

Ukraine: Selected Economic Issues

Vasily Astrov and Leon Podkaminer



P

Ukraine: Selected Economic Issues

VASILY ASTROV

LEON PODKAMINER

Vasily Astrov and Leon Podkaminer are Research Economists at the Vienna Institute for International Economic Studies (wiiw).

Abstract

Following the 'Maidan revolution' of February 2014, the National Bank of Ukraine (NBU) abandoned the exchange rate peg to the US dollar and switched to a flexible exchange rate, which was later formalised within the framework of the newly adopted inflation targeting regime. Our analysis suggests that this move has been questionable and, at the very least, premature. First, the presumed success of inflation targeting as a universally applicable 'magical tool' to reach low and stable levels of inflation in many countries has in reality been largely due to other factors rather than the inflation targeting concept. Second, the NBU's announced inflation target (5% in the medium term) appears to be overly ambitious given Ukraine's development level. Experience from other countries suggests that sticking to this target at all cost will likely require a consistently overly restrictive monetary policy, which will constrain Ukraine's growth prospects. Last but not least, as capital controls are gradually eased, the exchange rate will likely become vulnerable to speculative attacks once again, given the numerous political and geopolitical uncertainties and the 'thinness' of the country's foreign exchange market. Attempts at macroeconomic stabilisation in response to such exchange rate shocks by using 'classical' inflation targeting instruments such as interest rates will have a pro-cyclical impact, given the high degree of dollarisation and the related prevalence of so-called 'balance sheet effects'. The experience of other countries in similar circumstances – both in Central and Eastern Europe and elsewhere – suggests that a preferable strategy would be to smooth exchange rate fluctuations via interventions rather than monetary policy instruments. For this, a certain minimum level of reserves is needed; the latter will not only provide the necessary policy space for interventions should such a need arise, but should discourage speculations against the currency in the first place.

Another major reform effort undertaken recently (October 2017) has been a comprehensive pension reform, which envisaged most notably a gradual increase in the effective retirement age. Our analysis suggests that the current situation in Ukraine's pension system hardly justifies such a step. The country's statutory retirement age may be indeed rather low, but it is more than offset by the low life expectancy of Ukrainians, and the share of pensioners in the total population is not particularly high by international standards. Besides, while Ukraine's Pension Fund may be in deficit, this is not very different from the situation observed in other countries, and there are no theoretical arguments why the Pension Fund must be necessarily balanced. Finally, the sustainability of the pension system is not necessarily a cause of major concern either, taking into account the likely future improvements in the labour market. To the extent that any reform of the pension system is needed at all, it should target above all efforts to curb the shadow economy and/or partial reversion of last year's cuts in social security contributions.

Keywords: monetary policy, inflation targeting, pension systems

JEL classification: E52, E58, H55

CONTENTS

Abstract.....	v
---------------	---

I. Inflation targeting regime for Ukraine: caution is needed 1

1. Background: Ukraine's inability to secure stable exchange rates.....	1
2. Inflation targeting may constrain economic growth.....	2
2.1. Inflation targeting shortly explained: 'mechanics combined with mystics'	2
2.2. Disinflation under inflation targeting not guaranteed – unlike losses to the real economy....	2
2.3. Inflation targeting: a magic wand, or an undeserved reputation?	3
2.4. NBU inflation targets are unreasonably ambitious	5
3. The 'fear of floating' is justified.....	6
3.1. 'Pure' inflation targeting in a dollarised economy tends to be pro-cyclical	6
3.2. 'Balance sheet effect' matters in Ukraine.....	8
3.3. The hryvnia, if allowed to float, will be vulnerable to speculative attacks.....	9
3.4. Inflation targeting and fixed exchange rate regimes in practice: the equivocal experiences of the Balkan countries	11
3.5. 'Flexible' inflation targeting does not exclude occasional exchange rate interventions	15
4. Conclusions and policy recommendations.....	16
References	17

II. Ukraine's pension system: some reservations about the 'fundamental' reform 18

1. Introduction	18
2. Average pension not as low as claimed by the IMF.....	19
3. Statutory retirement age relatively – but not exceptionally – low	19
4. Lower life expectancy 'neutralises' the effect of lower statutory retirement age.....	20
5. Older workers may be unfit to work: higher levels of poverty expected.....	21
6. Excessive deficits of the Pension Fund or rather excessive preoccupation with the deficits?.....	22
7. Sustainability concerns may be exaggerated	23
8. The real problem with the pension system lies with taxation rather than spending	24
9. Conclusions	26
References	26

TABLES AND FIGURES

Table 1 / Male life expectancy at age 60 (years)	20
Table 2 / Female life expectancy at age 60 (years)	20
Table 3 / Ratio of population aged 65 or more to the working-age (15-64 years) population, in %	21
Figure 1 / Real GDP growth and inflation in OECD countries, in %.....	4
Figure 2 / Inflation targeting in a small open economy.....	7
Figure 3 / Share of foreign currency-denominated loans, in %.....	8
Figure 4 / Exchange rate and the share of non-performing loans.....	8
Figure 5 / Public debt, as % of GDP	9
Figure 6 / Economic size vs extent of dollarisation/euroisation, 2016.....	13
Figure 7 / GDP growth rates: Croatia vs Serbia.....	14
Figure 8 / GDP growth rates: Bulgaria vs Romania	14
Box 1 / Inflationary expectations in Ukraine: hardly influenced by NBU, but heavily dependent on exchange rate expectations.....	11

I. Inflation targeting regime for Ukraine: caution is needed

Following the ‘Maidan revolution’ of February 2014, the National Bank of Ukraine (NBU) abandoned the exchange rate peg to the US dollar and switched to a flexible exchange rate, which was later formalised within the framework of the newly adopted inflation targeting regime. In this chapter, we (i) question the universal wisdom of inflation targeting, especially when applied to less developed economies, and (ii) demonstrate that in the case of Ukraine, inflation targeting is additionally complicated by the high degree of dollarisation and the related ‘fear of floating’. We argue that the adoption of a full-fledged inflation targeting regime in Ukraine at this stage would be premature and misplaced. Instead, the NBU should (i) avoid an over-restrictive monetary stance, which would be inevitably following the adoption of inflation targeting, and (ii) retain at least some control over exchange rate movements using *market* mechanisms. This would provide a higher degree of macroeconomic stability by avoiding the ‘trap’ of depreciation-induced recessions. In the meantime, monetary policy should be conducive towards economic growth, which over time should strengthen trust in the domestic currency and thus could enable the adoption of an inflation targeting regime in the longer run.

1. BACKGROUND: UKRAINE’S INABILITY TO SECURE STABLE EXCHANGE RATES

Already after the 1998-1999 currency crisis, the International Monetary Fund advised the adoption of an inflation targeting strategy for conducting monetary policy in Ukraine. However, until 2014 the monetary policies followed by the NBU were at first rather conventionally anchored to the US dollar (in 2001-2007, replaced by a peg until 2013) and – later on – tracked monetary targets (while at the same time attempting to stabilise the exchange rates by various means). The monetary policies from 2000 through 2014 lacked consistency and inflation rates were rather unstable (but on the whole not very high, ranging between 28.2% in 2000 and -0.3% in 2013). Attempts to fix the exchange rate by means of foreign exchange interventions as well as the interest rates’ hikes and occasional restrictions/controls imposed on the capital account transactions¹ were successful – but only in otherwise tranquil periods (characterised by an absence of external shocks). But when the pressures on the hryvnia (UAH) were becoming serious, the foreign exchange interventions (even when ‘strengthened’ by the hikes in interest rates and some restrictions imposed on foreign exchange transactions) usually misfired. Under conditions of a developing currency crisis the interventions led to massive losses in official reserves (during the years 2008-2009, and then in 2014-2015). The eventual sharp devaluations (most likely excessive) have encouraged the transition to a regime of floating exchange rates (in 2014). The ‘float’ was followed by the measures introducing inflation targeting, formally launched in December 2016.

It may be worth noting that despite the rather chaotic longer-run monetary/exchange rate developments periodically occurring since 2000, in real terms the economy of Ukraine performed quite well until 2008. ***During that period (2000 through 2007) GDP growth was high (7.5% per year on average) and***

¹ Between October 2008 and May 2010, controls/restrictions were in place also over some current account transactions.

quite stable. After a deep recession (undoubtedly due to the external shock shaking Ukraine) in 2009, a moderate recovery followed in 2010-2011.

2. INFLATION TARGETING MAY CONSTRAIN ECONOMIC GROWTH

2.1. Inflation targeting shortly explained: ‘mechanics combined with mystics’

In purely ‘mechanical’ terms, full-fledged inflation targeting essentially boils down to the manipulation of the central bank’s policy interest rates with the aim of achieving (or approaching), in some definite time perspective, a well-defined level of inflation (i.e. the ‘inflation target’). In conducting its actions (over the policy interest rates and associated monetary transactions with the financial sector institutions) a central bank on a full-fledged inflation targeting regime is assumed to be ***insensitive to fiscal policy considerations and is expected not to target, at least explicitly, any other indicators (such as the exchange rate, the real GDP growth rate or employment levels).***

The ‘mystical’ aspects of full-fledged inflation targeting include the insistence on (i) the ‘inflation target’ being publicly announced in advance; (ii) the central bank’s transparency (including well-developed channels of communication with the ‘public’); (iii) the central bank’s ‘independence’ (at least from the ‘politicians running fiscal policies’); and yet (iv) its ‘accountability’ (whatever that can mean).

There may be a rational reason why a central bank should be clear about its (exclusive) inflation target and should be promulgating the air of ‘independence’, ‘transparency’ and ‘accountability’. It is quite reasonable to expect that such a central bank is more likely to gain and maintain credibility than a bank widely believed to lack such virtues. A central bank’s credibility may help stabilise public expectations concerning inflation – and the credibility may be contributing to the success of inflation targeting (i.e. the achievement of the inflation target). Of course, no amount of independence, transparency and accountability will be of any use if the monetary policy hugely misses its inflation target permanently, or is responsible for a devastating crisis of the financial system, or pushes the real economy into a severe recession. On the other hand, a central bank operating a monetary policy largely by means of its interest rates may be successful (on inflation control) without being ‘independent’, ‘transparent’ and ‘accountable’.

2.2. Disinflation under inflation targeting not guaranteed – unlike losses to the real economy

Under inflation targeting the monetary policy aiming at disinflation is to be ***restrictive***: interest rates administered by the central bank have to be sufficiently higher than the expected inflation to have an effect on actual inflation. High real interest rates prevailing under such conditions are to constrain the demand pressures – by restricting aggregate demand (i.e. the level of real economic activity, or the speed of growth of activity).

In other words, disinflation under inflation targeting boils down to harming, or slowing down, the real economy in the hope that this will translate into disinflation.

Disinflation under inflation targeting always involves some dose of real 'pain' according to the doctrine 'no pain – no gain'. But the 'pain' itself is no guarantee of 'gain'. The experience of inflation targeting monetary policies as conducted in e.g. Poland, the Czech Republic and Hungary (as well as the experience of the policy of the ECB, which has been also conducted by means of interest rates) is that achieving the targeted inflation rates is a lengthy and uncertain process. The consensus view has been that it takes at least 12 to 18 months for the policy interest rate decisions to have observable impacts on inflation. Moreover, it is generally accepted that these impacts are far from certain. (Uncertainty about the inflationary consequences of decisions on the policy interest rates is overwhelming at the inflation targeting central banks. In their published inflation forecasts the central banks avoid presentation of point-forecasts. Instead they produce so-called 'fan charts' showing possible ranges (usually very broad) of the eventual effects of their decisions.)

