range implied by ICU's real TWIs. Daily history since 1 January 2000 through 25 October 2013

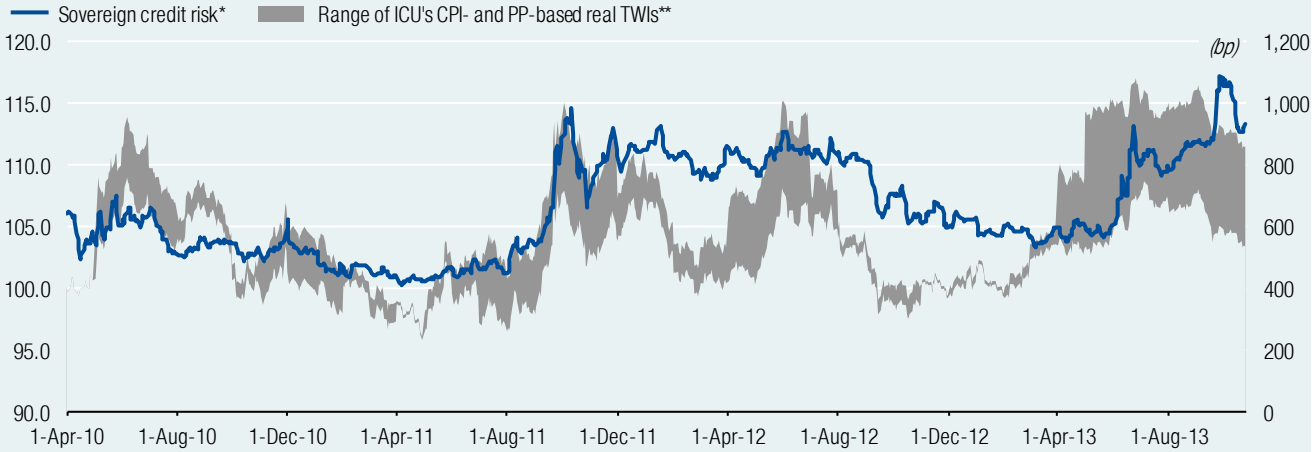


Note: * The USD/UAH rate implied by a real TWI is calculated by multiplying USD/UAH market exchange rate by the ratio of misalignment between the real TWI and its 5-year long-term averages. The calculation is based on the four series of TWIs: CPI- and PPI based indices and their misalignment with 5-year 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 two series and similarly the daily low point is the lowest implied rate out of the two series. Source: State Statistics Service of Ukraine, Investment Capital Ukraine LLC.

Chart 92. UAH's real TWIs versus Ukraine's sovereign credit risk[1] Daily history since **1 January 2005** through 25 October 2013

Sources: Bloomberg, State Statistics Committee of Ukraine.

Chart 93. UAH's real TWIs versus Ukraine's sovereign credit risk[1] Daily history since **1 April 2010** through 25 October 2013



Note: * credit default swaps on 5-year sovereign debt; ** the range is constructed upon the CPI- and PPI-based real TWIs, which are re-based at 100 points as of 1 April 2010.

Sources: Bloomberg, State Statistics Committee of Ukraine.

Russia's ruble (RUB): Input data and the indices

Input data: Trade partners, inflation and FX rates

This calculation is based on a basket of 20 countries that are Russia's key trading partners, which accounts for a 78.3% share of total merchandise trade turnover (exports and imports) for the last 12-month period to June 2013 (see Table 17 on page 77).

Inflation and exchange rates data are also used for the same 20 countries (see Chart 94-Chart 95 on page 78).

The RUB trade-weighted indices

Calculation results are presented in the tables and charts in Table 18 and Chart 96, pp.79. Averages of the indices are depicted in Chart 98-Chart 100 on pp.80. The right part of the same chart depicts RUB's misalignment through June 2013.

Table 17. Russia'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 Russia's ruble, data as of July 2013

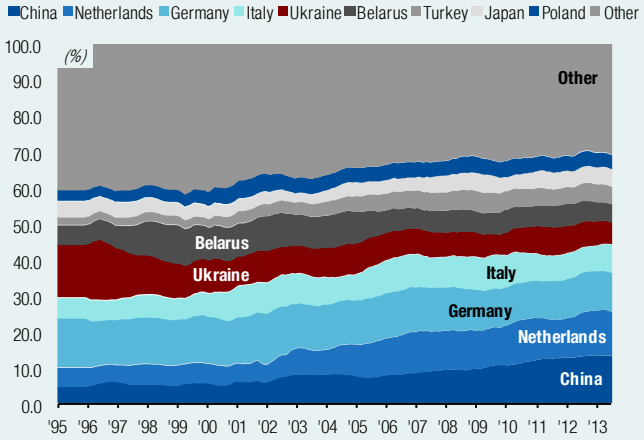
Country	Trade turnover* as of July 2013 (US$m)	Share in total turnover as of July 2013 (%)	Weight as of July 2013 (%)	Average weight, May 2002 till July 2013 (%)	Average weight, 1995-2013 (%)
China	87,431.40	10.43	13.35	8.05	87,431.40
Netherlands	78,425.60	9.36	11.97	8.17	78,425.60
Germany	72,197.30	8.61	11.02	12.44	72,197.30
Italy	51,839.00	6.18	7.91	7.47	51,839.00
Ukraine	39,798.20	4.75	6.07	9.02	39,798.20
Belarus	33,305.80	3.97	5.08	7.28	33,305.80
Turkey	32,926.30	3.93	5.03	4.03	32,926.30
Japan	32,509.90	3.88	4.96	3.90	32,509.90
United States	26,726.30	3.19	4.08	7.08	26,726.30
Poland	26,673.80	3.18	4.07	4.18	26,673.80
Kazakhstan	25,826.60	3.08	3.94	4.15	25,826.60
Korea, South	24,950.80	2.98	3.81	2.31	24,950.80
United Kingdom	24,426.30	2.91	3.73	4.15	24,426.30
France	23,761.80	2.83	3.63	3.66	23,761.80
Finland	17,890.40	2.13	2.73	3.96	17,890.40
Switzerland	12,542.20	1.50	1.91	3.66	12,542.20
Belgium	11,792.30	1.41	1.80	1.62	11,792.30
Spain	11,269.30	1.34	1.72	1.32	11,269.30
Czech Republic	10,621.80	1.27	1.62	1.93	10,621.80
India	10,231.10	1.22	1.56	1.61	10,231.10
Total basket	**655,146.20**	**78.15**	**100.00**	**100.00**	**655,146.20**
Total trade turnover	**838,289.80**	**x**	**x**	**x**	**838,289.80**

Notes: * total turnover is sum of annualised exports and imports.

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

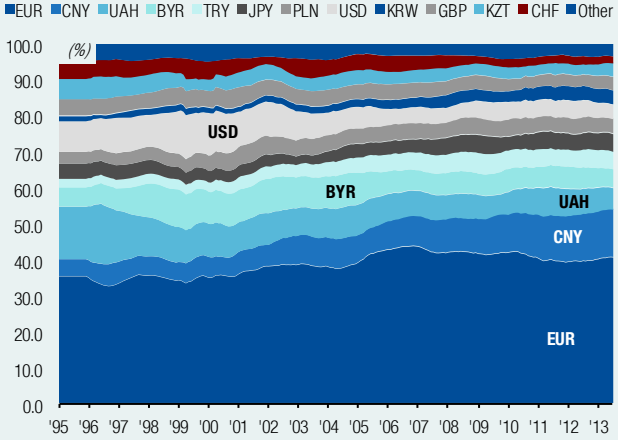
Chart 94. Historical breakdown of the ICU trade basket for Russia's ruble – history from January 1995 through July 2013 (% of total)

Breakdown by countries



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

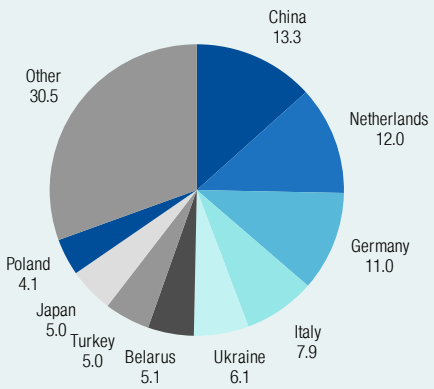
Breakdown by currencies



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

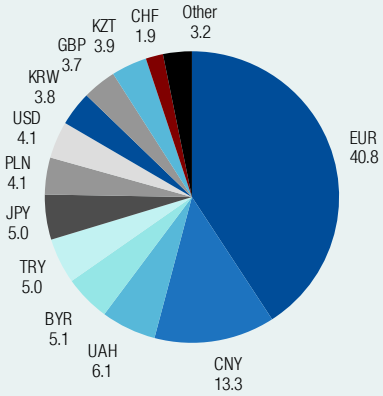
Chart 95. Breakdown of the ICU trade basket for Russia's ruble as of July 2013 (% of total)

Breakdown by countries



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

Breakdown by currencies



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

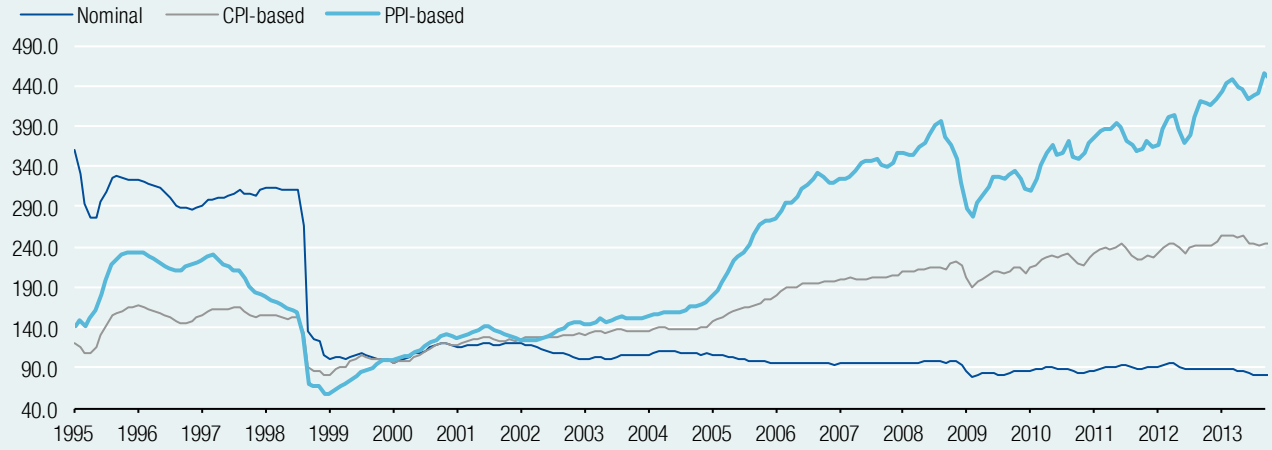
Table 18. Selected values of the ICU's monthly trade-weighted indices of Russia's ruble (RUB)

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	Sep-13
Nominal	342.7	100.0	110.2	99.2	91.2	88.0	88.9	89.7	88.8	88.7	88.2	88.1	81.7
CPI-based	113.7	100.0	141.8	210.7	227.2	232.0	240.5	241.6	240.3	241.3	241.8	246.0	243.1
PPI-based	134.7	100.0	158.7	366.0	363.4	370.1	379.7	402.6	419.0	416.1	413.3	421.4	419.8

Source: Investment Capital Ukraine LLC.

