

## Disbalances and risks of the Ukrainian economy

Historically, the economies of Russia and Ukraine were closely related. Since 2014, there has been a rupture of relations, but the influence of the “Ukrainian factor” on Russia remains through the sanctions policy of Western countries. The existing conflict has all the signs of the frozen one, and changes can occur only as a result of a significant change in the power balance. The current disbalances in the Ukrainian economy give serious grounds for considering a sharp deterioration in the state economy condition and weakening.

Among the most large-scale factors that can affect the economic situation of Ukraine, we can distinguish the following:

### Stress factors

Influence in \$ billions per year on:	Products / services		Clarifying
	Export	Import	
<b>Negative</b>	<b>-6,1</b>	<b>-0,1</b>	
Termination of gas transit	-1,6		Average revenue for 2014-15
Blockade of Donbass	-3,5	0,2	Export losses and rough overpayment for coal
Rising of gas prices		0,3	Price increase by 15%*
Termination of fertilizer exports	-1,0	-0,7	Termination of fertilizer exports and a corresponding
<b>Positive</b>	<b>2,7</b>	<b>0,0</b>	
Rising of wheat prices	1,6		Price increase by 27%**
Rising of steel prices	1,1		Price increase by 15%*

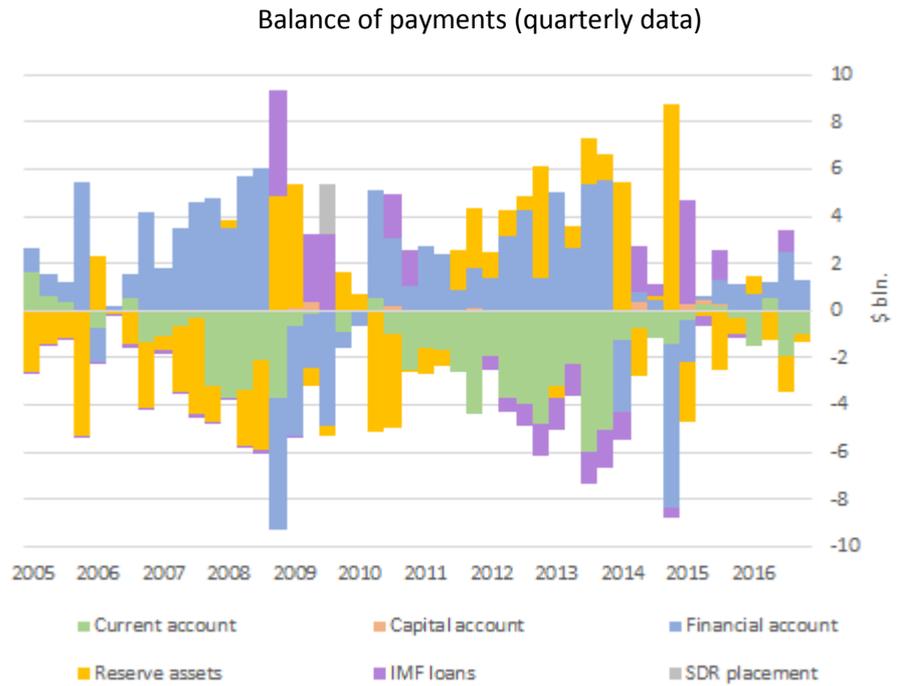
\* Prediction of Oxford Economics

\*\* Prediction of IMF

## Balance of payments

The balance of payments shows the currency flow that the country receives and gives by operations with foreign partners. Operations can relate to the country current exchange of goods and services (current account), financial transactions (financial account) or to the balance sheet.

Ukraine had kept the national currency at a stable level for a long time. This led to the disbalance in foreign trade, especially exacerbated in 2012-13. To eliminate the disbalance the country had to spend the reserve assets. Hryvnia had to be let float freely in early 2014. For the year the hryvnia was weakened by more than 80%, and this stabilized the balance of payments.



Source: NBU

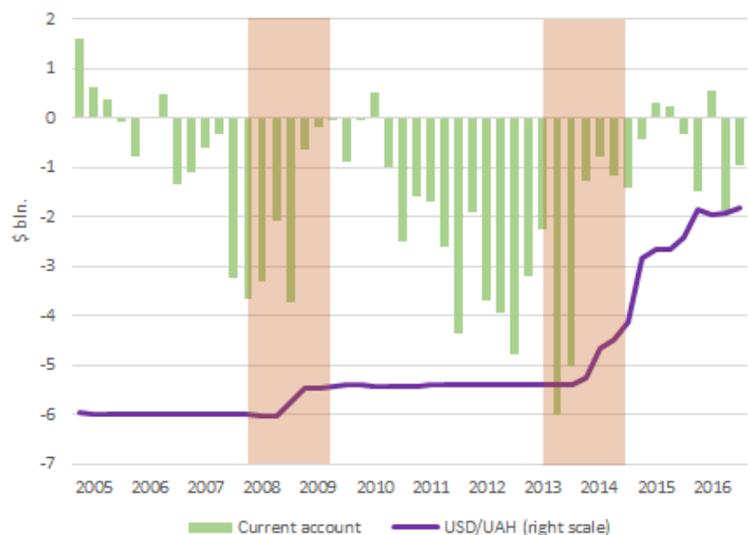
\* positive value of the reserve assets means their decrease, and vice versa

