

MEASUREMENT OF THE FISCAL
DEFICIT IN A TRANSITION
ECONOMY, CASE OF UKRAINE,
1995-1999

by

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Abstract

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The paper considers different methodological aspects of the measurement of fiscal deficits in a transition economy. The issue of fiscal transparency also is addressed. While measuring and monitoring fiscal deficits, three factors are important to consider: the type of the budget deficit, the coverage of the public sector and the time over which the budget deficit is measured. A number of various budget deficit measures and adjustments to the official budget deficit are applied to the estimation of the fiscal deficit in case of Ukraine. The augmented fiscal deficit turns out to be at a high level, though there is a tendency towards decline. Further, possible negative effects of the government's intention to lower the official budget deficit are discussed. The paper ends with some policy implications and recommendations.

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GLOSSARY

Accrual deficit. Fiscal deficit measure that records transactions during the fiscal year, regardless of whether they have been actually paid for.

Augmented fiscal deficit. Hybrid fiscal deficit measure that comprises the general government balance, adjusted for the privatization receipts and sales of government assets, plus change in the stock of budgetary arrears, plus fiscal operations of public enterprises, the Central Bank and public financial institutions.

Commitment deficit. Fiscal deficit measure that captures the change in the stock of budget arrears.

Contingent deferred fiscal deficit. Fiscal deficit measure that includes the transfer of present resources from a commercial bank to a state enterprise.

Counterpart funds. Foreign loans or grants denominated in the foreign currency, and which include commodity grants as well, that are used to finance a public sector deficit or go in the form of credits to institutions or enterprises.

Current deficit. Fiscal deficit measure based on the difference between non-capital budgetary revenues and budgetary expenditures.

Deficit that measures the impact of the government on aggregate demand. Fiscal deficit measure adjusted for intergovernmental transfers.

Domestic balance. Fiscal balance measure based on the difference between domestic budgetary receipts and budgetary outlays.

Extrabudgetary funds. Units outside the budget that collect money through, e.g., the imposition of taxes or compulsory levies, or are created with some charitable purpose, and which are meant to provide non-market goods and services.

Fiscal deficit. Conventional deficit that measures the difference between total government expenditures and revenues.

Fiscal transparency. Openness of fiscal operations to the public.

General government. Level of the government that includes central, state, local and other lower-level government institutions, and extrabudgetary funds.

Operational deficit. Conventional deficit where the part of the debt service that compensates the debt holders for actual inflation is excluded.

Payment arrears. Delayed payments from the budget to budgetary organizations.

Primary balance. Budget balance based on the difference between budgetary revenues and budgetary expenditures where the outlays exclude interest payments.

Public sector borrowing requirement. Cash-based deficit, whereby only actual cash expenditures and actual cash revenues are included in the budget balance.

Quasi-fiscal operations of public financial institutions and the Central Bank. Tax and subsidy operations of these institutions that are equivalent to those of the general government sector.

Structural or cyclically adjusted balance. Deficit measure that would be if the output were at full employment level.

Tax or revenue arrears. Delayed payments to the budget.

Tax expenditures. Tax exemptions, tax rate reductions, tax deferrals, and any other expenditures of the similar nature.

Tax privileges. Waivers or deferred payments of taxes and write-offs of budget loans and tax debts.

LIST OF ABBREVIATIONS

CB Central Bank

EBFs Extrabudgetary funds

GFS Government Finance Statistics

NBU National Bank of Ukraine

NFPEs Non-financial public enterprises

QFAs Quasi-fiscal activities

PFIs Public financial institutions

Chapter 1

INTRODUCTION

Fiscal policies play a very important role in determining internal and external economic developments in any economy. In many countries the government is directly accountable for a significant part of economic activity, and may indirectly influence the allotment of the resources in the private sector. There is no unique way to assess the sustainability of a government's fiscal position, but there exist a number of ways that can be helpful in showing different aspects of the fiscal picture. In particular, the fiscal deficit is a useful indicator of macroeconomic impacts on the economy and is important for macroeconomic management. Consequently, to give a proper diagnosis to the economic problems and to find sound fiscal policies, it is important to measure the government financial position in an appropriate way.

Budget deficit measures impose implications for (Bleijer, Cheasty, 1992, p.1644):

1. Policy: the government deficit may indicate various stances and thus, need for different fiscal policies, depending on how it is measured, and what period of time it covers.
2. Cross-country comparisons: budget deficits may be very misleading if they are not adjusted for specific economic characteristics of countries and accounting conventions.
3. Success to find “ one “ deficit measure: standard flow measures and stock-based measures are both important in macroeconomic analysis.

The correct measurement of the fiscal deficit is equally important in advanced market economies and transition economies as well. There exists a huge variety of budget deficit measures that may produce quite different results. Consider, for example, the calculation of the budget deficit for 1991 fiscal year in the USA when the total federal deficit was about \$ 269 billion, “standardized -employment” deficit amounted to \$ 124 billion, and there was a primary surplus of \$ 71 billion (Eisner, 1992, p.295). By comparison, for Ukraine in 1998 the official budget deficit was about UAH 2 280 billion (or about 2 % of GDP), commitment deficit amounted to UAH 7 104 billion (or 7 % of GDP), primary surplus was about UAH 136 billion (or about 0,2 % of GDP), and the augmented fiscal deficit constituted UAH 11 600 billion (or 11,4 % of GDP).

Large budget deficits have been characteristic for almost all transition economies since 1992 and have been higher than the budget deficits in the major advanced economies. It has been proven that those transition countries that implemented tight fiscal policies at the beginning of the transition process enjoy higher rates of growth now than those transition economies that have been slow in adopting restrictive fiscal policies and have been reluctant to cut government expenditures (Progress with Fiscal Reform in Countries in Transition, 1998, p.99). Less advanced transition economies, like Ukraine, Russia, etc. have considerable weaknesses in the institutional arrangements that undermine proper revenues and expenditure management.

Government deficits have posed a significant problem for the transition countries, including Ukraine. Revenues as a percent of GDP have decreased as a result of a decline in production and a deterioration of the tax base. Budget expenditures have to be adjusted to the received amount of the budget revenues. The deficit problem remains persistent, as the government is rather reluctant to reduce its expenditures. Actually, the deficit is used to finance public spending.

One of the major items of expenditures are subsidies to enterprises, direct and indirect (e.g. tax exemptions, or tax privileges, etc.). The result of such government policy has been a series of budget deficits, rising debt and increasing exchange rate pressure. The sluggish performance of the economy also has been important in keeping fiscal deficits at a high level. It is true that the official budget deficit, calculated on the basis of the difference between budget revenues and expenditures, has improved recently. However, this particular measure cannot be taken as the only indicator for assessing fiscal policy in Ukraine. It should be treated with caution during the transition period in guiding government policy, as it may differ significantly from the true public sector fiscal deficit, due to the quasi-fiscal operations of the Central Bank and public financial institutions, shifting out expenditures to lower levels of the government and creation of extrabudgetary funds, significance of arrears, performance of social responsibilities by state enterprises, etc. Thus, the measured budget deficit may convey less information and be of less value than the generally understood in the market economy deficit.

The hypothesis that I will examine in this research paper is that though improvements in the official budget deficits have been achieved during the last years in Ukraine, the overall fiscal deficit is either going up or at least more or less stable, that the official budget deficit is lower than the latent deficit. The zero, or minimum budget deficit, adopted by Verkhovna Rada of Ukraine in 2000¹, should be treated with caution, as it is not compatible with the stock of the outstanding government debt.

¹ According to the "Law on State budget in Ukraine for year 2000", State budget revenues are 33433.15 UAH billion, State budget expenditures are 33433.15 UAH billion, which implies zero budget deficit. Local budgets are considered to be in balance.

The fiscal deficit measure should help to assess the true fiscal position of the Ukrainian government. If the fiscal deficit figure turns out to be too large, the need for a more restrictive fiscal policy is palpable. It is clear that the exact, “all-encompassing” deficit is impossible to estimate under the given environment of the transition period. Hence, the budget deficit, which is possible to measure, is likely to exercise more influence on policymakers than the true fiscal deficit, which is unknown. Therefore, policymakers may want to keep the budget deficit smaller, although this action may come in conflict with other important economic objectives.

Thus, Section 1 deals with general description of fiscal deficits and discusses some related issues. Section 2 presents different measures of the fiscal deficit. Section 3 shows some measurement results for the case of Ukraine: analysis of the most frequently used budget measures (cash deficit, commitment deficit), computation of some new budget deficit measures, such as current deficit, domestic deficit, etc., calculation of the deficit that will be comparable with the budget deficit estimates in other countries, discussion of the negative effects of the government’s intention to lower the official budget deficit in Ukraine. The paper ends with some policy recommendations.

FISCAL DEFICITS AND RELATED ISSUES

2.1. Fiscal deficits, their definition and effects on the economy

According to the public finance literature, “ a budget deficit is the excess of government outlays over receipts taken in from taxes, fees and charges levied by government authorities” (Hyman, 1996, p.404). The budget balance measure is used to assess the sustainability of fiscal policy. A budget deficit suggests an expansionary fiscal stance, while a budget surplus may be an indicator of contractionary fiscal stance. The budget balance as a percent of GDP is an indicator of the changeful impact of the government sector on the economy.

The fiscal deficit is usually defined on a cash basis, and as such, is the difference between total government cash outlays and total government cash revenues. Expenditures include interest payments, but exclude debt amortization payments. Revenues include tax and non-tax revenue and grants, but exclude borrowing proceeds. One of the major items of government spending are subsidies which in a transition economy may take up different forms (see Appendix 1, Table 1.1). Among them, the so-called tax expenditures deserve special attention. “Tax expenditures include exemptions from the tax base, allowances deducted from gross income, tax credits deducted from tax liability, tax rate reductions, and tax deferrals (such as accelerated depreciation)” (Manual on Fiscal Transparency, 1999, p.30). They are frequently analogous in their essence to direct program expenditures. A particular industry can be supported either through explicit budget expenditures or through concessional tax strategy. Tax expenditures

receive less legislative attention than actual expenditures. They are reported in many countries (e.g., Australia, France, Germany, Spain, the USA, etc.).

There are four major ways of financing budget deficits: 1) printing money, 2) external borrowing, 3) the use of foreign reserves, and 4) domestic borrowing (Fischer, Easterly, 1990, p.131):

Budget deficit = Monetary issue + (External borrowing + foreign reserves use) + (Domestic borrowing).

The effects of budget deficits on economic performance are not precisely understood. Economists point out positive and negative impact of large budget deficits. In particular, the described above ways of financing budget deficits may have negative impacts on the real or financial sides of the economy. Printing money may result in high rates of inflation. External borrowing can end in excessive external debt that makes the country's access to international capital markets harder and increases the probability of a government's default on its external debt obligations. The use of foreign reserves may lead to the balance-of-payments crises. Domestic borrowing is usually associated with the increase in real interest rates.