Chart 96. Monthly data of ICU's family of RUB trade-weighted indices

All-time history from January 1995 through June 2013



Source: Investment Capital Ukraine LLC.

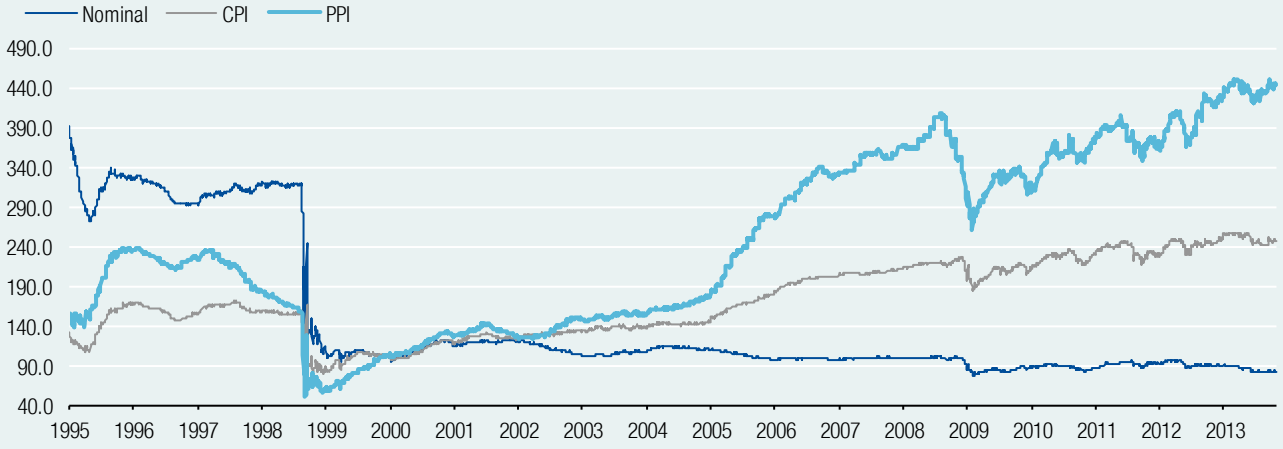
Table 19. Selected values of the ICU's daily trade-weighted indices of Russia's ruble (RUB)

Date	2-Jan-95	…	31-Dec-99	3-Jan-00	4-Jan-00	5-Jan-00	…	30-Sep-13	1-Oct-13	2-Oct-13	3-Oct-13	4-Oct-13	7-Oct-13	8-Oct-13
Nominal	392.8	…	100.0	99.6	98.8	99.6	…	81.7	82.1	82.0	81.9	82.0	81.8	81.4
CPI-based	130.4	…	100.0	100.4	99.7	100.5	…	245.6	246.8	246.3	246.0	246.5	245.7	244.7
PPI-based	154.9	…	100.0	103.8	103.0	103.9	…	430.3	432.3	431.5	431.0	431.8	430.5	428.7

Source: Investment Capital Ukraine LLC.

Chart 97. Daily data of ICU's family of RUB trade-weighted indices

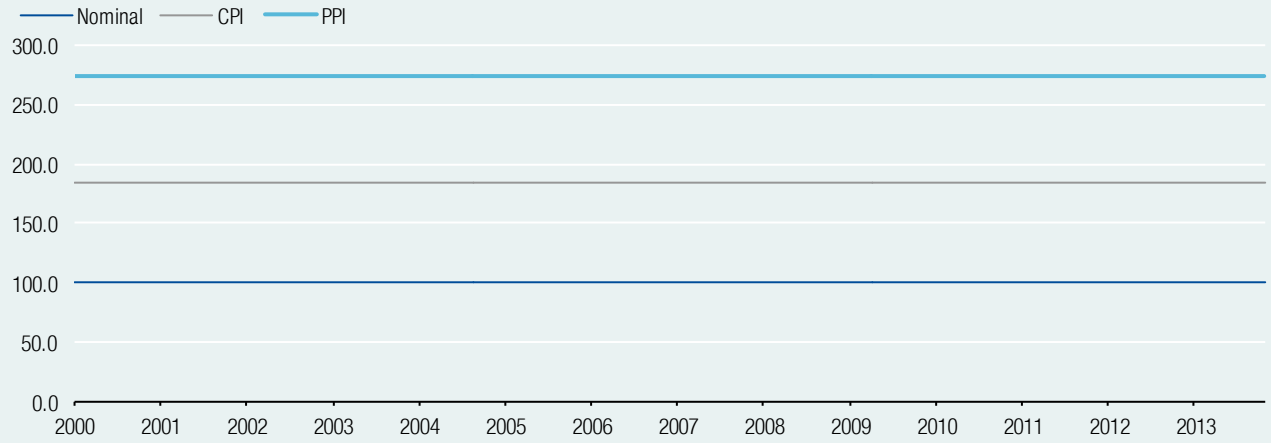
All-time history from January 1995 through 25 October 2013



Source: Investment Capital Ukraine LLC.

Chart 98. Long-term averages of the ICU's family of RUB trade-weighted indices (based on daily indices)

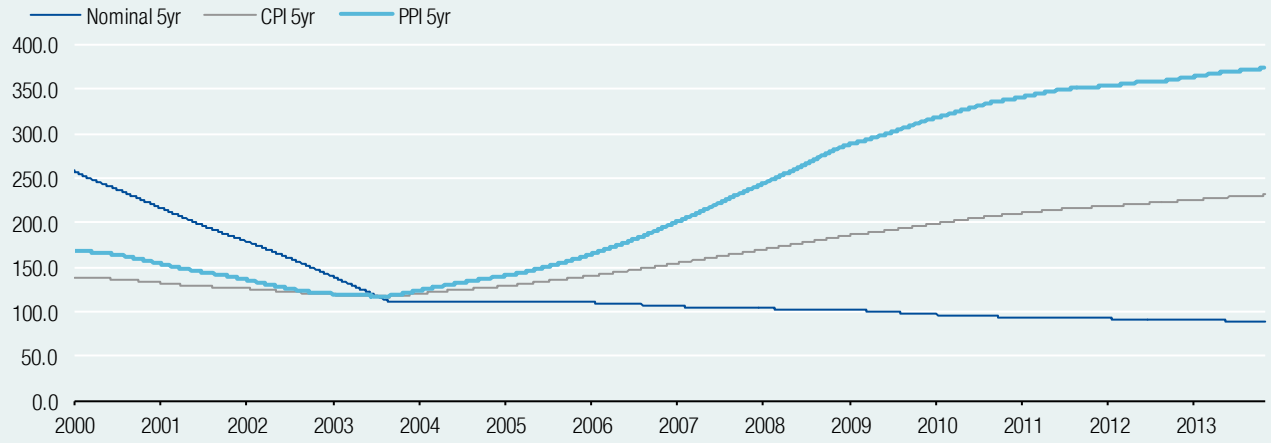
All-time history through 25 October 2013



Source: Investment Capital Ukraine LLC.

Chart 99. 5-year averages of the ICU's family of RUB trade-weighted indices (based on daily indices)

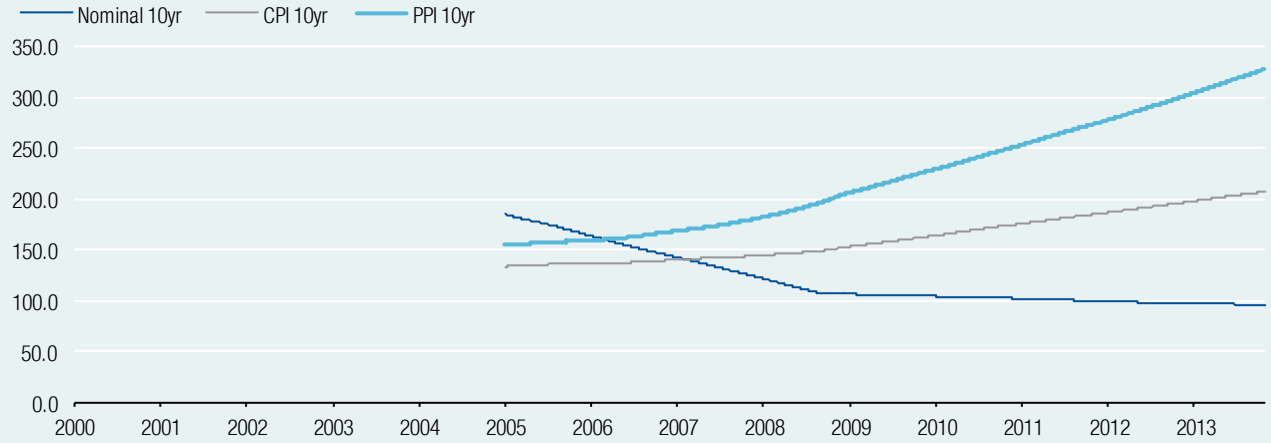
All-time history through 25 October 2013



Source: Investment Capital Ukraine LLC.

Chart 100. 10-year averages of the ICU's family of RUB trade-weighted indices (based on daily indices)

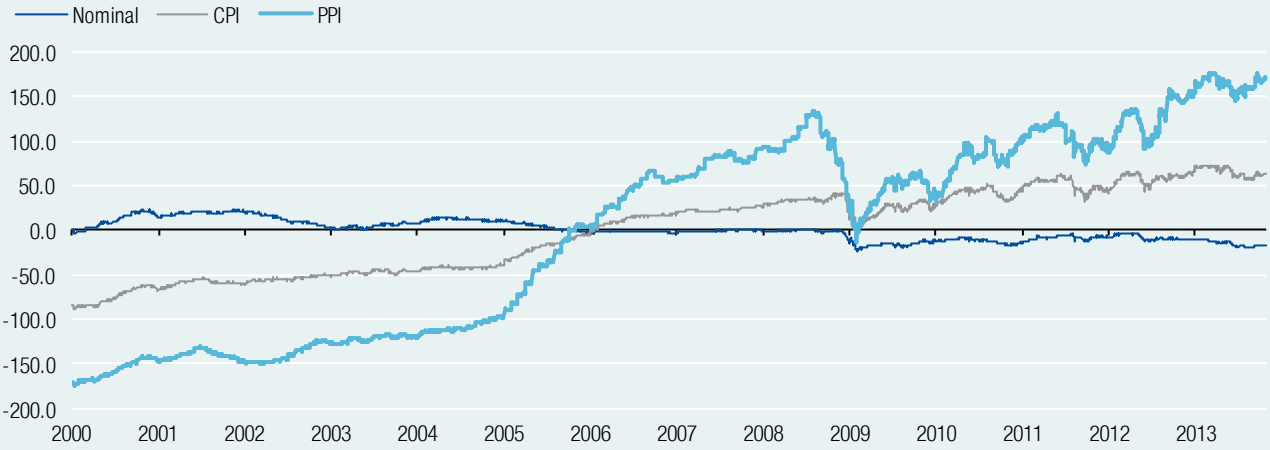
All-time history through 25 October 2013



Source: Investment Capital Ukraine LLC.

