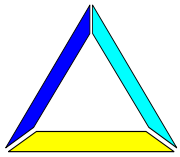
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T 10

Should the debt to the IMF be repaid in advance?

Executive summary

Under the current agreement, Ukraine's USD 1.8 bn debt to the IMF is scheduled to be paid back by instalments up until 2009. Recently, the NBU and the President suggested that this debt should be repaid within the coming months. Two main arguments were put forward in favour of an early repayment. First, it is supposed to send a positive signal to international investors and second, it is believed to save money to the country.

If the entire IMF debt were to be paid back today, then gross official reserves would go down from USD 7.0 bn, which corresponds to 3.5 months of import coverage, to USD 5.2 bn or 2.6 months of imports. Thus, an early repayment would drive reserves down from an adequate level above 3 months of imports to an inadequate level below 3 months of imports. As a result of this *critical* reduction in reserves, the ability of the NBU to intervene at the foreign exchange market in case of emergency would be significantly diminished. This in turn would send a negative signal to international investors and increase the cost of foreign borrowing. Finally, an early repayment would hardly save any money to the country. For these reasons, we strongly advice the Ukrainian government to decide against an early repayment of the IMF debt.

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1. Introduction

Recently, the National Bank (NBU) and the President of Ukraine suggested that the country should repay the total debt to the International Monetary Fund (IMF) within the coming months. Ukraine's debt with the IMF amounts to nearly USD 1.8 bn, and according to the agreement it is to be paid back by instalments up until 2009. The interest rate is flexible; at present it is 2.03% per year. There are no conditions attached to this debt.

Two main arguments were advanced in favour of early repayment. First, this measure is supposed to send a positive signal to international investors. Second, this measure is believed to save Ukraine money, because there would be no further interest payments related to this debt. The competence for the decision for or against an early repayment lies solely with the government of Ukraine.

In this paper we will analyse whether an early repayment would be in the economic interest of the country. An early repayment would reduce the level of the gross reserves of the NBU ("official reserves"). For that reason, we start our analysis with a short review of the economic role of official reserves, and present the different criteria for their adequacy (Part 2). In Part 3 we discuss which adequacy criterion is the most appropriate for today's Ukraine. In Part 4 we analyse the effect of an early repayment on the adequacy of the official reserves. In Part 5 we study the economic effects of an early repayment, and in Part 6 we conclude.

2. The economic role of official reserves and the criteria for judging reserve adequacy

Early repayment of the IMF debt would lower the level of the gross international reserves. Thus, in order to discuss the repayment, we should first look at the economic functions reserves play, and determine whether the remaining amount would be sufficient to perform these functions. There are two interlinked reserve functions:

> **Function 1: Intervention function.** The reserves determine the ability of the National Bank to intervene on the foreign exchange market supporting the national currency. If for any reason the demand for foreign currency exceeds its supply, the national currency is under devaluation pressure. In this case the NBU can intervene on the market supplying the foreign currency out of its reserves and, consequently, stabilise the exchange rate. This function of the reserves is important for all countries, except those with pure floating exchange rate systems.
>
> **Function 2: Confidence function.** The reserves do not only allow the NBU to intervene in case of a market imbalance, they also serve to maintain the confidence of foreign creditors and of residents. For foreign creditors, a high level of reserves indicates that the country can perform its external obligations; it thus serves as a basis for foreign borrowing. For both residents and foreign investors, the level of the reserves provides assurance for the potential ability of the National Bank to intervene and to support the national currency, thus preserving its stability.

It is clear that both functions are important, and the goal must be to maintain the reserves at a sufficiently high level to perform these functions.

To determine at what point the level of the reserves becomes adequate, we need to identify the sources for a potential decrease in the level of reserves, i.e. for a potential increase in net

demand for foreign exchange. Assuming a continuation of the current exchange rate policy, such an increase would namely require the selling of reserves and thus lower their level.

Broadly speaking, there are three sources for potential increases in net demand for foreign exchange:

> **Source 1: Foreign trade.** The volatility of foreign trade means to the large extent the volatility of goods flows. Both high import growths and significant export reductions result in a negative trade balance, which implies a higher net demand for foreign exchange and lower reserves.
>
> **Source 2: International capital mobility.** Capital movement across the border of a country can also be a source of increases in net demand for foreign exchange. Special attention needs to be paid to flows of short-term capital and to portfolio investments, and to the country's outstanding debt maturing in the short-run.
>
> **Source 3: Cash exchange transactions**. If many residents suddenly decide to switch from the national to a foreign currency, they will create a devaluation pressure on the national currency. The behaviour of residents depends on their trust in the national currency's stability and the foreign exchange market regulations in the country.