The deficits may not be such a bad thing if the government borrowing is used to finance productive investment. According to the Keynesian theory, the economic outcome of fiscal action, either a surplus or deficit, is one of the most stimulating factors in the economy. Furthermore, fiscal policy is the major mechanism that can move the economy from one equilibrium to another. The traditional point of view is that deficits cause a decline in national savings, contribute to higher interest rates, which in its turn leads to the crowding out of private investment, therefore slowing down economic growth. The reduction of private investment

as a result of government borrowing is a key assumption in the neoclassical analysis. The traditional view is not accepted by all economists.

The Keynesian analysis of the impact of the fiscal policy on the economy has been altered by two theories. The first theory was developed by Franco Modigliani and Milton Friedman and is known as life cycle and permanent income theory of consumption. According to this theory, expectations concerning the constancy of the deficit determine the influence of budget deficits on spending. The second theory, introduced by David Ricardo, the famous English classical economist, states that far-seeing tax-payers will increase their savings in response to the increased government borrowing, and that would keep the interest rates stable. This idea is known as Ricardian equivalence, and has been recently developed by the American economist Robert Barro.²

2.2. Fiscal deficit as an indicator for assessing fiscal policy

The overall balance is usually applied to judge fiscal policy performance. The official budget deficit measure reflects the change in the nominal value of the government debt. Some economists (e.g., Eisner, 1986) argue that the change in the real market value of the debt is the correct measure of the deficit. These two measures will vary when there are price level or nominal interest rate fluctuations. A conceptually right way to measure the deficit is to measure the change in public sector's net worth (assets-liabilities) which is extremely difficult. There exist situations when it is difficult to judge the fiscal policy stance by the overall balance only. In such cases the overall balance should be supplemented by other economically meaningful measures. The magnitude of the budget deficit depends much on fluctuations in economic activity. The high-employment deficit, or

² For a more extensive discussion of this point of view, see Barro, Robert J. 1989. 'The Ricardian Approach to Budget Deficits'. *The Journal of Economic Perspectives*. Volume 3. Issue 2.

structural, or cyclically adjusted balance, has been calculated since the 1940s, but mainly in the 1970s, by adjusting for changes in the business cycles. These budget deficits have been best viewed at that time by Alan Blinder and Robert Solow (1974), and have been further developed by Thomas Holloway, Patrice Muller, Olivier Blanchard, etc. The calculation of this budget measure is remarkably complicated due to the difficulty in identifying potential and trend output. Another budget deficit measure, primary deficit, excludes interest payments from the budget balance (Barth et al, 1989). Conceptually, only net interest payments should be removed. The deficit can also be adjusted for inflation by computing operational or real deficit (Tanzi, Bleijer, Teijeiro, 1987). Actually, this is a composite measure of the conventional and primary deficits. It is equal to the sum of the primary deficit and the real constituent of interest payments. Generational accounting was developed to assess generational fiscal burdens (Auerbach, Gokhale, Kotlikoff, 1994). This method is based on a present value estimation of the amount of net taxes that a typical member of successive generation will pay. The IMF calculates a fiscal impulse measure to define the discretionary fiscal policy stance of the government (Chand, 1993, p.85). Some more budget measures will be discussed in Section 3.

In addition, the issue of fiscal transparency is very meaningful while measuring fiscal deficits, especially in transition economies, due to the existence of quasi-fiscal activities of public financial institutions (PFIs), non-financial public enterprises (NFPEs) and the Central Bank, as well as the pursuit of government policies through extrabudgetary funds (EBFs) and tax expenditures. The analysis of policies inside and outside the budget is essential to give an accurate picture of the impact of the fiscal policy. The official data should be modified to make the official government deficit closer to reality. Many developed countries have succeeded in making their fiscal process more transparent, which unfortunately cannot be said about developing countries and transition economies.

To correct for the just mentioned above weaknesses, many economists (e.g., Bleijer, Cheasty, 1992, Craig, 1994) suggest that the coverage of the public sector is very important while measuring fiscal deficits, and that it is necessary to provide exhaustive and reliable information on extrabudgetary activities of the general government, alongside with its budgetary activities. International organizations like IMF, World Bank, the United Nations Development Program highly encourage the promotion of fiscal transparency.

Balance-sheet-based measures that take into account the intertemporal budget constraint of the public sector have been popular recently and have been studied well by the IMF staff members (Bleijer, Cheasty, 1993, Buiters, 1993, Manssor, 1993, Towe, 1993).

2.3. Fiscal deficits and related issues

2.3.1. The role of the government in an economy

According to the System of National Accounts of the United Nations, there are five sectors of the economy: 1) corporate, or quasi-corporate enterprises, 2) financial institutions, 3) general government, 4) private non-profit institutions, 5) households. Furthermore, the rest of the world is added. Each of these sectors is assigned a particular function. “The principal function of general government, in this framework, is to carry out public policy through: 1) the production of non-market goods and services for primarily collective consumption, and 2) the transfer of income, both functions being financed mainly by compulsory levies on other sectors” (GFS, 1997, p.1).

The government sector ought to be clearly distinguished from the rest of the economy, although to strictly define the boundaries of the government is a very complicated task, especially in the transitional surroundings. Generally, the

government sector should coincide with the notion of the general government that would include central government and lower levels of the government, together with EBFs. The general government is not to be confused with the public sector, which embraces PFIs and NFPEs. But some economists (e.g., Buiter, 1997) argue that the fiscal activity of the CB should be incorporated into the notion of the general government.

It is evident that conventional budget deficits have to be adjusted while moving from the centrally planned economies to market economies. The meaning of the budget deficit in the market economy and the centrally planned economy may be completely different. Before the transformation period there was no necessity to distinguish between the private and the public sectors. Many of the social functions were carried out not by the government, but by state enterprises, and this continues to be practiced now, though to a lesser extent. In a market economy, the general government concept excludes state enterprise sector, but such functions are financed by the government budget.

In a market economy, the government's role is important but is absolutely transformed from what it was in a centrally planned economy. In the new circumstances, its principal function is to provide public goods and services rather than to allot resources and appoint output quotas. Privately owned enterprises carry out chief productive activities in any free market economy. The ultimate role of the government in taxing citizens and in supporting social activities should become clear-cut and well focused. There should be a comprehensible, well-understood margin between private sector and public sector activities.

Recently there has been a heated debate over the economic role of the government and on the share of public spending in the economy. Advocates of

large government believe that there are many cases of market failure, that policymakers are guided by public spirit and that policy process is a way for voters and policymakers to arrange resources. Supporters of small government argue that the public sector activity is not perfect as well, that cases of government failure that result in the inefficient allocation of resources happen as well (Marlow, 1995). The predominant point of view is that the role of the public sector should be smaller (Tanzi, Schuknecht, 1998, p.209). Spending and taxation are the most commonly used measures of the size of the public sector. Another measure is the number of the employed in the public sector (Rosen, 1999, p.13). Many transition economies have a level and composition of public spending similar to that of the advanced OECD economies. The general government spending is especially high in the Czech Republic, Hungary, Poland, and the Slovak Republic. The optimal size of government spending is difficult to define as it is connected with the debate of the state in the economy.

2.3.2. Government interactions with other sectors of the economy

There should be a distinction between fiscal, monetary and public enterprise management. A complete and clear cut between fiscal and monetary policy is unfeasible in any economy. These areas overlap. But well-managed market economies endeavor to keep these two policies apart and strive to apply each policy toward the targets for which it is comparatively more efficient. In transition economies, fiscal goals are often pursued through monetary policy.

The Central Bank, public financial institutions and non-financial public enterprises may pursue quasi-fiscal operations.³ Their major types are presented in Appendix 1, Table 1.2. The first objective of the CB should be the realization

³ See Mackensie G.A., Stella P. 1996. 'Quasi-fiscal Operations of Public Financial Institutions'. IMF Occasional Paper No.142.

of monetary objectives. But in some countries, and particularly in transition and developing economies, the CB activities are quasi-fiscal in their nature. The most common examples of the CB's quasi-fiscal operations are its credits at concessional rates which are equivalent to interest subsidies, foreign exchange transactions in a multiple exchange rate system which are tantamount to foreign exchange subsidies or taxes, the levy of the reserve requirements on commercial banks to keep CB liabilities at lower interest rates which acts like a tax on deposits. When the CB is engaged in the bailout of the state enterprise either directly, or by supporting a commercial bank that has given a non-performing loan to some state enterprise, a contingent deferred fiscal deficit emerges (Buiters, 1997, p.11). This kind of deficit is less apparent than the conventional budget deficit, and its minimization is a prerequisite for achieving control over fiscal policy in the medium and in the long run. The most common quasi-fiscal operation of PFIs is the provision of loans to particular industries at below market rates, which, of course, decreases the profitability of banks and increases the probability of banking crises (Manual on Fiscal Transparency, 1999, p.19).

NFPEs may pursue quasi-fiscal operations as well. For example, they may provide non-commercial services, i.e., that is charge less for specific services (for instance, offer electricity to rural consumers at lower cost) or provide social services (Manual on Fiscal Transparency, 1999, p.19). Such activities should be financed by direct budgetary transfers.

Chapter 3

MEASURING AND MONITORING FISCAL DEFICITS

The methods of monitoring and measuring fiscal deficits have been summarized well by the staff members of the International Monetary Fund M. Bleijer and A. Cheasty (See Appendix 1, Diagram 1.1). These are the measures that will be applied to the studies of the fiscal deficits in case of Ukraine, except for the third group of measures, dealing with the time upon the budget deficit is measured, that are especially elaborate and deserve special treatment, they are beyond the scope of this work, as well as operational deficit.

3.1. Public sector deficits and its types

3.1.1. The conventional public sector deficit and its weaknesses

The most widely accepted measure of the budget balance is the conventional deficit measure. It is usually defined as the difference between total government budgetary expenditures and budgetary revenues:

$$\textit{Conventional Fiscal Deficit} = \textit{Total revenue and grants} - \textit{Total expenditure and net lending},$$

where *net lending* = *loans* – *interest payments* (e.g., subsidized loans to farmers, students, or small businesses).

The conventional deficit can be characterized by several limitations, based on the magnitude of public sector demand (Tanzi, 1993, p.13). According to economic theory, the conventionally measured public sector deficit is too narrow as it does not reflect the changes in the real value of public assets and liabilities, emerging

from fluctuations in the price level, exchange rates and present value of future tax payments (Buiter, 1993, p.297). In a similar way, changes in the distribution of wealth between generations are not captured in the conventional measures (Auerbach, Gokhale, Kotlikoff, 1994, p.75).

The conventional budget deficit concept is ordinarily not appropriately defined. Thus, the deficits of different countries cannot be compared directly. There are two main areas of discrepancy here (Blejer, Cheasty, 1991, p.1646): the differentiation between deficit-determining items - revenues and outlays, and deficit-financing items (drawing “ the line “) and designation of the time when the use of resources is estimated (cash versus accrual accounting). There are two criteria that may be used to distinguish between revenues and expenditures on the one hand and financing on the other hand: the government debt criterion and the public sector criterion.⁴ Debt amortization is classified “below the line”, “on the argument that, unless the sustainable level of public debt changes, it will be automatically rolled over and, hence, does not represent a new expenditure” (Blejer, Cheasty, 1992, p.41). The most frequently used variant of the conventional deficit is the public sector borrowing requirement, which measures the government’s employment of new financial resources, and from which the result of the repayment of the before accumulated debt is cleared away.

