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Macroeconomic factors of Ukrainian currency instability during the global financial crisis

Introduction

One of the main goals of macroeconomic policy is to ensure the stability of the national currency exchange rate. Fluctuations in exchange rate significantly affect economic growth, terms of trade and trade flows between countries. The growth of the exchange rate increases imports and reduces exports and worsens the trade balance of a country. If the exchange rate is falling, the terms of trade and the state of the trade balance improve.

During the years 1998–2012 there was a significant depreciation of the Ukrainian national currency — hryvnia (in 1998 to 80%, in 1999 to 52%, and in 2008 62.3%).[1] The devaluation of the national currency slows the economic growth in Ukraine, devalues savings of households, reduces the purchasing power of their incomes, and makes payment of a foreign debt more difficult.

In our opinion, there are two main reasons for the deterioration of the situation on currency market — the negative impact of the global financial crisis (external factor) and unfavorable macroeconomic environment in Ukraine (internal factor). The impact of these factors on the exchange rate of Ukrainian currency is investigated in the present paper.

[1] O. Bereslavska, *Stability of hryvnia: Objective reality or a forced necessity?*, "Visnyk NBU" 2012, March, pp. 6–11 (in Ukrainian).

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There is a list of factors that affect the dynamics of the exchange rate[2]:

— the speed of growth and real GDP (higher economic growth rates lead to currency appreciation);

— state of a country's balance of payments (if balance of payments is active, the exchange rate increases, and if it is passive, the exchange rate decreases);

— inflation rate in the country and abroad (higher inflation in the country leads to devaluation of its currency);

— central bank interventions on the foreign exchange market;

— speculative operations on the foreign exchange market and the expectations of its participants;

changes of real interest rates in the country and abroad.

The global financial crisis hit the real sector of Ukrainian economy. The demand for products of export-oriented industries (metallurgy, chemical industry) decreased. This led to a decline in industrial production in Ukraine. Only in the first half of 2009 mining and metallurgical complex reduced the production of iron and steel by 34–39%, and tube manufacturing decreased by 43%. As a result, the export and demand for Ukrainian currency decreased which led to a decrease in its rate. In 2008, the devaluation of hryvnia against the U.S. dollar was 52.48%, to euro — 49.89%, and the Russian ruble — 28.49%.[3]

Figure 1 shows a clear inverse dependence in 2008–2009 between the dynamics of the exchange rate and Ukraine's GDP measured in U.S. dollars.

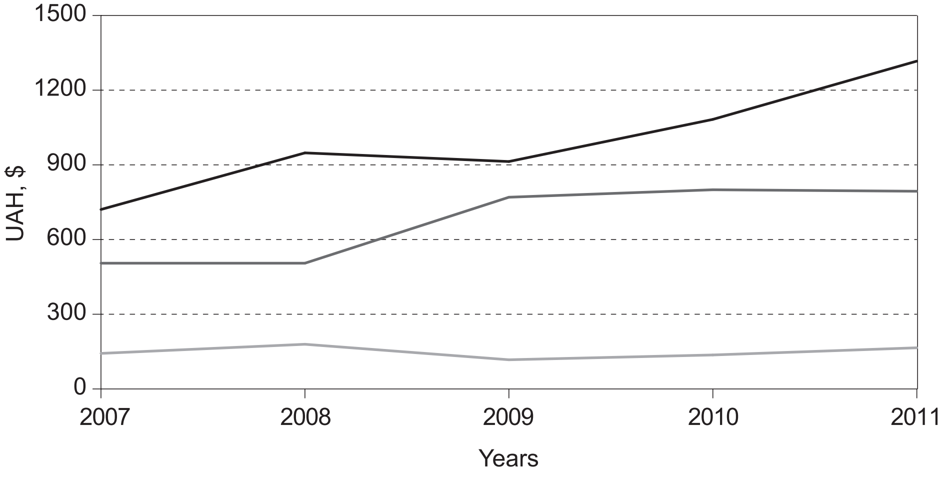

Figure 1. Dynamics of GDP and the exchange rate in 2007–2011

Source: The Ministry of Finance of Ukraine, http://index.minfin.com.ua/index/gdp/.

