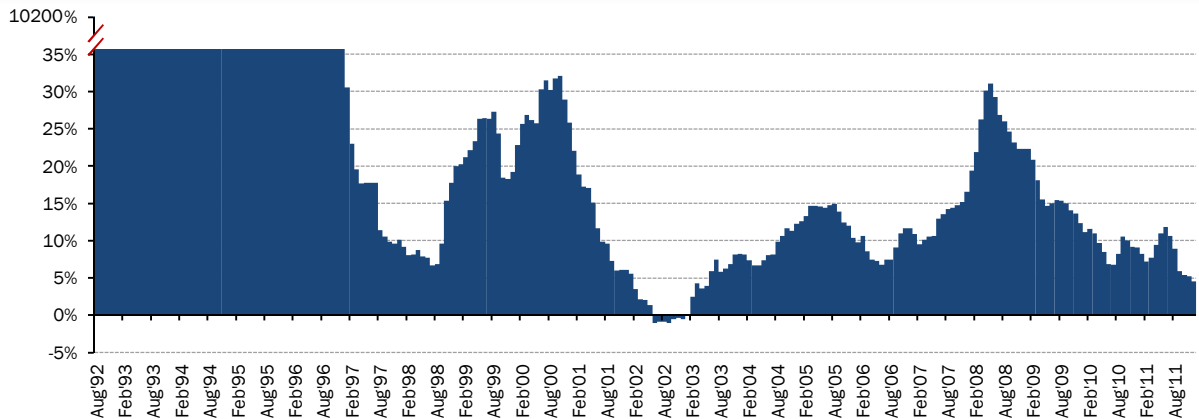


Ukraine's inflation: is "single-digit territory" the new normal?

In the post-crisis period a positive trend in inflation dynamics has arguably been Ukraine's most noticeable achievement. In fact, excluding a deflationary period in 2001, the CPI demonstrated its best annual end-of-period performance in 20 years, beating by a wide margin both consensus and government's forecasts. The CPI rose by a mere 4.6% in 2011 – a far cry from the 22.3% registered in 2008. While the fiscal and monetary authorities have enthusiastically claimed credit for the decline, the general public and many experts have been rather skeptical over the recent official figures and tend to see data manipulation. The recent inflation dynamics beg the question: what are the drivers of such performance and can they be sustained? In this report we argue that such factors as inflationary structure of budget expenditures, a de-facto fixed exchange rate regime and the food-oriented composition of the CPI do not allow the rate of inflation to remain within the single-digit territory on a sustained basis.

As with most emerging market economies, high rates of inflation have been a persistent and a pernicious feature of Ukraine's economic development path. Since Ukraine gained independence in 1991, the rate of inflation fell below the 10% mark only in 30% of all months, with periods of hyper-inflation in the early 90's. However, the beginning of the second decade of the 21st century brought the inflation trend back to its righteous path – gravitation towards single-digit territory. For the first time in 20 years the consumer price index registered two consecutive years of single-digit growth, rising by 9.1% in 2010 and 4.6% in 2011. Although over these periods different factors were at play, both structural and cyclical in nature, in this note we focus primarily on whether the recent dynamics have brought the long-awaited period of low inflation.

