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8.5 Addressing Volatility: Stabilization Funds

8.5.1 Volatility

The volatility of resource revenues in the EI sector is of major concern when it translates into fiscal policy pro-cyclicality and volatility in public consumption and investment spending. *High revenues encourage many governments to step up spending based on a mistaken belief that the revenue windfall will be permanent, or even on a politically driven wilful disregard of virtually certain future declines in revenue.* This gives rise to unsustainable spending levels with painful adjustments when revenues fall.[1]

Revenue volatility is particularly worrisome if it falls on domestic consumption via changes in wage income and employment. The poor are especially vulnerable, having less 'space' to alter household consumption, and often face severe difficulties in either insuring themselves or borrowing against fluctuating income. Current government expenditures are also difficult to cut in low-income states where they are likely to be focused on basic services and poverty reduction. This is not to argue against allocation of resource revenues to consumption but to suggest the importance of protecting some (recurrent) expenditures against the volatility of revenues.

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Fluctuations in domestic investment may be more manageable and less costly than those in consumption: in a mechanical sense, capital expenditures may seem easier to cut as a large piece and be cut in one go. In practice, existing contracts with suppliers have to be adjusted or renegotiated, sometimes at great cost if there are contractual clauses that protect suppliers from such government interventions. Some investments depend upon other investments: a new school may need a new country road for example. Investment expenditures have to be reprogrammed. Spending ministries usually oppose such cuts, which creates political problems for the ministry of finance.

It may be thought that the fluctuating investment can be partially offset by the relatively smooth output it typically produces. However, even if less costly than fluctuating consumption expenditures, 'stop-go' investment behaviour carries a considerable cost in terms of efficiency

[1] Ossowski, R., et al. (2008). *Managing the Oil Revenue Boom: The Role of Fiscal Institutions,* Washington, D.C.: IMF Media Services Division, p. 8.

losses, a build-up on project contract arrears and aggregate economic instability. Effective utilization of volatile resource revenues requires that the resulting expenditure in both consumption and investment be smoothed.

8.5.2 Stabilization Funds

A stabilization fund differs from a savings fund (see Section 7.3) in being designed to guard against volatility in the international resource markets. Such funds are a form of self-insurance against short-term volatility[2], and so are designed to address precautionary objectives, and indirectly, to assist in expenditure smoothing, though the latter will depend on many other things besides a fund. In many stabilization funds, when revenues or prices are 'high' relative to some norm, payments are made into the fund. When revenues are low relative to the norm, payments are made out of the fund to the budget.

The optimal size of a stabilization fund depends upon the magnitude of expected resource revenues, their relative importance in the budget, and the volatility of the revenues. The larger the possible variation in revenues relative to the total state budget expenditure, other things being equal, the larger the amount of precautionary assets in the fund should be. Given the objective of stabilization funds, they should hold short-term, highly liquid and low-risk assets. The fund's assets should be held abroad to avoid putting pressure on the domestic economy; otherwise, the fund far from contributing to domestic stabilization, would actually exacerbate pro-cyclicality and transmit resource price volatility into the economy.

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As is the case with savings funds, a major challenge facing a stabilization fund is the setting of a reference price or revenue, and ensuring that if the resource price exceeds the reference price, then any revenue collected over and above the reference is deposited in the fund and not channelled through the budget. If the aim is to help to stabilize current government revenues, the calculation of future revenues becomes very important. Any procedures set down for doing this will be highly dependent on price forecasts. In some countries, such as Chile (see **Box 8.3**) and Sao Tome e Principe, a formula is used to determine the reference price. This avoids arbitrary decisions that may favour the current spending plans of the ruling groups, and result in a depletion of the stabilization fund.

[2] Shabsigh, G and Ilahi, N (2007). Looking Beyond the Fiscal: Do Oil Funds Bring Macroeconomic Stability? IMF Working Paper WP/07/96.

In practice, the focus on a reference price has proved to be very difficult due to the stochastic process driving resource prices: there does not appear to be a meaningful ‘long-term average price’, and resource prices do not tend to or revert to anything. Further, there are problems due to the fungibility of money: the government can undo in the budget what it is trying to achieve in the fund.

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Box 8.3: Stabilization Funds: the Experience of Chile

One very important innovation of Chile is the use of independent professional committees to issue a projection for longer-run copper prices – vital for revenue forecasting – which helps to de-politicize them. Chile established two funds in 2006, the Pension Reserve Fund to help finance pension and social welfare spending and the Economic and Social Stabilization Fund to help overcome fiscal deficits when copper revenues decline unexpectedly. The Funds are governed by a strong set of deposit and withdrawal rules underpinned by a fiscal rule that has the effect of smoothing spending over time.

The Economic and Social Stabilization Fund is a stabilization fund and countercyclical tool that aims to smooth out government expenditures, allowing the government to finance fiscal deficits in times of low growth and/or low copper prices and to pay down public debt when necessary. While external audits are made public, compliance with the rules is not assessed by a formal oversight body like a multi-stakeholder committee or independent fiscal council.

The Funds are very transparent. Information on fund managers; returns on specific investments, and even how deposits and withdrawals are calculated is all publicly available. A minimum of 0.2 percent of the previous year’s GDP must be deposited into the Pension Reserve Fund annually. If the effective fiscal surplus exceeds this amount, the deposit amount can rise to a maximum of 0.5 percent of the previous year’s GDP. The Fund is capped at 900 million Unidades de Fomento (approximately US$ 41 billion as of July 2013. Deposits can be financed with funds from the Economic and Social Stabilization Fund at the discretion of the Minister of Finance.Any remaining fiscal surplus after deposits to the Pension Reserve Fund are made, minus any funds used for public debt repayments or advance payments into the Economic and Social Stabilization Fund made the previous year, are deposited into the Economic and Social Stabilization Fund. Funds from the Pension Reserve Fund can only be used to pay for pension and social welfare liabilities. Until 2016, the previous year’s return on the Pension Fund may be withdrawn. From 2016 onward, annual withdrawals from the Pension Reserve Fund cannot be greater than a third of the difference between the current year’s pension-related expenditures and 2008 pension-related expenditures, adjusted for inflation.

Chile’s Structural Balance Rule allows for estimating fiscal revenues for budget planning and therefore, whether withdrawals are needed from the Economic and Social Stabilization Fund. Funds can be withdrawn from the Economic and Social Stabilization Fund at any time in order to fill budget gaps in public expenditure and to pay down public debt. However, withdrawals are subject to the structural balance rule.Funds can be withdrawn, at the discretion of the Minister of Finance, to finance annual contributions to the Pension Reserve Fund. The Economic and Social Stabilization Fund’s investment policy is to maximize the Fund’s value in order to partially cover cyclical reductions in fiscal revenues while maintaining a low level of risk.