NATIONAL BANK OF SLOVAKIA

DEFICIT GENERAL GOVERNMENT AND THE CURRENT ACCOUNT OF THE BALANCE OF PAYMENTS

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Bratislava 2000

Deficit in General Government and the Current Account of the Balance of Payments

The existence of 'a double deficit' assumesa certain interdependence according to economic theory. One way to examinethis casual dependence is an analysis of changes in non-financial transactionsand financial flows within the individual sectors of the economy, by meansof Flow of Funds (FoF) matrixes. In the first section, we shall brieflydescribe the principles on the basis of which the FoF matrixes were compiledfor the years 1994-99. In the following sections, we shall apply the FoFmatrixes to the conditions of the Slovak economy, but we shall first compilethe balance of non-financial transactions and define the relations betweenthe sectoral balances. By including the flows of funds in the balancesof non-financial transactions in the third section, we shall compile FoFmatrixes which will be used for the analysis of relations between CAB andthe deficit of general government. In conclusion, we will present the resultsof this analysis and show the suitability of FoF matrixes for the studyof macroeconomic development.

1. Compilation of a Flow of Funds Matrix

The first step in the compilationof a Flow of Funds (FoF) matrix is the drawing up of a balance of non-financialtransactions, which is also referred to as balance of savings and investments.The result of this balance made in respect of the domestic sectors of theeconomy will be referred to as the country's balance of non-financial transactionsin relation to the external sector or the current account of the balanceof payments (S - I = CAB).

Transactions in the economy areconducted in three domestic sectors (private, government[1], andbanking sectors) and in the external sector. The positive or negative valuesof sectoral balances of non-financial transactions represent a change inthe balance of financial assets and liabilities in the economy. Accordingto the convention on the accounting of items within the individual sectors,an increase in assets is to be entered with a minus sign (-) and an increasein liabilities with a plus sign (+) and vice versa. For example, an increasein the money supply in the private sector, which represents a liabilityfor the banking sector and an asset for the private sector, must be enteredtwice: as a minus entry for the private sector and a plus entry for thebanking sector. We can see that the described operation affects neitherthe government nor the external sector, hence these columns will remainunchanged. The sum of all lines and columns must equal zero.

2. Balance of Non-Financial Transactions

The table below illustrates thecalculation of savings in the Slovak economy in the years 1994-99 and comparesthem with the existing gross investments. The difference represents thebalance of payments on current account, i.e. S - I = CAB. Tab. 1 ***(Tab.1 to 8 see in BIATEC Journal)*** shows that the balance of paymentson current account is a counter-

[1] The term 'government' or 'government sector' refers to general governmentas defined by the IMF. This covers the budgetary performance of the Stateand State funds as part of central administration (central government),the Social Insurance Company, National Labour Office, health care fundsas parts of social security (social security funds), and the budgets ofmunicipalities as parts of local administration (local government). TheNational Property Fund is also included in the category 'State funds'.Since we have no access to data on its budgetary performance, the NationalProperty Fund (NPF) is not included in the definition of general government.

component to the balance of savings andinvestments in the domestic economy[2]. However, our goal is todetermine the effect of general government deficit on the level of deficitin CAB. For that reason, we divide the balance of savings / investmentswithin the domestic economy into the balance of savings / investments inthe private sector (SP-IP) and the balance of savings / investments inthe government sector (SG-IG), i.e. we modify the original equation tothe form (SP-IP) + (SG-IG) = CAB.

Balance of Savings / Investments in the Government Sector

By transforming the revenue andexpenditure sides of the general government budget for 1994-99, we obtainthe balance of savings / investments in the government sector (Tab. 2).The total revenue of the government consists of tax and non-tax revenues,contributions to social insurance and health care funds, the unemploymentfund, and grants. Current transfers are reallocated as a rule (as socialbenefits, contributions to health care funds, etc.). The difference betweentotal revenues and current transfers represents the disposable income ofthe government, which is used in part for the government's own needs (wages,purchase of goods and services) and the payment of interest on loans fromprevious years.