To evaluate these volatility sources, three types of reserve adequacy criteria were developed.

> **Criterion 1: Import-based.** This criterion measures a country's exposure to fluctuations in foreign trade. This is especially important for countries with rather limited access to international financial resources, but with an extensive merchandise trade with the outside. The generally accepted guideline is that international reserves should cover at least three month's worth of imports.
>
> **Criterion 2: Debt-based.** This criterion measures the countries exposure to fluctuations in international capital movements. It is accepted that the reserves should cover all debt obligations for the coming 12 months.
>
> **Criterion 3: Money-based.** This criterion measures potential pressure that residents could exert on the national currency by exchanging it for foreign currency. Since in this case we talk about holdings of national currency, the rule of thumb is that the reserves should cover approximately 10% of broad money (M2).

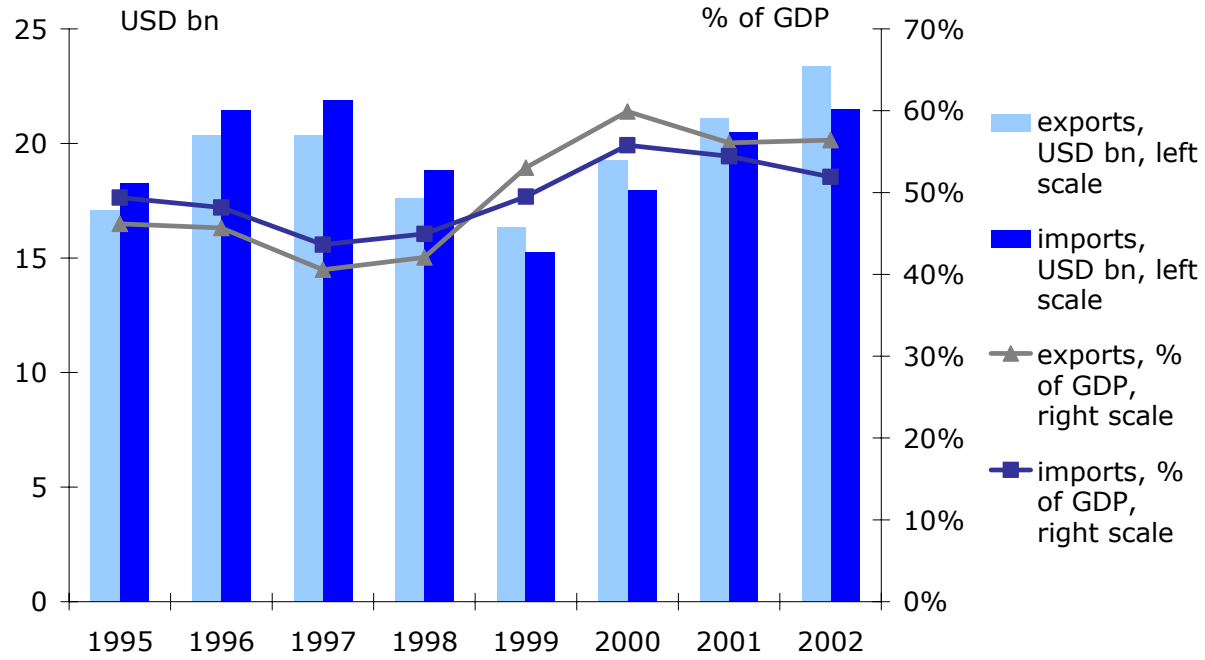
This set of criteria allows monitoring the level of international reserves in any country and judging whether they are sufficient. However, the different criteria are more or less important in different countries. Hence, the next question is to determine what criterion is the most appropriate for Ukraine today.

3. Which adequacy criterion is the most appropriate for Ukraine today?

Ukraine is a very open country in terms of foreign trade: exports and imports of goods and services constitute more than 50% of GDP each (Figure 1). For instance, in 2002 exports amounted to USD 23.4 bn and imports to USD 21.5 bn.

Figure 1

Ukraine's Foreign Trade



Sources: NBU, Derzhkomstat, own calculations

However, the structures of both goods exports and imports are rather problematic. On the one hand, exports are biased towards metallurgy and chemicals that are sensitive to world price fluctuations and to anti-dumping investigations. Thus, export receipts could be rather uncertain. On the other hand, mineral products, the demand for which is rather inelastic, dominate imports. In addition, the growth of investment demand is likely to stimulate the inflow of machinery and equipment, thus fostering the growth of imports. Therefore, a positive trade balance cannot be taken for granted, making foreign trade an important source of foreign exchange volatility.