Over the past year and a half, it was possible to hold the balance of payments without reserve assets expenditure, mainly due to further depreciation of the hryvnia. In the second half of 2016 there is a noticeable deficit in the current account.

## Current account

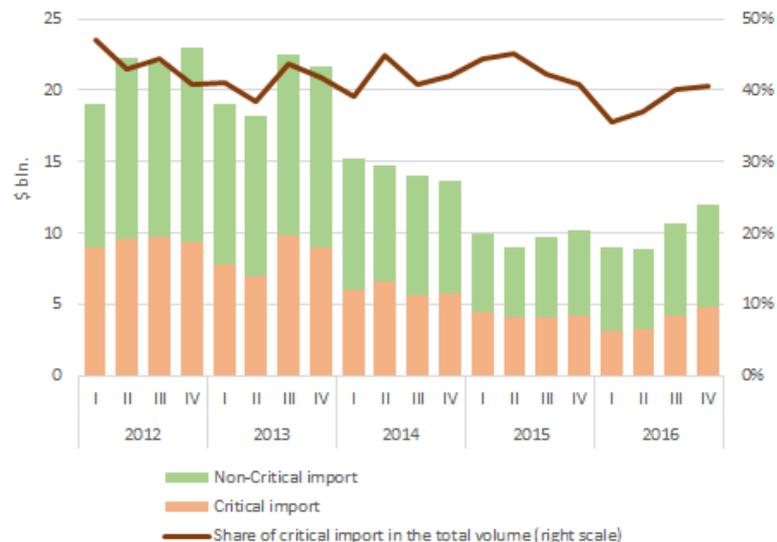
Macroeconomically long-term stable balance of the current account is zero. The graph below clearly shows how the devaluation of the hryvnia helped to cope with the accumulated current account deficit.

Current account and hryvnia to US dollar exchange rate



Source: NBU

Import of goods from the critical and non-critical group

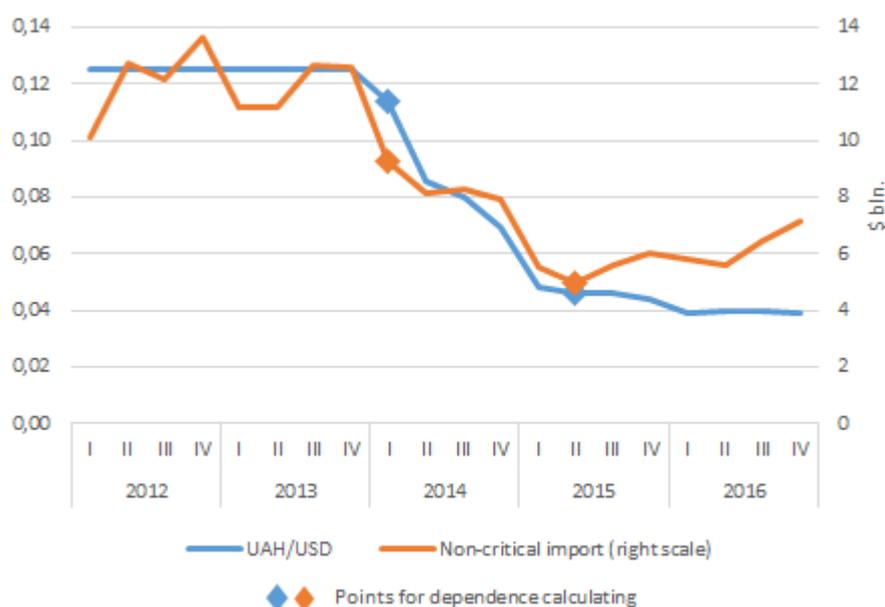


Source: Ukrstat

As part of the Ukrainian import, we can distinguish a group of goods, the value of which is critical for the country (critical import). The volume of their imports primarily depends on the general state of the economy and on prices in the world markets, and not on the exchange rate. Basically, it is energy and raw materials for the key Ukrainian companies. The rest import will be called “non-critical”.

Current account deficit can be corrected either by the export increase, or by import decrease. Quick balance adjustment can occur only when the exchange rate changes. Devaluation of the national currency has a negative impact on the volume of imports (primarily non-critical). As a result, the current account balance is equalized. The graph below shows how the hryvnia exchange rate influenced the volume of non-critical imports.