CPI growth in Ukraine since 1992, Y-o-y

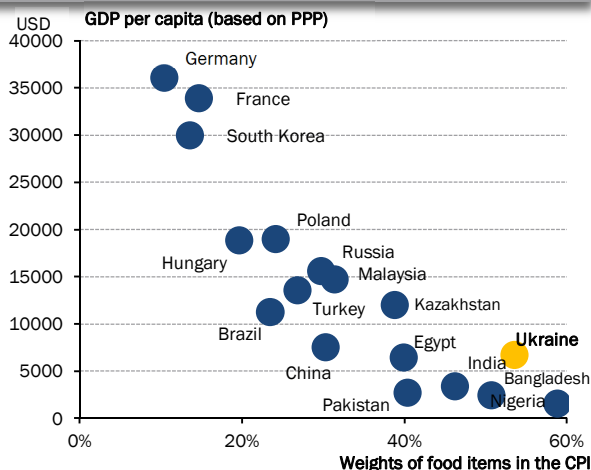


Source: State Statistics Committee, AYA calculations

Measurement issues: food bias

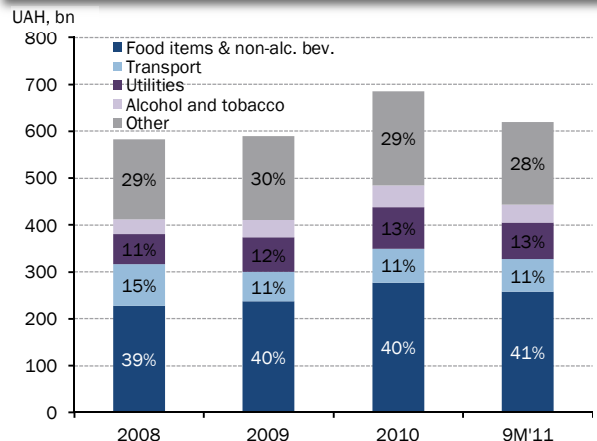
Ukraine's current economic profile determines to a large extent the consumption pattern of its households, which in turn has a direct impact on the measurement of the CPI. A low level of income, with GDP per capita based on PPP of just USD6.7 thd as of 2010, tends to be associated with a high share of food items in the household's consumption pattern. In fact, over the past four years households in Ukraine have spent on average about 40% of their final purchases on food and related items, excluding expenditures on imported goods.

Lower per capita income levels tend to be associated with higher share of food items in the CPI



Source: national statistics agencies, OECD, AYA estimates

Household consumption pattern (excluding imports)



Source: State Statistics Committee, AYA estimates and calculations

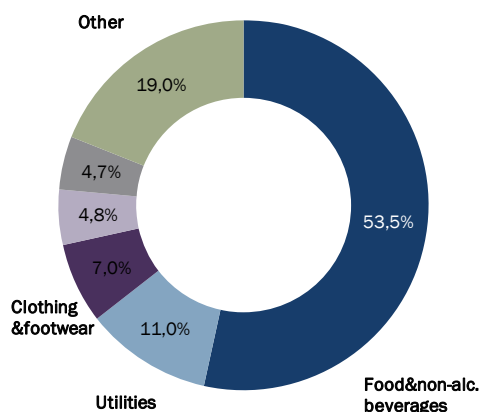
## Side-note: "Ukraine's inflation: is single-digit territory the new normal?"

January 2012

The households' consumption pattern finds its reflection in the CPI basket – the bulk part of it is weighted towards food items. In fact, food items and non-alcoholic beverages take up 53.5% of the index in Ukraine which makes its CPI one of the most food-weighted indices in the world and places the country along the ranks of Bangladesh and Nigeria in this category. It is noteworthy that food items also represent a large share (42%) in the measurement of core inflation which by definition should exclude food and energy costs. As such, **food items have the ability to exert the greatest pressure on both the headline and core CPI in Ukraine**, making it extremely difficult for the NBU to control the overall price level without stifling economic activity.

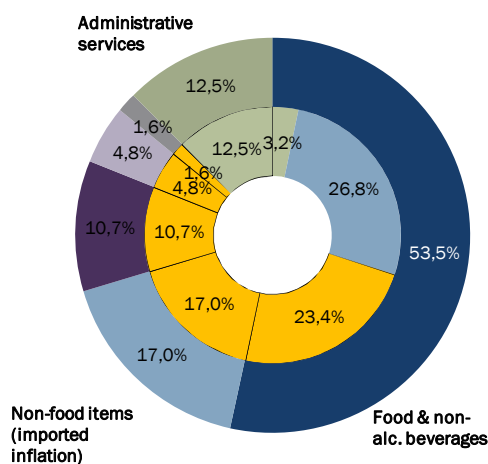
**Ukraine's CPI is one of the most food-weighted indices in the world**

CPI and core CPI weights are tilted towards food items



Source: State Statistics Committee (2010)

NBU structure of CPI basket



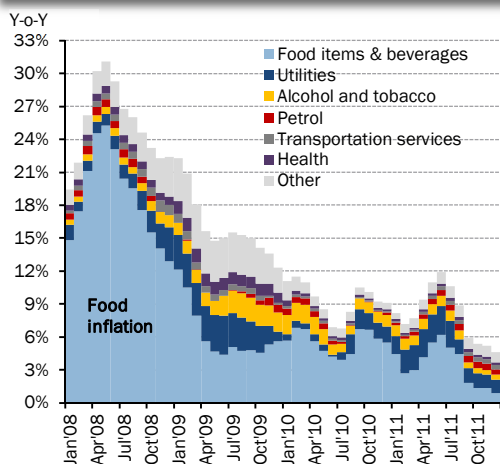
Source: NBU, AYA estimates

Note: the outer circle represents weights in the headline CPI basket; the inner circle portrays the breakdown of CPI into core inflation (yellow) and non-core inflation

In fact, it is obvious that the period of steadily declining CPI that started in the mid-2008 and continued until present, with periods of seasonal disruptions, was primarily due to the rapidly decelerating prices of food items. Notably, while other big-share items such as utilities, alcohol and tobacco displayed rising prices, sharply falling food prices (the steep slope of the food-items curve) pulled the CPI growth lower to single-digit territory.