Interestingly, the same decisions on policy interest rates are likely to have consequences for economic growth much earlier – already within twelve months. The real consequences of decisions tightening the monetary conditions are more predictable – and negative – while the decisions loosening the monetary conditions tend to be less predictable (and not necessarily positive). 'Pulling on a string' (i.e. tightening of the monetary conditions) is more effective in restricting output than 'pushing on a string' (i.e. relaxing of the monetary conditions).²

One must be 'transparent' about the fact that Ukraine's adoption of inflation targeting in the hope of achieving fast disinflation actually implies some additional hardship. Whether that hardship is worth the (possibly vain) hope of fast disinflation should be left to the Ukrainian policy-makers to decide.

2.3. Inflation targeting: a magic wand, or an undeserved reputation?

Inflation targeting was started in 1990 and spread subsequently to 11 advanced and 25 developing countries until now. One reason for the worldwide popularity of inflation targeting has been the fact that under progressing external liberalisation and globalisation, other monetary/exchange rate regimes, such as targeting the monetary aggregates or targeting exchange rates (or some combinations of both), had often (though not always) produced unwelcome consequences – at least for smaller open economies.

Interestingly, China continues to run an eclectic monetary/exchange rate policy very successfully – without experiencing high inflation and/or currency crises while at the same time continuing to grow vigorously in real terms. This has been possible because the Chinese authorities continue to maintain effective (and selective) restrictions on capital flows. The policies of the US Federal Reserve Board (Fed) and of the European Central Bank (ECB) are also *not* classified as being guided by inflation targeting.³

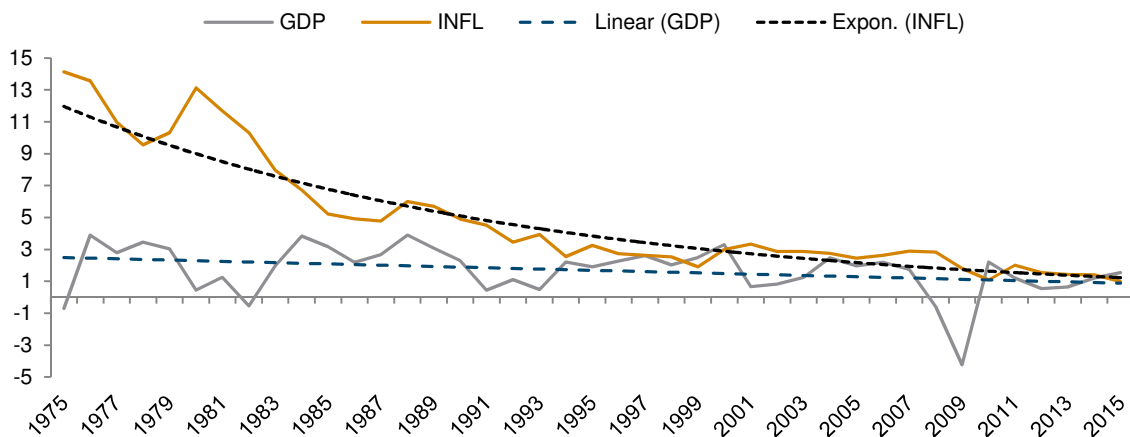
² The 'string' parable used to be one of J.M. Keynes' favourites.

³ The Fed conducts the monetary policy by managing the level of short-term interest rates and influencing the availability and cost of credit in the economy. The monetary policy of the Fed directly affects interest rates; indirectly it affects stock prices, wealth, and currency exchange rates. Through these channels, monetary policy influences spending, investment, production, employment, and inflation in the United States. The Fed's monetary policy actions are to achieve three general goals specified by the Congress: maximum employment, stable prices, and moderate long-term interest rates (without announcing any concrete quantitative targets for these goals).
The ECB is officially mandated to run a policy aiming at achieving an inflation rate 'lower than, but close to, 2% in the

The second, 'positive' reason for the popularity of inflation targeting has been its widespread reputation as a fool-proof 'method' of achieving low and stable inflation (i.e. the ability to hit the inflationary targets announced by the monetary authorities). In fact this reputation may be undeserved. Even before the advent of deflationary conditions (after 2014, when actual inflation was persistently lower than the targets) the actual inflation rates had tended to deviate quite visibly from the targets in a number of countries (including especially in Serbia, Iceland, Turkey, Romania, Hungary, Israel, and Poland, among others). Until 2014 the inflation targets were 'hit' with a greater precision only in highly developed countries where inflation had already been very low and stable for quite some time anyway.

The 'anti-inflationary' reputation of inflation targeting may also be undeserved on other grounds. The proliferation of inflation targeting from the early 1990s onwards happened to coincide with inflation subsiding throughout much of the globe (and certainly in the developed industrial countries). In these circumstances the impression could have been that falling inflation was due to the magic of inflation targeting: the 'modern policy tool'. But in actual fact the worldwide disinflation started much earlier, shortly after the dissolution of the Bretton Woods Accords in 1973 and the oil-price shock of 1974 (see Figure 1).

Figure 1 / Real GDP growth and inflation in OECD countries, in %



Source: World Development Indicators (World Bank), April 2017.

Disinflation in the post-1990 period is a smooth continuation of the pre-1990 tendency. The whole post-1975 disinflation, extending to this day, follows the 'Great Moderation' (in inflation and wages). This has resulted from progressing internal liberalisations in major OECD countries (advent of Thatcherism) combined with advancing globalisation (China and other low-cost countries starting to oversupply the world with cheap goods/labour). Persisting high unemployment and the resulting secular slowdown of real growth (see Figure 1), due to permanent inadequacy of aggregate demand, seem to have been the genuine basis of the worldwide disinflation more materially than the proliferation of inflation targeting.

medium run'. In its policy the ECB is required to take into account also the dynamics of monetary aggregates (this is the so-called 'monetary pillar' of the ECB policy).

After the 2008-2009 global financial and economic crises (with depressed real economies and deflationary tendencies) the Fed, the ECB as well as most inflation targeting central banks worldwide have long been unsuccessful in moving up inflation closer to their desired level (and that despite massive cheap lending to the financial sector institutions).

If the global tendencies for external and internal liberalisations come to an end (for example under the impact of protectionist and 'populist' sentiments) the 'Great Moderation' in wages and inflation may be also terminated. Under such conditions inflation targeting, even if solemnly celebrated, may no longer deliver the marvels expected. This conclusion must be remembered while encouraging the implementation of an inflation targeting regime in Ukraine.

2.4. NBU inflation targets are unreasonably ambitious

In the developed economies the standard inflation target is 2.0% (eventually with a 'tolerance band' of +/-1%). In the Czech Republic the 'central' inflation target is also 2.0%, in Poland it is 2.5%, in Hungary and Romania 3.0%, in Armenia, Russia and Serbia 4.0%, in Moldova and Turkey 5.0%.

The 'Road Map for Implementation of Inflation Targeting in Ukraine' (announced by the NBU in March 2016) sets the inflation (end-year) targets at 8% (+/-2%) for 2017; 6% (+/-2%) for 2018 and 5% (+/-1%) for 2019 (and beyond). As can be seen, the NBU is somewhat 'hawkish' on disinflation. (In year-on-year terms the consumer price index rose by 14% in 2016, the industrial producer price by over 20% while the Ukrainian hryvnia devalued by 17% against the euro.)

Whether these inflation targets will be met is anybody's guess at the moment; in any case, the target for 2017 will certainly be over-shot by a wide margin. A more relevant question is whether aiming at the targets so defined may be conducive to Ukraine's real prosperity in the medium term.

The prevailing view among most neoliberal ('mainstream') economists is that stable and low (though positive) inflation is conducive to strong real growth in the medium term. This belief also underlies the trajectory of inflation targets envisaged by the NBU's 'Road Map'. But in actual fact this conventional view is not really consistent with the available empirical evidence and the findings of respectable research reported – at least for the less developed countries. Pollin and Zhu (2006) studied the link between inflation and economic growth for 80 countries over the period 1961-2000. For medium- and low-income countries their finding is that ***higher inflation is associated with gains in GDP growth up to inflation threshold of 14-16%***.

The implication they draw is that ***there is no justification for inflation-targeting policies as they are currently being practiced throughout the middle- and low-income countries, that is, to maintain inflation within a 3-5 percent band***. A more recent research conducted at the World Bank (Espinoza et al., 2011) reviews a lot of published research on the issue of the optimal level of inflation and reports the outcomes of their own research based on data for a panel of 165 countries over the years 1960-2007. For developing countries they find that inflation becomes harmful to real growth when exceeding the threshold of 10%. Below that threshold, higher inflation is associated with faster real growth. In this context one must conclude that the path of disinflation targeted by the NBU actually lacks proper justification. If really followed, the path envisaged over the coming years is very likely to imply real growth falling short of what could be achieved with substantially higher inflation.

Concluding, ***the inflation targets set by the NBU will very probably imply losses in real GDP growth otherwise achievable at a substantially higher inflation target – and thus in a loss to***

Ukrainian living standards. The advancement of real economic development – which is the ultimate goal of any desirable economic policy – will thus be subordinated to the attempts to meet the secondary (and possibly elusive) goal of achieving an arbitrarily low level of inflation.

3. THE ‘FEAR OF FLOATING’ IS JUSTIFIED

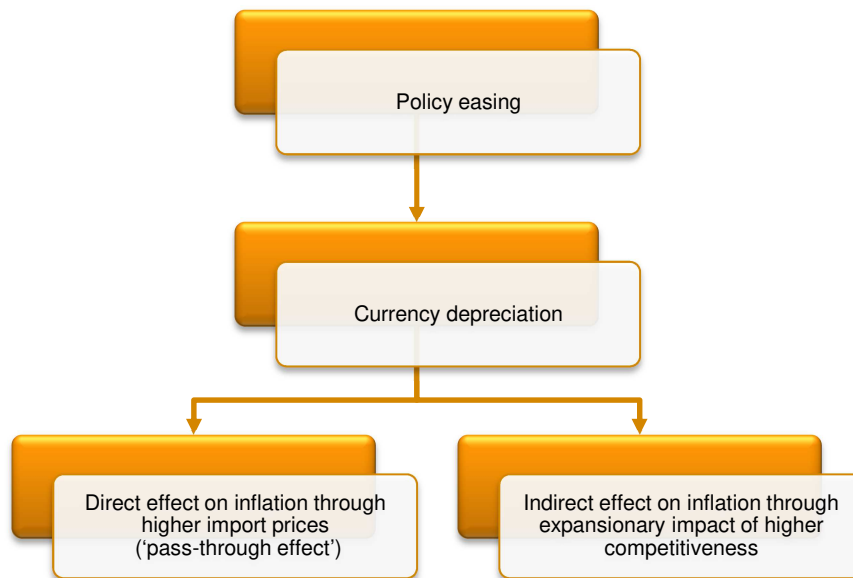
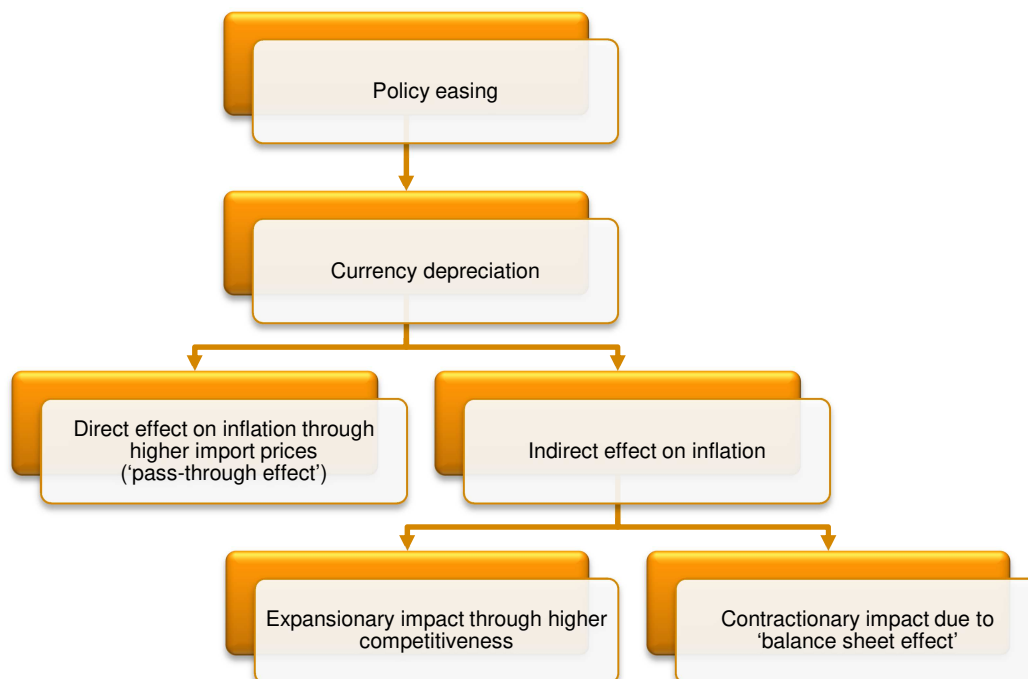
3.1. ‘Pure’ inflation targeting in a dollarised economy tends to be pro-cyclical