Government savings are defined asthe difference between disposable income and spending on government consumptionand interest payments. The table below shows that capital expendituresare only partly financed from savings (except 1995), therefore the balanceof SG-IG shows negative values. This difference is also referred to asthe financial balance of the government or net credit (net lending/netborrowing).

Table 2 documents a sharp fall ingeneral government savings. While in 1994-96, government savings representedan average of 4.4% of GDP; in 1997-99, their share decreased to 2.0%. Duringthe period under review, capital expenditures followed an upward trend,up to 1997. In 1998-99, they grew at a slower rate, though their dynamicsexpressed as a share of GDP well exceeded the share of government savingsin GDP. Therefore, the change in the item 'net government financing' ledto a fall in savings and a steep increase in investments.

In the remainder of the article,we shall analyse the factors that have significantly affected the developmentof government savings and investments. The identification of these factorsshould yield information about their potential effects on CAB.

According to the economic theory,government savings are determined in the short and medium-term by changesin current transfers and, in the long-term, by changes in public spendingand the payment of interest on government debts.

Current transfers are determinedby the pace of economic growth and the measures of the government. In general,they tend to grow roughly at the same rate as GDP. During 1994-98, theshare of current transfers in GDP was stagnant; in 1999, a decrease isexpected. The development of current transfers had a negative, and thenin 1999, a positive effect on the growth in government savings.

Despite some fluctuations, the shareof public consumption followed a downward trend over the period under review(Tab. 2). However, the fall in consumption was not connected with the growthin government savings, just the opposite in fact. In 1994-96, the levelof consumption reached 14.4% of GDP and average savings stood at 4.4%.In 1997-99, average consumption is expected to reach roughly 12.3% of GDPand average savings will account for about 2% of GDP in this period. Thedecreasing share of consumption, combined with a downward trend in currenttransfers, is having a positive effect on CAB.

[2] The Table shows moderate differences between the balance of savings/ investments and the balance of payments on current account, due to statisticalinaccuracies. In future analyses, we will rely on data calculated on thebasis of the balance of savings / investments.

Interest rates show a tendency tofall in relation to GDP. Despite this, they exert a negative effect onthe development of CAB due to a rise in the external debt of the government.

During the period under review,the disposable income of the government fell in relation to GDP, despitethe relatively strong rate of economic growth. It is considered that CABwill deteriorate during a period of decline in disposable government income.

Balance of Savings / Investments in the Private Sector

The balance of savings / investmentsin the private sector will be calculated as a residual variable, by deductinggovernment savings SG (Tab. 2) from national savings (Tab. 1) and governmentinvestments IG from gross investments.

Table 3 shows the balance of savings/ investments for the entire economy, broken down in government and privatesectors. The private sector consists of the corporate and household sectors.

It illustrates the severe deterioration in the balance of payments on currentaccount and the balance of the private sector in 1996. In 1999, a markedimprovement is expected to take place in the balance of payments on currentaccount. If the deficit in CAB improves by Sk 31.1 billion (forecast),the size of the general government deficit will diminish by Sk 7.6 billionand the balance of savings / investments in the private sector by Sk 23.5billion.

For a deeper understanding of thesectoral balances of non-financial transactions, it is necessary to analysethe financial flows that took place in the individual years.

3. Balance of Financial Transactions

This section is devoted to thecompilation of Fund-Flow matrixes, which extend the balances of non-financialtransactions to include the flow of funds within the economy. Based ona broad view of financial and non-financial transactions concluded in theeconomy during 1995-99, we have attempted to formulate a hypothesis concerningthe mutual dependence between the deficit in general government and CAB.

The effect exerted by the balanceof non-financial transactions on the flows of funds in 1995, is illustratedin Table 5. In the foreign sector, the surplus of CAB (Sk 14 billion) wasassociated with the growth in net foreign indebtedness (Sk 34.3 billion)and net foreign assets in the banking sector (Sk 48.3 billion), which havebecome the main source of growth in the money supply. The second importantcomponent of the money supply was the growth in domestic bank lending (Sk27.7 billion), of which Sk 19.2 billion was absorbed by the private sectorand Sk 8.5 billion by the government sector.