[2] N.E. Bodrova, *Foreign exchange market in Ukraine: State, problems and prospects*, "Visnyk of Sumy State University. Series Ekonomika" 2012, No 1, p. 583 (in Ukrainian).

[3] "Bulletin of the National Bank of Ukraine" 2011, No 4.

Another important macroeconomic factor in the dynamics of exchange rate is the balance of payments of Ukraine. Balance of payments is a systematic record of all international transactions of residents with non-residents of the country for a certain period of time (year, quarter, month). It shows the ratio of payments abroad and currency receipts from abroad.[4]

We can see from Table 1 that during the period 2007–2011 Ukraine had a negative current account balance, i.e. imports exceeded exports. In 2011, exports of goods increased in comparison with the previous year by 33.0% — to 69.4 bln USD, and imports by 37.4% — to 83.2 bln USD. An important component of imports in Ukraine are energy carriers (gas, oil). The volume of imports in 2011 amounted to 28.4 bln, which is 45% more than in 2010. Only in December 2011, our country has paid Russian "Gazprom" 7.2 bln rubles (about $240 mln).[5] This creates a demand for foreign currency, and thus becomes one of the reasons for the devaluation of hryvnia.

Table 1. The dynamics of the Ukraine's balance of payments and hryvnia exchange rate in 2007–2011

Indicator	Year				
	2007	2008	2009	2010	2011
Current account balance, $ mln	–5272	–12763	–1732	–3018	–9006
Capital account and financial transactions, $ mln	14693	9700	–11994	8049	6551
Consolidated balance, $ mln	9421	–3063	–13726	5031	-2455
The nominal exchange rate of hryvnia against the U.S. dollar	5.05	5.05	7.70	8.00	7.94

Source: http://www.bank.gov.ua/doccatalog/document?id=118305.

As a result of the global financial crisis in 2008–2009, the situation on the currency market of Ukraine worsened sharply. Receiving by the Ukrainian banks cheap loans on the international financial market became more difficult, foreign exchange inflows reduced and the demand for them was increasing rapidly. In 2009, the negative balance of the capital account peaked — almost 12 bln USD. That year was crucial for the depreciation of Ukrainian currency (from 5.05 to 7.7 UAH Per USD) (Table 1). In the years 2007–2012 one of the most effective tools to ensure the stability of the national currency was foreign exchange intervention. In 2007, the National Bank of Ukraine in order to support Ukrainian hryvnia, bought 6.9 bln USD. But with the global financial crisis the Bank was forced to sell the foreign currency (in the fourth

[4] *Ukraine's foreign debt*, "National Bank of Ukraine, Balance of payments and external debt of Ukraine: in 2011–2012", No. 4, p. 93, http://www.bank.gov.doccatalog/document?id=112444 (in Ukrainian).

[5] V.V. Kolomiets, *Economy and State*, http://bookdn.com/book_366_glava_14_24._Sistema_derzhavnikh_vnutr% EF% BF% BD.html (in Ukrainian).

quarter of 2008 10,284.3 mln USD were sold).[6] In 2009, the sale of foreign currency exceeded its purchases by more than 10 bln USD (Table 2).

Table 2. Dynamics of net foreign exchange interventions of the National Bank of Ukraine (NBU) and economy monetization level in the years 2006–2011

Indicator	2006	2007	2008	2009	2010	2011
Balance of currency interventions of NBU, mln USD	5030	7600	3900	10432	2400	1787.3
Economy monetization rate, % of GDP	42.3	46.5	46.0	47.9	49.6	48.4
Inflation rate, %	111.6	116.6	122.3	112.3	109.1	104.6

Source: O. Bereslavska, op. cit., p. 7.

To overcome the shortage of foreign currency in 2009, the National Bank started to intervene in the form of currency auctions. On February 27, 2009 there were target auctions of U.S. dollars and euros held to meet the needs of bank customers-individuals in order to pay foreign currency loans. After the introduction of foreign exchange target auctions the amount of budget deficit of foreign currency significantly decreased.