Full-fledged inflation targeting assumes a freely floating value of the domestic currency vs the foreign currencies: the operation of the foreign exchange market is assumed to be unperturbed by interventions by the central bank and otherwise unconstrained (for instance, by administrative controls). Under such an inflation targeting regime the monetary authority is expected to be totally indifferent to the exchange rate movements. The monetary regime opposite to the ‘free float’ is centred on securing the exchange rate stability (or ‘fix’). Under a ‘fix’ the stability of the exchange rate is to be achieved, for example, by the central bank’s unrestricted (and reasonably credible) ability and determination to intervene – by selling or buying foreign currencies – on the (free) foreign exchange market.

However, in a highly dollarised economy such as Ukraine’s, the implementation of ‘pure’ inflation targeting with a flexible exchange rate regime can be problematic, as suggested by the following theoretical arguments.

In a non-dollarised small open economy (see e.g. Ball, 1999), **a flexible exchange rate is deemed as an important transmission mechanism which supplements and amplifies the desired effects of monetary policy instruments.** For instance, when a central bank eases its policy (e.g. by lowering the policy interest rate) in a cyclical downturn, lower capital inflows result in currency depreciation, which in turn fuels inflation via both direct and indirect channels (see Figure 2a). The direct channel of depreciation operates through the higher prices of imported goods, which fuels overall inflation (‘pass-through effect’). At the same time, currency depreciation generally renders the economy more competitive and thus has an expansionary effect, which may also lead to increased inflationary pressures (the indirect channel of depreciation).

In a dollarised small open economy, however (see Figure 2b), rather than being expansionary, the outcome of monetary policy easing can be quite the opposite because of the so-called ‘balance sheet effect’. If many credits are denominated in foreign exchange, exchange rate depreciation in response to monetary policy easing typically results in a higher credit burden for households and businesses. This may result in surging non-performing loans and thus have potentially negative consequences for the financial stability, which weighs on domestic demand (see e.g. Leiderman et al., 2006). Even if the share of non-performing loans does not go up, the increased credit burden means that households and businesses divert a higher share of their incomes for the purpose of debt service at the expense of other expenditures. If such a contractionary ‘balance sheet effect’ over-compensates the expansionary effect of depreciation thanks to a more competitive exchange rate, **the overall effect of monetary policy easing may well turn out to be contractionary**, albeit accompanied by higher inflation because of the ‘pass-through effect’ (which is argued to be particularly high in dollarised economies).

Figure 2 / Inflation targeting in a small open economy**2a. Non-dollarised economy****2b. Dollarised economy**

Source: Own presentation based on Leiderman et al. (2006).

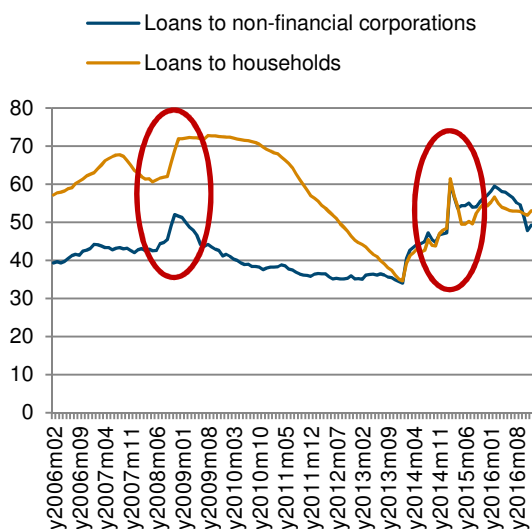
The above difference in the underlying transmission mechanism between the non-dollarised and the dollarised economy can be easily transposed to the case of an exogenous exchange rate shock. In a non-dollarised economy, exchange rate depreciation typically has a both expansionary and inflationary effect; this calls for monetary tightening as the appropriate policy response. In a dollarised economy,

however, for the reasons outlined above, exchange rate depreciation may well be inflationary and contractionary at the same time. ***If the central bank is only concerned with inflation rather than the state of the real economy, it will react to exchange rate depreciation by tightening its policy, which works pro-cyclically*** by amplifying the contractionary impact of currency depreciation. Thus, in a dollarised economy, a pure inflation targeting regime may contradict the task of macroeconomic stabilisation, which should really be a key concern for the central bank (at least implicitly).

3.2. 'Balance sheet effect' matters in Ukraine

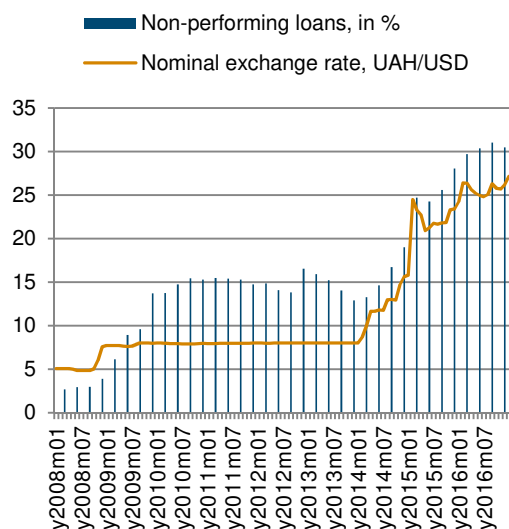
Of what relevance are the above theoretical considerations for Ukraine? Ukraine's economy is certainly 'small and open': its GDP stands at just around EUR 80 billion, about the same size as Slovakia's (see Figure 6 below), whereas exports and imports of goods and services combined account for 105% of Ukraine's GDP (in 2016). It is also highly dollarised, reflecting the long-standing tradition of mistrust in the domestic currency as a saving vehicle. A large part of bank deposits has been historically denominated in foreign exchange (mainly US dollars), despite much higher interest rates offered on hryvnia deposits. In these circumstances, the proliferation of foreign currency loans in Ukraine could be arguably explained by the strategy of banks to hedge exchange rate risks related to their high exposure to dollar-denominated deposits.⁴ Although *new* lending in foreign currency has been generally banned since the global financial crisis of 2008, each devaluation episode (most recently in 2008-2009 and 2014-2015) resulted in another spike in the share of foreign currency-denominated loans due to the mere valuation effect (the rising volume of outstanding foreign currency loans when expressed in national currency terms) – see Figure 3.

Figure 3 / Share of foreign currency-denominated loans, in %



Source: wiiw Monthly Database.

Figure 4 / Exchange rate and the share of non-performing loans

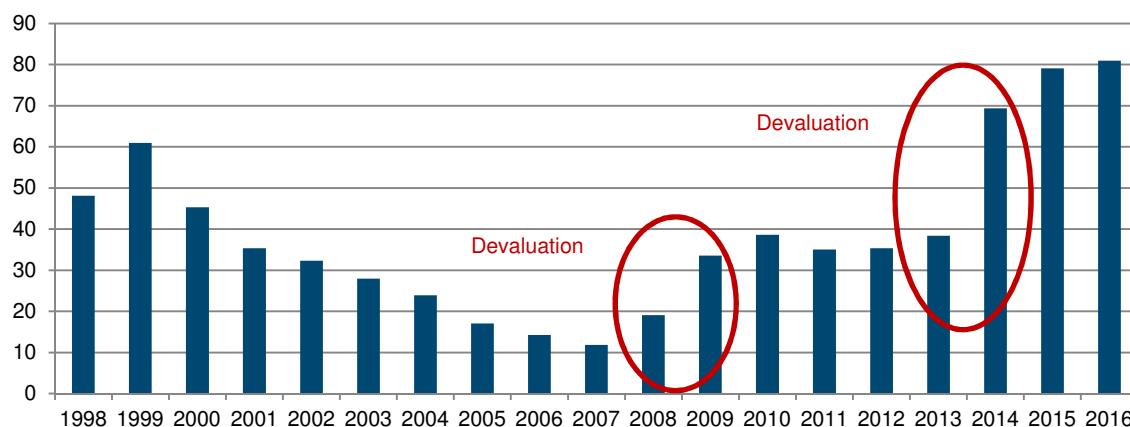


Source: wiiw Monthly Database.

⁴ Such an explanation would be consistent with the high dollarisation of both loans and deposits (see, for instance, Belhocine et al., 2016). However, the incentive for borrowers to economise on lower interest rates charged on foreign currency loans ('carry-trade') might have played some role as well.

Given the high degree of dollarisation, it is little wonder that *the recent history of economic crises in Ukraine fits well the 'balance sheet' theoretical narrative* outlined in section 3.1. Figure 4 demonstrates that every episode of currency devaluation resulted, with a certain time lag, in surging non-performing loans. During the most recent such episode (the switch to a floating exchange rate in 2014-2015), the nominal exchange rate depreciated by around four times, which put the vast majority of foreign currency borrowers under pressure. The 'balance sheet effect' has also manifested itself in the dynamics of Ukraine's public debt, 70% of which is denominated in foreign currency. In 2014 alone, it jumped by 31 pp of GDP (Figure 5), of which 20 pp was on account of the valuation effect of exchange rate depreciation, according to our calculations. This (and the high burden of public debt service) has given rise to fiscal consolidation (mostly through cuts in wages of public sector employees and social expenditures), which suppressed domestic demand still further.

Figure 5 / Public debt, as % of GDP



Source: wiiw Annual Database.

At the same time, inflation soared (to 48% in 2015, far exceeding the official target of 20%) on account of the pass-through effect of hryvnia depreciation to import prices, forcing the NBU to hike its policy (discount) rate markedly, up to 30% p.a., and keep it at this level for a relatively prolonged period of time. Not surprisingly, credit expansion stalled as a result: the stock of loans to the non-financial private sector grew during 2014-2015 by a mere 8.7% in *nominal* terms (in real terms it contracted by 32.5% (!)). Needless to say, the impact on the real economy was highly contractionary, adding to the pains induced by the exchange rate depreciation. All in all, in 2014-2015 Ukraine's real GDP declined by 16% as a result.