Correlation of non-critical imports with the US dollar to the hryvnia exchange rate



The rate growth reduces the volume of non-critical imports, as the depreciation of the national currency raises the prices for imported goods. To calculate the predicted volume of non-critical imports, depending on the hryvnia exchange rate, we take the points in the first quarter of 2014 and in the second quarter of 2015. Suppose that the same ratio will continue in the future. According to the calculations, the depreciation of the hryvnia will double the fall in non-critical imports by 54% (in US dollar).

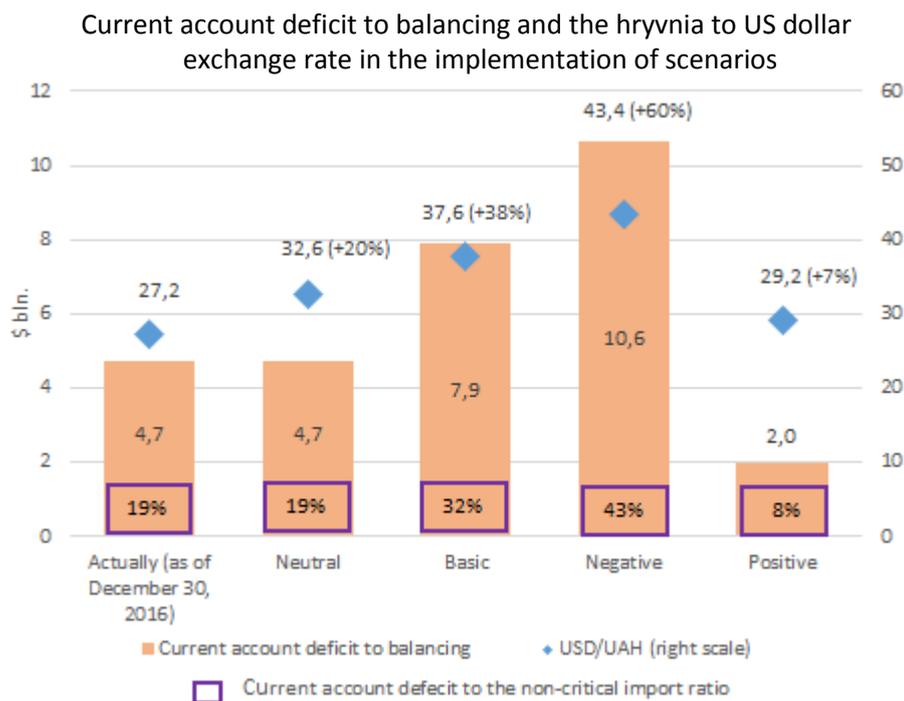
Source: NBU, Ukrstat

Consider four scenarios based on the stressors listed above:

- Neutral scenario assumes balancing of the existing current account deficit in the amount of \$4.7 billion by 2016.
- Basic - balancing of the existing deficit and the implementation of all the factors.
- Negative - balancing of the deficit and implementation of only negative factors.
- Positive - balancing of the deficit and implementation of only positive factors.

In the neutral scenario, the deficit in 2016 of \$4.7 billion before balancing remains the same. In other scenarios, the deficit before balancing will be in the range of \$2 to \$10.6 billion.

The estimated hryvnia exchange rate during the implementation of the scenarios will fluctuate from 29.2 to 43.4 per US dollar.



Source: NBU, Ukrstat, Standard Capital calculations

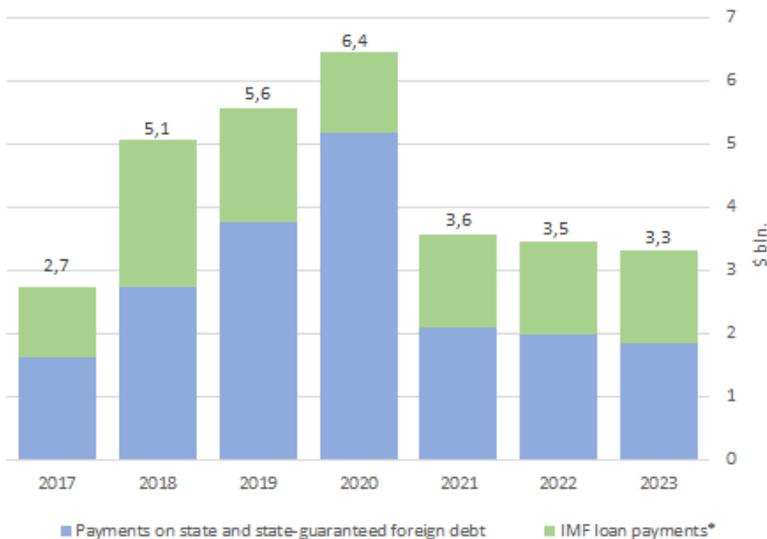
### Financial account

Even with the balanced current account, the balance of payments can be scarce at the expense of another important component that is the financial account.