Chart 101. UAH misalignment vs. long-term averages of the ICU's RUB TWIs (based on daily indices)

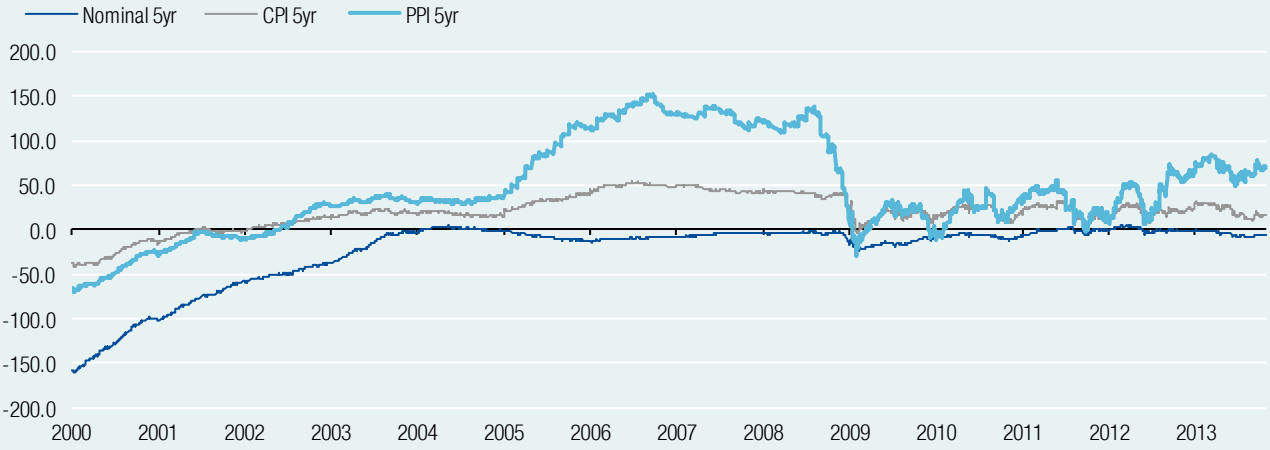
All-time history through 25 October 2013



Source: Investment Capital Ukraine LLC.

Chart 102. UAH misalignment vs. 5-year averages of the ICU's RUB TWIs (based on daily indices)

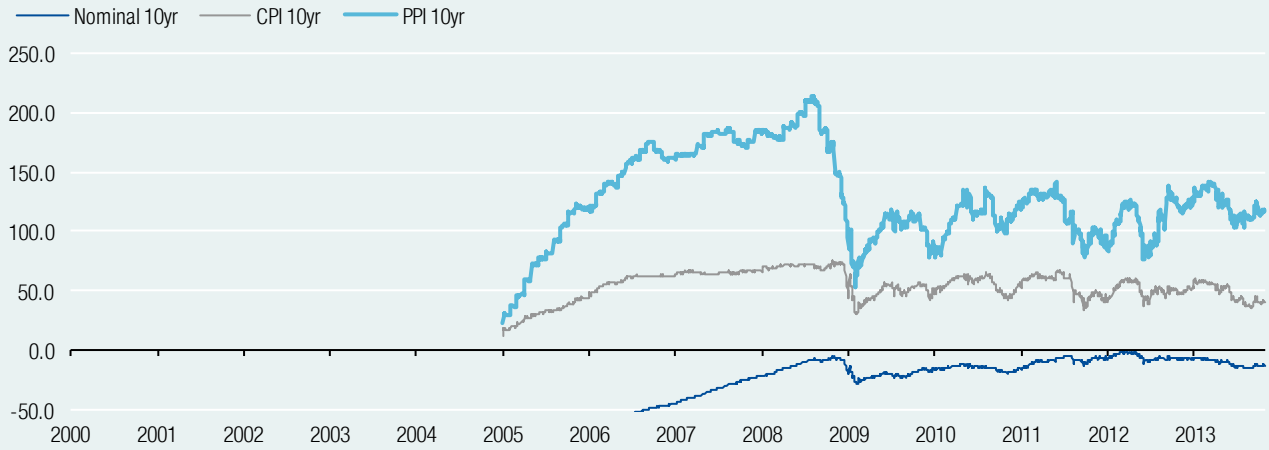
All-time history through 25 October 2013



Source: Investment Capital Ukraine LLC.

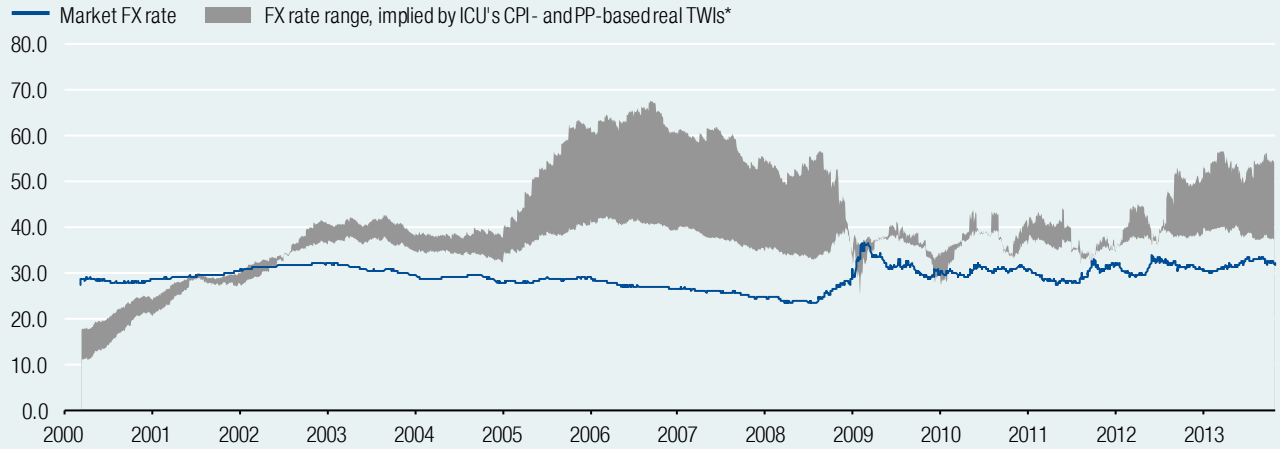
Chart 103. UAH misalignment vs. 10-year averages of the ICU's RUB TWIs (based on daily indices)

All-time history through 25 October 2013



Source: Investment Capital Ukraine LLC.

Chart 104. USD/RUB market FX rate vs. the FX rate range implied by ICU's real TWIs. Daily history since 1 January 2000 through 25 October 2013



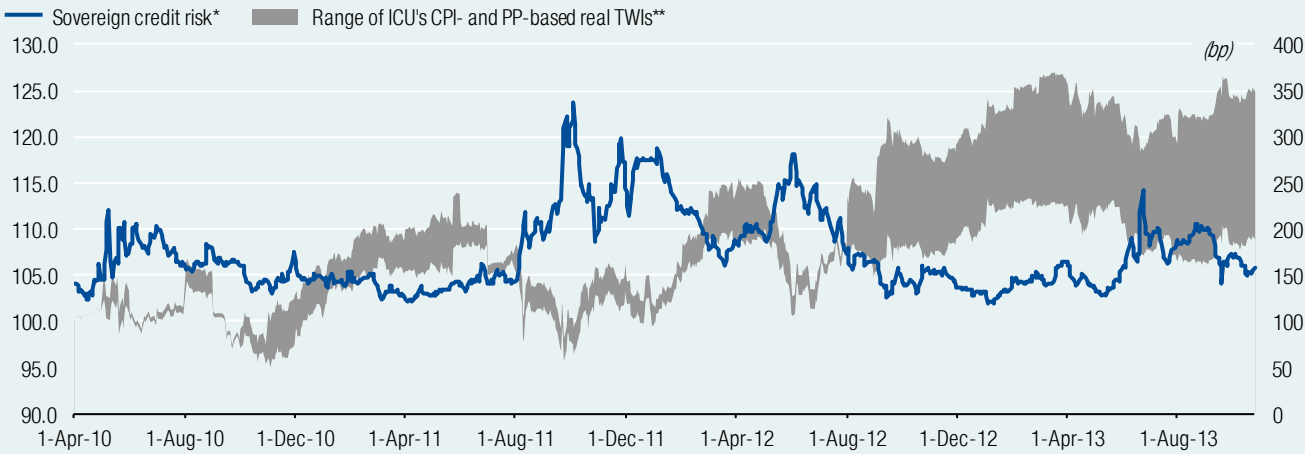
Note: * The USD/RUB rate implied by a real TWI is calculated by multiplying USD/RUB market exchange rate by the ratio of misalignment between the real TWI and its 5-year long-term averages. The calculation is based on the four series of TWIs: CPI- and PPI based indices and their misalignment with 5-year 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 two series and similarly the daily low point is the lowest implied rate out of the two series.

Source: Investment Capital Ukraine LLC.

Chart 105. RUB's real TWIs versus Russia's sovereign credit risk[1] Daily history since **1 January 2001** through 25 October 2013

Sources: Bloomberg, State Statistics Committee of Ukraine.

Chart 106. RUB's real TWIs versus Russia's sovereign credit risk[1] Daily history since **1 April 2010** through 25 October 2013



Note: * credit default swaps on 5-year sovereign debt; ** the range is constructed upon the CPI- and PPI-based real TWIs, which are re-based at 100 points as of 1 April 2010.

Sources: Bloomberg, State Statistics Committee of Ukraine.

Belarus' ruble (BYR): Input data and the indices

Input data: Trade partners, inflation and FX rates

This calculation is based on a basket of 13 countries that are Belarus's key trading partners, which accounts for a 86.6% share of total merchandise trade turnover (exports and imports) for the last 12-month period to July 2013 (see Table 20 on page 83). Inflation and exchange rates data are also used for the same 13 countries (see Chart 107-Chart 108 on page 84).

The BYR trade-weighted indices

Calculation results are presented in the tables and charts on pp.85.

Averages of the indices are depicted in the charts on pp.86.

BYR's misalignment through three angles of economic cycle length (five- and 10-year) is depicted in the charts on pp.87.

Lastly, the range of TWI-implied USD/BYR rates is depicted in the Chart 117 on pp.88.