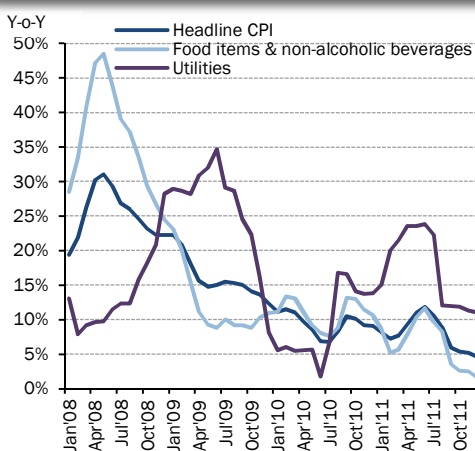
**Food prices pulled the CPI into single-digit territory in the post-crisis period**

The CPI gravitated to single-digit territory...



Source: State Statistics Committee, AYA calculations

... pulled down by sharply falling food prices.



Source: State Statistics Committee, AYA calculations

**Side-note: “Ukraine’s inflation: is single-digit territory the new normal?”**

January 2012

Yet, to paraphrase a famous idiom, ‘what comes down might go up’. Unfavorable base effects and a low possibility of another record harvest induce us to see an acceleration in food prices, and hence in the CPI in 2012. Thus, with a large share of food items in the headline and core CPI, the threat of the inflation rate returning to double-digit growth remains intact, particularly in light of the forecasted resumption of the upward trend in world food prices.

Therefore, *from a technical perspective, we believe that measurement features of CPI in Ukraine are likely to repeatedly undermine the gravitation of inflation rate to the single-digit territory.* In this view, the crucial effect on constraining inflationary developments will lie in fiscal and monetary realms.

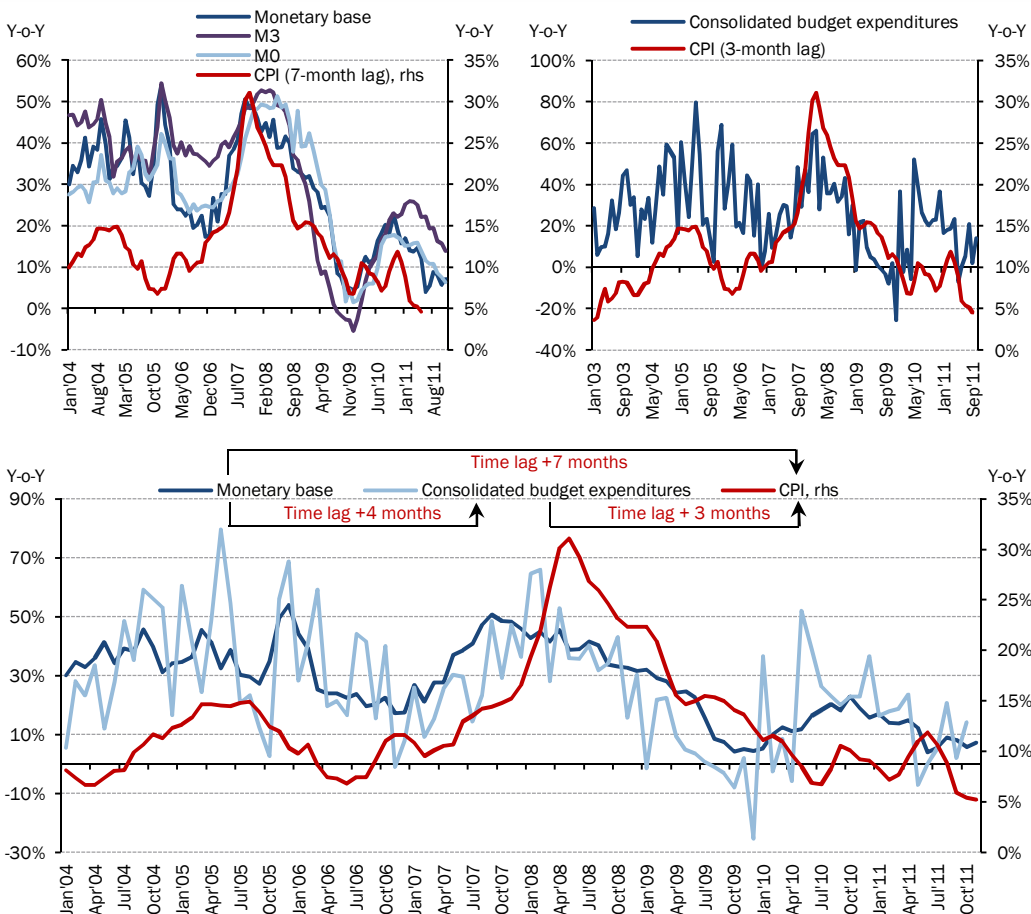
**Fiscal and Monetary policy: restraining the ‘monetary phenomenon’**