In 2017, Ukraine shall pay \$2.7 billion for external loans. In addition, it is likely that the country will have to return \$3 billion received from Russia in late 2013. Taking into account the \$1 billion tranche received from the IMF a month ago, the outflow in Ukraine's financial account in 2017 will be \$4.7 billion. During the next six years, payments on external debt will amount to \$3.3 to 6.4 billion per year.

The financial account disbalance is comparable with the amount of the current account disbalance. The source for debt payments can be reserve assets, budget (see below) or new loans.

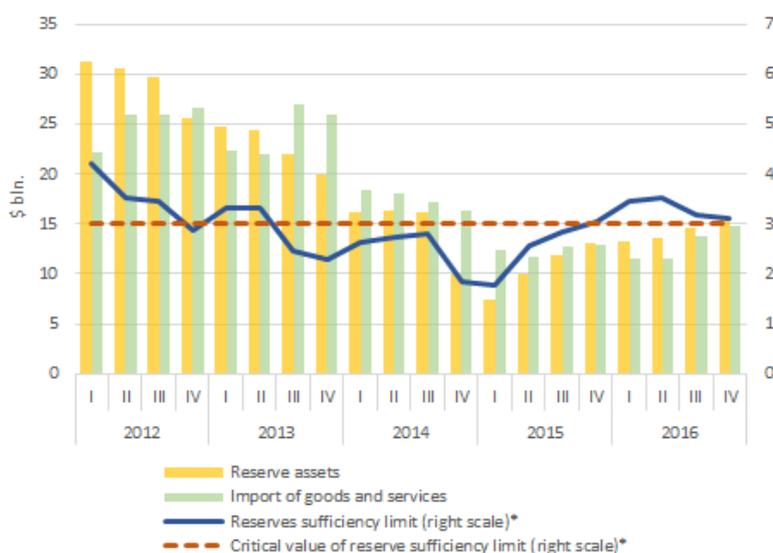
Schedule of payments for external debt (without taking into account the debt to the Russian Federation)



Source: World Bank IDS, IMF

\* payments on loans from the IMF are made in the SDR, are transferred to US dollars at the exchange rate as of May 17, 2017.

Reserve assets and imports of goods and services



Source: NBU

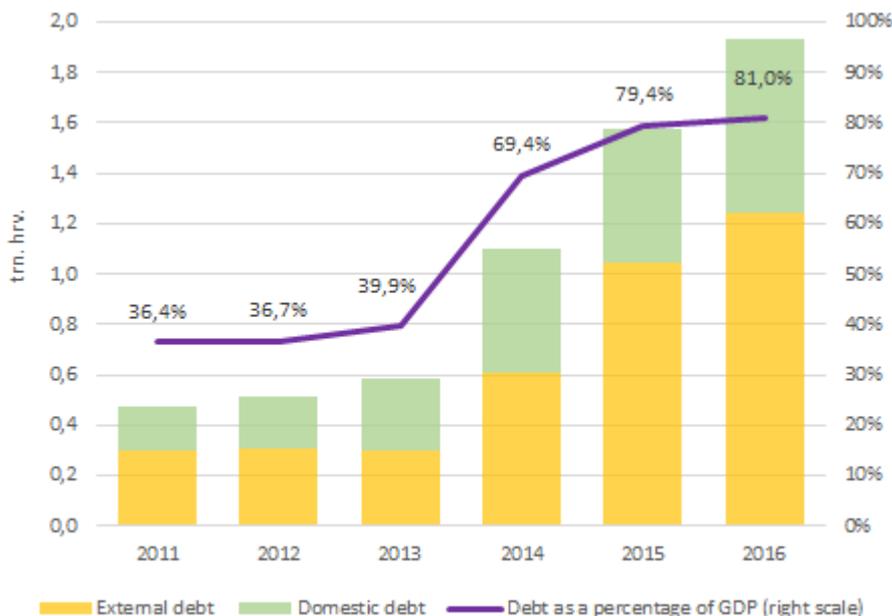
\* In months of import

According to generally accepted standards, the country's gold and currency reserves should cover at least three months of its imports. At the end of last year, Ukraine's reserve assets were just above this level. That is, there is no space for the reserves maneuvers in Ukraine.

At the end of 2016, Ukraine's aggregate national debt (including state-guaranteed) was 81% of its GDP. When implementing the scenarios, the debt will increase even more, with a positive value it will be 84% of GDP, with a negative one - 112%.