In the private sector, financialassets increased by Sk 76.0 billion (62.5 + 13.5) and financial liabilitiesby Sk 62.5 billion. The difference between the changes in financial assetsand liabilities is covered by a surplus in the balance of non-financialtransactions or domestic savings in the private sector, amounting to Sk13.5 billion. The increase in financial assets and liabilities in 1995was a salient factor in the substantial deterioration in CAB in 1996.

The government sector representedby the general government recorded a surplus of Sk 0.5 billion in the balanceof non-financial transactions. In the area of financial transactions, thelevel of foreign debt fell by Sk 9 billion, while domestic indebtednessincreased by Sk 8.5 billion, as a consequence of deficit financing. Withregard to the surplus in the balance of savings / investments, we may saythat the budgetary performance of the general government was restrictivein nature. The budgetary performance of the government sector in 1995 hadno direct impact on the development of CAB over the following year. However,it remains a question whether the government had made an indirect contribution,with its restrictive policy combined with the issue of government guaranteesfor loans to the corporate sector, to the rise in the level of debt inthe private sector (Sk 43.3 billion), which became a source of financingfor the deficit in CAB in the ensuing year. In 1995, the State providedguarantees for loans to the private sector (which were predominantly foreignexchange loans) in the amount of Sk 12.8 billion.

The increase in the level of indebtednessvis-a-vis the banking sector may be regarded as another potential sourceof government spending with a negative impact on CAB in 1996.

In terms of FoF, the year 1996 maybe regarded as a turning point for at least two reasons: (a) there was a sudden deterioration in CAB and (b) the private and governmentsectors shifted from a creditor to a debtor position. The deficit in CABreached Sk 64.6 billion and was financed from an inflow of foreign fundsin the amount of Sk 65.4 billion, which led to a moderate increase in netforeign assets in the banking sector. In contrast with 1995, when growthin the money supply was due primarily to an increase in the net foreignassets of banks; in 1996, money supply growth was due to an increase indomestic bank loans. Of the total change in domestic loans, the privatesector accounted for Sk 55.9 billion and the government sector Sk 4.1 billion.

Financial assets in the privatesector increased by Sk 60.8 billion (59.5 + 1.3) and financial liabilitiesby Sk 117.8 billion. The marked increase in financial liabilities was dueto foreign loans (Sk 61.9 billion) and loans granted by the banking sector(Sk 55.9 billion). The difference between the change in financial assetsand liabilities causes a deficit in the balance of non-financial transactions(amounting to Sk 57 billion). In comparison with the previous year, thedynamics of growth in financial liabilities doubled in 1996.

The deficit in the government sector,expressed in terms of the balance of non-financial transactions, stoodat Sk -7.6 billion. In this connection, we should mention that the governmenthas, since 1996, been involved in large-scale infrastructural projects,which are responsible for the deficit in general government and the markedincrease in government guarantees for loans in the private sector, in theamount of Sk 41.4 billion. Since the guarantees concerned mainly foreigncurrency loans, we may say that the government sector is indirectly responsiblefor the deficit of CAB in 1996.

The high degree of liquidity inthe private sector due to domestic and foreign indebtedness had a negativeeffect on the development of CAB in 1997 (Tab. 6), which resulted in adeficit of Sk 64.6 billion. In the same year, the level of net foreigndebt rose by Sk 69.9 billion, which sufficed to cover the deficit of CABand generate an increase of Sk 5.5 billion in net foreign assets in thebanking sector. The money supply grew by Sk 36.6 billion, representinga sharp fall in comparison with the level of 1996. Of this increase, lendingby domestic banks accounted for Sk 38.1 billion; of this amount, Sk 30.3billion came from the government sector.