3.1.2. The most frequent variants of the conventional budget deficit

Another source of variation between the conventional deficit measures may be the choice between cash and accrual accounting. In actual practice, budget deficit measures lie somewhere in between the cash and accrual measures.

⁴ According to the government debt criterion, revenues or outlays are recorded above the line if they are not a government’s liability. According to the public policy criterion, revenues or outlays are presented above the line when they pursue the policy makes’ goals.

The cash deficit usually measures the direct impact of government on the economy in the given period, not taking into account the delays in payments that generate public sector arrears, though this measure reflects some past events and may carry out some implications for the future (Levin, 1993, p.103):

$$\begin{aligned} \text{Cash balance} &= \text{Revenue} - \text{Non-interest expenditure} - \text{Actual Interest} = \text{Cash deficit} = \epsilon \\ \text{Financing} &= \text{New external borrowing} - \text{Actual amortization} + \text{Net domestic borrowing}. \end{aligned}$$

The purely “ cash” deficit is tantamount to “public sector net borrowing requirement”. The cash approach allows a direct comparison of deficits across countries.

Accrual-based deficits give rise to a whole class of the non-conventional measures of the deficit that are based on the discussion of the public net worth or intertemporal budget constraints. These measures could be much more useful to assess the government’s fiscal position, but they are not observable (Easterly, Schmidt-Hebbel, 1993). The difference between cash and accrual measures becomes significant due to the delayed payments from the budget, which lead to the accumulation of government expenditure arrears. Payment arrears are not characteristic of advanced economies, but they are very common in developing and transition economies. There also may be a significant amount of time before tax payments are made, which determines the existence of tax arrears. Accrual accounting takes into account also transactions-in-kind, contingent liabilities and other non-cash operations. It has been adopted by governments in the United Kingdom, Australia, New Zealand and in some other countries.

Cash and accrual deficits have been reconciled on the basis of arrears that led to the measurement of the deficit on a commitment basis:

Deficit on a commitment basis = Revenue – Non-interest expenditure – Scheduled interest = Commitment deficit = (-) Financing = New external borrowing – Scheduled amortization + Change in arrears + Net domestic borrowing.

3.1.3. Special deficit measures

There are other ways, the fiscal deficit measurement (e.g., current deficit, etc.) can be used to provide some additional hints on a government's fiscal stance. Different estimates of the budget balance can be attained depending upon the concepts of the deficit one prefers and the technical adjustments and corrections made. Such budget deficit measures are used to differentiate the impact of different budgetary transactions (e.g., investment, import purchases, or debt service) on macroeconomic variables (e.g., savings, balance of payments, and inflation). These measures should not be looked at as good or bad, as each measure reveals a specific facet of the government's fiscal position. Hence, bringing these measures together can reveal a fuller picture.

- **Primary balance**

The primary balance is the budget balance based on the difference between revenues and expenditures where the outlays exclude interest payments:

Primary fiscal deficit = Conventional fiscal deficit – Interest payments.

It is argued that interest payments are a result of past deficit decisions and, consequently, should be excluded to give a more accurate current picture, to identify the direct effect of current government policies on the economy.

- **The current deficit: government saving and the capital budget**

The current deficit is the difference between non-capital budget revenues and expenditures:

Current fiscal balance = Government saving = Total current revenues and grants – Total current expenditures.

Investment expenditures and capital revenues are excluded from the budget measure. The capital account of the budget will look in the following way (GFS, 1997, p14, 39):

Capital revenues	Capital expenditures
<ul style="list-style-type: none"> • Sales of fixed capital assets • Sales of stocks • Sales of land and intangible assets • Capital transfers from nongovernmental sources 	<ul style="list-style-type: none"> • Acquisition of fixed capital assets • Purchases of stocks • Purchases of land and intangible assets • Capital transfers (domestic and from abroad)

The current deficit is a measure of the government’s savings that constitute a part of national savings. When it is positive, that means that the government can finance its consumption from its revenue (IMF, 1995, p.13). Capital expenditures mean that funds given to industries, enterprises, organizations, etc., should be transferred into certain goods and services which under the appropriate use, and under the condition of profitable utilization should bring corresponding revenues to the budget. One of the tasks of fiscal policy is to define the optimal ratio between current and capital expenditures. Funds dedicated to the capital formation should be reasonably utilized. These capital expenditures may be unproductive and not contribute to growth. At the same time, some current expenditure, e.g. on health and education, can be productive and lead to capital formation in the future. In practice, it is difficult to distinguish between investment and current outlays. The examples of different types of expenditures are presented below:

	Productive	Unproductive
Consumption	Education and health services	Interest payments
Investment	Acquisition of fixed capital assets, purchases of stocks	Capital transfers

- **The domestic fiscal balance**

This measure includes only transactions within the domestic economy and excludes those ones that directly influence the balance of payments:

Domestic balance = Conventional fiscal deficit – Balance of government transactions with foreigners.

The foreign deficit measures budget transactions connected with the external sector. The foreign balance of the government will look in the following way:

Foreign revenues	Foreign expenditures
Taxes on international trade and transactions: <ul style="list-style-type: none"> • Import duties: Import duties Customs duties Other import charges • Export duties • Profits of export or import monopolies, etc. 	Interest payments abroad Transfers abroad: <ul style="list-style-type: none"> • To governments and international organizations • To supranational authorities • From supranational authorities to their headquarters • Other transfers abroad

The domestic balance figure may be useful to evaluate the direct expansionary impact of the government on the economy (IMF, 1995, p.14). The separate calculation of domestic and foreign deficits is particularly important when the consequences of a devaluation are being assessed, or when the country has large

trade and capital flows to and from the world. This assessment depends on the size of the government imports and foreign debt service obligations (Blejer, Cheasty, 1992, p.41). Devaluation may lead to an increase in the budget deficit when the imports of the government, or foreign debt service are large, in such a way falsely indicating an expansionary fiscal policy, as the amount of government resources into the economy may not change, or even fall.

- **Deficit that measures the impact of government on aggregate demand**

There exists a Keynesian approach to the assessment of the government contribution to the aggregate demand. For this purpose, it is necessary to separate exhaustive expenditures (on goods and services) and transfers.

It has been recognized that the government's contribution to aggregate demand will be overestimated if transfers are a part of government spending, due to the lags in the spending of those transfers (Blejer, Cheasty, 1991, p. 1652). This problem is most evident in those countries where there are some layers of the government. In such a case the transfer from central to local government will not add up to the aggregate demand up to the time it was recorded:

Budget balance = Conventional fiscal deficit, excluding transfers in government spending

3.2. The coverage of the public sector

The deficit measure can be the most accurate measure of the fiscal position of the country when it is based on the assessment of the consolidated public sector. The conventional definition of the "general government" does not encompass the fiscal content of public enterprises, Central Bank, and public financial institutions. Sometimes non-governmental agencies carry out government-like transactions that can be relevant while measuring the impact of the fiscal deficit.

3.2.1. General Government

The general government includes central government, state, provincial, local and other lower-level government institutions plus extrabudgetary funds:

$$\text{General government balance} = \text{Budget balance} + \text{Extrabudgetary funds balance.}$$

The fiscal position is often distorted by the widespread use of extrabudgetary funds and counter-part funds, especially when these operations are not presented in the budgetary framework. Extrabudgetary funds are units outside the budget that raise money through, e.g., the imposition of taxes or compulsory levies, or are created with some charitable purpose, and which are supposed to provide non-market goods and services (e.g., Social Security fund, or Unemployment fund). The government may lose control over the funds of the extrabudgetary accounts. To gain the necessary command, accountability and inspection, many governments try to include these funds into budgetary accounts. Counterpart funds are foreign loans or grants denominated in the foreign currency, and which comprise commodity grants as well, that are used to finance the deficit or go in the form of credits to institutions or enterprises. These loans are very often not reflected in the budget, and so receive less parliamentary attention. These funds should be recorded above the line under “net lending”. If they are not, the deficit is understated. As a result of timing and data availability problems, connected with the existence of the extrabudgetary funds, analysis by economists and policy-makers is usually focussed on a narrower part of the government.

3.2.2. Non-financial public sector

Public enterprises constitute a part of the public sector. Their activity is inspired to some extent by profit, but their prices and sales may be often affected by the government policies. While measuring the government’s influence, it is important, first of all, to identify public enterprises correctly, and, second, to

measure their fiscal implications. “ As a proxy for isolation of the policy (tax or subsidy) element in public enterprise net profits, the operational balance of public enterprises may be added to the general government balance (along with investment with the public enterprise sector), because it is usually considered to derive principally from public policy decisions” (Bleijer, Cheasty, 1992, p.41). But there is no way to incorporate the operational balance of the public enterprises into the public sector deficit. The general government concept does not include the state enterprise sector, though it will be appropriate to include government-like or fiscal operations of the state enterprises into the measured fiscal deficit.

Some economists (e.g., Tanzi, 1993) argue that social benefits to support individuals are an example of expenditures that should be recorded in the measured fiscal deficit. In the centrally-planned economies, many fiscal functions were performed not by the government, but by the state enterprises that provided to their workers and families different social services: housing, medical care, pensions, kindergarten services, employment, etc. They also fulfilled a part of public investment. During the transition period, many enterprises still continue to perform many of those previous functions that in market economies are financed through the government budget and thus should be transferred to the government in the transition economy. The transfer of these functions will, for sure, increase the government expenditures and, further, government deficit if there is no corresponding increase in government revenues. Besides, the government continues to offer unemployment insurance through hoarding of workers

Other economists (e.g., Schaffer, 1995) assert that the state is not responsible for fulfilling these functions and that the burden of these social functions is not high and can be alike to non-wage remuneration in Western firms. The main difference between transition firms and Western firms are not the costs, but the

type of the ownership that provides these benefits and the type of the offered benefits.⁵

3.2.3. Financial Public Sector Deficit

This fiscal deficit concept implies that there should be a clear boundary between the activities of the government and the private sector, that the fiscal activity of the government should be separated from the monetary policy. The fiscal activity of the Central Bank ought to be thought over as a part of the fiscal policy. Thus, the concept of the general government sector as described above may be too narrow, as it does not reflect the financial operations of the government to the full extent. Consequently, the government deficit figure may be underestimated. Central Banks and other public financial transactions often play the same role as taxes or subsidies (IMF, 1995, p.18). Thus, the term “government” should include not only the general government but Central Bank as well (Kosterna, 1998, p.12), as the government may shift outlays and receipts from general government budget to the Central Bank. Government accounts should include quasi-fiscal revenues and expenditures, though actually, it is rather difficult to separate monetary activities from quasi-fiscal activities. The lending of PFIs directly financed by domestic capital market or from abroad should be added to the deficit. Quasi-fiscal activities can be a huge drain on public resources, and thus should be incorporated into the public sector balance (Bleijer, Cheasty, 1992).