The application of foreign exchange intervention in order to maintain exchange rate has one major drawback — it reduces foreign exchange reserves. As it is shown in Table 3, foreign exchange reserves of the National Bank of Ukraine during 2010–2011 declined from 34.6 to 31.8 bln USD. In 2012, foreign exchange reserves declined even faster. In January–September 2012, they decreased by 15.7% (from 31.8 to 26.8 bln USD), i.e. by $5 bln. As of October 31, 2012 foreign exchange reserves amounted to 26.8 bln USD.[7]

Table 3. Gross external debt of Ukraine and the volume of international reserves in the years 2006–2011

Indicator	2006	2007	2008	2009	2010	2011
Gross external debt of Ukraine, bln USD	54.3	84.5	101.7	103.4	117.3	123.2
Increase rate, %	137.0	155.7	120.3	102.3	113.4	105.2
Gross foreign exchange reserves, bln USD	22.4	32.5	31.3	25.3	34.6	31.8
Growth rate, %	120.5	145.0	97.2	80.7	136.8	91.9

Source: "Balance of payments and external debt of Ukraine" 2010, p. 79. (in Ukrainian); "Bulletin of the National Bank of Ukraine" 2011, No. 4, p. 79.

In our opinion, there are several reasons for reducing foreign exchange reserves and volatility on the foreign exchange market of Ukraine in 2011–2012:

[6] S.Y. Borinets, *International Monetary and Financial Relations: Textbook*, 5th ed, K. Znannya 2008, p. 223 (in Ukrainian).

[7] "Balance of payments and external debt of Ukraine" 2010, p. 79 (in Ukrainian).

— The National Bank of Ukraine maintained the exchange rate at a fixed level before the elections to the Supreme Council of Ukraine in 2012;

— Increase in imports and in foreign currency inflows from exports, which is now the main source of currency reserves replenishment;

— Reduction in 2011 of inflows of foreign portfolio and other investments in Ukraine;

— Ukraine has not received from the International Monetary Fund the tranche of the IMF Stand-By Arrangement, which is directed to replenish foreign exchange reserves of the NBU.

One of the factors causing the instability on the foreign exchange market in Ukraine is the high level of dollarization. Data in Table 2 shows that the amount of foreign currency on cash market significantly exceeds the volume of cash in local currency and comprises the third part of M_2. Such amount of foreign currency poses a potential threat to the stability of the national currency and the economy in general.

The reason for sharp fluctuations in the exchange rate of the national currency in Ukraine is speculation on the foreign exchange market and unfavorable expectations of its participants. For example, at the beginning of the economic crisis in September 2008, households bought 3,855.8 mln USD in banks. The volume of foreign currency purchased in 2011 on the spot market compared to 2010 increased by 5.4 bln USD, showing the lack of confidence of households and business enterprises in the Ukrainian currency. This distrust maintains a high level of dollarization of the economy of Ukraine (the level is about 30.69% of M_2cash deposit).[8] The demand for foreign currency in Ukraine remains very high, the growth rate of foreign currency deposits exceeded growth in deposits in the national currency.

In order to deal with these issues the Ukrainian government increasingly resorts to administrative tools. The National Bank of Ukraine introduced in 2011 the requirement for mandatory submission of passport when buying and selling foreign currency. On November 16, 2012 the Bank obliged exporters to sell 50% of foreign exchange earnings from the sale of goods (this requirement was abolished in 1998), and reduced the period of repayment of foreign exchange earnings from 180 to 90 days. Another NBU resolution established mandatory sale of foreign currency that comes to individuals in the form of remittances from abroad in excess of 150 thousand per month. The Supreme Council of Ukraine is drafting a bill on the introduction of tax of 15% on income derived from the purchase and sale of foreign currency on the spot market.[9] In our opinion, such administrative measures may lead to negative consequences of shadow and speculative segments of the

[8] *Annual Report of the National Bank of Ukraine in 2011*, http://www.bank.gov.ua/doccatalog/document?id=121938.

