Box

Wealth and balance sheet effects of exchange rate

In addition to its influence on the external competitiveness of the economy, the exchange rate also impacts households' wealth and companies' net worth. Households' wealth and companies' net worth reflect holdings of resources in the form of goods, money, and other financial assets. However, not all of these holdings of goods/assets represent wealth or own equity of the company, some of them being the counterpart of outstanding loans. Therefore, the wealth of households or the net worth of companies is given by the value of their holdings of goods (assets) net of the value of their liabilities. Exchange rate movements affect the domestic currency value of loans contracted in a foreign currency, thus altering households' wealth and companies' net worth.

The wealth and balance sheet effects of the exchange rate entail changes in the volume of resources that can be allocated to consumption and investment or to repayment of loans.

The wealth effect of the exchange rate consists in the influence of exchange rate movements on consumption and investment given their impact on households' wealth and companies' net worth. The wealth and balance sheet effects are important especially when a large part of the households' or companies' liabilities consists of loans contracted in a foreign currency. Given a foreign currency denominated loan, the exchange rate appreciation results in a reduction of the net present value of the liability expressed in domestic currency (taking into account both principal and interests). Thus, domestic currency denominated wealth increases, improving consumption and investment opportunities.

The balance sheet effect describes the impact of the exchange rate on the output gap caused by the effect of changes in wealth and net worth on the availability of bank loans. It is usually difficult and costly for banks to directly assess the clients' future capacity to repay loans. As a result, households' wealth and companies' net worth, as synthetic indicators, are important factors underlying the decision to grant a loan, as they can be used as collateral. The RON appreciation causes households' wealth and companies' net worth to increase. Moreover, a current lower value in *lei* of foreign currency denominated loans improves the capacity to repay loans. These effects reduce the default risk and improve borrowing eligibility. Therefore, the availability of bank loans increases, which leads to rises in both consumption and investment spending.

The wealth and balance sheet effects of the exchange rate act in opposite direction to the effects through the external competitiveness channel. The overall effect of the exchange rate through these two channels depends on their relative importance.

Table 1. Initial state – RON/EUR 4.00

	RON
Assets	**10,800**
Fixed assets	9,000
Other assets and money	1,800
Liabilities (1,500 x 4 =)	**6,000**
Wealth/Equity (10,800 – 6,000 =)	**4,800**

Table 2. Final state – RON/EUR 3.60

	RON
Assets	**10,800**
Fixed assets	9,000
Other assets and money	1,800
Liabilities (1,500 x 3.6 =)	**5,400**
Wealth/Equity (10,800 – 5,400 =)	**5,400**

We demonstrate how the appreciation of the domestic currency against the euro leads to a rise in wealth/net worth by way of a simplified example. Consider a household or a company which holds RON-denominated assets (with a total value of RON 10,800 in the example) and it has been granted a foreign exchange loan (EUR 1,500 in the example) – this is probably the most relevant situation for Romania at present. Table 1 presents the initial state, when the exchange rate is RON/EUR 4.00[66]. Appreciation of the domestic currency to RON/EUR 3.60 pushes down the local currency value of the loan from 6,000 (EUR 1,500 x 4.00) to 5,400 (EUR 1,500 x 3.60), increasing wealth/net worth in domestic currency from 4,800 to 5,400 (Table 2). Likewise, depreciation of the domestic currency leads to a decrease in the wealth of households and net worth of companies, with specific effects on their access to financing, as well as on their capacity to service the already existing debt.

[66] The exchange rate level is chosen arbitrarily, for illustrative purposes.