Table 20. Belarus' key partners by merchandise trade turnover and their weights in the basket used for calculation of ICU's family of trade-weighted indices of Belarus' ruble, data as of July 2013

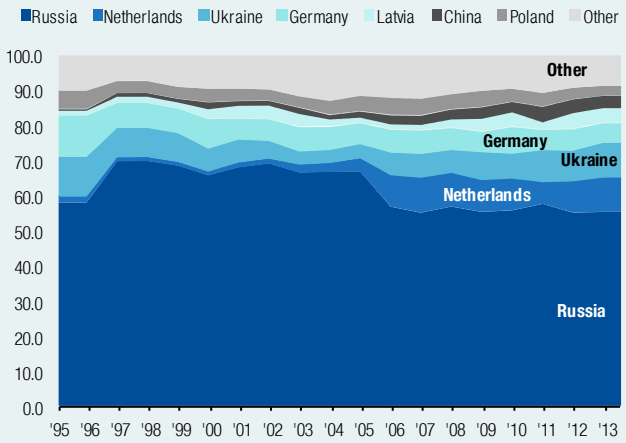
Country	Trade turnover* as of July 2013 (US$m)	Share in total turnover as of July 2013 (%)	Weight as of July 2013 (%)	Average weight, May 2002 till July 2013 (%)	Average weight, 1995-2013 (%)
Russian Federation	44,148.46	47.79	55.18	58.88	61.80
Netherlands	8,061.33	8.73	10.08	7.49	5.12
Ukraine	7,917.39	8.57	9.90	6.76	7.28
Germany	4,501.55	4.87	5.63	6.37	7.02
Latvia	3,435.52	3.72	4.29	2.91	2.67
China	2,826.67	3.06	3.53	2.80	2.14
Poland	2,314.07	2.50	2.89	4.11	4.04
Italy	1,655.27	1.79	2.07	2.00	1.76
Lithuania	1,563.29	1.69	1.95	1.78	2.32
Brazil	1,010.93	1.09	1.26	1.38	1.11
United Kingdom	932.62	1.01	1.17	3.31	2.50
Kazakhstan	928.22	1.00	1.16	0.91	0.82
United States	715.18	0.77	0.89	1.30	1.42
Total basket	**80,010.49**	**86.61**	**100.00**	**100.00**	**100.00**
Total trade turnover	**92,383.58**	**100.00**	**x**	**x**	**x**

Notes: * total turnover is sum of annualised exports and imports.

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

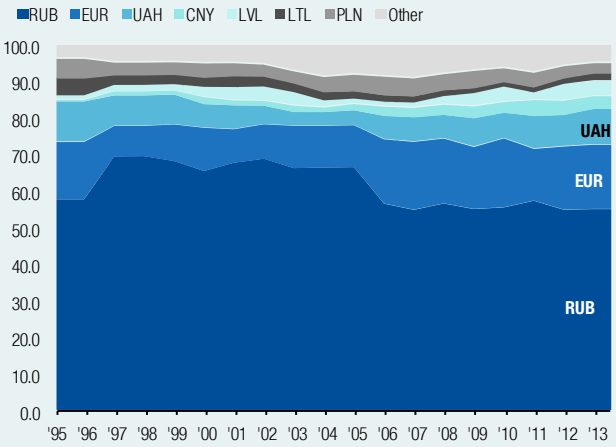
Chart 107. Historical breakdown of the ICU trade basket for Belarus' ruble – history from January 1995 through July 2013 (% of total)

Breakdown by countries



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

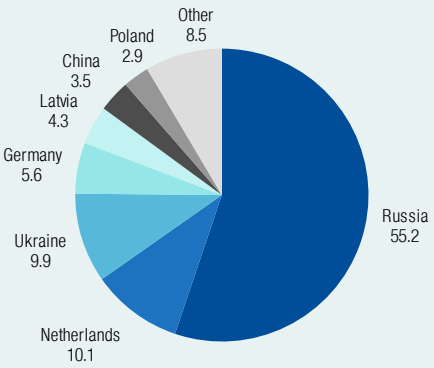
Breakdown by currencies



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

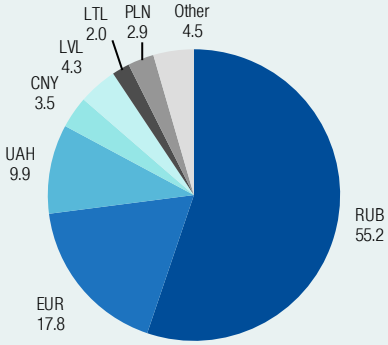
Chart 108. Breakdown of the ICU trade basket for Belarus' ruble as of July 2013 (% of total)

Breakdown by countries



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

Breakdown by currencies



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

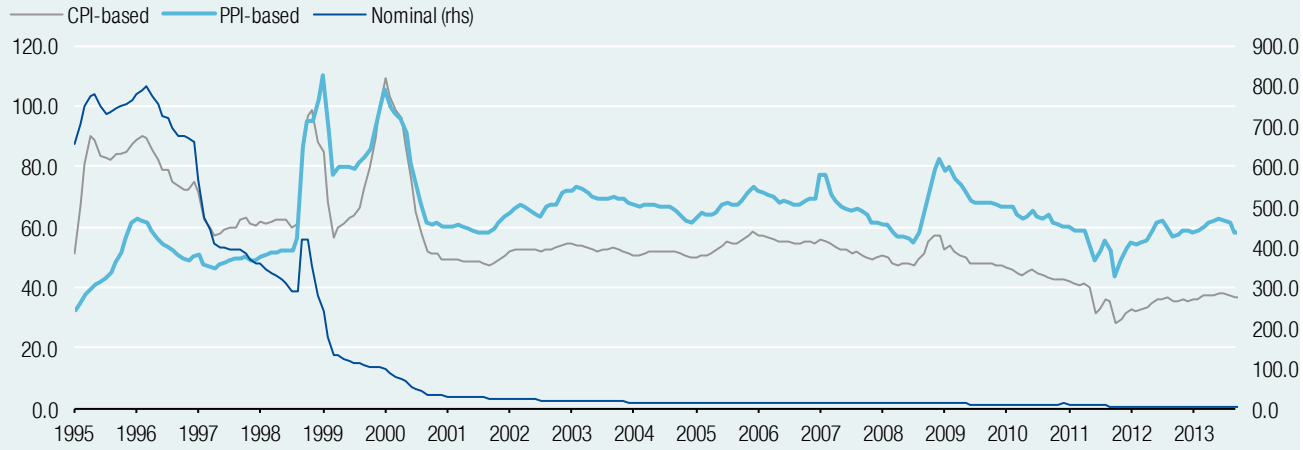
Table 21. Selected values of the ICU's monthly trade-weighted indices of Belarus' ruble (BYR)

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	Sep-13
Nominal	657.8	100.0	14.7	10.6	3.4	3.6	3.6	3.6	3.4	3.4	3.4	3.3	3.3
CPI-based	50.9	100.0	51.3	50.1	31.5	35.9	35.9	36.3	35.4	35.2	36.0	35.6	36.8
PPI-based	32.5	100.0	68.0	61.1	53.1	61.4	61.8	59.9	57.0	57.4	58.8	58.5	58.2

Source: Investment Capital Ukraine LLC.

Chart 109. Monthly data of ICU's family of BYR trade-weighted indices

All-time history from January 1995 through June 2013



Source: Investment Capital Ukraine LLC.

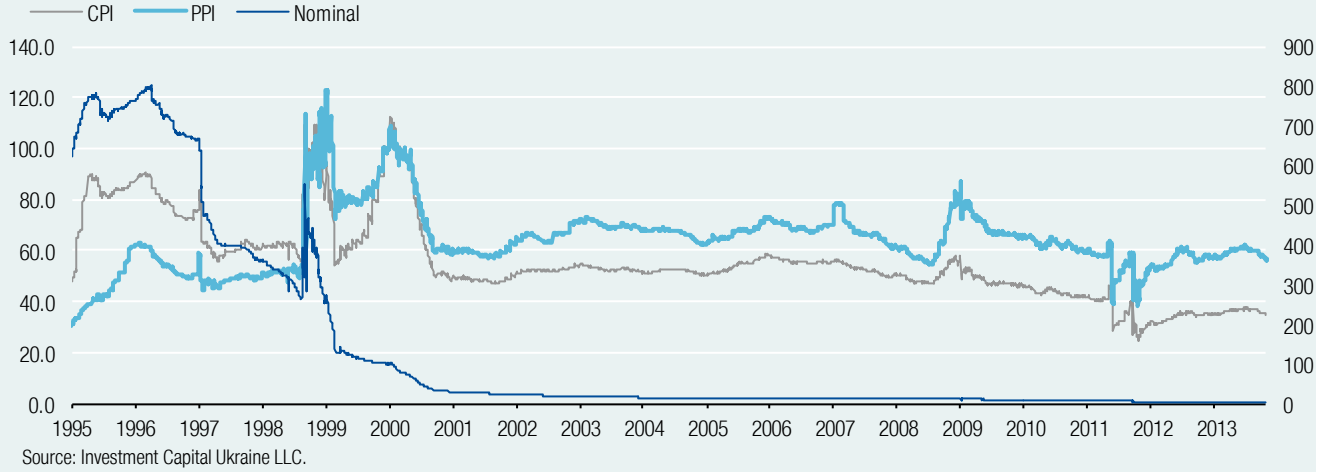
Table 22. Selected values of the ICU's daily trade-weighted indices of Belarus' ruble (BYR)

Date	2-Jan-95	…	31-Dec-99	3-Jan-00	4-Jan-00	5-Jan-00	…	17-Oct-13	18-Oct-13	21-Oct-13	22-Oct-13	23-Oct-13	24-Oct-13	25-Oct-13
Nominal	623.2	…	100.0	99.6	99.9	99.9	…	3.1	3.1	3.1	3.1	3.1	3.1	3.1
CPI-based	48.3	…	100.0	110.7	111.1	111.0	…	34.8	34.8	34.8	34.6	34.7	34.6	34.7
PPI-based	30.8	…	100.0	107.1	107.5	107.4	…	56.7	56.7	56.8	56.4	56.5	56.5	56.5

Source: Investment Capital Ukraine LLC.

Chart 110. Daily data of ICU's family of BYR trade-weighted indices

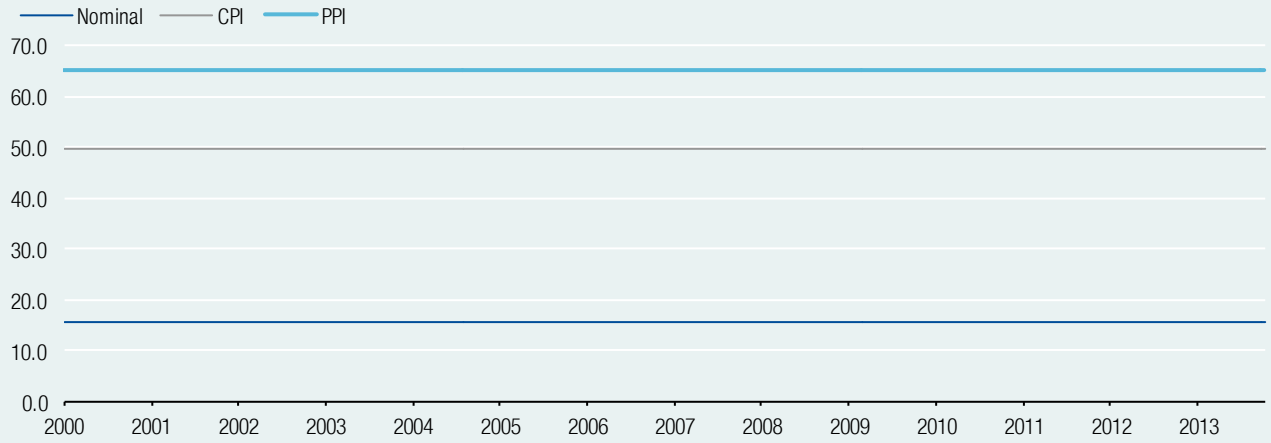
All-time history from January 1995 through 12 August 2013



Source: Investment Capital Ukraine LLC.