With food prices leading the disinflation trend in the post-crisis period, the role of monetary authorities should not be underestimated since inflation, as argued, is ‘always and everywhere a monetary phenomenon’<sup>1</sup>. While fluctuations in food prices tend to result in cyclical inflation dynamics, imprudent monetary policy and rapid fiscal spending usually lie at the heart of a protracted period of elevated inflation rates.

Interestingly enough, since 2007 inflation dynamics in Ukraine have closely followed the growth of monetary aggregates with an approximate 7-month lag and to a lesser extent the growth in fiscal expenditures (with an approximate 3-month lag).

**Measurement features may easily force the CPI to overshoot the desired range**

**Growth of monetary aggregates, budget expenditures and inflation demonstrate solid relationship**



Source: NBU, Treasury, AYA estimates and calculations

<sup>1</sup> Milton Friedman (1963)

Given the relationships between monetary aggregates, budget expenditures, and inflation rate we believe that **a sustained period of low inflation will critically depend on the NBU’s ability to restrict growth of the money supply, particularly in a period of a positive output gap.** In order to achieve this goal the NBU will have to:

- a) Resist political pressure to finance fiscal deficits through debt monetization;
- b) Shift monetary policy to inflation targeting in the mid-term.

In the short-term period, in our view the NBU is likely to face increased political pressure to facilitate the financing of fiscal deficits for the government, particularly in light of the expected deterioration of macroeconomic conditions and high government’s borrowing costs. Moreover, the bank’s ability to resist such pressures will be significantly diminished given the upcoming parliamentary election in 2012 and still high probability of the ‘Power centralization’ scenario unfolding on the political front. However, we believe that Ukraine’s current exchange rate regime and expected macroeconomic conditions could allow the central bank to mitigate the inflationary effects of an increase in money supply by partial sterilization via the exchange rate channel.

As we argued in our Monetary policy outlook 2012, exchange rate stability is likely to remain the overriding goal for the NBU next year. In our view the expected increase in net foreign currency demand in 2H’12 are likely to force the NBU to step up its interventions along with administrative measures. The bank’s foreign currency sales will allow it to partly offset the probable increase in the money supply arising from debt monetization, preventing a rapid acceleration of monetary aggregates.

Yet, we view such measures as temporary, and do not believe the NBU will be able to maintain such course on a sustained basis. With a de-facto fixed exchange rate regime, the NBU has limited monetary flexibility and is forced to maintain the peg. E.g., in case of return of favorable macroeconomic conditions and the consequent resumption in net foreign currency inflows is likely to lead to an increase in the money supply and could ultimately result in double-digit CPI growth, as occurred in the run-up to the 2008 crisis. Therefore, in our view, a shift towards inflation rather than exchange rate targeting remains a crucial determinant of the ability of the CPI growth to fluctuate within the single-digit range.

While the policy course of the NBU, in our view, is key for the inflation to gravitate towards single-digit growth, fiscal issues also stand in the way. Ukraine’s budget expenditures are heavily oriented towards the financing of current consumption, with less than 20% share of funding directed towards investment in capital. Clearly, such budget structure is inflationary and is likely to derail the CPI growth’s course to single-digit territory.

Based on the above analysis, **we believe that the recent positive inflation trend does not present new normal yet, in a sense that it implies a sustained period of single-digit inflation.** On the one hand, temporary financing constraints of the government and the composition features of the CPI are likely to provide the cyclical component to the fluctuations in the CPI above the 10% mark. On the other hand, the structure of budget expenditures, a frequent recourse to central bank funding and a fixed exchange rate regime are the structural impediments that determine the risk of the CPI growth overshooting the desired range.

**Actions of fiscal and monetary authorities are still crucial for bringing the inflation rate to single-digit territory**

**Inflationary structure of budget expenditures is set to derail the CPI’s ‘single-digit’ course**

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