Table 6 shows that the year 1997differs substantially from previous years in terms of budgetary performancein the government sector. The steep increase (Sk 22.1 billion) in the sizeof general government deficit expressed in terms of the balance of non-financialtransactions (Tab. 3) had a marked influence both on the development ofCAB and the structure of growth in domestic credit, in favour of loansto the government. This crowding-out effect, representing a restrictionon the access of the private sector to domestic loans (Tab. 6, line 5)due to limited growth in total domestic credit, motivated the entrepreneurialsector to borrow funds from abroad. The level of net foreign debt in theprivate sector rose that year by Sk 70.5 billion. (Government guaranteesgranted for bank loans to the private sector amounted to Sk 5.9 billionthe same year). We may say that in 1997 the government contributed indirectly(through the crowding-out effect) to the rise in the level of net debtin the private sector, which then became a source for financing the deficitin CAB.

In 1998, the deficit in CAB reachedSk 72.8 billion and was financed from foreign resources (Sk 46.5 billion)and the net foreign assets of the banking sector, which fell by Sk 26.3billion. The fall in net foreign assets had an absorbing effect on themoney supply, which grew by only Sk 19.2 billion.

The government sector continuedto pursue a policy of fiscal expansion, with general government deficitreaching Sk 30.6 billion. With regard to the limited capacity of the domesticfinancial market, the government entered foreign markets with the aim ofraising funds for deficit financing. In 1998, the growth in the volumeof net debt owed by the general government (Sk 26.0 billion) exceeded therise in the level of net debt in the private sector (Sk 20.5 billion).

In 1998, the government gave guaranteesfor loans to the private sector, in the amount of Sk 13.8 billion. In 1998,the government sector influenced the level of net foreign debt in the Slovakeconomy directly through its own indebtedness and indirectly through governmentguarantees to the private sector. Depending on the ratio of correlationbetween the total level of net debt and the deficit in CAB, we can workout the size of general government deficit in CAB.

The forecast for 1999 is based onthe following assumptions:

- deficit in the balance of payments current account: 5-6% of GDP;

- deficit in general government: 2-3% of GDP;

- growth in nominal GDP: 12%;

- growth in the nominal money supply: 9%

Taking the aforementioned assumptionsinto account, we may expect certain changes in non-financial and financialflows.

In 1999, CAB is expected to fallto Sk 41.7 billion, which is roughly half of the level of 1998. This improvementshould be reflected in the sectoral balances of non-financial transactionswithin the domestic economy. We predict that the private sector will producea deficit of Sk 18.7 billion in this balance (representing an improvementof Sk 23.5 billion compared with 1998) and the government sector Sk 23.0billion (a year-on-year improvement of Sk 7.6 billion).

Net foreign financing is estimatedat Sk 46.7 billion, and is expected to cover the deficit in CAB up to Sk41.7 billion and to increase the net foreign assets of banks by Sk 5 billion.The net foreign debt of the government is estimated at Sk 17 billion andthat of the private sector at Sk 29.7 billion. In 1999, the Slovak Governmentgave guarantees for loans in the amount of Sk 29.2 billion. This indicatesthat the government sector had a high share in the increase in Slovakia'snet foreign debt, i.e. in the financing of the deficit in CAB.

Conclusion

The influence exerted by the budgetary performance of the general governmenton the development of CAB is indicated by the FoF matrixes for the individualyears. In all cases, we relied on the hypothesis that CAB is determinedby changes in net foreign financing. With this in mind, we analysed theshare of the government and private sectors in the increase in the netindebtedness of the economy, and the share of the government in the indebtednessof the private sector vis-a-vis abroad. The analysis of the deficit ingeneral government and the current account of the balance of payments bymeans of FoF matrixes indicates strong interdependence between the twodeficits.

For a deeper understanding of casualrelations between the two deficits, it is necessary to construe an economicmodel. The FoF matrixes show the changes that occur in financial and non-financialtransactions in the economy and could form an information basis for itscompilation. The exact statistics of financial and non-financial flowswithin the individual sectors of the economy enable the makers of economicpolicy to estimate the responses of various macroeconomic variables tochanges in monetary and fiscal policies.