There are several factors that may explain the quasi-fiscal operations of the CB and PFIs (IMF, 1995, p.18). First of all, QFAs may help to hide certain budgetary activities, as they are subjected to less legislative and parliamentary attention than

⁵ For a greater discussion of this point of view, see Schaffer, Mark E.1995. ‘Should we be Concerned about the Provision of Social Benefits by Firms in Transition Economies?’. *Economics of Transition*. Volume 3(2).

ordinary budgetary operations. Secondly, QFAs can be more readily administered than budgetary operations.

IMF economists (e.g., Buiters, 1997) suggest the calculation of the augmented deficit or surplus that would comprise the overall budget balance, any CB or PFIs loss, and not recorded capitalization activities, and which would provide a more exact and accurate measure of the fiscal deficit. According to the Buiters's rule of thumb, CB's credits to all sectors of the economy, excluding the general government, can be treated as de facto quasi-fiscal grants or subsidies. But if all lending of the CB is incorporated into the fiscal deficit, the deficit measure can be misleading, as much of this lending is done for pure monetary reasons, and thus should not result in the increase in the fiscal deficit. Nevertheless, this may be more realistic in advanced transition economies.

3.3. The issue of the period over which the budget deficit is measured

In assessing sustainability of the government's position, the short-term balance can turn out to be misleading due to the sensitivity of the fiscal assessment to the time framework of analysis.

The budget deficit can be hidden when privatization receipts are included. Privatization of public assets, or sales of other assets does not change the government's net worth position, it only provides a considerable amount of the budget revenues at the time of sale. In subsequent years revenues may be reduced if the privatization receipts are not reinvested efficiently in alternative, sufficiently high yielding assets. The fiscal position may be improved if the privatization process results in an efficiency gain for the economy and widens the tax base. Thus, if the size of the public sector changes, the total picture of the government's long run financial strength may be distorted (Mansoor, 1993, p.345). Consequently, in those cases where receipts from the privatization are

large, they should be excluded from the budget revenues to give a more accurate picture of the fiscal stance.

The contingent liabilities of the government should be assessed. The fiscal balance may include expenditures connected with the government's future obligations to pay (e.g., social security outlays). Government guarantees may not be associated with cost now but can imply significant outlays in the future. These issues gave a rise to the suggestion of replacing the annual deficit with a measure that would factor in changes in the government's discounted net worth (IMF, 1995, p.15):

Net worth measures = Assessments based on measured book values of net assets + Contingent net assets including the discounted value of future revenues.

But in practice, these measures turned out to be very difficult.

Finally, evaluation changes in the government's assets or liabilities are not recorded in the conventional budget deficit. Nevertheless, fluctuations in inflation, devaluation, terms-of-trade prices, real gains or losses of the government on its claims or debts will affect the capacity of the government to pay.

In this and the previous sections of the thesis paper, a large number of budget balance measures have been considered that may be used upon the certain objective. The presented below table summarizes the major measures according to their primary objective:

Objective (to evaluate)	Appropriate measure
Government's contribution to national savings	Current fiscal balance
Current fiscal policy	Primary balance
Impact of macroeconomic developments on the budget	Cyclically adjusted, or structural balance
Impact of inflation	Operational balance
Long-term planning (contingent liabilities)	Net worth measures
Coverage of government operations	Augmented fiscal balance
Government's contribution to the growth of monetary aggregates	Commitment deficit
Expansionary impact of the government on domestic economy	Domestic deficit
Debt	Public sector borrowing requirement

Chapter 4

MEASUREMENT RESULTS OF THE FISCAL DEFICIT IN UKRAINE. SOME POLICY IMPLICATIONS AND RECOMMENDATIONS

Since Ukraine's gaining of independence, two periods in the history of the budget deficit can be pointed out:

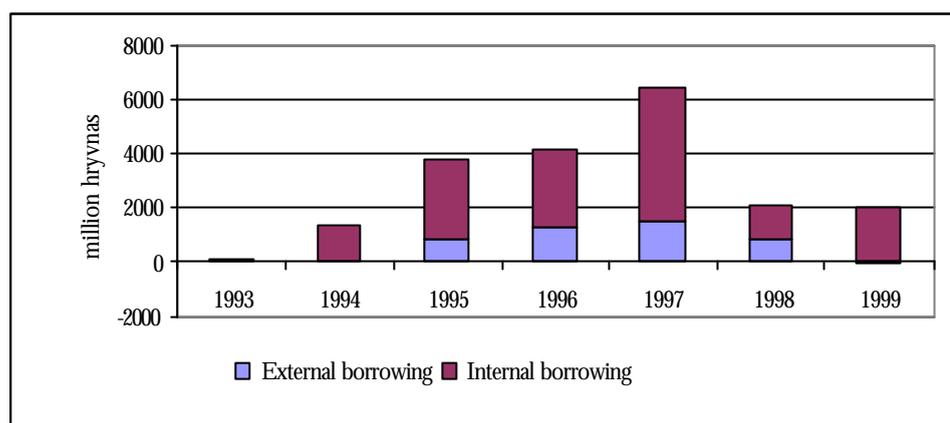
- a) Before the middle of the 1990s, the government tried to maintain expenditure targets and reacted to revenue shortfalls by increasing borrowings from the National Bank of Ukraine. This practice contributed to the monetization of the debt and to very high inflation⁶.
- b) The second period can be characterized by the adjustment of expenditures to available revenues and financing, although a portion of expenditure commitments was not financed and there was an increase in arrears. External financing during the second period has gone up (see Figure 1).

This part of the research paper discusses the second period in the history of the budget deficit (mainly due to possible difficulties in raising the necessary data during the first period). In the first part of this section, different types of budget deficit measures will be applied to the Consolidated budget that comprises state budget and local governments. The second part of the chapter considers the measurement of the conventional deficit within a broader range of government

⁶ According to the National Bank of Ukraine, the inflation rate (average yearly increase in the consumer price index) was about 200,0 % in 1992, 10125,0 % in 1993 and 400,0 % in 1994.

operations. The last part addresses the problem of the accurate measurement of the public sector in Ukraine.

Figure 1. Sources of Consolidated budget finance



Source: State Treasury reports

4.1. Public sector deficit and its types

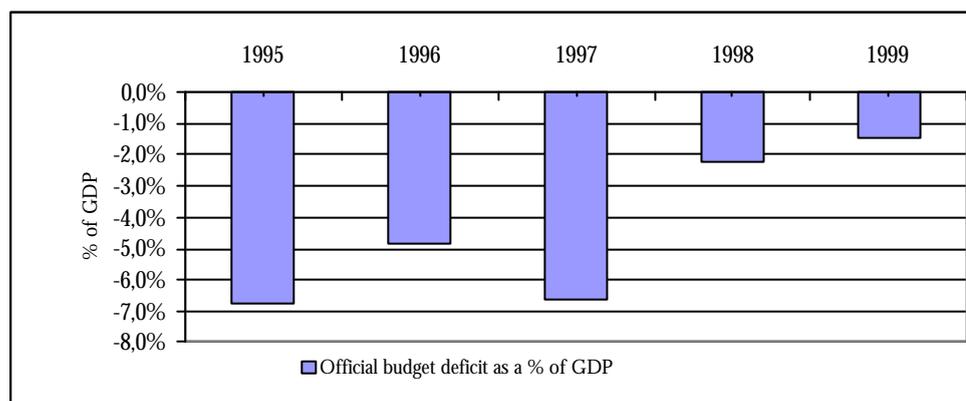
4.1.1. Conventional Deficit

The official budget deficit in Ukraine has been significantly reduced in recent years: from about 6,8 % in 1995 to about 1,5 % in 1999⁷ (see Figure 2). A downward trend is observed since 1997 when there had been a huge spike in the official budget deficit figure (to about 6,6 %). This may be explained by the fact that the Ukrainian government was successful enough to obtain much financing from the external and internal financial markets, leading to the accumulation of a high level of debt and imposing a high burden on the future generations. A large reduction in the budget deficit in 1998 can be explained by a huge increase in

⁷ The information on revenues, expenditures and balance of the Consolidated, State and Local budgets is presented in Appendix 2, Table 2.1.

budget arrears. The official budget deficit is too narrow as it does not capture all the government's operations in the economy, its off-budget activities. It is also underestimated by the amount of the privatization receipts and sales of government assets, that up to the present moment have constituted a relatively small share of the total government revenues, but are expected to be significantly increased in the subsequent two or three years. Another weakness of the official budget deficit is that it is based on the difference between government revenues and expenditures that comprise non-cash transactions as well.

Figure 2. Official Consolidated budget balance



Source: State Treasury reports

Generally speaking, the government employs different methods of reducing its budget expenditures, employing indirect and hidden subsidies to the economy. There are three major types of subsidies to the Ukrainian economy: direct, indirect and hidden (See Appendix 2, Table 2.3).

Direct subsidies are those expenditures that are explicitly reflected in the budget documents. Their portion in the amount of the total expenditures of the Consolidated budget has gone down recently, from about 16 % in 1997 to about 7 % in 1999.

Hidden and indirect subsidies help the government reduce its expenditures on the industry and agriculture, and thus to reduce the official budget deficit. These subsidies are not carefully studied and are non-transparent.

Among indirect subsidies, the major measurable subsidy is the wide practice of giving tax privileges, which is also a form of tax expenditures. Their nominal amount exceeds the revenues of the Consolidated budget, though real budget losses estimated by the State Tax Administration are much lower. These data should be treated with caution as they may be subjected to underestimation. The interpretation of tax privileges can be dual: on the one hand, it is the amount of the foregone budget revenues, on the other hand, they may be looked upon as one of the forms of the indirect subsidies to enterprises, and thus, a form of budget expenditures. I would rather maintain the view that it was another way to reduce budget expenditures, and thus the budget deficit in the budget documents, when the practice of budget arrears was subjected to criticism and the government was no longer able to allow large expenditures to the economy.⁸ Most tax privileges are value-added tax or enterprise profit tax privileges.

Another more or less measurable form of indirect subsidies, though very non-transparent, are credits to enterprises under government's guarantee. Here two major sources of such credits should be distinguished: export-import credits provided by foreign banks and credits provided by domestic banks. Such credits are often used to support certain investment projects and enterprises, and are not necessarily the most effective ones. The majority of Ukrainian enterprises fail to return the credits; thus, it is the government that has to bear this responsibility.

⁸ Note: According to the State Treasury reports, Consolidated budget expenditures on industry, energy and agriculture decreased from about 16,3 % of total expenditures in 1997 to about 6,6 % in 1999, while total budget losses from giving tax exemptions went up from about 13 % of total budget expenditures in 1997 to 25 % in 1999.

The enterprises receive government financial support in the form of tax arrears and the amount of the written-off or restructured tax arrears, which are an example of hidden budget subsidy. The amount of tax arrears ranges from about 0,7 % in 1996 to about 5 % in 1998.

The described above subsidies, like tax privileges or tax arrears, should become explicit in the official budget documents and be represented as a separate memorandum, which would give a clearer indication of the government's financial position and would reduce non-transparency in the government budget. But for that purpose, good institutions, such as tax system and good budgetary system are vitally important.