The domestic debt of Ukraine will be affected by the Privatbank nationalization. To close the bank's financial problems in the amount of 148 billion UAH the Ministry of Finance will issue internal loan bonds (ILB). In 2016, ILB were issued for the amount of 43 billion. Thus, Ukraine's domestic debt will grow by at least another 100 billion hryvnia.

State debt (including guaranteed by the state), at the end of the year, in UAH

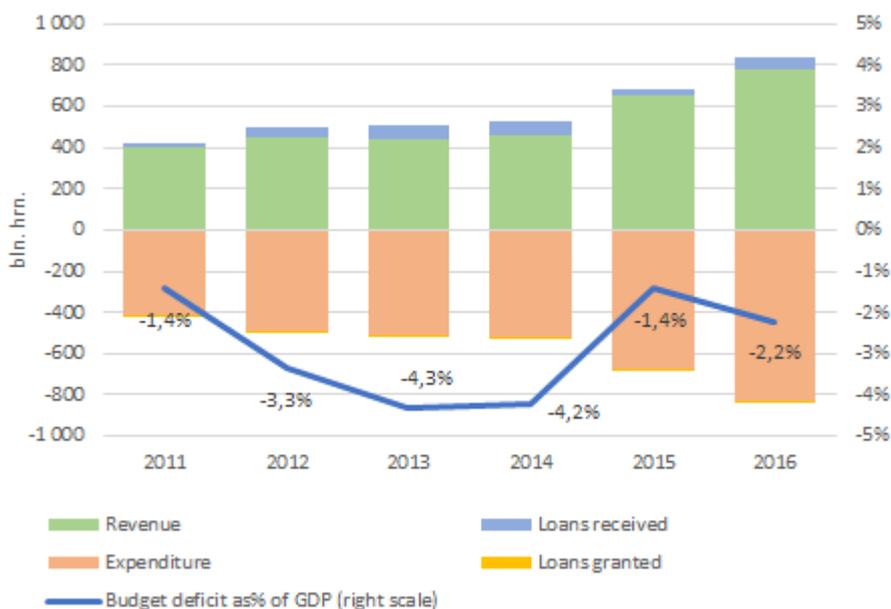


Source: Ministry of Finance of Ukraine

The current effective rate for Ukraine's external debt is 5%. It consists of the yield of market bonds in the amount of 8-9% and loans from the IMF at the rate of 3%. We believe that the country will not have the opportunity to raise funds on the open market in the medium term. Ukraine will only rely on the international support.

### Budget disbalances

Deficit of the consolidated budget



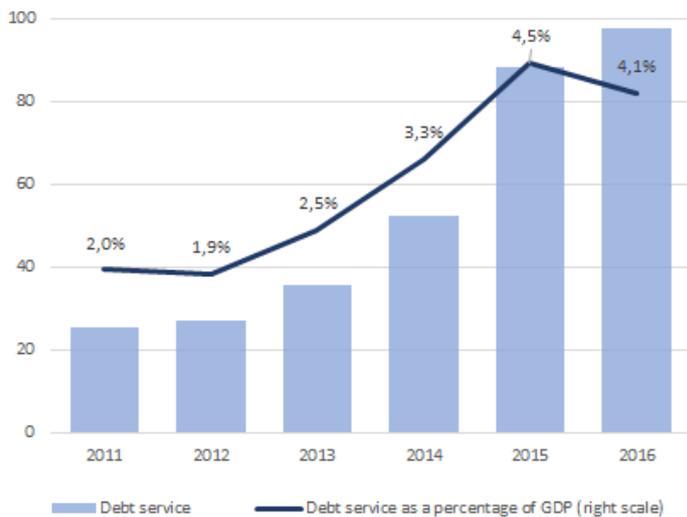
Source: NBU

In 2015-16 Ukraine managed to return the budget deficit to a relatively comfortable level (less than 3% of GDP). At the same time, there are two articles in the budget that, in the event of a change in the exchange rate, can cause imbalances-debt servicing costs and taxes on imported goods.

Debt service expenditure as a percentage of GDP has steadily increased from 2012 to 2015. In 2016, Ukraine spent 4.1 percent of its GDP on debt servicing.