At the same time, cross-border capital mobility, including the movement of short-term capital, is currently rather limited in Ukraine. There exists a system of regulations concerning different aspects of capital mobility and foreign exchange market functioning. For instance, the NBU tightly regulates the purchases of foreign assets by residents, including Ukrainian eurobonds[1]. Also the NBU introduced a regulation concerning the purchase of domestic assets by residents from non-residents. Moreover, there is a series of exchange market regulations, almost completely preventing the purchase of foreign currency for speculative purposes. Thus, the potential volatility of cross-border capital movements is limited and is tightly monitored, hence of less concern for Ukraine at this time.[2].

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[1] In October 2003, the Governor of the NBU announced plans to allow residents to purchase Ukrainian eurobonds. For details, see advisory paper T7.

[2] However, the importance of cross-border capital movements may increase in the future since Ukraine has increased its participation in international financial markets. In this case, the import-based and debt-based criteria for reserves adequacy should be used as complements.

The third potential source of imbalance is the pressure, which could arise should many residents suddenly decide to switch from the domestic to foreign currencies. This possibility is quite realistic because cash exchange transactions at kiosks are relatively free, and it actually happened during the 1998 financial crisis. However, the amount that could potentially be converted is likely to be also limited, consequently manageable.

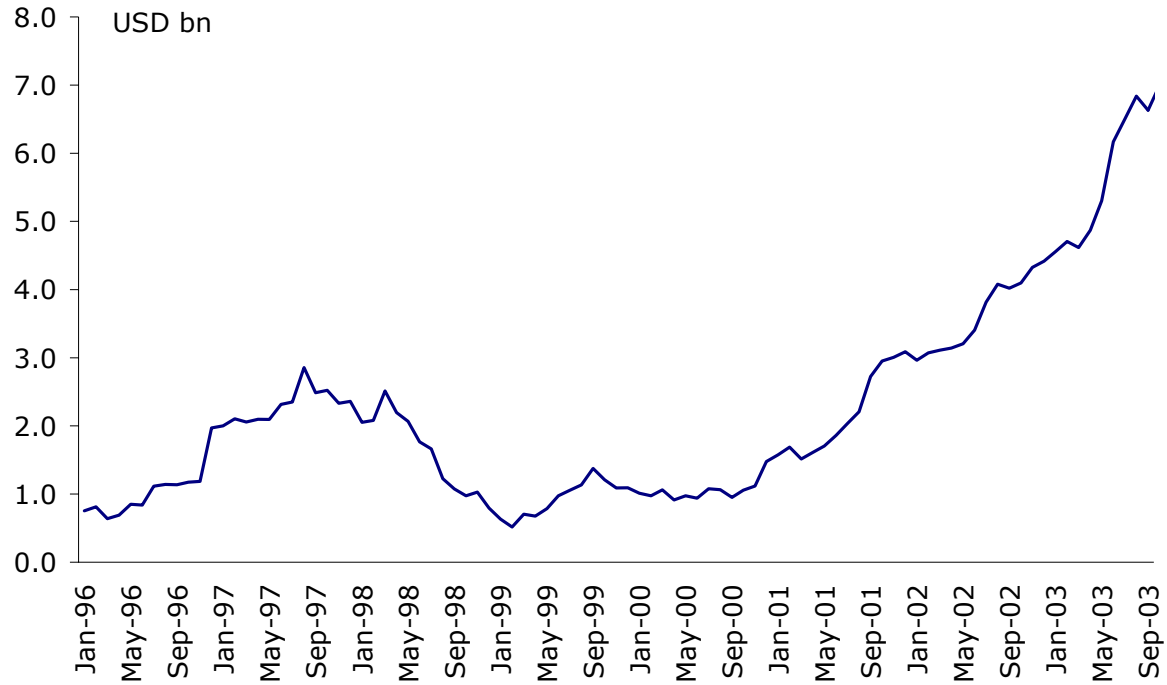
Thus, we come to the conclusion that the most important reserve adequacy criterion for Ukraine at this time is import coverage.