3.3. The hryvnia, if allowed to float, will be vulnerable to speculative attacks

Disinflation only became possible once extensive capital controls (including a surrender requirement on export proceeds, limits on withdrawals of foreign currency deposits, caps on dividend repatriation, etc.) were imposed in spring 2015 and the exchange rate stabilised accordingly (Figure 4). As a result, in 2016 inflation was brought down to 12.4% – thus meeting the official inflation target of the NBU (12%). Thus, *the success of macroeconomic stabilisation in Ukraine has been basically a success of the implemented capital controls rather than of inflation targeting*. In fact, stabilisation only became

possible once the inflation targeting regime was effectively abandoned.⁵ **But the existence of capital controls** – despite their relaxation over the recent months – **contradicts the very idea of inflation targeting**, with the exchange rate being equilibrated by market forces.

Can it be safely assumed that once capital controls are relaxed further, the exchange rate will remain reasonably stable and shocks like those observed in 2008 and 2014 will be avoided? If yes, one could argue that the vulnerability of the economy to contractionary ‘balance sheet effects’ (and the related problems with the implementation of a ‘pure’ inflation targeting regime) are less of an issue. But unfortunately there are good reasons to believe that the exchange rate – once allowed to freely float again – will likely remain very volatile.

One reason for the likely volatility of the exchange rate, which is grounded in ‘fundamentals’, is its susceptibility to shifts in the terms of trade. For instance, a decline in the global prices of wheat and steel (Ukraine’s two major export items) would certainly put the hryvnia under downward pressure, which cannot be resisted – at least not over prolonged periods of time – by foreign exchange interventions: sooner or later, foreign exchange reserves will be depleted, and the exchange rate defence will have to be abandoned. In such a situation, there is little choice for the NBU rather than to accept a weaker currency and live with its consequences, however contractionary they may be.⁶ Therefore, exchange rate shocks driven by fundamentals should not be seen *per se* as an obstacle to the implementation of inflation targeting.

Another – and arguably more likely – reason for future exchange rate volatility is speculative capital flows. Unlike in the above example of sustained shifts in the terms of trade where the exchange rate can be seen as a ‘shock absorber’, in this case **the exchange rate can become a source of a ‘shock’ itself, with potentially destabilising consequences for the real economy – especially if amplified by a pro-cyclical inflation targeting regime**. The most recent hryvnia devaluation in 2014-2015 is the best illustration of this. Although it cannot be denied that by the end of Viktor Yanukovich’s presidency, Ukraine had accumulated unsustainable external imbalances, making an exchange rate adjustment only a matter of time, the *extent* of the subsequent hryvnia devaluation cannot be explained other than by purely speculative factors, triggered by political and geopolitical tensions (political instability following the ‘Maidan revolution’, the secession of Crimea, military conflict in Donbass, etc.).

Many of these factors may become relevant again anytime: the semi-frozen conflict in Donbass may become ‘hot’ anytime, geopolitical tensions surrounding Ukraine-Russia relations/sanctions have not been resolved, political stability within Ukraine itself remains shaky, and any abortion of the IMF loan programme may trigger another wave of speculations against the hryvnia. Even disregarding the specific political and security challenges Ukraine is facing, its market for foreign exchange is fundamentally ‘thin’: the daily turnover on the interbank market only reaches USD 200-300 million,⁷ making the hryvnia an easy target for speculations. In a ‘thin’ market, even single transactions may make an impact, potentially causing large swings in the value of the hryvnia.

⁵ In fact, capital controls should have been introduced much earlier than spring 2015. This would have enabled the hryvnia to stabilise at a much higher level, thereby limiting the devastating effects of devaluation on the real economy.

⁶ One example of such an approach is the experience of Russia, which in response to a sustained deterioration in its terms of trade (oil price decline starting from the second half of 2014) allowed the rouble to depreciate by up to 50%.

⁷ ‘Hryvnia is falling again’, Central European Financial Observer, 20 March 2017, <http://www.financialobserver.eu/cse-and-cis/ukraine/hryvnia-is-falling-again/>

Unlike exchange rate movements driven by ‘fundamentals’ (which tend to be of a long-lasting nature), ***exchange rate movements driven by speculative capital flows can – and should – be resisted, or at least smoothed out via active foreign exchange interventions rather than interest rate instruments.*** Active management of the exchange rate would also help anchor inflationary expectations, which in Ukraine – as research strongly suggests – are dependent much more on exchange rate expectations than on NBU actions (see Box 1).

BOX 1 / INFLATIONARY EXPECTATIONS IN UKRAINE: HARDLY INFLUENCED BY NBU, BUT HEAVILY DEPENDENT ON EXCHANGE RATE EXPECTATIONS

As mentioned above, a properly functioning inflation targeting regime requires that the central bank is able to influence inflationary expectations of economic agents. If it is unable to do so and inflationary expectations exceed substantially the official inflation target (and, as a result, employees require accordingly higher wages and producers higher prices), the actual inflation may well end up following inflationary expectations rather than the central bank’s inflation target, forcing the latter to resort to excessive policy tightening, with the likely negative consequences for the real economy.

Meanwhile, Coibion and Gorodnichenko (2015) found that economic agents in Ukraine tend not to revise their inflationary expectations in light of new information coming from the central bank. They found no difference between the inflationary expectations of firms which track the announcements and actions of the central bank and those which do not, suggesting a significant credibility gap. Instead, they found that there is a strong positive correlation between inflationary expectations and expectations with respect to exchange rate development, especially in the case of households, suggesting that the exchange rate is used as a simple proxy of broader price movements. Consistent with this interpretation is their finding that there is no difference in the inflationary or exchange rate expectations of firms which do not trade with other countries and those which do (otherwise firms which trade extensively would track exchange rates more and would have different expectations with respect to inflation because of the ‘pass-through effect’). These findings put in doubt the credibility of the NBU and its ability to ‘form’ inflationary expectations via channels other than the exchange rate, raising doubts over the feasibility of a ‘pure’ inflation targeting regime in Ukraine.

3.4. Inflation targeting and fixed exchange rate regimes in practice: the equivocal experiences of the Balkan countries

The conventional wisdom has been that while the ***credible*** exchange rate fix tends to be a more efficient tool (or ‘anchor’) for the stabilisation of inflation (especially if inflation is rather high), the ‘float’ is a more efficient tool for smoothing out the fluctuations in the real activity. The conventional wisdom follows the observation that a ‘float’ allows a quick and flexible adjustment to economic shocks (especially to external shocks) by means of real currency devaluation (or revaluation). This flexibility is believed to be conducive to faster (and more stable) real growth, at least in the medium term. Under flexible exchange rates, periods of economic boom tend to be accompanied by increased capital inflows and currency appreciation, which ‘cools down’ the economy. Conversely, in times of economic slack, capital outflows result in currency depreciation, which makes the economy more competitive.

The countries on the ‘fix’ exchange rate regimes do not have that option. It is assumed that they could respond to such shocks by either changing real aggregates (e.g. the levels of investment or consumption) or by changing domestic wage rates or prices. But – in contrast to the changes in

exchange rates, which could happen overnight – changes in real activities, or domestic wages/prices, are not easy to implement (at short notice). Also, the ‘pain’ due to a sharp devaluation is likely to be less acute than the pain of a comparably deep decline in the wage rates.

The conventional wisdom on the superiority of ‘floaters’ over ‘fixers’ as far as the real responses to external shocks are concerned has been supported by the experiences of two groups of Central and East European EU Member States (EU-CEE). It turned out that, generally speaking, the ‘floaters’ (including inflation targeting countries such as Poland, the Czech Republic, Hungary and Romania) tend to have performed better, in real growth terms, than the ‘fixers’ (including Estonia, Latvia, Lithuania and other EU-CEE countries which had adopted the euro).⁸ These findings square well with those of Belhocine et al. (2016) who, in addition to EU-CEE, also included countries of the Western Balkans into their sample and found that ‘floaters’ have performed better not only in terms of growth, but also in terms of inflation.

The latter does not mean however that a floating exchange rate regime is superior to a fixed one under any circumstances; in fact, there are usually good reasons why a country chooses a particular exchange rate regime and not the other. For instance, Central and East European ‘floaters’ tend to be bigger economies (which are generally less dependent on exchange rate movements), are typically more developed and have better institutions. In turn, ‘fixers’ and economies with heavily managed exchange rates tend to be smaller and have a higher degree of euroisation/dollarisation and, accordingly, a higher ‘fear of floating’ – see Figure 6.

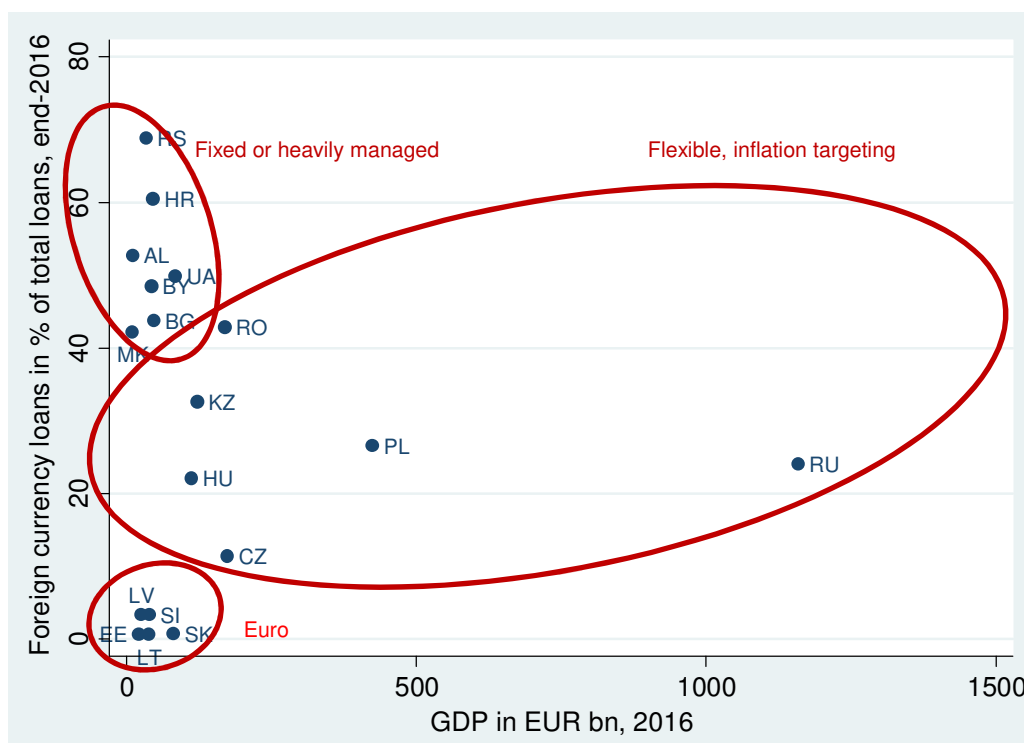
Currently Ukraine differs very radically from the advanced EU-CEE countries (be they ‘floaters’ or ‘fixers’) on very many counts (macroeconomic in nature, as well as structural and ‘systemic’). Conclusions drawn from the experiences of these more advanced transition countries may be rather irrelevant for today’s Ukraine. Much more relevant conclusions might be expected to follow from the experiences of relatively less advanced (and relatively poorer⁹) transition countries such as Serbia, Croatia, Romania and Bulgaria. Another relevant feature Ukraine shares with all four Balkan countries (but not with the advanced transition countries) is the high level of dollarisation (euroisation in the case of the Balkan countries) of both loans and deposits. (In Croatia and Serbia the shares of deposits and loans denominated in foreign currencies have been about 75%, in Bulgaria and Romania about 50-60% – see Figure 6.)

