Box 3.1 Measuring the public deficit

The correct way to measure the public sector deficit depends on the purpose. The most obvious objective is to measure the net claim on resources by the public sector; this in turn influences the external deficit, inflation, domestic interest rates, and employment.

A useful indicator would then be the public sector's net use of financial resources, the *public sector borrowing requirement* (PSBR). The PSBR represents the total excess of expenditure over revenue for all government entities, all of which must be financed by new borrowing net of repayment of previous debts. It is also called the "consolidated public sector deficit." Expenditure includes wages of public employees, spending on goods and fixed capital formation, interest on debt, transfers, and subsidies. Revenue includes taxes, user charges, interest on public assets, transfers, operating surpluses of public companies, and sales of public assets. Expenditure does not include amortization payments on government debt or accumulation of financial assets, while revenue does not include the drawdown of cash reserves.

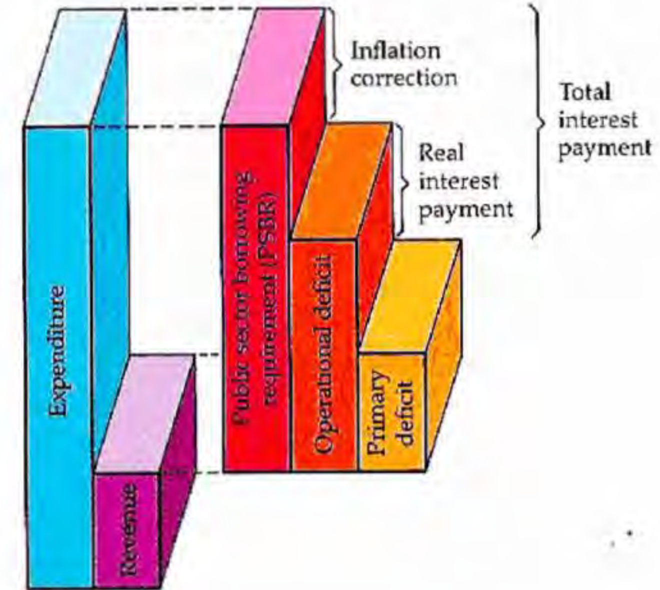
The PSBR is the most comprehensive deficit measure, but it can be misleading in some circumstances. In countries with a high rate of inflation, part of the borrowing by the public sector is offset by the decline in the real value of their existing debts. A fraction of the interest payments by the public sector then compensates creditors only for the loss in the real value of the debts; it does not represent a real interest cost to the government. Sometimes the debt principal is explicitly indexed to inflation, in which case the indexation inflates the PSBR. Another measure of the public sector deficit for these cases is the change in real debt. The *operational deficit* is defined as the PSBR minus the inflation correction part of interest payments; it is sometimes called the "inflation-corrected" deficit. The difference can be significant. In 1985 in Brazil the inflation correction component of the indexed domestic debt was so large that the PSBR was 27.1 percent of GDP, while the operational deficit was only 3.5 percent of GDP.

The interest paid on debt is a result of past deficits rather than current behavior. A measure of the current policy stance might therefore exclude all interest payments, yielding the *primary deficit*, also called the "noninterest deficit." The primary deficit measures how current actions improve or worsen the public sector's net indebtedness, and it is important for evaluating the sustainability of government deficits. Although fiscal deficits can be run indefinitely, the primary balance must eventually become positive to cover at least part of the interest on current debt. If public revenue and the economy as a whole grow faster than the real interest rate, then even the primary balance can remain in deficit. However, it is generally not possible in the long run to always grow faster than the interest rate. The relation between these deficit concepts is shown in Box figure 3.1.

The public sector should include the central government, provincial and municipal governments, decentralized agencies, and state-owned enterprises. Conventional deficit measures often include only the central government. This can give a very misleading picture when other public entities are running large deficits or surpluses. Even in comprehensive measures the public financial intermediaries are often excluded because of their special role as financing agents. On occasion these intermediaries, especially the central bank, have run large losses. These are sometimes called the "quasi-fiscal deficit." They usually arise because the central bank assumes the exchange rate or portfolio losses of private banks (see Box 3.3) or because the central bank directly engages in subsidized lending. The deficit of public financial intermediaries has macroeconomic effects similar to the deficits of other public entities; they should therefore be included in the overall PSBR. Measurement difficulties are formidable, however. Such losses are often omitted unless they are too large to ignore.

Another correction to the deficit is to remove the effect of temporary factors: the deviation of domestic income, commodity prices, and interest rates from their long-run values, and events such as tax amnesties. Sales of government assets could also be excluded, since they are really financing deficits rather than contributing revenue. The result would be the *structural deficit*, that is, the deficit likely to persist unless corrective measures are taken.

Box figure 3.1 The relation between different deficit concepts



All of these deficit measures provide their own insight into the economic impact of government finance. The PSBR measures the need for domestic or external financing (see Box 3.2). The operational deficit removes some of the distortions caused by high inflation. In debtor countries the primary deficit indicates the public sector's current contribution to debt difficulties. During times of abnormal commodity prices or domestic income, the structural deficit gives a picture of the long-run position.