4.1.2. Cash vs. accrual deficits

- **Cash deficit**

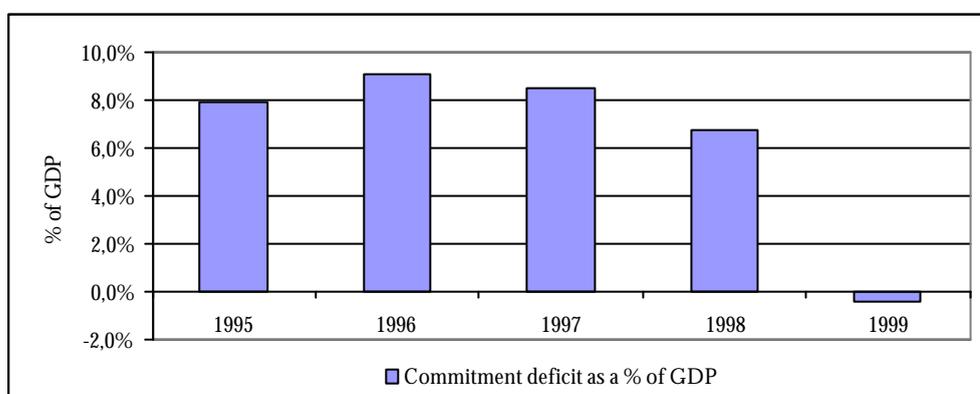
In most countries, the conventional budget deficit figure implies that it is a cash deficit. This is not the case in Ukraine, where the budget expenditures and budget revenues embody non-cash revenues and expenditures as well: in the form of mutual offsets and promissory notes (See Appendix 2, Table 2.2). Cash revenues constituted, on average, 76 % of the total amount of the Consolidated revenues in 1996, 1997, 1998, while cash expenditures were about 80 %. ⁹ Government transactions should be provided on a cash basis to meet the international standards of the government finance statistics.

⁹ The amount of the mutual settlements and promissory notes is larger at the revenue level, due to the peculiarities of the tax revenue mutual settlements.

- **Commitment deficit**

The difference between cash and accrual budget deficits is important in Ukraine as it can be significant due to the delayed payments from the budget, which in turn lead to the accumulation of budget arrears. The exclusion of the budget arrears from the official budget deficit helped the government to hide the true deficit (See Figure 3).

Figure 3. Commitment deficit of the Consolidated budget



Source: Ministry of Finance

As can be seen from the figure, by factoring in the change in the stock of the budget arrears, the commitment deficit also shows a downward trend: from about 9 % in 1996 to the surplus of about 0,5 % in 1999. In 1995-1996 the official deficit was reduced through the accumulation of budget arrears. In 1997 the government tried to impede the growth of government arrears. The large budget deficit was financed through selling Treasury bills (OVDP) to domestic and foreign commercial banks and through selling Eurobonds. In 1998 the government again increased substantially the amount of the budget arrears. The sharp reduction in budget arrears in 1999 can be explained to a greater degree by the presidential elections when a large amount of wages, pensions and stipends has been paid out.

At the end of 1999 total arrears amounted to about 8 billion hryvnas, of which there is a 40-60 split between the state and local government sector. At the state level, arrears are concentrated in wages and stipends, whereas at the local level these are mainly utilities arrears. The greater amount of budget arrears at the local level may be partially explained by the imbalance between the assigned expenditures and the actual capacity of localities to finance them. Another explanation is the extensive use of barter at the local level. Therefore, the deficit seems to be shifted from the state budget to the local budgets and further, to enterprises, workers and other parts of the economy. Furthermore, local budgets receive transfers from the state budget, which makes them appear balanced. These phenomena indicate a need for some change in the sphere of intergovernmental finance.

Another issue that is important to stress here is that the government may resort to non-cash mechanisms to settle budgetary arrears against the arrears of tax debtors. These non-cash tax arrangements prevent the government from getting enough cash revenues to cover the expenditures that can be satisfied only in cash. The amount of the written-off budget arrears in exchange for the writing-off of tax arrears (mutual settlements)¹⁰ could have certainly increased the commitment deficit figure. Budget arrears may lead to greater tax evasion. Firms may choose not to pay taxes, taking the government as an example or they may use budgetary arrears as a way to make the government write-off or restructure arrears. It may be convenient for both sides: firms have less to pay and the government gets rid of its liabilities. Such kinds of operations make the budget process non-transparent and should be discouraged.

¹⁰ The only possible source for such data is the State Tax Administration, but it has proven difficult to obtain information from this agency.

Budget arrears can be treated as some form of forced borrowing from the economy. They intensify social tension and jeopardize the government's credibility. They are not included in either expenditure or financing statistics, but may create important monetary effects, first of all, by increasing inflationary expectations. The level of budget arrears and their changes should be shown in a separate memorandum item to the government finance statistics.

4.1.3. Special deficit measures

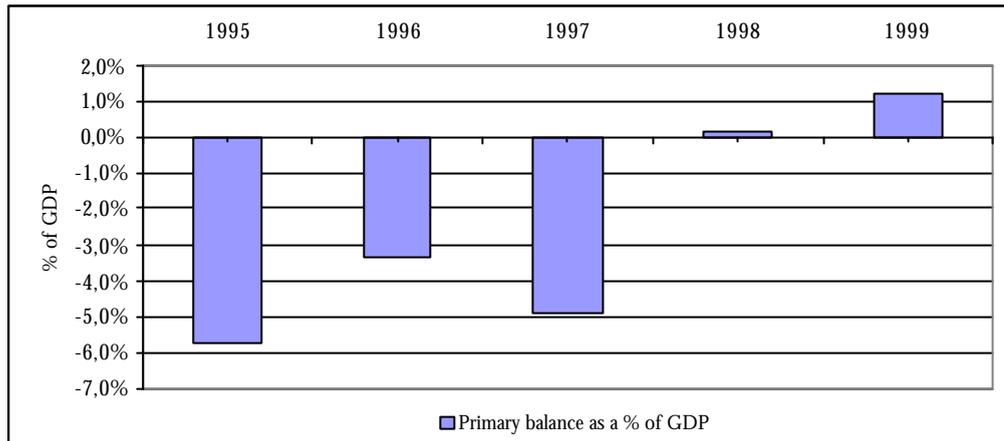
In the course of researching this topic, four specific-purpose deficit measures have been considered: primary deficit, current deficit, the impact of the government on aggregate demand and domestic deficit.

- **Present vs. past: the primary deficit**

As it can be seen from Figure 4, over the period from 1995 to 1999 there was a turnaround from a primary deficit exceeding 5 % of GDP in 1995 to a surplus of about 1,2 % in 1999 (See Figure 4). It should be mentioned that interest payments occupy a greater and greater part of the Consolidated budget expenditures, moving from 2 % in 1995 to about 9 % in 1999. Program expenditures account for a decreasing share of the budget. The primary budget surplus suggests that Ukraine managed to service at least a part of its interest payments through the present budgetary receipts and what is more important, is able to finance its domestic expenditures on its own. By running primary surpluses, the Ukrainian government could restore its solvency, as the upward trend in the primary budget surplus could indicate the improvement of the net indebtedness, at least, of the Central government as a result of the current fiscal policy. Nevertheless, because of high interest rates on the debt that actually

exceed the growth rate and devaluation of the currency, the debt-to-GDP ratio (debt denominated in the domestic currency) is growing very rapidly.¹¹

Figure 4. Primary balance of the Consolidated budget



Source: State Treasury reports

¹¹ According to the Debt Management Department of the Ministry of Finance information, state debt -to- GDP amounts to about 60 % in 2000, in comparison to 25 % in 1996.

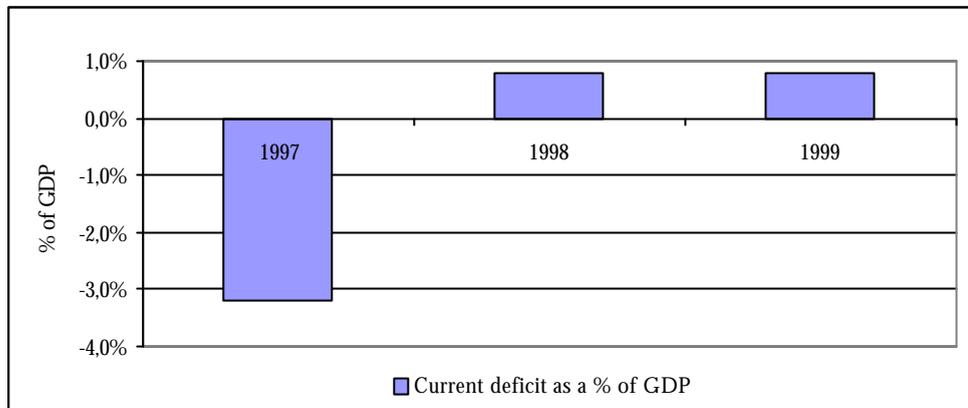
- **Current vs. capital transactions**

According to the economic classification¹², the composition of the Consolidated budget expenditures shows that the current and capital expenditures as a portion of total expenditures have been relatively stable. Capital expenditures have constituted a small share of the total budget expenditures, about 10 % (see Appendix 2, Table 2.4). They went down as a percent of GDP from about 4,0 % in 1997 to about 2,8 % in 1999 (capital expenditures may be politically relatively easier to cut than current expenditures). This is one of the arguments in favor of the statement that most of the budget expenditures are directed at the state consumption. It should be emphasized that in any economy, including Ukraine, the sharp distinction between capital and current expenditures is difficult. It may be argued that capital expenditures are ineffective in Ukraine, that they do not truly contribute to the capital formation in the country, while, on the other hand, some current expenditures, like on education or health, contribute to the accumulation of human capital in the country. Therefore, the results may be inaccurate. Actually, this empirical difficulty of distinguishing between capital and current expenditures is one of the arguments of the opponents of capital budgeting. Capital revenues also have constituted a small part of the budgetary revenues and include the sales of some government assets (e.g., jewelry) and privatization receipts.

The current balance is equal to the government saving. Thus, the current balance surpluses for 1998-1999 indicate the government savings which are a part of national savings (See Figure 5). Consequently, a portion of the current revenues has been used to finance a part of government capital expenditures, or public investment. Nevertheless, this result should be treated with caution due to the mentioned above reason. The improvement of the current balance during 1998-1999 coincides with primary balance surplus during these years.

¹² This economic classification of government expenditures is prepared by the State Treasury.