While Serbia and Romania have been inflation targeting countries and thus ‘floaters’ (since 2006 and 2005 respectively),¹⁰ Bulgaria and Croatia have been ‘fixers’ for a very long time (the former since 1997, the latter since 2003). Bulgaria and Croatia differ in the ‘hardness’ of their ‘fixes’. Bulgaria is formally a currency-board country with the exchange rate vs the euro constant since the very beginning, while the Croatian exchange rate (vs the euro) is allowed to fluctuate within a very narrow band.

⁸ See e.g. wiiw (2015).

⁹ In 2016 the Ukrainian per capita GDP (at purchasing power parity) represented 20% of the EU-28 level vs the Polish or Hungarian 69%. For Serbia and Bulgaria the levels are 37% and 48% respectively; for Croatia and Romania 58% (each). Apart from being relatively poorer, all four countries suffer from ‘systemic’ shortcomings (e.g. as evidenced by widespread corruption), even Bulgaria and Romania, which acceded the EU ten years ago.

¹⁰ It has to be mentioned though that Serbia has been a ‘floater’ largely on paper only. As suggested by the so-called Calvo-Reinhart ‘Fear of Floating’ Index (which puts the variability of the nominal exchange rate in relation to the variability of policy instruments typically used to stabilise the exchange rate), Serbia’s *effective* exchange rate flexibility has been much lower than e.g. in Hungary and Romania – and closer to Croatia (see Belhocine et al., 2016).

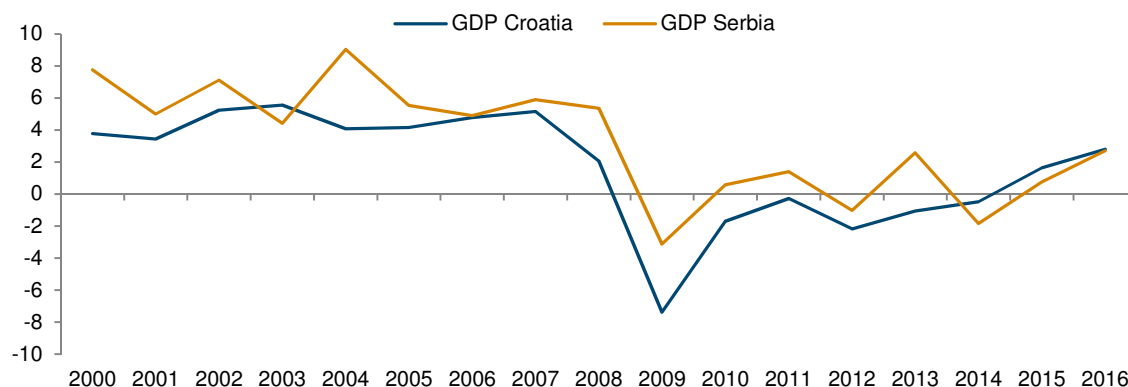
Figure 6 / Economic size vs extent of dollarisation/euroisation, 2016

Source: wiiw Annual and Monthly Databases.

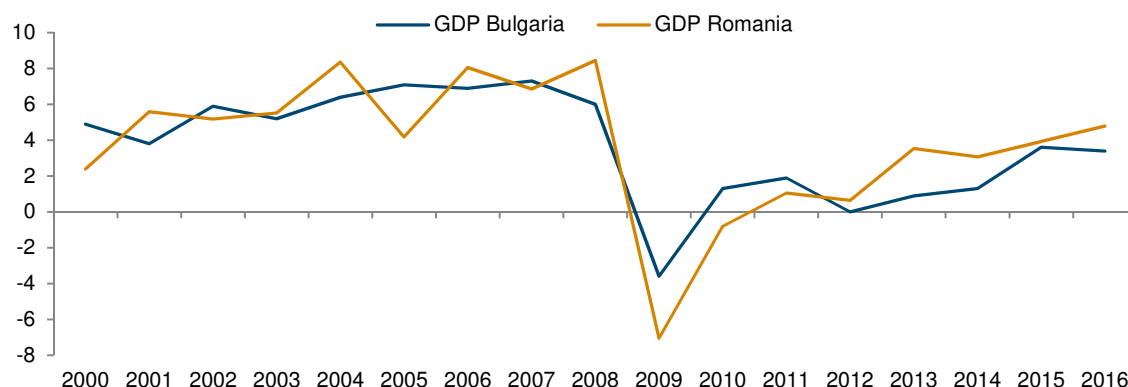
Comparing the real performances of Croatia and Serbia¹¹ supports the conventional view that under ‘floating’ the external shocks tend to be absorbed with smaller GDP losses than under a ‘fix’ (see Figure 7). In 2009 the Croatian GDP plummeted by 7.4% while Serbia’s only by 3.1%. Overall, GDP growth in Serbia has almost always been much faster than in Croatia. Since 2005 GDP has grown at 2% per year (on average) in Serbia but only at 0.6% in Croatia. On the other hand, in terms of inflation Croatia performed much better than Serbia. Average yearly inflation in Croatia was 2.1%, against 8.0% in Serbia (years 2005 through 2016). It may be added that since 2013 inflation has been much lower in Serbia, while Croatia has been experiencing outright deflation.

However, comparing the real performances of Bulgaria and Romania does not quite support the conventional views (see Figure 8). It turns out that in Romania (the inflation targeting ‘floating’ currency country) the GDP decline in 2009 was deeper than in Bulgaria with a ‘fixed’ exchange rate (-7.1% vs -3.6%). In terms of longer-term GDP growth, there is virtually little difference between the two countries (since 2005 GDP has on average grown by 3.1% in Romania and 3.0% in Bulgaria). However, on inflation Bulgaria has performed definitely better than Romania. In the former country average yearly inflation since 2005 has been 3.4% – in the latter country 4.4%. (Recently both countries have suffered deflation: Bulgaria since 2013, Romania since 2015.)

¹¹ Comparing Serbia and Croatia makes sense: both countries are successor states of former Yugoslavia and – as such – share many institutional features developed under the Yugoslav model of ‘Socialism’ (e.g. the role of labour-managed firms). In contrast, in the past both Bulgaria and Romania were on rigid, centralistic, regimes of the orthodox Soviet persuasion (i.e. the ‘command economy model’).

Figure 7 / GDP growth rates: Croatia vs Serbia

Source: wiiw Annual Database.

Figure 8 / GDP growth rates: Bulgaria vs Romania

Source: wiiw Annual Database.

On comparing two pairs of countries: Croatia with Serbia and Bulgaria with Romania, one can find some support for the view that the 'fixed' exchange rate regimes are more conducive to the achievement (or maintenance) of low inflation than free float regimes (combined with inflation targeting). However, the conventional view that 'float' (and thus inflation targeting) helps to better absorb 'shocks' than the 'fix' is not unequivocally supported.

On the whole, the experiences of the four Balkan countries considered seem to suggest that inflation targeting (and the exchange rate float) is not necessarily a better choice than the monetary policy regimes seeking to stabilise the value of the exchange rate in the first place.

3.5. 'Flexible' inflation targeting does not exclude occasional exchange rate interventions

The NBU's 'Road Map for Implementation of Inflation Targeting in Ukraine' mentions (on p. 15) ongoing improvements in the functioning of the foreign exchange markets. These improvements (still 'in process') are to result in 'lifting the administrative restrictions', 'revision and liberalisation of the capital account' and 'development of hedging instruments'. On p. 17 the 'Road Map' mentions, among 'actions for reaching inflation targets', the smoothing of excessive exchange rate fluctuations: 'FX interventions will be used to smooth exchange rate fluctuations without resistance to fundamental appreciation/depreciation trends.'

The declared intention to use foreign exchange interventions is commendable not only for smoothing out 'excessive' exchange rate fluctuations but also for the accumulation of safe levels of foreign reserves and for ensuring adequate liquidity in the foreign exchange market during stressful episodes. The smoothing out of 'excessive' exchange rate fluctuations may be important not only for the real economy (stabilisation of economic conditions facing domestic exporting and importing firms, minimisation of balance sheet crises among the financial institutions) but, first of all, because strong devaluation shocks (especially if speculative in nature) may fuel domestic inflation (e.g. via hikes in prices of essential imports).

Combining inflation targeting (implying floating of the domestic currency) with a liberal use of foreign exchange interventions has become a standard practice – especially among lower- and medium-income countries.¹²

While the NBU's declared intention to fall back on foreign exchange interventions (when expedient) is in principle commendable, the envisaged 'improvements' whose aim is to lift administrative restrictions on capital transactions may not be accepted unconditionally. Given the shallowness and institutional underdevelopment of Ukraine's exchange rate market, the successful conduct of exchange rate interventions may require a good deal of non-market-based measures to be taken by the authorities. These measures may include various reserve requirements (for example the imposition of obligatory deposits on specific types of transactions) or other measures. Needless to say, the application of non-market measures supporting foreign exchange interventions would require staffing the NBU with reasonably competent – and incorrupt – personnel.

The NBU may be well advised to consider the usefulness of various non-market-based measures with which the monetary authorities of Israel, Korea, Russia or Colombia (among others) have supported their foreign exchange interventions (while still operating under inflation targeting regimes).

¹² That combining inflation targeting with foreign exchange interventions has become a common practice is amply documented in a volume reporting the contents of a conference held at the Bank for International Settlements (BIS) in February 2013. The conference was attended by high-level representatives of 24 inflation targeting central banks from emerging economies (including from Poland, Hungary, the Czech Republic and Russia) – see BIS (2013). In a similar vein, IMF (2015) found that *not a single* low- and low-middle-income country – irrespectively of whether or not it has a formal inflation targeting regime – conducts a pure exchange rate float. More recently publications have appeared justifying what works in practice on 'theoretical grounds' – see e.g. Airaudo et al. (2016). Of high relevance in this context are also the findings by Ötker-Robe et al. (2007) who report that even countries like Israel, Poland and Chile – undoubtedly more advanced than Ukraine in nearly all respects – needed 10-20 years for a switch to a full-fledged floating and inflation targeting regime.

4. CONCLUSIONS AND POLICY RECOMMENDATIONS

The above analysis suggests that the adoption of ‘pure’ inflation targeting as Ukraine’s monetary policy framework, which was formally announced at the end of 2016, is questionable and, at the very least, premature. The presumed success of inflation targeting as a universally applicable ‘magical tool’ to reach low and stable levels of inflation in many countries has in reality been largely due to other factors, such as progressive liberalisation and globalisation, rather than the inflation targeting concept itself. Besides, the NBU’s announced inflation target (5% in the medium term) appears to be overly ambitious given Ukraine’s development level. Experience from other countries suggests that sticking to this target at all cost will likely require a consistently overly restrictive monetary policy, which will constrain Ukraine’s growth prospects.

The success of macroeconomic stabilisation in Ukraine so far has had nothing to do with inflation targeting but has been basically due to the imposed capital controls, which contradict the basic idea of inflation targeting with the exchange rate being determined by market forces. However, as capital controls are being gradually eased, the hryvnia exchange rate is likely to become vulnerable to speculative attacks once again, given the numerous political and geopolitical uncertainties facing Ukraine and the ‘thinness’ of its foreign exchange market. Attempts at macroeconomic stabilisation in response to such exchange rate shocks by using ‘classical’ inflation targeting instruments such as interest rates will have a pro-cyclical impact, given the high degree of dollarisation and the related prevalence of so-called ‘balance sheet effects’. The experience of other countries in similar circumstances – both in Central and Eastern Europe and elsewhere – suggests that a preferable strategy would be to smooth exchange rate fluctuations via interventions rather than monetary policy instruments. Such interventions can be occasionally used within the framework of a formal inflation targeting regime. It is clear that for this, a certain minimum level of reserves is needed; the latter will not only provide the necessary policy space for interventions should such a need arise, but should discourage speculations against the currency in the first place.