Chart 111. Long-term averages of the ICU's family of BYR trade-weighted indices (based on daily indices)

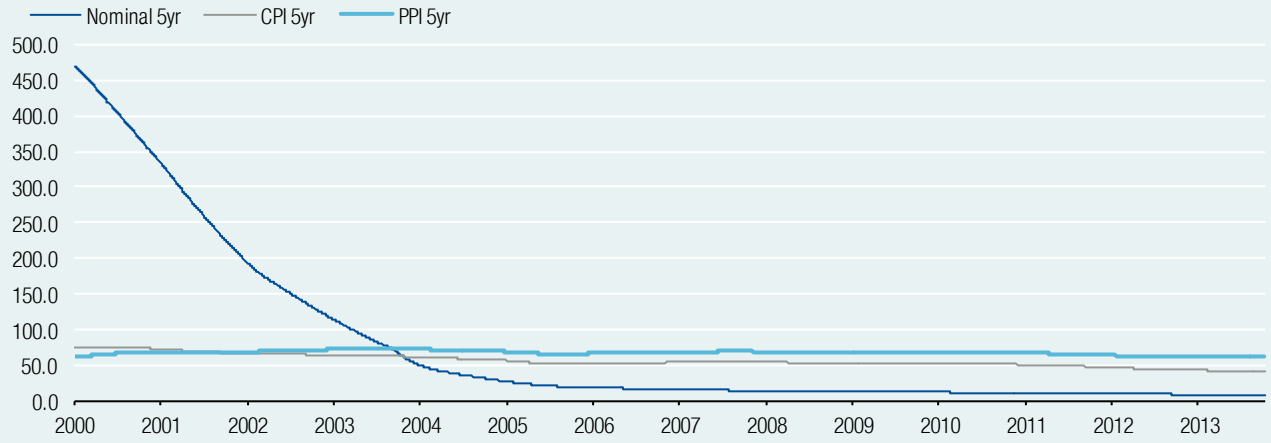
All-time history through 25 October 2013



Source: Investment Capital Ukraine LLC.

Chart 112. 5-year averages of the ICU's family of BYR trade-weighted indices (based on daily indices)

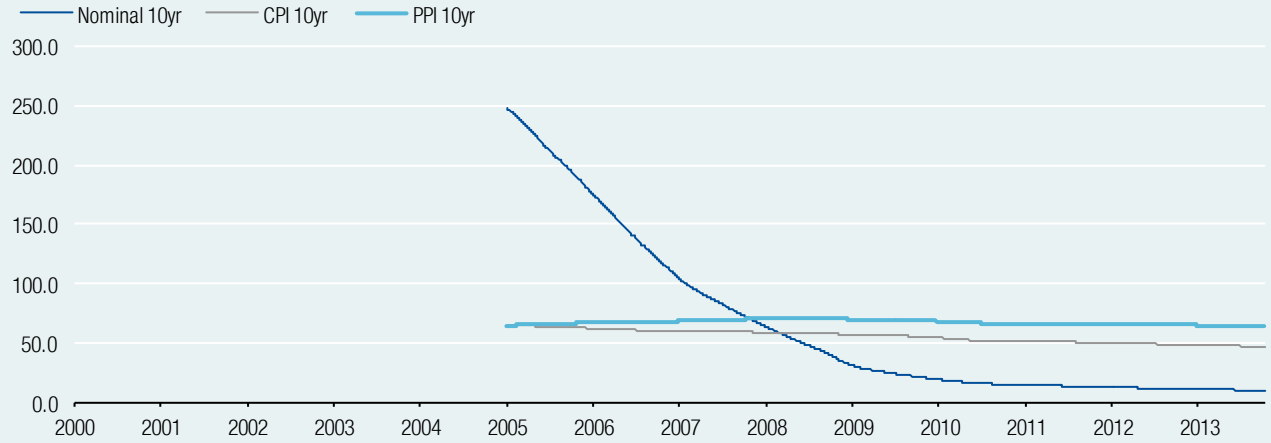
All-time history through 25 October 2013



Source: Investment Capital Ukraine LLC.

Chart 113. 10-year averages of the ICU's family of BYR trade-weighted indices (based on daily indices)

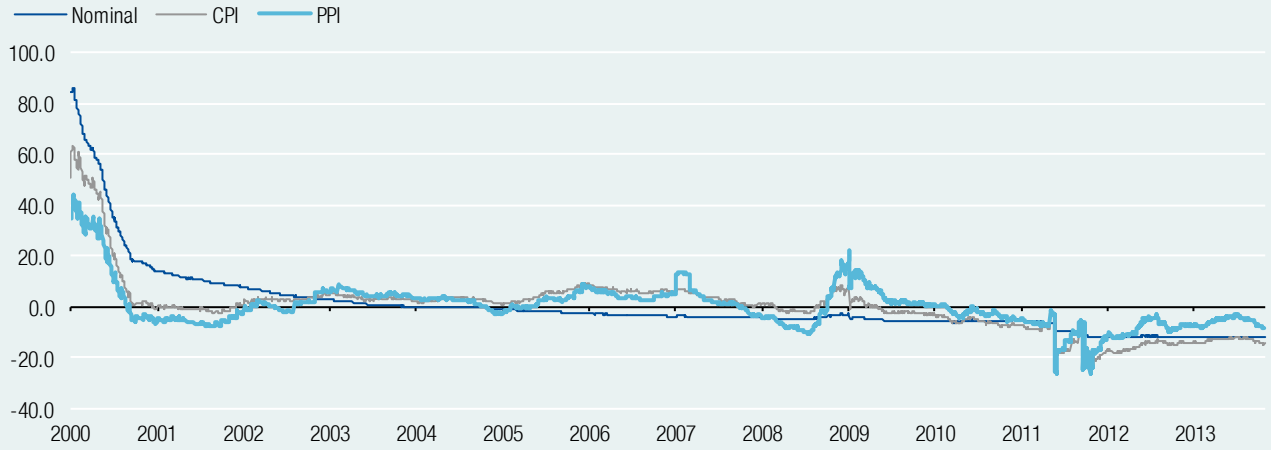
All-time history through 25 October 2013



Source: Investment Capital Ukraine LLC.

Chart 114. BYR misalignment vs. long-term averages of the ICU's BYR TWIs (based on daily indices)

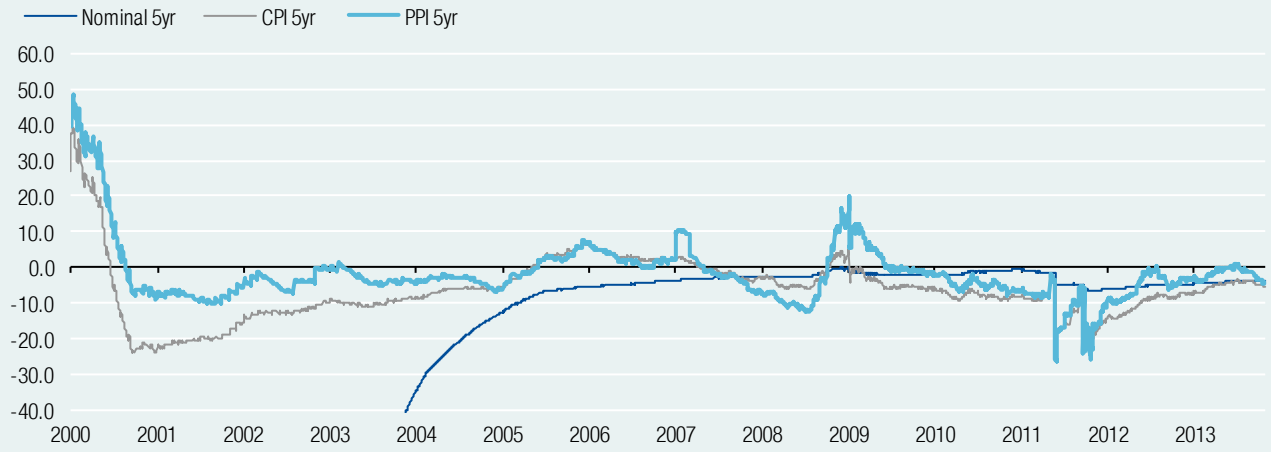
All-time history through 25 October 2013



Source: Investment Capital Ukraine LLC.

Chart 115. BYR misalignment vs. 5-year averages of the ICU's BYR TWIs (based on daily indices)

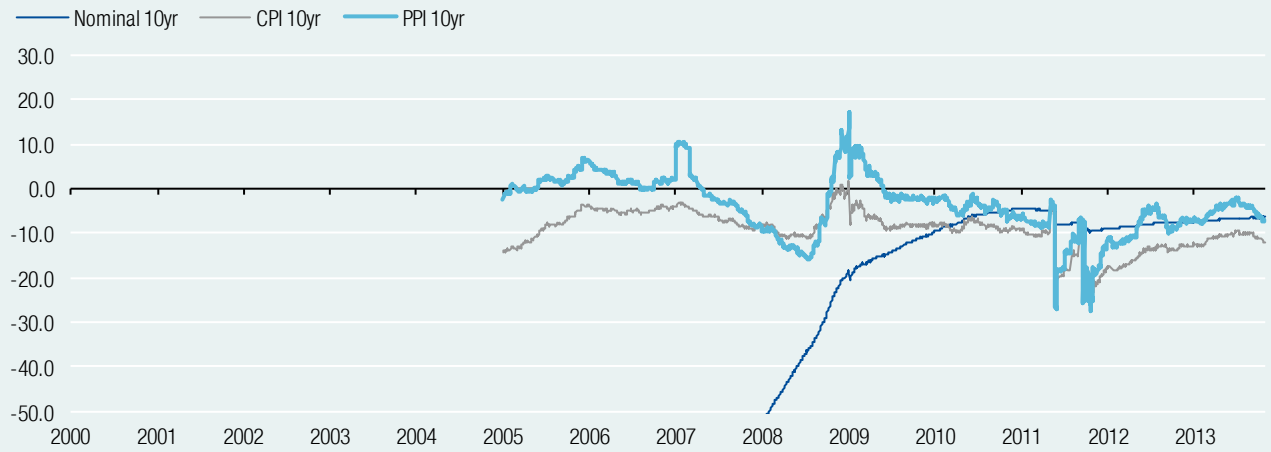
All-time history through 25 October 2013



Source: Investment Capital Ukraine LLC.