Figure 5. Current balance of the Consolidated budget

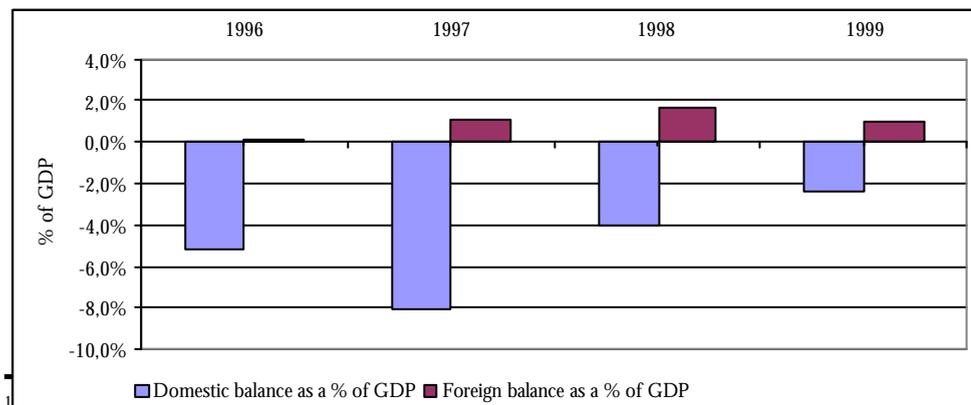


Source: State Treasury reports

- **Domestic deficit¹³**

The domestic deficit shows the government's expansionary impact on the local economy, though there is a tendency towards decline (See Figure 6). It turns out to be higher than the official budget deficit. The government's receipts from abroad are not matched by payments to abroad. Therefore, the government incurs large domestic deficits that are only partially balanced by small foreign surpluses.

Figure 6. Domestic balance of the Consolidated budget



Source: State Treasury reports

- **Intergovernmental fiscal relations**

State and local budgets¹⁴ in Ukraine are connected through the system of intergovernmental transactions in the form of transfers. These transactions were eliminated to calculate the deficit of the state budget and local budgets¹⁵. State budget balance without transfers (these are mostly transfers to local budgets) appears to be much better than the state budget balance where transfers are included (See Figure 7).

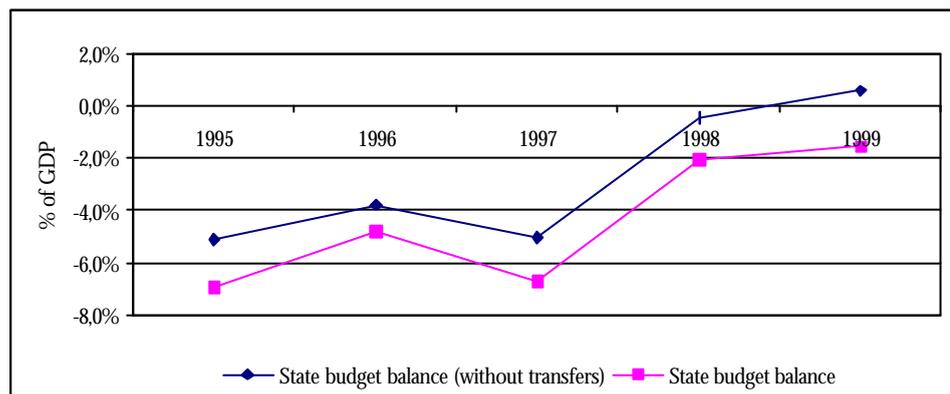


Figure 7. State budget balance, adjusted for intergovernmental transfers

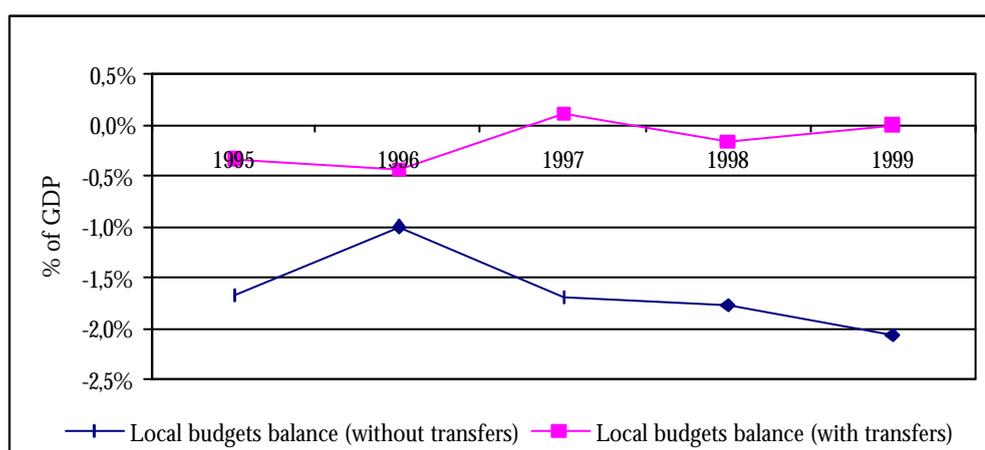
Source: State Treasury reports

It is interesting to see that local budgets in Ukraine, although required by law to have balanced budget, actually face the deficit which is going up (See Figure 8). This may be explained by the increasing gap between the assigned at the local level expenditures and the actual capacity of the local governments to finance

¹⁴ There are 27 regional or oblast level governments (including the Crimean Republic and the cities of Kyiv and Sevastopol), 490 rayon district governments, about 447 municipalities and a large amount of villages and settlements (World Bank, 1999)

them ('vertical imbalance'). Local governments are discouraged to raise much revenue collection either by a reduction in the tax sharing rate or amount of transfers. Thus, the local budgets have to rely on transfers from the state budget to cover their assigned responsibilities. The greater share of budget arrears at the local level and the increasing deficit suggest a problem in the intergovernmental fiscal relations, and the worsening of the financial position of local governments.

Figure 8 Local budgets balance, adjusted for the intergovernmental transfers



Source: State Treasury reports

¹⁴ More information on the estimation of this budget deficit is presented in Appendix 2, Table 2.6.

4.2. The Coverage of the public sector of the Ukrainian economy and its composition

4.2.1. General government deficit

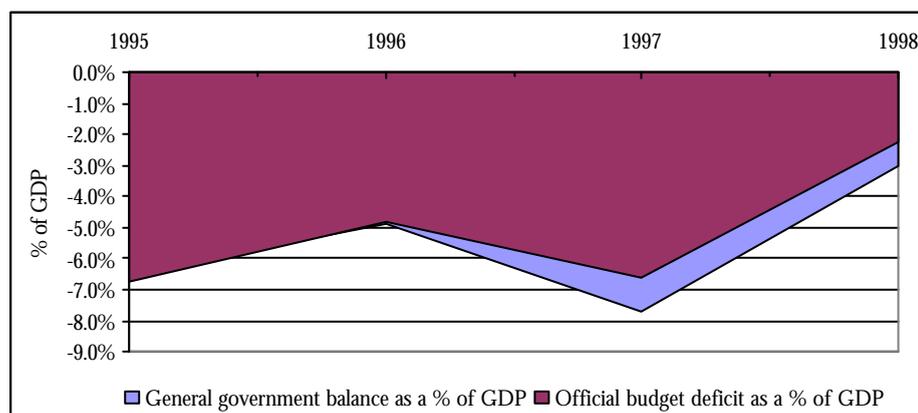
General government of Ukraine consists of the Consolidated government plus extrabudgetary funds. Consolidated budget comprises the state budget and local budgets.¹⁶ State budget ministries provide activities of national economic significance: defense, law enforcement, public administration, interest payments, foreign relations, etc. The territory of local budgets comprises social and cultural spheres: education, social protection, and health care programs. The creation of EBFs is another way to reduce the official budget expenditures in Ukraine, that is, by shifting them to lower levels of the government, or to extrabudgetary funds. On the one hand, by encouraging the creation of the extrabudgetary funds, the government was able to reduce the amount of the official budget expenditures, as most of the funds expenditures were directed at performing social functions and maintaining the large state administration, but on the other hand, it made the problem of the transparency of the budget process more acute. When the government understood its error, it was rather late, as the EBFs were flourishing. At the present time, it is difficult to estimate the precise number and magnitude of the activity of the EBFs. They exist at the state level (e.g., the Ministry of Coal industry has two funds: innovative and labor safety fund) and at the local level as well (e.g., some school, or hospital fund). The information provided by the Ministry of Statistics covers only a part of the activity of such EBFs. There were more than 1500 EBFs in Ukraine in 1999.¹⁷ According to the World Bank study (World Bank, 1999, p.14), the number of the EBFs at the local level has been

¹⁶ The data on the estimation of the general government balance are presented in Appendix 3, Table 3.1.

¹⁷ For more detailed discussion of the nonbudgetary/extrabudgetary funds in Ukraine, see Pasyeka, Liliiana.2000. 'Nonbudgetary/Extrabudgetary Funds in Ukraine'. Unpublished HIIID Working Paper .

going down, mainly due to the increased legislative efforts to bring them into the official budget (though this year some attempts have been made to include the EBFs of budgetary organizations into the budget, a great number of them are still off the budget). The funds have their own source of revenue, as well as some official transfers. They can be charitable; in this case not imposing any costs on those who provide those funds (e.g. a school fund). On the other hand, they may impose an additional burden on the enterprises, acting as some kind of tax, and creating possibilities for misuse and corruption. Usually, such extrabudgetary funds are balanced, with, may be, the exception of Pension Fund. To consolidate state and local governments and EBFs within the general government sector, intergovernmental transactions between levels of the government were eliminated to calculate the general government deficit (See Figure 9).

Figure 9. General government balance



Source: State Treasury reports. Ministry of Statistics.

There is a need to pursue the policy of bringing EBFs into the official government budget and exercise better control over the number and activity of

the EBFs. Their existence gives ground to talk of the unofficial budget on analogy with unofficial economy. It makes the fiscal adjustment process more difficult and less transparent, as it is difficult to assess the public sector as a whole. Off-budget expenditures, alongside with tax expenditures, lead to the underestimation of the expenditures and, thus, of the budget deficit. There is a need to present a separate balance of the activity of the EBFs on analogy with the government accounting to gain the necessary control over the size of public spending.

4.2.2. Non-financial public sector

As during the Soviet times, the roles of the government and enterprises continue to be mixed in Ukraine. State and collective enterprises are the major types of enterprises in Ukraine, with private enterprises occupying a smaller share of the total number of all enterprises and their total production (see Appendix 3, Table 3.2.). The profits of the public enterprises have been going down. In 1998 collective enterprises, the majority of which are agricultural enterprises, faced losses. The agricultural sector has the lowest profits in Ukraine among all industries (in 1995 – UAH 832 billion, in 1998 - - UAH 4424 billion of losses and the largest amount of loss-making enterprises (in 1998 – 70 % of the whole number of enterprises).¹⁸

Based on the existing evidence, it can be argued that the cost of provision of social benefits is a significant financial burden for the public enterprises, though it can be seen that they are downsizing their social benefit provision as a result of the fall in the volume of production and sales, and the persistent payment crises. A larger part of these social functions is being transferred to local governments or has been stopped permanently. There is a need to speed up the transfer of these

¹⁸ These data were taken from the yearly statistical book, issued by the Ministry of Statistics (1998).

functions from the enterprises to the government. This operation will, for sure, decrease the burden laid on the state banking sector, that has to credit the enterprises, reducing the amount of the “bad credits” in the banks portfolios, and shift the burden to its rightful place - the government.