REFERENCES

- Airaudó, M., E.F. Buffie and L.M. Zama (2016), 'Inflation Targeting and Exchange Rate Management in Less Developed Countries', International Monetary Fund Working Paper No. 16/55.
- Ball, L. (1999), 'Policy rules for open economies', in: J. Taylor (ed.), *Monetary Policy Rules*, University of Chicago Press, Chicago, Illinois.
- Belhocine, N. et al. (2016), 'Taking stock of monetary and exchange rate regimes in emerging Europe', IMF European Department, Washington DC.
- BIS (2013), 'Market volatility and foreign exchange interventions in EMEs: What has changed', *BIS Papers* No. 73, Bank for International Settlements.
- Coibion, O. and Y. Gorodnichenko (2015), 'Inflation expectations in Ukraine: a long path to anchoring', VoxUkraine, 5 October, <https://voxukraine.org/2015/10/05/inflation-expectations-in-ukraine-a-long-path-to-anchoring-en/>
- Espinoza, R., H. Leon and A. Prasad (2011), 'When Should We Worry About Inflation', *The World Bank Economic Review*, Vol. 26, No. 1, pp. 100-127.
- IMF (2015), 'Evolving monetary policy frameworks in low-income and other developing countries', *IMF Staff Report*, October.
- Leiderman, L., R. Maino and E. Parado (2006), 'Inflation targeting in dollarized economies', *IMF Working Paper* 06/157, June.
- Ötoker-Robe, I., D. Vavrá et al. (2007), 'Moving to greater exchange rate flexibility: operational aspects based on lessons from detailed country experiences', *IMF Occasional Paper* No. 256.
- Pollin, R. and A. Zhu (2006), 'Inflation and Economic Growth: A Cross-Country Non-Linear Analysis', *Journal of Post Keynesian Economics*, Vol. 28, pp. 593-614.
- wiiw (2015), 'A Time of Moderate Expectations: Economic Analysis and Outlook for Central, East and Southeast Europe', The Vienna Institute for International Economic Studies (wiiw), *wiiw Forecast Report*, Spring.

II. Ukraine's pension system: some reservations about the 'fundamental' reform

1. INTRODUCTION

The international financial institutions have a very poor record as the promoters of pension reforms in less developed and emerging economies. The wave of partial privatisations of public pension systems enforced in the 1990s throughout Latin America and the post-socialist countries has ended badly for both the whole national economies in question and for their pensioners. An urgent need to scrap (or substantially reformulate) the fundamental reforms introduced under the *conditionalities* of the international financial institutions (led in this case by the World Bank) was acknowledged – and acted upon accordingly – not only in Latin America but also in Hungary, Poland, Kazakhstan and Russia.

In Ukraine, a comprehensive pension reform has been one of the most pressing IMF requirements for the allocation of the fifth tranche in the framework of its EFF (Extended Fund Facility) loan programme. The final version of the pension reform adopted in October 2017 abandoned the initial IMF demands for a higher statutory retirement age but envisages a gradual increase in the *effective* retirement age by (i) tightening the number of years in service requirement, and (ii) abolishing early retirement schemes for a wide range of occupations. In its recent Country Report (IMF, 2017), the International Monetary Fund provides some theoretical and empirical arguments underlying its policy recommendations. It does not seem to be considering a partial privatisation of Ukraine's pension system, remarking though that 'the introduction of a second pillar should be delayed'. Nonetheless it critically reviews the state of Ukraine's pension system which, in its judgement, 'is in urgent need of fundamental reform'. Some of the measures the IMF considers as worthy of implementation make good sense – for instance, the suggestion to link the size of the pension benefit to the amount of paid social security contributions, as it would provide incentives to declare wages and incomes and thus help to raise the badly needed revenues for the Pension Fund (for more on that see below). However, some of the basic assumptions underlying the IMF analysis are not unquestionable. Also, the most essential and concrete reform measure recommended which boils down to 'raising the effective retirement age' may not be accepted unconditionally.¹³

¹³ The current draft government bill endorsed by the IMF and the World Bank does not envisage a hike in the statutory retirement age. However, it envisages an increase of the minimum years of service requirement and the abolition of early retirement options (with the exception of the military), which is tantamount to a higher effective retirement age.

2. AVERAGE PENSION NOT AS LOW AS CLAIMED BY THE IMF

In 2015 the average monthly pension in Ukraine, disbursed under the pay-as-you-go system¹⁴, stood at about UAH 1,700, equivalent to about EUR 70 at the exchange rate or EUR 217 at purchasing power parity (PPP). This is well above the international poverty line of USD 1.90 (PPP) per day. Even the minimum pension, which currently stands at UAH 1,312 per month (about EUR 45 at the exchange rate and EUR 140 at PPP) and is received by around two thirds of the country's pensioners,¹⁵ is more than double the international poverty line.

The average gross replacement rate (the ratio of average pension to average gross wage) was 40.4% – not very low by international standards (e.g. in Poland that ratio stood at 42.2% in 2015). However, the genuine gross replacement rate is currently certainly lower than the figure quoted above. This is due to both the government decision to double the official minimum wage starting from January 2017 (which has led to an overall strong wage growth, by 20% in real terms) and the high level of underreporting of wages earned by working-age individuals 'informally'. On the other hand, it must be admitted that most probably a high share of the retirees *also* work in the informal sector, earning incomes supplementing their pensions.

3. STATUTORY RETIREMENT AGE RELATIVELY – BUT NOT EXCEPTIONALLY – LOW

Contrary to what the IMF study claims, Ukraine's *statutory* retirement age for men (60 years) is not very low by international standards. It is not different from that for Russia and Belarus. While it is indeed lower than in most OECD countries (the OECD average is 64.7 years, in Poland it is 65 years) – it is the same as, or higher than, in such OECD countries as Turkey, Slovenia and Luxembourg (according to OECD data for 2014).

Ukraine's statutory retirement age for women (58 years) is *currently* higher than in Belarus and Russia (where it is 55 years), lower than in most OECD countries (63.5 years on average; 60 years in Poland) but the same as in Turkey. More importantly, the statutory retirement age for women in Ukraine goes up by half a year ever year in line with the pension reform enacted in 2011 (also under pressure from the IMF). By 2021, the statutory retirement age for women will reach 60 years – the same as for men.

The *effective* retirement age (for both sexes) in Ukraine (61.2 years) does not appear to be particularly low in international comparison either. Interestingly, the effective retirement age (for both sexes) falls short of 60 years in France. For women it falls short of 60 years also in Slovenia, Poland, Belgium and Slovakia (see OECD, 2015).

¹⁴ In theory, the 'Law on Mandatory State Pension Insurance' also envisages the introduction of a second and a third 'pillar' of the pension system (operated by the government and the private sector, respectively). However, the second pillar (mandatory funded system) remains only on paper: the law does not stipulate when it has to come into effect, only the conditions that are required for it to do so. The third pillar (voluntary funded system) has been functioning since 2005, but the participation rate has been very low (Lisenkova, 2011).

¹⁵ The high number of those receiving the minimum pension is explained by the fact that by law, if the calculated pension is below the official minimum pension, it is adjusted to that level (which corresponds to the official subsistence minimum).

4. LOWER LIFE EXPECTANCY 'NEUTRALISES' THE EFFECT OF LOWER STATUTORY RETIREMENT AGE

Ukraine's relatively low statutory retirement ages – in the IMF study 'very early retirement ages by international standards' – are seen as the main reason for the particularly large number of pensioners – which then is 'the main reason behind high pension expenditure'. However, it is essential to see the retirement ages in connection with the life expectancy at the ages of retirement. It appears that Ukraine's life expectancy for both men and women is substantially lower than in the advanced countries (see Tables 1 and 2). Moreover, the gaps between Ukraine's and other countries' life expectancies are not expected to diminish even in the long run.

Table 1 / Male life expectancy at age 60 (years)

	2015-2020	2020-2025	2025-2030	2030-2035	2035-2040
Eastern Europe	16.45	16.69	16.96	17.30	17.65
Belarus	14.72	14.96	15.18	15.45	15.73
Bulgaria	17.30	17.63	17.94	18.30	18.65
Czech Republic	19.98	20.61	21.29	22.01	22.72
Hungary	18.02	18.42	18.85	19.23	19.69
Poland	19.45	20.08	20.73	21.42	22.13
Romania	18.00	18.40	18.85	19.31	19.77
Russian Fed.	15.30	15.43	15.57	15.72	15.91
Slovakia	18.23	18.70	19.21	19.68	20.20
Ukraine	15.34	15.45	15.57	15.70	15.86
Northern Europe	22.32	23.05	23.77	24.49	25.11
Southern Europe	22.58	23.27	23.92	24.51	25.09
Western Europe	22.87	23.60	24.29	24.89	25.43

Table 2 / Female life expectancy at age 60 (years)

	2015-2020	2020-2025	2025-2030	2030-2035	2035-2040
Eastern Europe	21.54	21.89	22.22	22.57	22.91
Belarus	21.24	21.53	21.84	22.17	22.47
Bulgaria	21.47	21.79	22.11	22.42	22.73
Czech Republic	23.93	24.45	24.96	25.48	25.95
Hungary	22.46	22.85	23.24	23.61	24.02
Poland	24.37	24.85	25.33	25.78	26.26
Romania	22.03	22.41	22.82	23.23	23.68
Russian Fed.	20.98	21.29	21.57	21.85	22.13
Slovakia	22.84	23.25	23.66	24.10	24.51
Ukraine	20.50	20.77	21.00	21.25	21.51
Northern Europe	25.28	25.82	26.33	26.86	27.36
Southern Europe	26.54	27.17	27.80	28.42	29.00
Western Europe	26.52	27.08	27.63	28.20	28.75

Source: UN Population Projections, 2015.

Taking into account the facts from Tables 1 and 2 it must be concluded that ***the relatively low statutory retirement ages in Ukraine cannot be the main reason for the relatively large number of pensioners.*** Earlier retirement is coupled with lower post-retirement life expectancy. In effect the ratio of

the old- to the working-age population in Ukraine is not much different from the same ratio for other East European countries – while much lower than in other parts of Europe (see Table 3).

Table 3 / Ratio of population aged 65 or more to the working-age (15-64 years) population, in %

	2015	2020	2025	2030	2035	2040	2045
Eastern Europe	21.1	25.2	28.9	31.4	31.8	33.5	36.3
Belarus	20.0	22.8	26.8	30.3	30.9	31.6	32.8
Bulgaria	30.4	33.4	35.6	37.0	39.0	42.5	46.6
Czech Republic	27.0	31.7	34.1	36.1	38.1	43.4	50.7
Hungary	26.3	30.4	32.8	32.9	34.6	37.9	44.1
Poland	22.3	28.2	33.9	36.3	37.7	41.0	47.0
Moldova	13.4	17.6	21.1	24.7	25.3	26.5	29.4
Romania	25.8	30.0	33.4	33.6	39.2	44.4	49.9
Russian Fed.	19.1	22.8	26.7	29.5	28.8	29.5	31.0
Slovakia	19.5	24.2	28.5	31.6	33.4	37.2	43.5
Ukraine	21.9	26.0	28.1	30.8	30.8	32.1	34.4
Northern Europe	27.9	29.8	32.0	35.4	38.5	40.0	40.8
Southern Europe	30.8	33.9	37.8	43.3	49.5	56.3	61.9
Western Europe	30.6	33.7	37.8	43.2	48.1	50.0	50.5

Source: UN Population Projections, 2015.