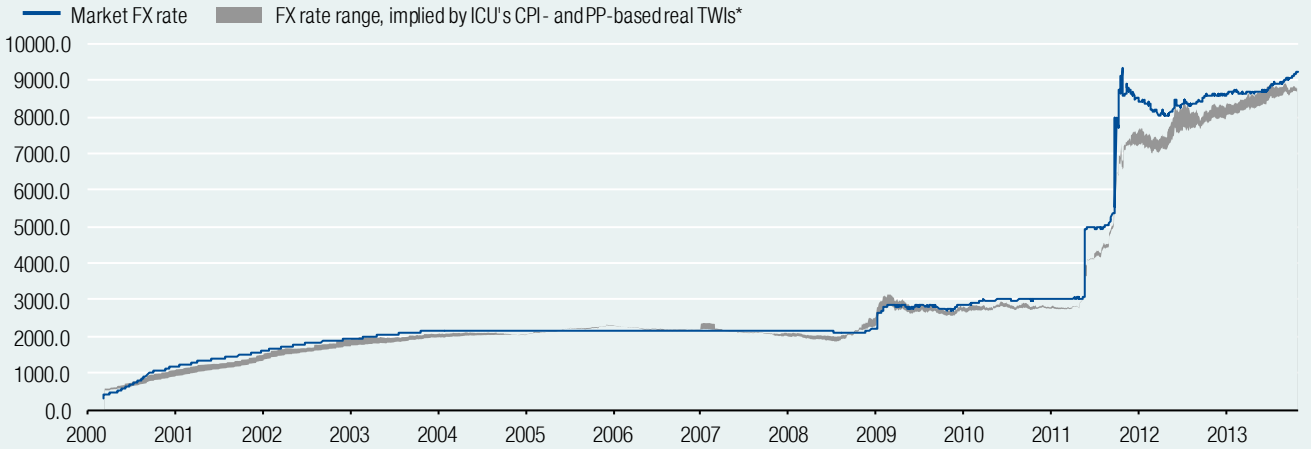
Chart 116. BYR misalignment vs. 10-year averages of the ICU's BYR TWIs (based on daily indices)

All-time history through 25 October 2013



Source: Investment Capital Ukraine LLC.

Chart 117. USD/BYR market FX rate vs. the FX rate range implied by ICU's real TWIs. Daily history since 1 January 2000 through 25 October 2013



Note: * The USD/BYR rate implied by a real TWI is calculated by multiplying USD/BYR market exchange rate by the ratio of misalignment between the real TWI and its 5-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 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 two series and similarly the daily low point is the lowest implied rate out of the two series.

Source: Investment Capital Ukraine LLC.

Kazakhstan's tenge (KZT): Input data and the indices

Input data: Trade partners, inflation and FX rates

This calculation is based on a basket of 17 countries that are Kazakhstan's key trading partners, which accounts for a 85.1% share of total merchandise trade turnover (exports and imports) for the last 12-month period to July 2013 (see table below).

Inflation and exchange rates data are also used for the same 17 countries (see Chart 118-Chart 119 on page 90).

The KZT trade-weighted indices

Calculation results are presented in the tables and charts on pp.91.

Averages of the indices are depicted in the charts on pp.92.

BYR's misalignment through three angles of economic cycle length (five- and 10-year) is depicted in the charts on pp.93.

Lastly, the range of TWI-implied USD/KZT rates is depicted in the Chart 128 on pp.94.

Table 23. Kazakhstan'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 Kazakhstan's tenge, data as of July 2013

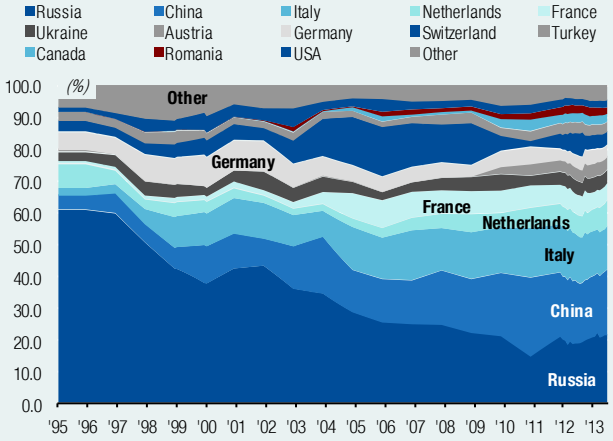
Country	Trade turnover* as of July 2013 (US$m)	Share in total turnover as of July 2013 (%)	Weight as of July 2013 (%)	Average weight, May 2002 till July 2013 (%)	Average weight, 1995-2013 (%)
Russia	24,139.38	18.28	21.47	25.01	34.41
China	23,027.35	17.44	20.48	17.03	13.32
Italy	15,519.09	11.75	13.81	13.55	11.06
Netherlands	9,216.07	6.98	8.20	4.43	4.38
France	5,736.08	4.34	5.10	6.19	4.21
Ukraine	4,759.23	3.60	4.23	4.02	3.94
Austria	4,751.89	3.60	4.23	1.64	1.17
Germany	4,150.58	3.14	3.69	4.89	6.00
Switzerland	4,630.46	3.51	4.12	9.45	7.35
Turkey	3,415.66	2.59	3.04	2.50	2.57
Canada	2,855.83	2.16	2.54	1.66	1.09
Romania	2,198.12	1.66	1.96	1.42	0.91
United States	2,663.48	2.02	2.37	3.00	3.11
United Kingdom	2,527.72	1.91	2.25	2.51	3.48
Poland	1,632.25	1.24	1.45	1.74	1.57
Belarus	886.29	0.67	0.79	0.64	0.82
Lithuania	306.14	0.23	0.27	0.32	0.61
Total basket	**112,415.60**	**85.15**	**100.00**	**100.00**	**100.00**
Total trade turnover	**132,028.20**	**100.00**	**x**	**x**	**x**

Notes: * total turnover is sum of annualised exports and imports.

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

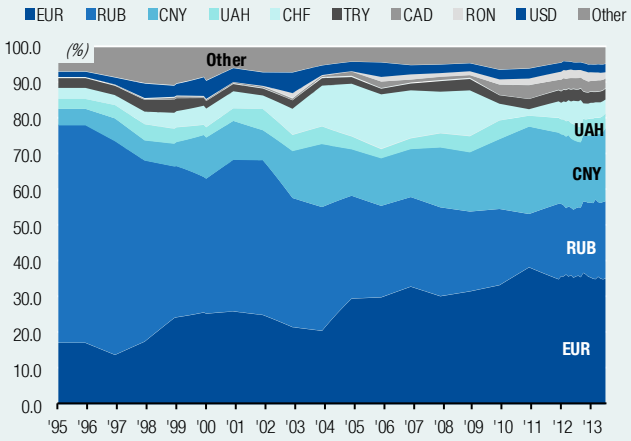
Chart 118. Historical breakdown of the ICU trade basket for Kazakhstan's tenge – history from January 1995 through July 2013 (% of total)

Breakdown by countries



Sources: United Nations, Kazakhstan state statistical agency, Investment Capital Ukraine LLC.

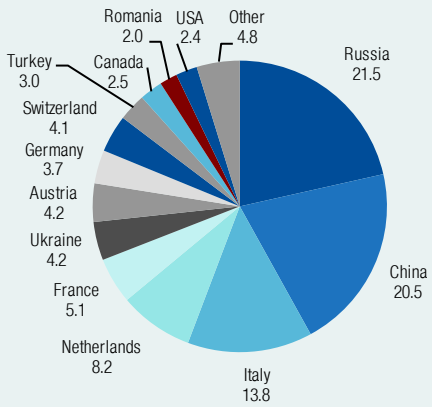
Breakdown by currencies



Sources: United Nations, Kazakhstan state statistical agency, Investment Capital Ukraine LLC.

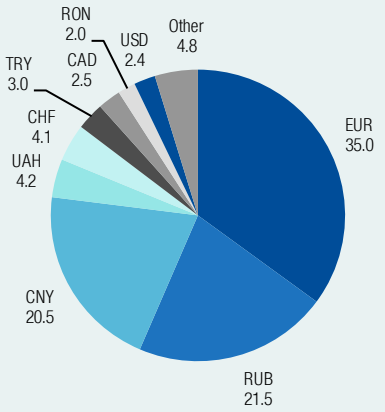
Chart 119. Breakdown of the ICU trade basket for Kazakhstan's tenge as of July 2013 (% of total)

Breakdown by countries



Sources: United Nations, Kazakhstan state statistical agency, Investment Capital Ukraine LLC.

Breakdown by currencies



Sources: United Nations, Kazakhstan state statistical agency, Investment Capital Ukraine LLC.

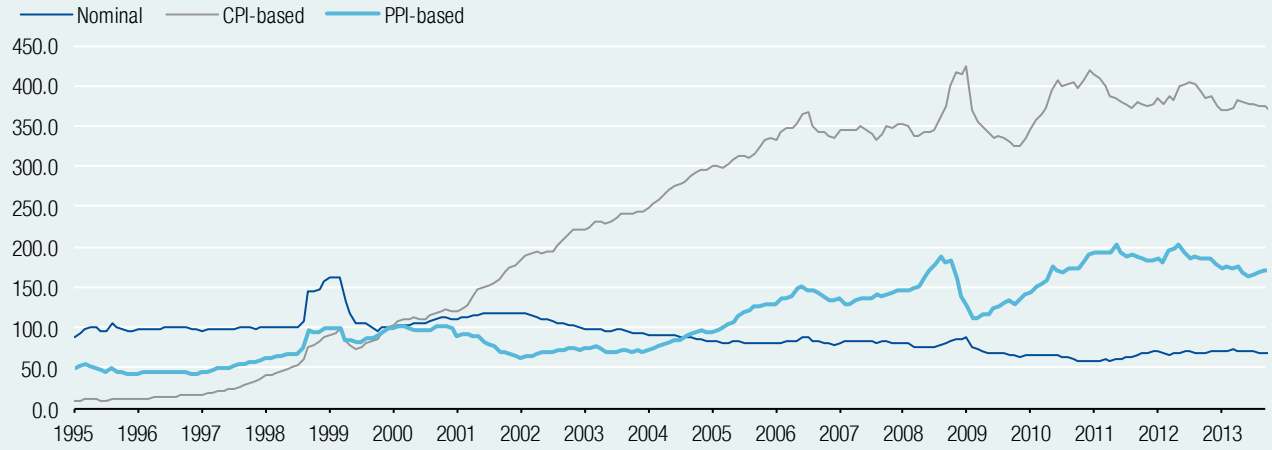
Table 24. Selected values of the ICU's monthly trade-weighted indices of Kazakhstan's tenge (KZT)

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	Sep-13
Nominal	86.6	100.0	91.7	81.3	70.8	69.5	69.5	69.2	67.7	69.2	70.1	70.3	68.5
CPI-based	9.4	100.0	242.7	352.8	378.3	403.3	405.8	403.4	392.6	384.5	386.6	375.8	374.5
PPI-based	50.7	100.0	70.0	147.2	182.5	194.0	186.8	188.3	185.2	186.6	186.2	177.9	170.6

Source: Investment Capital Ukraine LLC.

Chart 120. Monthly data of ICU's family of KZT trade-weighted indices

All-time history from January 1995 through September 2013



Source: Investment Capital Ukraine LLC.

