Секція 2

ФІНАНСОВІ ВАЖЕЛІ СИСТЕМИ ЗАБЕЗПЕЧЕННЯ СТАЛОГО РОЗВИТКУ ЕКОНОМІКИ

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THE IMPACT OF MONETARY FACTORS ON ECONOMIC GROWTH UNDER CONDITIONS OF SUSTAINABLE DEVELOPMENT

The government can maintain economic growth through two areas: monetary policy and fiscal policy. Monetary policy influence on economy through monetary factors – money supply, inflation, credit etc. Since 2014, the Central Bank of Ukraine has officially switched to inflation targeting. Inflation targeting regime consist in public disclosure of target inflation rate and central banks` policy to reach it.

Monetary policy decisions made with inflation forecasting taking into account. The main monetary instrument and operational achievement for such a monetary regime is the interest rate. If the projected inflation rate exceed target, then central bank conducts a policy of "expensive money". Conversely, with a lower projected inflation rate than the target level, a policy of "cheap money" is conducted. Ultimately, changing the interest rate, the central bank supports economic activity.

However, there are other monetary factors that are influence on economy – lending to the economy, external debt, and the exchange rate of the national currency. The case of Ukraine is interesting in terms of these factors influence of on the economy, because not all of these factors were market driven. The UAH/USD exchange rate was actually fixed over time and did not depend on the current account balance. Inflation was not targeted, the central bank struggled with it after its actual disturbances.

Ukraine moved to inflation targeting in 2014 and this step, in its turn, has led to the launching of the monetary policy transformation. Exchange rate maintaining objectively had to be canceled as the National bank`s reserves had been already exhausted by that time. Since 1996, when the Ukrainian currency – hryvnia – was adopted, the interest rate has not shown to be the effective tool of monetary policy and, therefore, was not applied by the National Bank of Ukraine in carrying out inflation policy and economic development. On the other hand, Ukraine has undergone economic growth and increase of GDP. So, the question is whether there is any link between monetary policy and economic growth in Ukraine? Does monetary policy make an influence on economic growth in Ukraine in the period 2006-2019?

In this particular case, we assume that GDP is a function of the amount of money, exchange rate, interest rate, inflation rate (we consider consumer price index and producer price index separately), loans provided to business and external debt.

$$GDP = f(M3, EXR^{UAH/USD}, EXR^{UAH/EUR}, IR, CPI, PPI, L, ED) \qquad (1)$$

Explicitly, we define the equation 1 as follows:

$$GDP = \beta0 + \beta1M3 + \beta2EXR^{UAH/USD} + \beta3EXR^{UAH/EUR} + \beta4IR + \beta5CPI + \beta6PPI + \beta7L + +\beta8ED + \varepsilon i \qquad (2)$$

where:

GDP – real gross domestic product,
M3 – amount of money (M3 monetary aggregate),
$EXR^{UAH/USD}$ – exchange rate UAH/USD,
$EXR^{UAH/EUR}$ – exchange rate UAH/EUR,
IR – interest rate (central bank key rate),
CPI – consumer price index,
PPI – producer price index,
L – loans to business,
ED – external debt,
β0 – constant,
β1,β2,β3,β4,β5,β6,β7,β8 – coefficients,
εi – error term.

The model was estimated using quarterly time series data covering the period of 1-st quarter 2006 – 2-nd quarter 2019 and the data were sourced from the Database of National Bank of Ukraine, State Statistics Service of Ukraine and UNCTAD.

The purpose of the study was to determine the impact of monetary factors (money supply, UAH/USD exchange rate, UAH/EUR exchange rate, interest rate, consumer price index, producer price index, loans issued to the economy, external debt) on economic growth in Ukraine. The results obtained should be considered with some caveats in mind. During the researched period, the central bank's policy was not consistent. Until 2014, there was no inflation targeting in Ukraine, so the actions of the central bank were aimed not at achieving a certain inflation rate but at combating the effects of inflation. On this basis, the relationship between inflation and GDP can only be established by statistical methods, since there is no economics basis for their correlation. From 2014 to 2019, the central bank targets inflation and this influences business activity and the economy through inflation expectations. As a result of variance decomposition of GDP, we see that in the long run, the impact of inflation on GDP increases by increasing the impact of CPI.

The effect of the UAH/USD exchange rate on economic growth is quite insignificant, although the vast majority of exports and imports are made in US dollars. Such a low degree of influence may be explained by the fact that by 2014, the UAH/USD exchange rate was actually fixed, not floating. Due to central bank reserves, exchange rate stability of the hryvnia was maintained, while a constant current account deficit was experienced. In this case, GDP growth rates did not take into account the actual national currency depreciation. Only after 2014, when the central bank's policy has changed, the exchange rate is determined on the basis of market conditions. According to the obtained data, the degree of impact of the exchange rate on GDP will increase in long term.

The key interest rate, which has been used as an inflation targeting tool since 2014, has also had insignificant impact on economic growth. According to Taylor's rule, an increase in the interest rate has a negative effect on economic growth. However, in Ukraine this mechanism of influence is rather weak. The reason for this is the inefficient of the central bank interest rate as a tool to influence inflation expectations in the period up to 2015.

Interestingly, loans to businesses have insignificant effect on economic growth. This can be explained by the fact that by 2015, the majority of loans in the banking system were issued to related parties and very often did not return. This has led to a crisis in the banking system and the liquidation of about 100 banks. In this case, the loan was not a form of financing the economy, but a way of withdrawing capital abroad by bank owners.