Also on account of the number of pensioners as a percentage of the working-age population (41.7% in 2015), Ukraine is not worse off than its regional peers. For instance, it does not differ much from Belarus (41.2%) and scores much better than Russia (45.5%), although worse than most OECD countries (e.g. in Poland, this ratio stood at 36.6%).

5. OLDER WORKERS MAY BE UNFIT TO WORK: HIGHER LEVELS OF POVERTY EXPECTED

Raised statutory retirement ages would deprive a large number of persons of pensions to which they are currently entitled. The assumption is that these persons would earn their incomes themselves. Of course this assumption is questionable. Firstly, the demand for services of the elderly may not be forthcoming. Secondly, in view of Ukraine's low life expectancies of the seniors (see Tables 1 and 2) large fractions of the cohorts considered may be *physically* unable to earn any income. (Low life expectancy is a sign of the poor health status of the population.) In both cases **raising the statutory retirement ages would only contribute to higher levels of extreme poverty and material deprivation**. It may be added that the 'savings' to the public finances achieved that way would come primarily from cuts in the volume of pensions disbursed. The non-working (for whatever reason) new cohorts of the elderly would not contribute to higher revenues of the public pension system at all.

Raising the statutory retirement ages need not be the only way of extending the average *effective* retirement ages. Seniors that are able and willing to work may choose to defer the time of retirement if income earned is sufficiently attractive in comparison with the retirement pay. It is interesting to note that while in most countries the average effective retirement ages are lower than the statutory ages, in Turkey (where the statutory retirement ages are comparable with Ukraine's) the opposite obtains: the

average effective retirement ages are much higher than the statutory ones. Also in other lower-income OECD countries (Korea, Mexico and Chile) seniors work substantially longer than statutorily required.

6. EXCESSIVE DEFICITS OF THE PENSION FUND OR RATHER EXCESSIVE PREOCCUPATION WITH THE DEFICITS?

The issue that is central to the IMF's dissatisfaction with the current state of Ukraine's pension system is its being apparently unsustainable: 'Without a major overhaul, the current contributory, earnings-related pension system will continue to remain in deficit and will fail to provide adequate and equitable pensions to all retirees.' To support that conclusion the IMF analysis quotes pension spending as a percentage of GDP for Ukraine and its regional peers (Russia, Belarus and Moldova) – suggesting that at 13.4% that share was the highest in 2015.

The first problem with that number is that it is inconsistent with other numbers for Ukraine quoted in the same place (IMF, 2017, Table 1). The ratio consistent with the IMF numbers from that table is 10.8% – less than in Moldova and only slightly more than in Russia and Belarus. Anyway, even at 13.4% the GDP share of spending on pensions is not excessive by international (European) standards. The average share for the euro area is 10.8%, for a number of European countries it is much higher (for France 13.6%, for Italy 13.8%, for Austria 13.1%, for Finland 13.4%). In Poland the share is lower (9.1%). However, when one allows for public spending for retirees' survivors (1.8%) the share is close to 11% also in Poland.¹⁶

In addition, other items of social spending in Europe (among others on account of sickness and disability, family and children) to some extent also benefit the retirees. Arguably, **total social protection spending** is a better measure of attention the poorer social strata – including retirees – should be given in the modern world. The GDP share of social protection spending (excluding health care) in the euro area is over 20% now: 15.9% in Poland, 17.4% in Slovenia – but much higher in the Scandinavian countries: 23% in Denmark, 22% in Finland. In Ukraine, total social protection spending is much lower: 13.6% of GDP.¹⁷

The IMF quotes the high and rising deficits in Ukraine's pension system (revenue from obligatory contributions *minus* pension expenditure) as something unacceptable in the long run. Even if the IMF's estimates of the deficit for 2015 are overstated (on account of the mistaken value of expenditure) the deficits in question are nothing unusual by international standards. For the euro area the deficit in question (calculated as the net social security contributions *minus* social protection expenditure) was 5.6% of GDP in the euro area, 6.3% in the whole EU, 3.4% in Poland – but as much as 22.6% (!) in Denmark. Narrower social spending (on old-age persons and their survivors) was still higher than the whole of social security contributions in a number of countries (including in Austria, the Scandinavian countries and Italy). **There is nothing irregular or unacceptable about social spending (and pension spending in particular) being financed out of the budget of the general government.** It is superstition to believe that social spending must be balanced by social contributions.¹⁸ Equally well the

¹⁶ The average public spending on retirees' survivors also equals 1.8% of GDP for the euro area.

¹⁷ See ILO (2014). Data refer to the latest available year.

¹⁸ The IMF analysis deplores the fact that the Pension Fund of Ukraine makes deficits which are then financed by transfers from the state budget. But the PFU is just a part of Ukraine's general government, of which the state budget is another component. The existence of the PFU is just an administrative detail without any real consequence from the macro

former may be financed by other taxes levied on the private sector (e.g. indirect taxes, personal income taxes or corporate income taxes) – or, under some conditions – by government borrowing.

7. SUSTAINABILITY CONCERNS MAY BE EXAGGERATED

The alleged need for a major pension reform is also advocated on the grounds of the pension system's sustainability. The low fertility rate (currently 1.5 per woman) in Ukraine is expected to lead to both population decline and population ageing in the long term. According to the UN central (medium-fertility) scenario, which reckons with a gradual improvement in the fertility rates over the coming decades, Ukraine's population is projected to decline by 20% by 2050. The decline may turn out to be even higher (up to 30%) if fertility and mortality rates stay at their current levels. At the same time, the old-age dependency ratio (the share of old-age to working-age population) is expected to double under the UN central scenario. According to IMF projections, this will lead to a significant increase in pension spending as a share of GDP, by about 6 pp of GDP by 2050.

There are grounds to believe that these predictions – even assuming that the underlying demographic projections are correct – may be overly pessimistic. Following the same methodology as the one used by IMF (2017), pension spending as a share of GDP (PE) can be decomposed as follows:

$$PE = RR * CR * ODR * \frac{1}{LP} \quad (1)$$

where RR is the replacement rate (the ratio of average pension to average output per worker), CR is the coverage ratio (the share of pensioners in the total population above 65), ODR is the old-age dependency ratio (the ratio of population above 65 to the working-age population), and LP is labour participation (the share of workers in the total working-age population).

The IMF conclusion with respect to the expected long-term increase in pension spending as a share of GDP primarily stems from the ageing of the population (increasing old-age dependency ratio) on account of the above-mentioned demographic trends. The replacement ratio is assumed to remain constant at the level of 2015, which does not entirely correspond to the current system of pension indexation (under the current system, only part of the pension which corresponds to the minimum pension is being indexed to inflation) but may be a plausible assumption in the long term.¹⁹ In turn, the coverage ratio, the old-age dependency ratio, as well as the labour force participation and employment rates are all determined exclusively by the population dynamics and assume that age- and gender-specific participation rates are unchanged from their current levels.

Some of these assumptions are questionable, in particular the one with respect to the constant rate of employment over time. Rather, it is reasonable to expect that the demographic decline should diminish

perspective. Equally well the PFU could cease to exist, with its functions being taken over by the state budget (as is the case in e.g. Denmark). Such a 'reform' would make sense also on economic ground as it would reduce another layer of de facto redundant bureaucracy.

¹⁹ The total value of the pension is also partially indexed to wages; this indexation should be no less than 20% of the average wage increase in the previous year, provided that pensions were growing more slowly than wages (Lisenkova, 2011).

the excess labour supply, resulting in a lower unemployment rate and a higher de facto labour participation rate. Another reason for the likely future decline in the labour supply may be outward labour migration. The latter may accelerate following the entry into force of the visa-free regime with the EU as of June 2017²⁰ as well as due to the large-scale recruitment campaigns in several EU countries, such as Poland and the Czech Republic, which are designed to alleviate labour shortages and explicitly target Ukrainian labour force. The recent experience of many Central and East European countries suggests that ***the combined effect of these two factors – demographic decline and outward labour migration – may bring about a strong reduction of unemployment and thus an increased de facto labour participation rate*** (see wiiw, 2016).

A higher de facto labour participation rate would mean that a higher share of working-age population would be *actually* working (and not just be part of the labour force, with or without a job) – and thus paying social security contributions to the Pension Fund.²¹ According to LFS data, 64% of the working-age population in Ukraine were employed in 2016, and another 7% were unemployed (the total labour participation rate stood thus at 71% of the working-age population – a relatively stable figure over time). It is clear that with an unemployment rate of nearly 10%, Ukraine's labour market is far away from the state of full employment. Even a mere reduction of this unemployment rate by half, i.e. to around 5%, which would arguably correspond more or less to the 'natural' unemployment rate (the infamous NAIRU), would raise the share of those employed by 3.5 pp of the working-age population, to 67.5%. An increase in the de facto labour participation rate of this magnitude (by 5%) would reduce the share of pension spending in GDP by around 1 pp according to formula (1), thus offsetting some of the 6 pp rise projected by the IMF on account of population ageing. Clearly, reaching the state of full employment, i.e. an unemployment rate more like 2%, would constrain the increase in pension spending as a share of GDP even more.

8. THE REAL PROBLEM WITH THE PENSION SYSTEM LIES WITH TAXATION RATHER THAN SPENDING

Assuming that the gloomy demographic projections underlying the IMF analysis are correct and pension spending as a share of GDP does indeed go up markedly in the medium and long run, this would likely contribute towards higher budget deficits. There is little doubt that it is these fiscal sustainability concerns which underlie the IMF recommendations to cut pension expenditure – primarily by raising the effective retirement age.

However, as argued above, the actual need for cuts in pension expenditure is far from obvious: the number of pensioners is not particularly high in international comparison and reducing it further may have unwelcome poverty effects. ***Even a casual look at the reasons behind the low level of Pension Fund revenues (low statutory social contribution rate, high degree of the shadow economy) suggests that the problem lies here rather than in the area of pension expenditures.*** Thus, if the feared increase in fiscal deficits in the long term is to be prevented, it is the revenue side of the Pension Fund which is to be tackled first.

²⁰ Per se, the visa-free regime is only valid for stays of up to 90 days in the Schengen EU Member States and does not grant the right to work. However, there is little doubt that it will make it easier for Ukrainians to find jobs in the EU.

²¹ Here, for simplicity purposes we disregard the informality issue, which is dealt with below.

A first-best solution in this vein would be to 'de-shadow' the economy, i.e. broaden the tax base as far as social security contributions are concerned. According to the IMF, out of 16.4 million estimated to be employed in 2015, only 12.3 million were employed officially and paid social security contributions. Assuming that those employed in the 'shadow' sector were earning on average the same wage as those employed in the official economy (which stood at UAH 4,200 per month in gross terms in that year), the mere declaration of their incomes would result in additional annual Pension Fund revenues (PF) of the following magnitude:

$$PF = \text{Shadow employment} * \text{Average gross monthly wage} * 12 * \text{Rate of social security contribution (SSC)} * \text{Share of SSC going to the Pension Fund} = 4.1 \text{ million} * \text{UAH } 4,200 * 12 * 0.22 * 0.8 = \text{UAH } 36.4 \text{ billion. (2)}$$

This sum, which corresponds to 1.8% of the 2015 GDP, is to be seen as an underestimate, as it does not include revenues which the Pension Fund could potentially receive from those employed officially but whose wages and salaries are declared (and thus taxed) only partially: anecdotal evidence suggests that the rest is being paid 'in envelopes'.