4. What level of reserves is appropriate, based on the import-covering criterion?

Ukraine started to accumulate reserves ever since the establishment of the National Bank, i.e. since the introduction of an independent monetary policy. By the mid-1997s they reached almost USD 3.0 bn, covering approximately 1.5 months of imports. And, as clearly demonstrated during the financial crisis of 1998, the Ukrainian reserves were quickly run down: from January to October 1998 they dropped by more than 50% from USD 2.1 bn to USD 0.9 bn (Figure 2). Since then the reserve level has been carefully monitored and the NBU has supported a policy directed towards further accumulations of reserves. At the beginning of October 2003, the gross international reserves amounted to approximately USD 7.0 bn.

Figure 2

Gross International Reserves



Source: IFC, NBU, own estimates

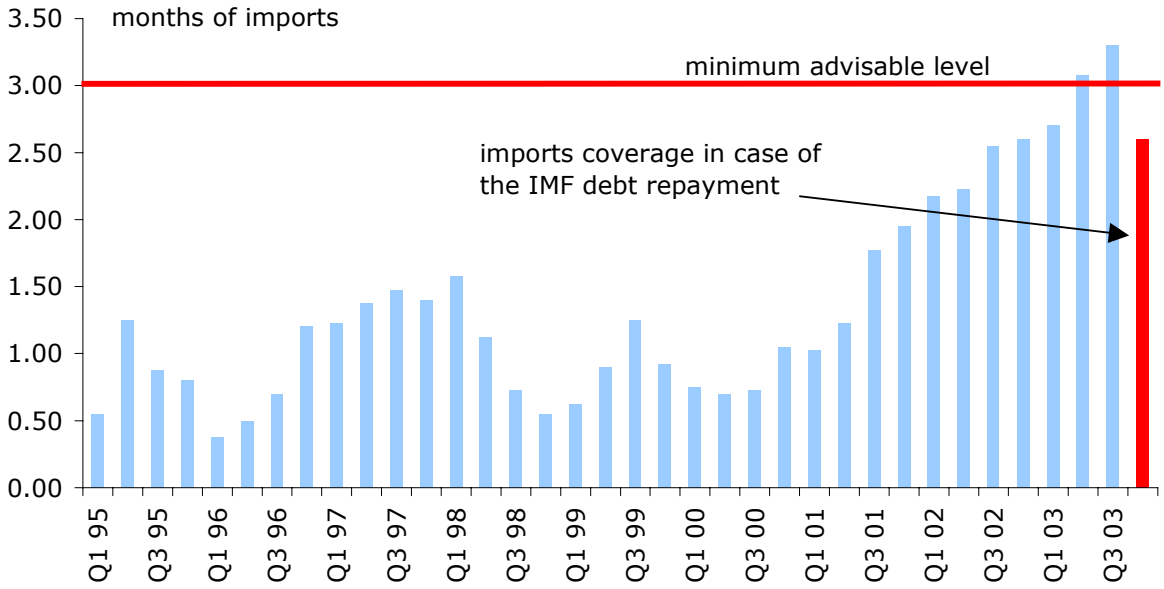
This level corresponds to approximately 3.5 months of goods and services imports (Figure 3), slightly exceeding the minimum advisable level of reserves. It is to be noted that Ukraine only

recently reached this level, and that this level is still just the minimum. For instance, for the last six years Poland has kept the gross international reserves at a level covering approximately 6.3 months of imports. Thus, to reach the minimum advisable level may not be enough to perform all functions incumbent on reserves. This is especially relevant for the confidence function, since it is difficult to maintain confidence in the health of a system, which is balancing on the edge of the minimum level.

Also, we should take into account that the level of reserves required to cover three months of imports is not constant over time. In the likely event of higher imports in the future, the country will need a higher level of reserves to fulfil the import coverage criterion. Besides, if imports grow faster than exports and the trade balance switches to negative, it would be difficult to accumulate further reserves. Thus, it is highly recommended to keep reserves exceeding the minimum advisable level.

Figure 3

International Reserves in Months of Imports



Sources: NBU, own estimates

What would happen to the gross reserves if the IMF debt were repaid early? Supporters of an early repayment have proposed not just one, but several repayment schedules. Some favour repaying till the end of 2003, while others proposed to repay by 12 monthly instalments of USD 150 m each. Consequently, we need to make an assumption as to what "early repayment" actually means. In this paper, we assume that "early repayment" means the repayment of the entire IMF debt today. This assumption can be justified by the three following arguments. First, all proposals foresee a repayment in the short, if not in the very short term, which is similar to repaying today. Second, assessing the effect of repaying in the future (as opposed to repaying today) implies the necessity of using *expectations* about the future. By assuming that the repayment takes place today, we avoid using expectations and can base our assessment purely on facts. Third, even if Ukraine does not pay the entire debt today, it will *commit* itself to repay the entire debt in the short term. Thus, Ukraine would enter an obligation to make certain payments in the coming months, with little or no room for change.