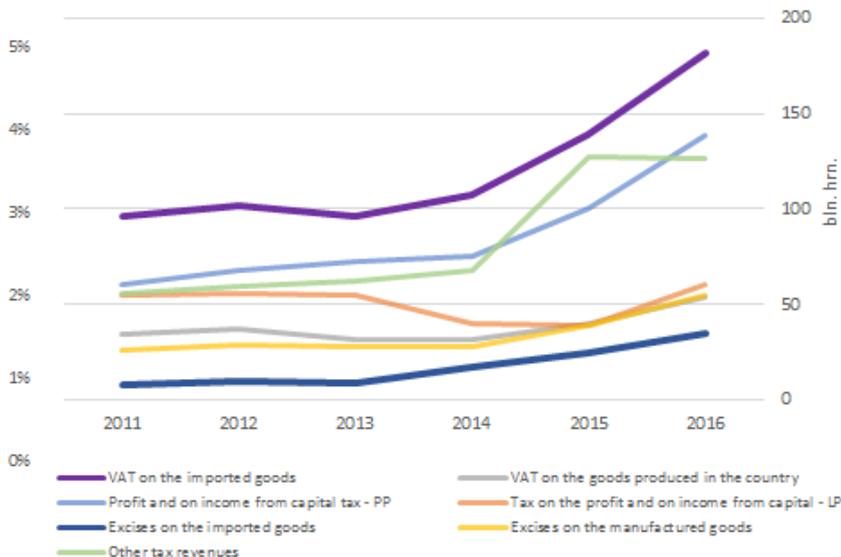
Imported goods and services taxes in 2016 provided more than a quarter of all the revenues to the Ukrainian state budget. In general, import taxes for the past three years have more than doubled, while the remaining tax revenues are only 75%.

Debt service



Source: NBU

Tax revenues of the consolidated budget

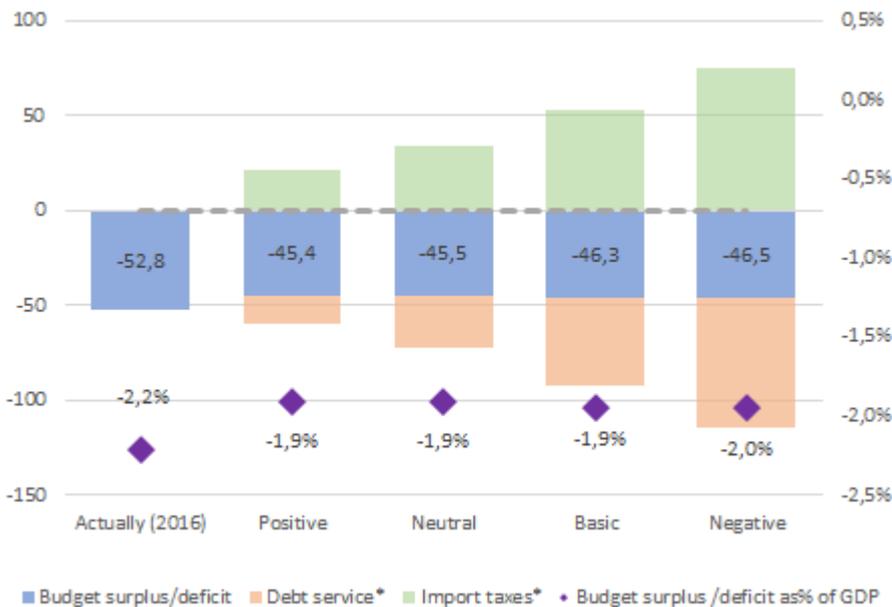


Source: NBU

Let's consider the impact of the above scenarios on the Ukrainian budget. The hryvnia devaluation increases the costs of debt servicing and income from imported goods taxes. The reduction in imports reduces the import taxes base, but the devaluation effect is stronger.

As a result, all the scenarios predict the reduction in the deficit of the Ukrainian consolidated budget. The spread of values is small – from 1.9% to 2%.