One important reason for this under-reporting of wages and incomes is the fact that, as mentioned above, even for (officially) low-income earners the state still guarantees a minimum pension; that is, the size of the pension is largely unrelated to the official wage. Therefore, one way to create incentives to declare wages would be to explicitly link the size of the pension benefit to the official wage. (Such an approach is advocated by the IMF and the World Bank and appears reasonable.) Under such a scheme, a more generous pension formula for those with official wages could be counter-balanced by lower pension payments (or lower minimum pension) to those with low official incomes, so that the average pension – and the expenditures of the Pension Fund – could be preserved at the current level, while its revenues could go up thanks to improved tax compliance.

However, fighting the 'shadow economy' is a complex issue which goes far beyond mere tax-related matters, and it would be illusory in our view to expect fast progress in this area. As long as the state apparatus remains corrupt (and extorting), any 'opening up' will remain risky for both companies and individuals – no matter how high or low the tax rate. The failure of the recent tax reform, which was implemented in 2016 and involved a radical cut in the rate of social security contribution (from an average rate of 41% to a flat 22%) in order to provide incentives to 'de-shadow', is highly indicative in this respect; tax compliance improved only marginally, so that revenues of the Pension Fund declined nearly in line with the cut in the social contribution rate (by 3.5 pp of GDP).

Therefore, ***as long as the shadow economy remains a fact of life in Ukraine, a more feasible solution would be to partly reverse last year's tax reform, which would involve raising again the statutory social security contribution rate.*** For instance, even bringing the rate of social security contribution from the current 22% to levels around 30% (which would be in line with the levels observed not only in other countries of the region, such as Russia and Belarus, but also elsewhere in Europe) would result in additional 1.7 pp of GDP of Pension Fund revenues. This sum would offset nearly half of the 6 pp of GDP increase of the Pension Fund deficit projected by the IMF, while another half could potentially come from 'de-shadowing' efforts (in the longer term and in the best-case scenario).

Finally, it should be mentioned as a general note that a potentially large and untapped source of government revenues is the incomes – and fortunes – of Ukrainian oligarchs. Since the latter effectively control the Ukrainian state ('state capture'), it is little wonder that they are typically able to ensure attractive deals for themselves, either in the form of explicit tax exemptions or by avoiding taxes altogether (through company registrations e.g. in Cyprus and other offshore locations). Tapping these sources would provide the government with funds which could be used not only for pensions, but for other crucial needs as well: infrastructure, health, education, social support, etc. However, as in the case of the 'shadow economy', it would be naïve to expect any major improvements in this respect as long as the system of governance in Ukraine remains the way it is.

9. CONCLUSIONS

The above analysis suggests that the current situation in Ukraine's pension system hardly justifies the need for a major reform as advocated by the IMF and the World Bank. The statutory retirement age may be indeed rather low by international standards (albeit for women, it will go up by another 2 years by 2021). However, it is more than offset by the low life expectancy of Ukrainians, which is unlikely to increase much going forward according to UN projections. As a result, the share of pensioners in the total population is not particularly high by international standards. Besides, while Ukraine's Pension Fund may be in deficit, this is not very different from the situation observed in other countries. Anyway, there are no theoretical arguments why the Pension Fund must be necessarily balanced. The future sustainability of the pension system is not necessarily a cause of major concern either, particularly when one takes into account the likely future improvements in the labour market (due to both demographic decline and emigration), which should at least partially offset the negative impact of population ageing.

To the extent that any reform of the pension system is needed at all, it should target above all efforts to curb the shadow economy (ideally) and/or partial reversion of last year's cuts in social security contribution rate. Additional Pension Fund revenues raised this way could enable raising pensions to more decent levels and thus improve the living standards of the older population and reduce inequality.

REFERENCES

- ILO (2014), *World Social Protection Report 2014/15: Building Economic Recovery, Inclusive Development and Social Justice*, International Labour Office, Geneva.
- IMF (2017), 'Ukraine: Selected Issues', International Monetary Fund (IMF), *IMF Country Report No. 17/84*, Washington DC, April.
- Lisenkova, K. (2011), 'Ukrainian Pension Reform in the Context of Population Ageing: A Dynamic CGE Approach', Institute for Economic Research and Policy Consulting (IER), *Working Paper No. 01/2011*, Kyiv, February.
- OECD (2015), 'Pensions at a Glance 2015: OECD and G20 indicators', OECD Publishing, Paris, http://dx.doi.org/10.1787/pension_glance-2015-en
- wiiw (2016), 'Labour Shortages Driving Economic Growth? Economic Analysis and Outlook for Central, East and Southeast Europe', The Vienna Institute for International Economic Studies (wiiw), *wiiw Forecast Report*, Vienna, Autumn.

SHORT LIST OF THE MOST RECENT WIIW PUBLICATIONS

(AS OF DECEMBER 2017)

For current updates and summaries see also wiiw's website at www.wiiw.ac.at

UKRAINE: SELECTED ECONOMIC ISSUES

by Vasily Astrov and Leon Podkaminer

wiiw Policy Notes and Reports, No. 19, December 2017

29 pages including 3 Tables, 8 Figures and 1 Box

hardcopy: EUR 8.00 (PDF: free download from wiiw's website)

WIIW HANDBOOK OF STATISTICS 2017: CENTRAL, EAST AND SOUTHEAST EUROPE

by Alexandra Bykova, Nadya Heger, Beate Muck, Renate Prasch, Monika Schwarzhappel, Galina Vasaros and David Zenz

Countries covered: Albania, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Kazakhstan, Kosovo, Latvia, Lithuania, Macedonia, Montenegro, Poland, Romania, Russia, Serbia, Slovakia, Slovenia, Turkey, Ukraine

wiiw Handbook of Statistics No. 2017, November 2017 (ISBN: ISBN- 978-3-85209-056-6)

334 pages including 248 Tables and 15 Maps

Hardcopy + CD-ROM with PDF: EUR 70.00 (time series given for 2000, 2005, 2010, 2014-2016)

Download PDF: EUR 50.00 (PDF with identical content as hardcopy)

Download Excel tables + PDF: EUR 245.00

USB drive Excel tables + PDF + hardcopy: EUR 250.00

GLOBAL VALUE CHAINS AND STRUCTURAL UPGRADING

by Roman Stöllinger

wiiw Working Papers, No. 138, November 2017

41 pages including 6 Tables and 2 Figures

hardcopy: EUR 8.00 (PDF: free download from wiiw's website)

WIIW MONTHLY REPORT 2017/11

ed. by Vasily Astrov and Sándor Richter

- › Graph of the month: Total Forbes billionaire wealth in selected countries, in % of national income
- › Opinion Corner: What may be the future of EU cohesion policy in the light of currently discussed reforms?
- › Self-imposed food embargo and consumer prices in Russia
- › Can economics explain the current bad EU-Russia relations?

- › Non-tariff barriers in the EU inhibiting DCFTA trade
- › The editors recommend for further reading
- › Monthly and quarterly statistics for Central, East and Southeast Europe
- › Index of subjects – November 2016 to November 2017

wiiw Monthly Report, No. 11, November 2017

47 pages including 3 Table and 21 Figures

exclusively for wiiw Members

CESEE BACK ON TRACK TO CONVERGENCE

by Vladimir Gligorov, Richard Grieveson, Peter Havlik, Leon Podkaminer, et al.

wiiw Forecast Report. Economic Analysis and Outlook for Central, East and Southeast Europe, Autumn 2017

wiiw, November 2017

149 pages including 31 Tables, 51 Figures and 1 Box

hardcopy: EUR 80.00 (PDF: EUR 65.00)

WIIW MONTHLY REPORT 2017/10

ed. by Vasily Astrov and Sándor Richter

- › Graph of the month: Regional GDP per capita in the EU, 2014
- › Opinion Corner: What are the potential consequences of decertifying the nuclear deal with Iran by US President Trump?
- › Austria's economic geography position in Europe
- › Visit thy neighbour: Compositional trends in the Austrian tourism sector
- › Economic relations between Austria and Slovakia
- › The editors recommend for further reading
- › Monthly and quarterly statistics for Central, East and Southeast Europe
- › Index of subjects – October 2016 to October 2017

wiiw Monthly Report, No. 10, October 2017

48 pages including 4 Table and 32 Figures

exclusively for wiiw Members

ÖSTERREICHS STAATSAUSGABEN-STRUKTUREN IM EUROPÄISCHEN VERGLEICH

by Philipp Heimberger

wiiw-Forschungsberichte / wiiw Research Reports in German language, No. 8, October 2017

75 pages including 15 Tables and 45 Figures

hardcopy: EUR 8.00 (PDF: free download from wiiw's website)

MACEDONIAN EXPORTS

by Vladimir Gligorov

wiiw Research Reports, No. 420, September 2017
47 pages including 10 Tables and 40 Figures
hardcopy: EUR 8.00 (PDF: free download from wiiw's website)

CAN'T KEEP UP WITH THE JONESES: HOW RELATIVE DEPRIVATION PUSHES INTERNAL MIGRATION IN AUSTRIA

by Stefan Jestl, Mathias Moser and Anna K. Raggl

wiiw Working Papers, No. 137, September 2017
25 pages including 7 Tables and 5 Figures
hardcopy: EUR 8.00 (PDF: free download from wiiw's website)

IS EUROPE DISINTEGRATING? MACROECONOMIC DIVERGENCE, STRUCTURAL POLARISATION, TRADE AND FRAGILITY

by Claudius Gräbner, Philipp Heimberger, Jakob Kapeller and Bernhard Schütz

wiiw Working Papers, No. 136, September 2017
21 pages including 1 Tables and 6 Figures
hardcopy: EUR 8.00 (PDF: free download from wiiw's website)

WIIW MONTHLY REPORT 2017/9

ed. by Vasily Astrov and Sándor Richter

- › Graph of the month: Real GDP growth in 2015, 2016 and first half of 2017 by major groups of countries of the European Union
- › Opinion Corner: What can be said about the status of Brexit in September 2017?
- › Cohesion policy meets heterogeneous firms
- › On the use of different public innovation commercialisation measures in the EU-28
- › Choosing the right partner: R&D cooperations and innovation success in CESEE and CIS economies
- › The editors recommend for further reading
- › Monthly and quarterly statistics for Central, East and Southeast Europe
- › Index of subjects – September 2016 to September 2017

wiiw Monthly Report, No. 9, September 2017
46 pages including 1 Table and 26 Figures
exclusively for wiiw Members

IMPRESSUM

Herausgeber, Verleger, Eigentümer und Hersteller:

Verein „Wiener Institut für Internationale Wirtschaftsvergleiche“ (wiiw),
Wien 6, Rahlgasse 3

ZVR-Zahl: 329995655

Postanschrift: A 1060 Wien, Rahlgasse 3, Tel: [+431] 533 66 10, Telefax: [+431] 533 66 10 50
Internet Homepage: www.wiiw.ac.at

Nachdruck nur auszugsweise und mit genauer Quellenangabe gestattet.

Offenlegung nach § 25 Mediengesetz: Medieninhaber (Verleger): Verein "Wiener Institut für Internationale Wirtschaftsvergleiche", A 1060 Wien, Rahlgasse 3. Vereinszweck: Analyse der wirtschaftlichen Entwicklung der zentral- und osteuropäischen Länder sowie anderer Transformationswirtschaften sowohl mittels empirischer als auch theoretischer Studien und ihre Veröffentlichung; Erbringung von Beratungsleistungen für Regierungs- und Verwaltungsstellen, Firmen und Institutionen.



wiiw.ac.at