4.2.3. Quasi-fiscal operations of the National Bank and other PFIs in Ukraine

As has been noted, the fiscal deficit implies that the fiscal activity of the government is separated from monetary policy. Quasi-fiscal operations are typical for Ukraine as a transition economy and the ones that are difficult to measure. The publicly owned banks and former state-owned banks under the strong influence of the government may be forced by the government to give credits to the state enterprises at concessional rates. Such credits are usually never returned, thus increasing the share of the prolonged, overdue, and doubtful credits in the credit portfolio. According to the National Bank of Ukraine, the credit portfolio of the Ukrainian banking system amounts to 14682 UAH billion as of 01.01.2000. About 80 % of the total credit portfolio are credits to the economy. The total amount of doubtful, overdue, and extended loans constitutes about 27 % of the total credit portfolio, though this official figure may be underestimated. The volume of not returned banks' credits under implicit or explicit guarantees of the Cabinet of Ministers was 1,6 UAH billion as of early 1999. Most of this lending is given to loss-making industries. Credits under government's guarantee create adverse selection and moral hazard problems. In Ukraine, there are two banks with 100 % state ownership: Exim Bank and Oschadny Bank (34 % of bad credits in the total credit portfolio in 1998). Besides, there are three former state-owned banks: Prominvestbank (17 % of bad credits), Ukraina (32 % of bad credits), Ykrsotsbank (19 % of bad credits) that remain to be under the strong influence of the state. Prominvestbank gives credit support to the heavy industry,

Ukraina gives credits to the agricultural sector, Ykrsotzbank credits light industry. The banks overspecialize in making loans to the specific sectors of the economy, putting “too many eggs into one basket”. They are not given the possibility to diversify. Domestic Ukrainian banks lent money to the economy to receive favors from the government. During 1997-1998 the biggest source of the banking profits was the service of the government’s accounts. The government’s influence over the banking activity undermines the efficiency of the banking system of Ukraine. The precise impact of the activity of these banks on the overall fiscal balance is difficult to estimate due to the lack of necessary data and non-transparency in the relations between the government and the banking system. From the limited source of information available (National Bank of Ukraine, Department of supervision over large banks), some data on the quasi-fiscal lending of the Ukrainian state-owned and former state-owned banks were obtained. These are mostly credits, given under the Cabinet of Ministers’ resolutions by Exim Bank, Oschadny Bank and Ykraina. These credits are classified as doubtful or overdue credits, as the obligations on these credits are not actually met, and the greater part of which are credits to the agricultural sector. They can be treated as government expenditures (a subsidy), which are financed not by the government revenues, but by forced borrowing from the banking system, which is unlikely to be paid back. But the amount of such credits should be treated with caution, as it may differ from the actual amount, which is much higher. This directed lending should be added to the budget deficit figure. Taking into account the current situation of the growing external debt and overall economic situation, it is unlikely that the government will pay back those domestic credits, especially those that are not acknowledged by the Ministry of Finance, as well as it is doubtful that public enterprises will return those credits.

The NBU, except for the direct support of the government, is also engaged in the quasi-fiscal activities. As a proxy for QFAs of the National Bank of Ukraine, the

rule of thumb suggested by Buiter (1997) has been applied, according to which it is assumed that all credit of the Central Bank to all sectors of the economy, except for the general government, can be treated as de facto quasi-fiscal grants or subsidies (see Appendix 3, Table 3.3). This seems quite reasonable due to the persistent problems in the financial sector of Ukraine (a large share of bad credits in the credit portfolio), slow rate of privatization and persistent problems in the public enterprise sector (a lot of credits of the banking system of Ukraine are to the state enterprises, the majority of which are loss-making, thus it is very doubtful that banks will be willing to give credits to them on their own will).

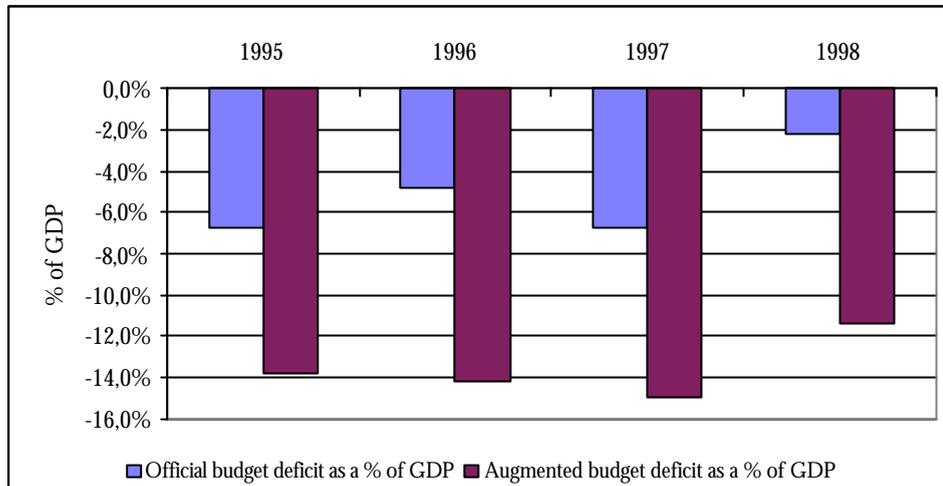
Thus, quasi-fiscal activities of PFIs and the NBU are important in estimating the fiscal deficit in Ukraine, but are those that are difficult to measure. The inclusion of the whole amount of credits to specific industries in Ukraine, like agriculture and coal-mining industry at low rates into the budget could mirror more precisely the current gap between government revenues and expenditures and could give a clearer indication of the necessary fiscal adjustment. Quasi-fiscal operations should be reflected in the government finance statistics. The transparency about QFAs, the activity of the extrabudgetary funds, and tax expenditures would certainly discourage their broad use.

4.2.4. Augmented fiscal deficit in Ukraine

Having considered the various factors that may help to adjust the official budget deficit in Ukraine, and including those ones that cover a broader public sector, but reflect government-like operations, a more informative measure of the budget deficit in Ukraine for 1995-1998 has been estimated¹⁹ in this study (see Figure 10)

¹⁹ The detailed information on how this budget measure has been calculated is presented in Appendix 3, Table 3.4.

Figure 10. Augmented fiscal deficit in Ukraine



Source: See Appendix 3, Table 3.4

The augmented fiscal deficit in Ukraine has been calculated in the following way: the official budget deficit + privatization receipts + change in the stock of budget arrears + deficit of extrabudgetary funds + amount of government-like operations of public enterprises (social functions) + amount of the quasi-fiscal operations of the Central Bank (its lending to all sectors of the economy except for the government) + quasi-fiscal lending of the state or former state-owned banks. One more factor, the amount of the written-off budget arrears, could have certainly increased the augmented fiscal deficit, but is not included due to the lack of data. The decision concerning the appropriateness of the inclusion of all these factors has been based on the arguments described in Sections 3 and 4 of the thesis paper and the peculiarities of the Ukrainian fiscal situation.

The trend on the graph rejects the hypothesis that the true budget deficit in Ukraine has been going up. But the level of the budget deficit is still high, and

remains more or less stable during 1995-1998.²⁰ The downward trend is likely to be continued in 1999, as the official budget deficit and the stock of the budgetary arrears have gone down, the amount of the social functions performed by the public enterprises and quasi-fiscal operations of the NBU and public banks have been going down as well.

The measurement results indicate the large gap between the official budget deficit and the augmented fiscal deficit, which even increased for 1998. The official budget deficit should be treated with caution in Ukraine. Given the estimated below size of the public spending, the large fiscal deficit and growing public debt to GDP, it can be argued that there has been no considerable fiscal adjustment in the country. The obtained results support a need for a more restrictive fiscal policy in Ukraine. The amount of the desired fiscal adjustment is usually associated with the reduction in the overall fiscal deficit, and the budget of the Ukrainian government should be balanced, taking into account its growing debt-to-GDP.

The measurement results of fiscal deficits in Ukraine can be summarized in the following way:

% of GDP	1995	1996	1997	1998	1999
Official budget deficit	-6,8	-4,8	-6,6	-2,2	-1,5
Cash deficit	n/a	-9,2	-6,5	-2,4	n/a
Commitment deficit	-7,9	-9,1	-8,6	-6,7	0,4
Primary deficit	-5,7	-3,3	-4,9	0,1	1,2

²⁰ There is no data available for social payments of state and collective enterprises for 1995, which makes the budget deficit figure for this year look lower. The augmented budget deficit was not estimated for 1999 due to the lack of data.

Current deficit	n/a	n/a	-3,2	0,8	0,8
Domestic deficit	n/a	-5,2	-8,1	-4,0	-2,4
General government balance	-6,5	-4,9	-7,7	-3,0	n/a
Augmented fiscal deficit	-13,8	-14,2	-15,0	-11,4	n/a

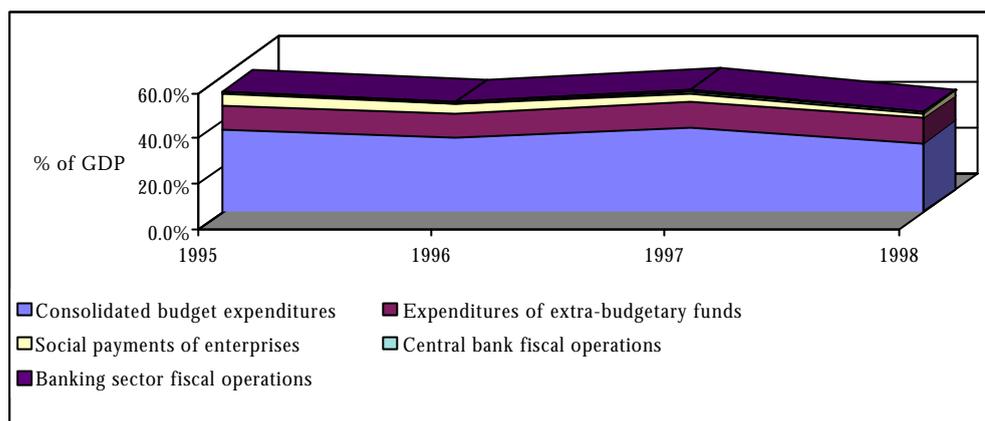
The official budget deficit cannot be used alone in guiding government policy in the country. Several budget measures should be considered together to give a more accurate picture of the government's fiscal stance. For Ukraine, it is the augmented fiscal deficit that seems to be the most appropriate indicator of the Ukrainian government financial position.

4.3. The size of the public sector in Ukraine

The measurement results also show a very high level of public spending in the country, which support the argument that little fiscal adjustment is being made in the country. Conventional budget expenditures convey a rather misleading picture of the size of the government in the economy. They have gone down from about 37 % of GDP in 1995 to about 30,4 % in 1998. Though general government expenditures have been reduced during 1995-1998 from about 48,0 % in 1995 to about 41,1 % in 1998 as well, the ratio of the general government expenditures to GDP is still high, which signifies the great involvement of the government in the economy. Extrabudgetary funds expenditures constitute a rather relatively stable share of GDP, about 10 % of GDP. The addition of social payments of enterprises and quasi-fiscal activities of the NBU and public banks gives a closer to reality picture of the public spending. Based on such a range of

public spending, public spending decreased from about 54 % of GDP in 1995 to about 44 % in 1998 (see Figure 11).

Figure 11. The size of the public sector of Ukraine



Source: Ministry of Finance, State Treasury, National Bank of Ukraine, Ministry of Statistics. Note: Public spending here comprises general government expenditures, social payments of enterprises and quasi-fiscal operations of the NBU and public banks.