Consolidated budget deficit in the implementation of scenarios



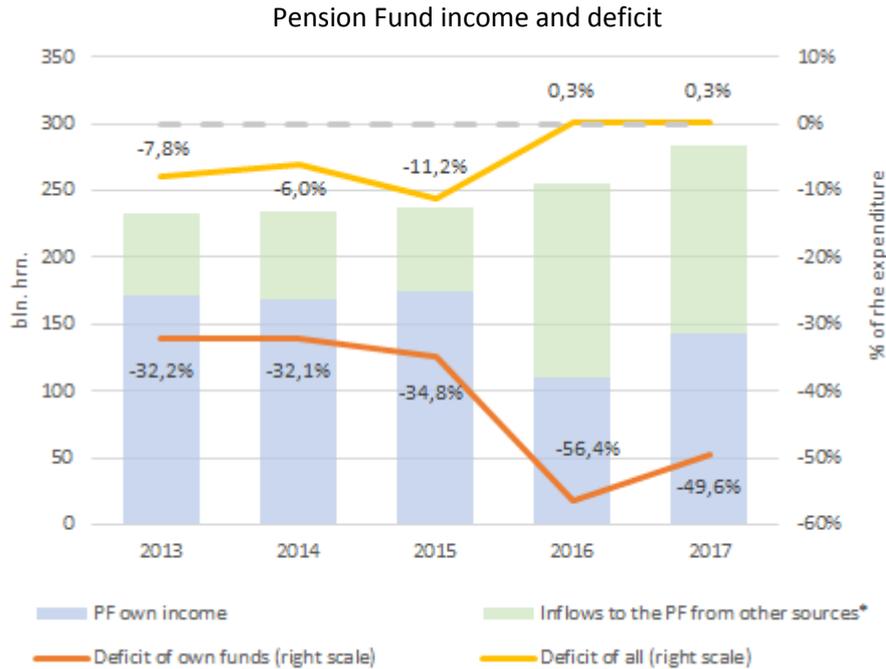
Source: NBU, Standard Capital estimates

\* changed in comparison with 2016

## Other disbalances

The deficit of the Pension Fund of Ukraine own funds increased sharply in 2016, more than half of the revenues were provided by the revenues from the state budget. However, the general deficit was eliminated. In 2017, a similar situation is planned – due to large-scale inflows from the budget, the Pension Fund deficit is expected to be zero.

Reducing the huge deficit of the Pension Fund own funds is one of the IFM main requirements. The government of Ukraine maximally delays the adoption of pension reform because of the fear of the social explosion.

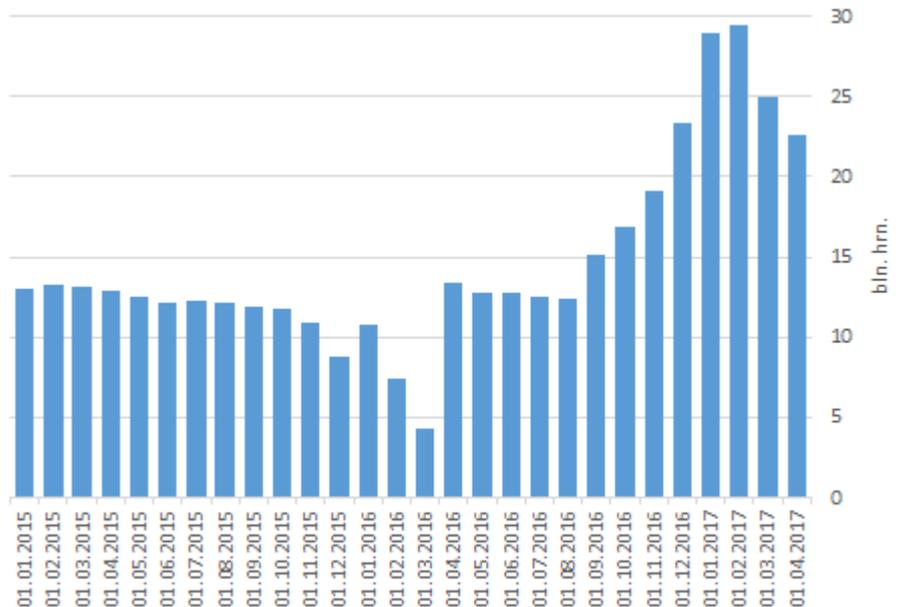


Source: Verkhovna Rada of Ukraine

\* mainly from the state budget

## Debt of the population on payment of housing and communal services

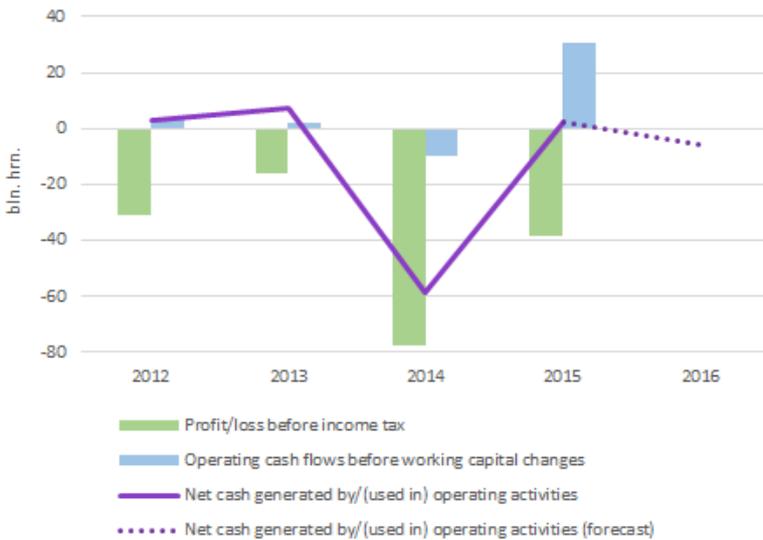
One of the Ukrainian economy disbalances is the people's debt to pay for the utility services. Since September 2016, due to the tariffs raising and the abolition of benefits for the heating season, the arrears have started to increase. Now the debt has somewhat decreased compared to the peak in February, but it is very likely that with the beginning of the new heating season, the growth will resume.