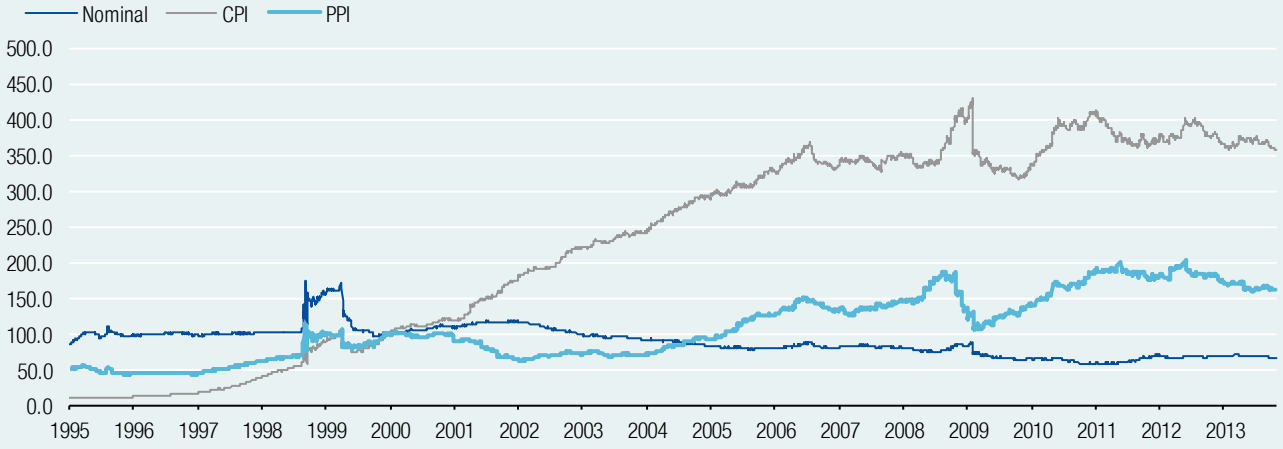
Table 25. Selected values of the ICU's daily trade-weighted indices of Kazakhstan's tenge (KZT)

Date	2-Jan-95	…	31-Dec-99	3-Jan-00	4-Jan-00	5-Jan-00	…	17-Oct-13	18-Oct-13	21-Oct-13	22-Oct-13	23-Oct-13	24-Oct-13	25-Oct-13
Nominal	83.5	…	100.0	98.7	98.7	98.5	…	65.8	65.7	65.9	65.5	65.5	65.6	65.5
CPI-based	9.1	…	100.0	101.8	101.8	101.6	…	358.4	357.9	358.7	356.9	356.9	357.0	356.8
PPI-based	48.9	…	100.0	98.3	98.3	98.1	…	161.0	160.8	161.1	160.3	160.3	160.3	160.2

Source: Investment Capital Ukraine LLC.

Chart 121. Daily data of ICU's family of KZT trade-weighted indices

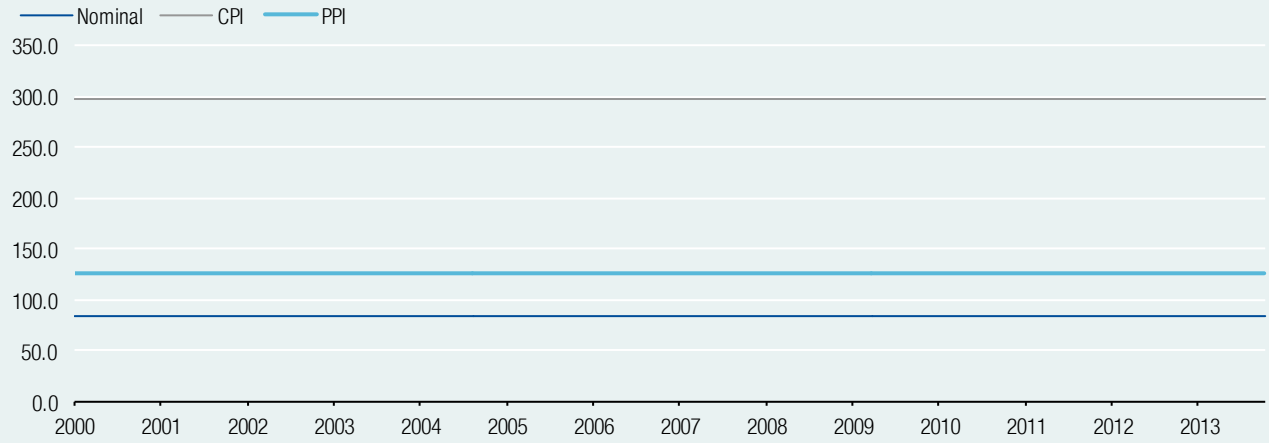
All-time history from January 1995 through 25 October 2013



Source: Investment Capital Ukraine LLC.

Chart 122. Long-term averages of the ICU's family of KZT trade-weighted indices (based on daily indices)

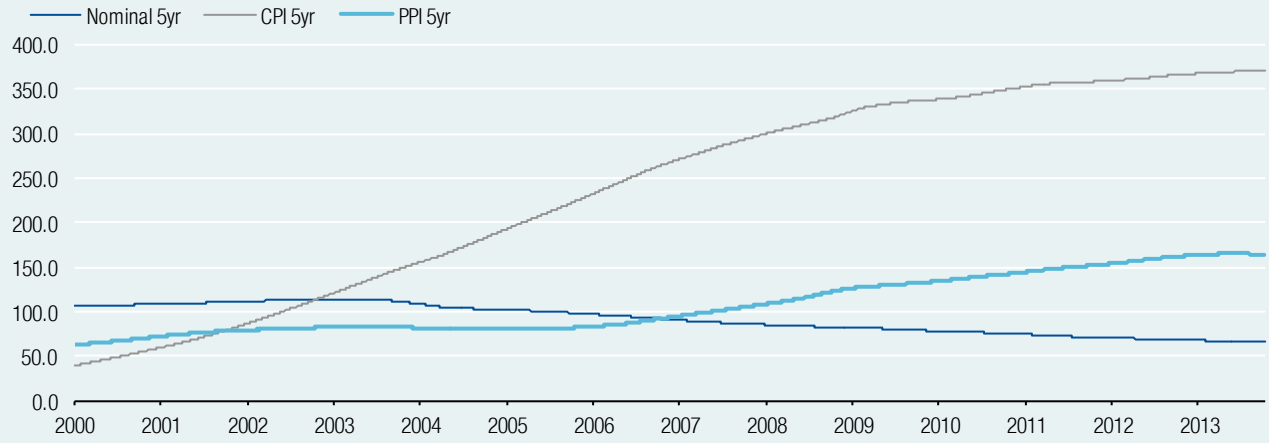
All-time history through 25October 2013



Source: Investment Capital Ukraine LLC.

Chart 123. 5-year averages of the ICU's family of KZT trade-weighted indices (based on daily indices)

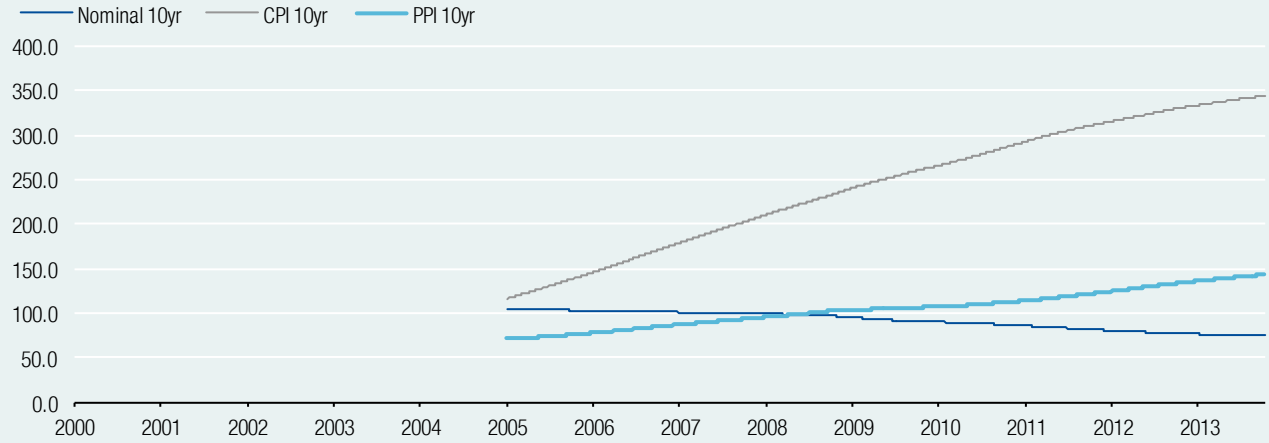
All-time history through 25October 2013



Source: Investment Capital Ukraine LLC.

Chart 124. 10-year averages of the ICU's family of KZT trade-weighted indices (based on daily indices)

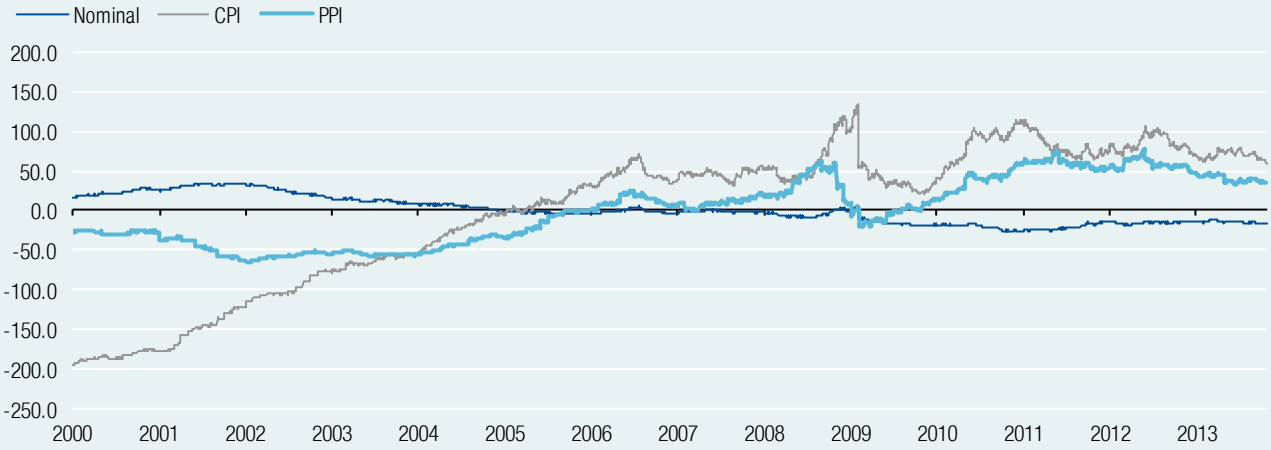
All-time history through 25October 2013



Source: Investment Capital Ukraine LLC.