Now the average monthly import of goods and services in Ukraine is USD 2.0 bn, while the current level of reserves is near USD 7.0 bn, covering 3.5 months of imports. If the IFM debt of USD 1.8 bn were repaid, the level of reserves would drop to USD 5.2 bn. In this case, the coverage would drop to 2.6 months of imports (Figure 3). This level is definitely below the minimum advisable and thus potentially dangerous, since the reserves could not fully perform their intervention and confidence functions.

5. The economic effect of an early repayment

From the above analysis we conclude that an early repayment of the entire IMF debt would drive the official reserves down from an adequate to an inadequate level. Hence, we are dealing with a *critical* reduction in the official reserves. Now we turn to the analysis of the economic effects of this critical reduction in the reserves.

The first effect relates to the *intervention* function of the official reserves. A critical reduction in the gross reserves will significantly reduce the ability of the NBU to intervene on the foreign exchange markets in case of an emergency. Consequently, the ability of the NBU to guarantee the stability of the hryvnia in case of a large negative shock will clearly be diminished.

The second effect is linked to the *confidence* function of the official reserves. Reducing the reserves to a critical level will send a negative signal to international investors. As a consequence, the yield of Ukrainian eurobonds will tend to increase, making the servicing of new issues of eurobonds more expensive. This view has already been expressed by leading international investment banks and rating agencies. Thus, one of the arguments put forward by Ukrainian officials for an early repayment cannot be considered as valid: an early repayment will send a negative, not a positive signal to international investors.

But what about the second argument presented in support of an early repayment? Would an early repayment save the country any money? In the event of an early repayment, Ukraine would certainly save on future interest payments to the IMF. But it would also receive less money from investing its reserve funds. Thus, the money saving argument is only valid, if the cost of the debt is higher than the return on its investment. As stated above, the cost of the IMF debt is currently 2.03% per year. Official reserves must be invested in safe and liquid instruments. For that reason, the rate of return of official reserves is traditionally low. But not all the reserves must feature the same level of liquidity. The first segment must certainly have the highest level of liquidity (cash and sight deposits), the second segment requires a little less high level of liquidity (very short term deposits), and so on. In case of repayment, the NBU would loose the last or final segment of its reserves, which features (or could feature) a still lower level of liquidity and thus a higher yield. Taking this into account, we think that the NBU should be able to get a rate of return on this marginal USD 1.8 bn of its reserves, which could be comparable to the IMF interest rate. Some improvement in the management of the NBU reserves might be necessary to achieve this. But such an improvement is possible even in the short run. Thus, no or only very little money would be saved by an early repayment of the debt. Consequently, the validity of the money saving argument is also rather questionable.

Last not least, an early repayment might have a negative effect on the outcome of the current negotiations between Ukraine and the IMF on a new precautionary stand-by arrangement. Officially, these two issues are not related to each other. But the members of the IMF Board might ask themselves: Does Ukraine really need a new credit line? And if so, why do they repay the existing credit before schedule? A failure to sign a new agreement with the IMF will send an additional negative signal to foreign investors.

6. Conclusions

After years of holding dangerously low levels of official reserves, Ukraine has finally managed to surpass the level of 3 months of imports coverage, generally accepted as the minimum level of reserve adequacy. This development has contributed to a higher confidence in the national currency and to the successful placement of eurobonds at relatively low yields in recent months.

The proposed early repayment of the IMF debt could bring Ukraine back to a level below 3 months of import coverage. This critical reduction of reserves would significantly reduce the ability of the NBU to intervene at the foreign exchange market in case of emergency and to preserve the stability of hryvnia (intervention function of reserves). In addition, it would negatively affect the confidence of residents and of international investors in the country and its currency (confidence function). Besides, it would save (almost) no money to the country.

We conclude that an early repayment of the debt to the IMF would not be in the *economic* interest of the country. If for *political* reasons the government decides in favour of an early repayment, then Ukraine should try to negotiate a flexible repayment schedule in order to reduce the economic risks involved with this decision. But based on our economic analysis, we strongly recommend the Ukrainian government to decide against an early repayment of the debt to the IMF.

R.G., V.M. Lector: F.P.

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