[9] *Finance.ua web-site*, http://news.finance.ua/ua/ ~ / 1/2012/11/07/290808.

foreign exchange market development, the criminalization of foreign exchange transactions, foreign capital outflow from Ukraine and others.

The cause of instability on the foreign exchange market lies also in the fact that external debt of Ukraine increased during 2006–2011 from 54.3 bln USD to $123.2 bln USD (Table 3). As of January 1, 2012 gross external debt reached 126.2 bln USD,[10] and as of July 1, 2012 — 129.0 bln USD (74% of GDP).[11]

During the years 2004–2012 the gross external debt of Ukraine annually grew by 12.8 bln USD. Anxiety is caused rather by an increase in short-term loans in foreign currency (with a repayment period of up to one year). The amount of such loans as of January 1, 2012 amounted to 32.7 bln USD (25.9% of total external debt).[12] This is more than the sum of all gold reserves in Ukraine. In 2014 payments on foreign liabilities will amount to almost 60 bln USD. Under such conditions, the stability of the Ukrainian currency is impossible to achieve.

Conclusions and suggestions

The dynamics of the exchange rate and the foreign exchange market in Ukraine affects two groups of factors: external, related to the global economic crisis, and internal, that were formed in the transition economy of Ukraine. The first group should include a slowdown in the economies of countries that are major trading partners of Ukraine (the European Union and Russia), the decrease in world market prices and demand for the products of the chemical industry and metallurgy, which are part of Ukrainian exports, rising prices for imported gas and oil.

Depreciation of the Ukrainian currency is a result of internal factors associated with ineffective government policies and unfavorable macroeconomic environment in Ukraine. These are growth of external debt, significant excess of imports over exports, negative balance of payments, high dollarization of the economy and low level of confidence in the Ukrainian currency, the rapid decrease in foreign exchange reserves, high dependence on imported oil and gas from Russia. One of the most important macroeconomic factors influencing the Ukrainian currency exchange rate is the trade deficit and payments balance. With global economic crisis, the negative trade balance cannot be financed by foreign investment. During 2008–2012, the government and the National Bank of Ukraine artificially constrained the exchange rate of Ukrainian currency with the help of administrative rules.

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[10] Website of the Ministry of Finance of Ukraine, http://index.minfin.com.ua/index/gdp/.

[11] Website of the National Bank of Ukraine website, http://www.bank.gov.ua/doccatalog/document?id=118305.

[12] O.M. Tsarenko, *Development Economics*, http://pidruchniki.ws/12560607/ekonomika/stabilnist_natsionalnoyi_valyuti_osnova_postupalnogo_rozvitku_ekonomiki#391(in Ukrainian).

In our opinion, in order to provide stability on the foreign exchange market in Ukraine the following measures should be applied by the government:

— reducing the negative balance of trade and payments (the development of domestic production, elimination of shadow economy, transition to a policy of import substitution, creating favorable conditions for the flow of foreign direct and portfolio investments);

— public finance improvement (reducing fiscal deficits, pension fund, the size of external public debt);

— reducing dollarization of the economy and boosting confidence in the Ukrainian currency (phase out foreign currency loans, including consumer loans to individuals, increase of mandatory reserve funds in foreign currency, low and predictable inflation);

— reducing dependence of the Ukrainian economy on imported oil and gas from Russia (reducing energy intensity of industry, housing and utilities, increasing oil and gas production in Ukraine);

— development and liberalization of the foreign exchange market, reduction of foreign exchange restrictions and gradual transition to a floating exchange rate.

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Summary

The article discusses the macroeconomic factors influencing Ukraine's currency instability in conditions of the global financial crisis. These factors include the slow-down in the economies of countries that are major trading partners of Ukraine, the decrease in world market prices and demand for the products of the chemical industry and metallurgy which are part of Ukrainian exports, rising prices for imported gas and oil, growth of external debt, significant excess of imports over exports, negative balance of payments, high dollarization of the economy and low level of confidence in the Ukrainian currency, the rapid decrease in foreign exchange reserves, high dependence on imported oil and gas from Russia.