Source: Ukrstat

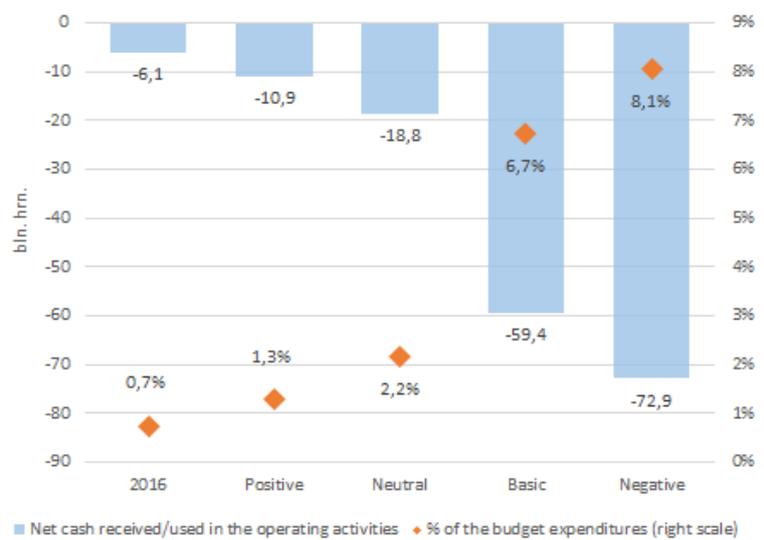
Debt of the population on payment of housing and communal services extraction, processing and transportation of oil and natural gas. Judging by the import, consumption and gas tariffs, the cash flow from Naftogaz's operating activities in 2016 will be negative, about 6 billion UAH.

### Cash flow from Naftogaz's operating activities



Source: Naftogaz, Standard Capital estimates

### Net cash from operating activities in the implementation of scenarios



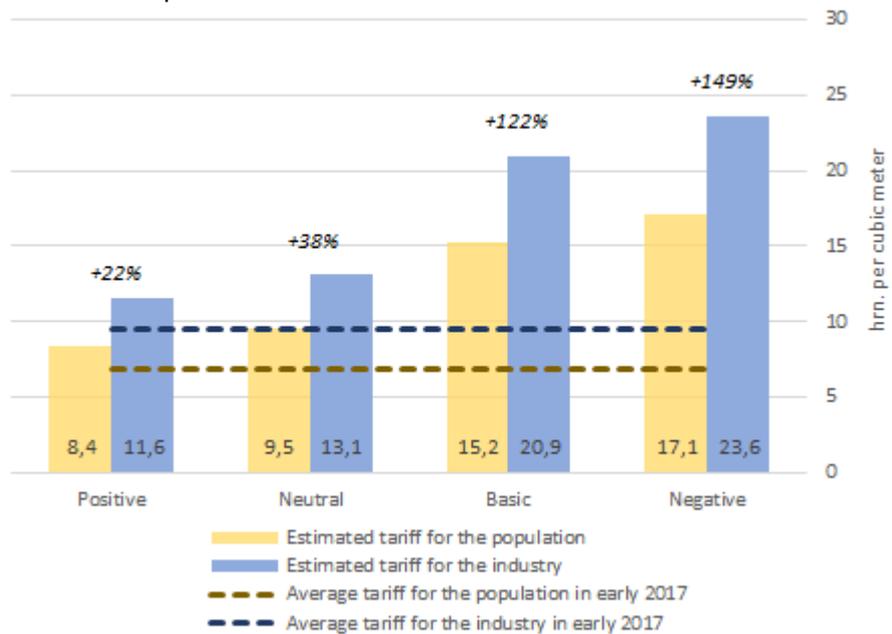
Source: Naftogaz, NBU

When the scenarios are implemented, the situation will be even worse, especially according to the basic and negative scenarios (since these scenarios also include stopping the gas transit through the territory of Ukraine). To make the cash flow from operating activities to zero, Naftogaz will have to significantly raise the tariffs. In particular, the tariff for industrial enterprises with a positive scenario should grow by 22%, and with a negative scenario - by 149%.

The first decision of the Stockholm Arbitration regarding the litigation of Naftogaz with

Net cash from operating activities in the implementation of scenarios Gazprom rejected most of the mutual claims. The amount of Gazprom's claims to Naftogaz was about \$4.7 billion, counterclaim of Naftogaz - \$17.9 billion. Naftogaz is under obligation to Gazprom in the amount about \$1 billion.

### Net cash from operating activities in the implementation of scenarios



Source: Naftogaz

The current account deficit will lead to the hryvnia devaluation. This will significantly worsen the position of Naftogaz. The budget will be affected by the devaluation neutrally. Privatbank's sanitation will be due to an increase in domestic debt. The danger of people's debt on payment for utility services is difficult to assess. Ukraine will critically depend on the international support.