This study cannot answer the question whether such a level of public spending is good or bad for the country. But there is no doubt that it is very high and approaches the level of the public spending in developed countries if a broader range of factors are included. Compare, for instance, these results with other countries' estimation of public spending. In more advanced transition economies the share of government spending as a percent of GDP is about 40 %. For 1994, the average size of the government expenditures as a percent of GDP for advanced economies is about 49 % (the lowest in the USA – about 33 % and highest in Sweden – about 69 % (Tanzi, Schuknecht, 1998, p.174). But if the size of the government is determined by per capita income, the government is large for a country at Ukraine's income level (Ukrainian GDP per capita at current US dollars is about \$ 652,4 according to the IMF estimates). But to make any firm conclusions on this subject, this hypothesis should be tested.

CONCLUSIONS

“ A budget deficit is like sin. To most of the public, it is morally wrong, very difficult to avoid, but always easy to identify, and susceptible to considerable bias in measurement” (Eisner, 1984).

Most importantly, the whole budget process in Ukraine should be made more transparent: beginning at the level of local fiscal operations and ending with fiscal and quasi-fiscal operations at a broader public sector level. As can be seen, when there are limits on the budget deficit, it may create inverse incentives for policy-makers. The government may use different methods: arrears, tax expenditures, EBFs, quasi-fiscal activities to reduce its official budget expenditures, and thus to reduce its official budget deficit, in order, for example, to meet an agreed budget ceiling, though the underlying budget deficit will not be reduced. Some fiscal adjustment in Ukraine (which is usually tantamount to the reduction in the budget deficit) may be seen only in the budget documents, though in reality this fiscal adjustment is not so evident (which may be proved by a high level of the augmented fiscal deficit in the country).

While analyzing any economy, it is important to have an accurate idea of the size of the government. One should be careful while talking about the size of the government in Ukraine, estimated on basis of the Consolidated government expenditures. The inclusion of other government-like expenditures seems to give a more accurate picture of the involvement of the government into the economy. The role of the government in Ukraine is not adjusted to the role it had to perform in a viable market economy. A large amount of social functions is

performed by state enterprises. The government continues to subsidize the production activity of such enterprises either directly or indirectly.

The process of compiling government finance statistics should be improved in Ukraine, as it should reflect all the government activity. Quasi-fiscal activities of the National Bank of Ukraine, public financial institutions, and non-financial public enterprises should be considered in the measurement of the overall fiscal deficit. Their precise quantification turned out to be difficult. Thus, the need for better information should be underlined. In particular, there should be separate information on cash-based transactions, capital vs. current, domestic vs. foreign budget expenditures and revenues, tax expenditures, floating debt. Privatization receipts should be recorded below the line. The implementation of all these practices will for sure contribute to effective fiscal management, greater fiscal transparency and reduce the use of negative practices.

This study of the measurement of the budget deficit not only helps to assess a more or less true size of the fiscal deficit and the public sector, but also contributes to a better understanding of the interaction between the fiscal policy and the economy. Based on the above results, it can also be argued that the size of the deficit depends much the accounting conventions and is susceptible to the measurement bias. Therefore, it is improper to evaluate the policy of the public sector on the basis of the official deficit size. Other factors such as, for example, government spending and its financial activities are important to evaluate while making decisions on the quality of government policy. Furthermore, before comparing budget deficits across countries, the accounting conventions of the measurement of the deficit in the particular countries should be carefully studied.

One of the reasons for the further persistence of the economic problems in Ukraine may be due to an inadequate understanding and comprehension of the processes that are taking place in Ukraine, and, as a result, failure to conduct

sound fiscal and monetary policies in the economy. I hope the research summarized in the paper will contribute to the better understanding of processes in the Ukrainian economy, and in the sphere of public finance in particular, and will provide evidence of the need for the Ukrainian government to reconsider its fiscal policy.

Of course, this research can be considered preliminary in the sphere of the studies of budget deficits. It has touched a broad number of budget deficit issues that can be studied more deeply. In particular, the following areas for future possible research can be pointed out: quasi-fiscal operations of the National Bank of Ukraine and public financial institutions, contingent liabilities of the government, estimation of other budget deficit measures, like full-employment deficit or operational deficit, etc.

The obtained measurement results have broader applicability. The fact that we cannot rely on the overall fiscal balance alone in assessing the government's financial position concerns other transition, developing and advanced economies as well. The overall balance of the general government ought to be a standard summary indicator of the government's financial position, though it should be supplemented by other fiscal indicators (e.g., commitment deficit, primary balance, current deficit) when, as a result of particular economic circumstances, it is inappropriate to base judgements about fiscal policy sustainability on the overall deficit alone. Various budget estimates facilitate policy analysis and help to give a more accurate picture of the government's fiscal position. The quality of information available to the public, the financial community and policy-makers should be increased, as the transparency of the government operations and the ability to measure the government's financial requirements correctly are very important in guiding and conducting sound government policy in any economy, including Ukraine as a transition economy as well.

BIBLIOGRAPHY

- A Manual on Government Finance Statistics*. 1992. IMF, Washington, D.C.
- Auerbach, Alan J., Jagadeesh Gokhale, Laurence Kotlikoff. 1994. 'Generational Accounting: a Meaningful Way to Evaluate the Fiscal Policy.' *The Journal of Economic Perspectives*. Vol. 8. Issue 1:73-94.
- Barro, Robert J. 1989. 'The Ricardian Approach to budget Deficits'. *The Journal of Economic Perspectives*. Vol. 3, Issue 2.
- Barth, James R., et al. 1989. 'Effects of Federal Deficits on Interest Rates and the Composition of Domestic Output'. Presented at the Conference on Fiscal Policy. Washington, DC: The Urban Institute.
- Bleijer, Mario I., and Andrienne Cheasty. 1991. 'The Measurement of Fiscal Deficit : Analytical and Methodological Issues'. *Journal of Economic Literature*. Vol. 19: 1644-1678.
- _____. 1992. 'How to Measure the Fiscal Deficit.' *Finance and Development*. September: 40-42
- _____. 1993. 'Measuring the Fiscal Deficit: Overview of the issues' in *How to Measure the Fiscal Deficit: Analytical and Methodological Issues*. Eds.: Bleijer, Mario, and Andrienne Cheasty. IMF.
- Blinder, Alan S., and Solow, Robert M. 1974. 'Analytical Foundations of Fiscal Policy' in the *Economics of Public Finance*. Eds.: Alan S. Blinder et al. Washington, DC: Brookings Institution.
- Buiter, Willem H. 1993. 'Measurement of the Public Sector Deficit and its Implications for Policy Evaluation and Design' in *How to Measure the Fiscal Deficit: Analytical and Methodological Issues*. Eds.: Bleijer, Mario, and Andrienne Cheasty. IMF: 297-345.
- _____. 1997. 'Aspects of Fiscal Performance in some Transition Economies under Fund-Supported Programs.' IMF Working Paper WP/97/31.
- Chand, Sheetal K. 1993. 'Fiscal Impulse Measures and their Impact' in *How to Measure the Fiscal Deficit: Analytical and Methodological Issues*. Eds.: Bleijer, Mario, and Andrienne Cheasty. IMF: 85-103.
- Craig, Jon. 1994. 'Budget Presentation and Concepts'. IMF Lecture No.6.

- Easterly, William, and Klaus Schmidt-Hebbel. 1993. 'Fiscal Deficits and Macroeconomic Performance in Developing Countries.' *The World Bank Research Observer*, Vol.8, No.2: 127-142.
- Eisner, Robert. 1984. 'Which Budget Deficit? Some Issues of Measurement and their Implications.' *The American Economic Review*. Vol.74, Issue 2: 138-143.
- _____. 1986. 'How Real is the Federal Deficit?' New York: Macmillan, Free Press.
- _____. 1992. 'Deficits: Which, How Much and So What?' *The American Economic Review*. Vol. 82, Issue 2: 294-298.
- Fischer, Stanley, and William Easterly. 1990. 'The Economics of the Government Budget Constraint'. *The World Bank Research Observer*, Vol.5, No.2: 127-142.
- Government Finance Statistics: a Summary of Methodology*. 1997. IMF, Washington, D.C.
- Guidelines for Fiscal Adjustment*. 1995. Fiscal Affairs Department. IMF Pamphlet Series No.49. Washington, D.C.
- Hyman, David, N. 1996. *Public Finance: a Contemporary Application of Theory and Practice*. The Dryden Press.
- Intergovernmental Finance in Ukraine: an Agenda for Reform*. 1999. World Bank Draft for Discussion (unpublished).
- Kosterna, Urszula. 1998. 'On the Road to European Union. Some Remarks on the Budget. The Performance in Transition Economies'. CASE-CEU Working Papers Series. Warsaw.
- Levin, Jonatan. 1993. 'The Cash Deficit: Rationale and Limitations' in *How to Measure the Fiscal Deficit*. Eds.: Bleijer, Mario, and Andrienne Cheasty. IMF: 103-113.
- Mackenzie G.A., Stella P. 1996. 'Quasi-fiscal Operations of Public Financial Institutions'. IMF Occasional Paper No. 142.
- Mansoor, Ali, M. 1993. 'The Budgetary Impact of Privatization' in *How to Measure the Fiscal Deficit*. Eds.: Bleijer, Mario I., and Andrienne Cheasty. IMF: 345-363.
- Manual on Fiscal Transparency*. 1995. IMF. Fiscal Affairs Department. Washington, D.C.
- Marlow, Michael L. 1995. *Public Finance: Theory and Practice*. The Dryden Press.
- Rosen S., Harvey. 1999. *Public Finance* Boston: Richard D. Irwin, Inc.

- Pasyeka, Liliana.2000.
 'Nonbudgetary/Extrabudgetary Funds in Ukraine'. HIID Working Paper (unpublished).
- Progress with Fiscal Reform in Countries in Transition*. 1998. IMF. Fiscal Affairs Department. Washington, D.C.
- Schaffer, Mark, E. 1995. 'Should we be Concerned about the Provision of Social Benefits by Firms in Transition Economies?' *Economics of Transition*, Volume 3(2).
- Tanzi, Vito. 1993. 'Fiscal Policy and the Economic Restructuring of Economies in Transition.' IMF Working Paper No.93.
- Tanzi, Vito, Mario Bleijer, and Mario Teijeiro. 1987. 'Inflation and the Measure of the Fiscal Deficits'. IMF Staff Papers.
- Tanzi, Vito, and Ludger Schuknecht. 1998. 'The Growth of Government and the Reform of the State in Industrial Countries' in *Social Inequality: Values, Growth and the State* The University of Michigan Press: 171-207.
- Towe, Christopher M. 1993. 'Government Contingent Liabilities and Measurement of Fiscal Impact' in *How to Measure the Fiscal Deficit*. Eds.: Bleijer, Mario I., and Andrienne Cheasty. IMF: 363-389.
- Siedenberg, Axel, and Lutz Hoffman, ed.1998. *Ukraine at the Crossroads: Economic Reforms in International Perspective*. Fenix: 119-127.