Chart 125. KZT misalignment vs. long-term averages of the ICU's KZT TWIs (based on daily indices)

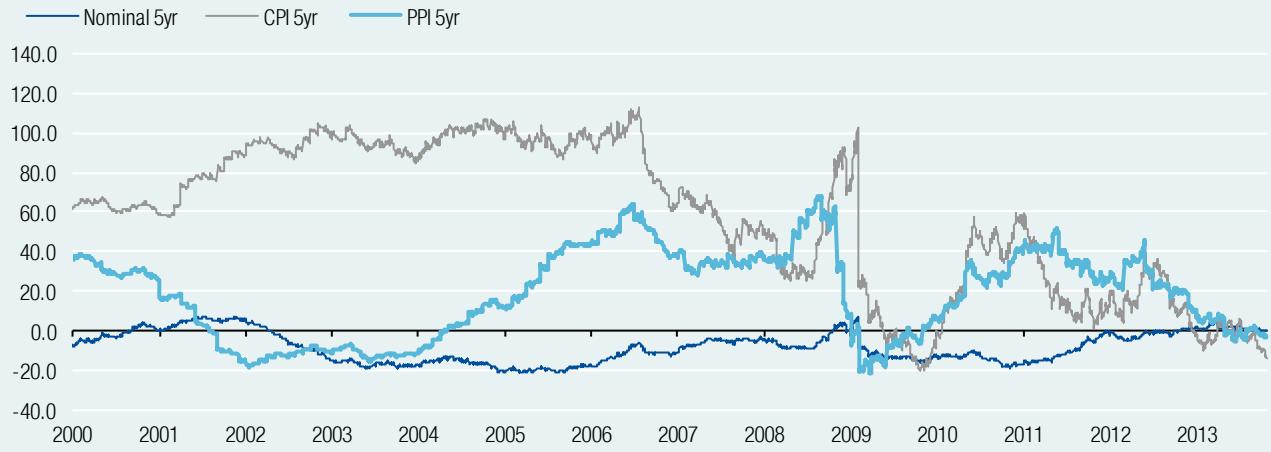
All-time history through 25 October 2013



Source: Investment Capital Ukraine LLC.

Chart 126. KZT misalignment vs. 5-year averages of the ICU's KZT TWIs (based on daily indices)

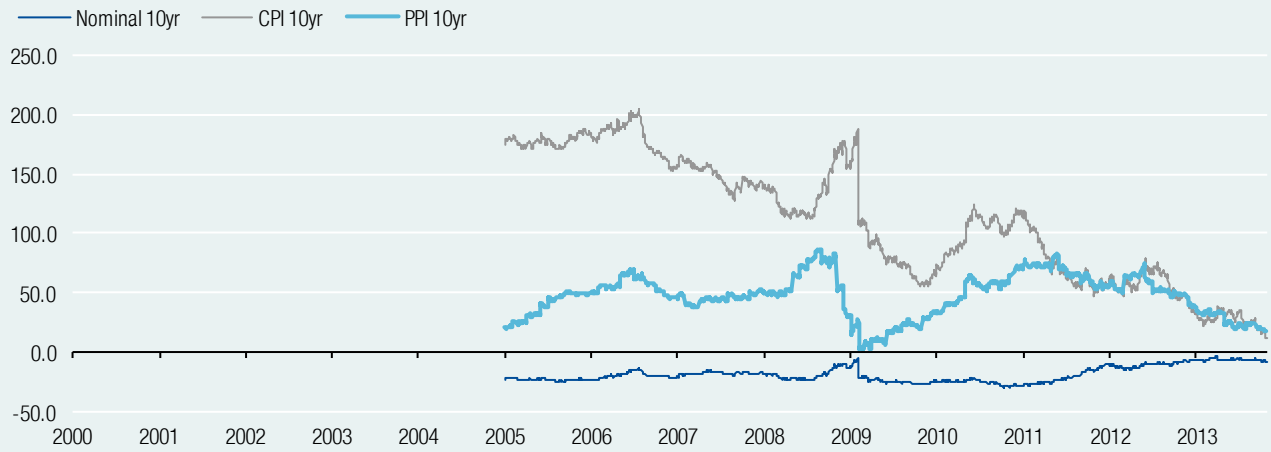
All-time history through 25 October 2013



Source: Investment Capital Ukraine LLC.

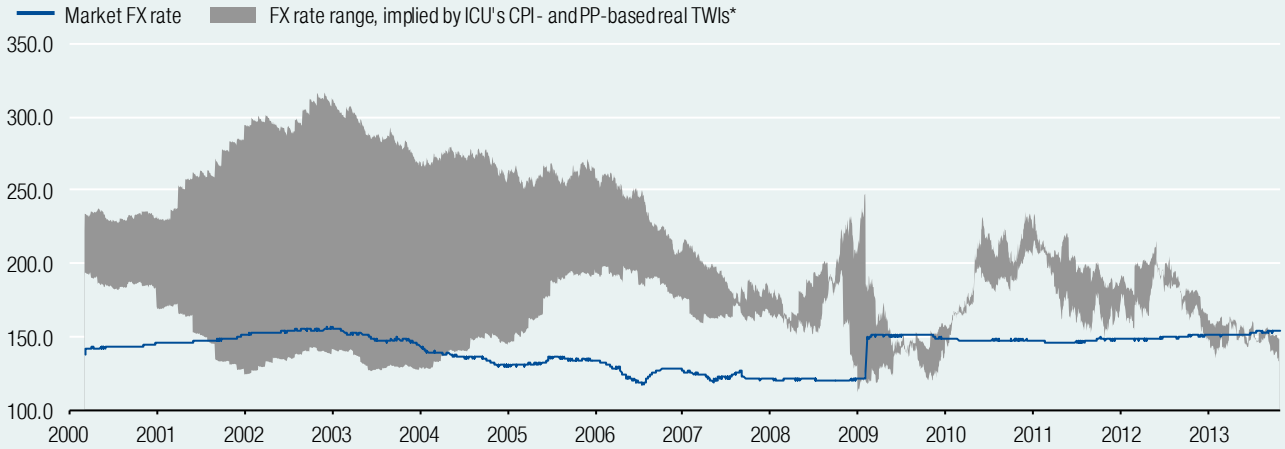
Chart 127. KZT misalignment vs. 10-year averages of the ICU's KZT TWIs (based on daily indices)

All-time history through 25 October 2013



Source: Investment Capital Ukraine LLC.

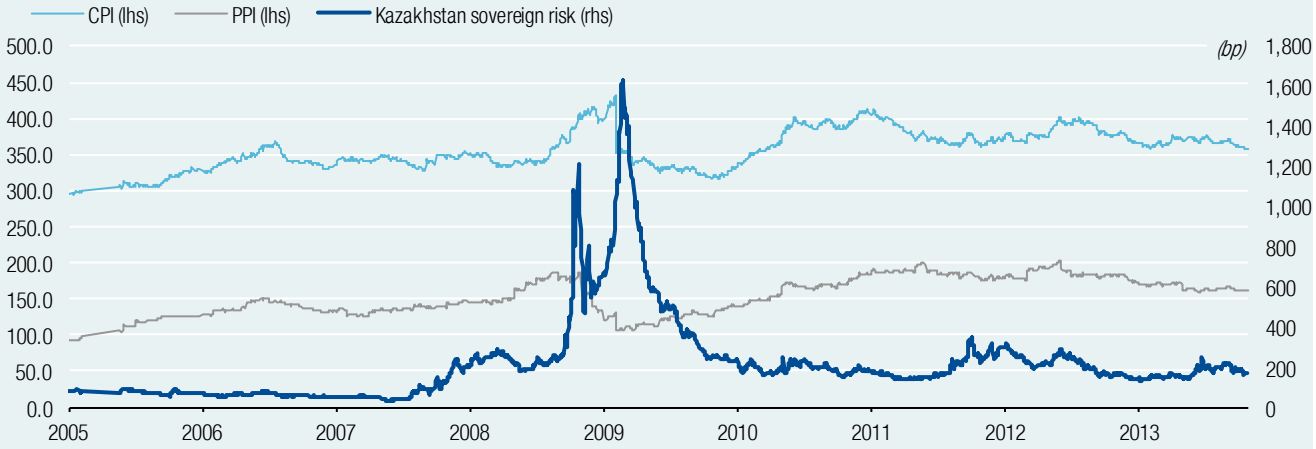
Chart 128. USD/KZT market FX rate vs. the FX rate range implied by ICU's real TWIs. Daily history since 1 January 2000 through 25 October 2013



Note: * The USD/KZT rate implied by a real TWI is calculated by multiplying USD/ KZT market exchange rate by the ratio of misalignment between the real TWI and its 5-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 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 two series and similarly the daily low point is the lowest implied rate out of the two series.

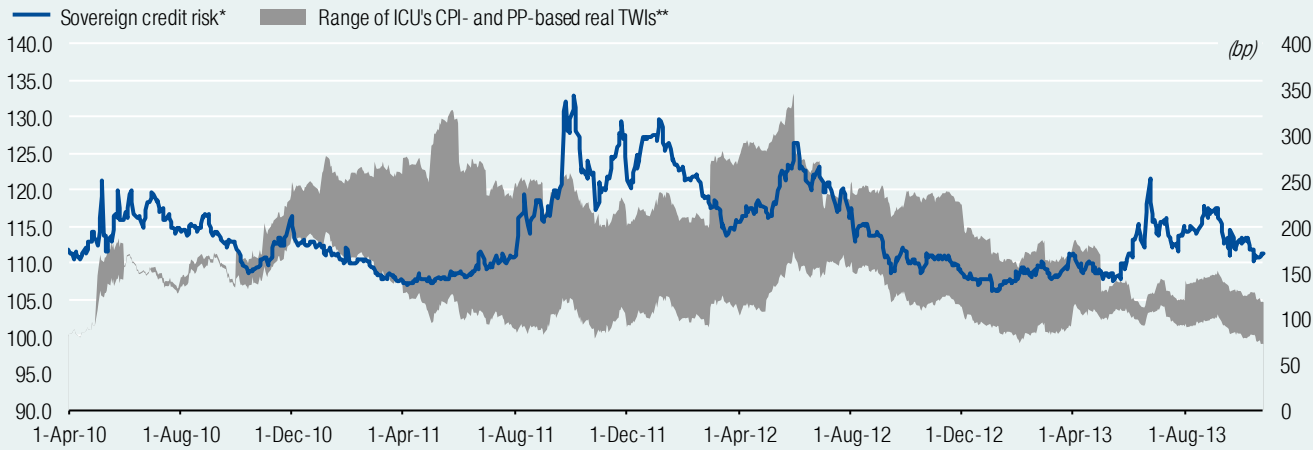
Source: Investment Capital Ukraine LLC.

Chart 129. KZT's real TWIs versus Russia's sovereign credit risk[1] Daily history since **1 January 2001** through 25 October 2013



Sources: Bloomberg, State Statistics Committee of Ukraine.

Chart 130. KZT's real TWIs versus Russia's sovereign credit risk[1] Daily history since **1 April 2010** through 25 October 2013



Note: * credit default swaps on 5-year sovereign debt; ** the range is constructed upon the CPI- and PPI-based real TWIs, which are re-based at 100 points as of 1 April 2010.

Sources: Bloomberg, State Statistics Committee of Ukraine.

Disclosures

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