

# Financing Capital Investment

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## Sources of capital investment

Sub-national and local governments finance capital expenditure in various ways:

- Charges for the service concerned
- Budget surplus (i.e. recurrent revenues less recurrent expenditures)
- Government grants
- Sales of assets
- Borrowing
- Bond issues
- Community contributions/self-help
- Private investment and public-private partnerships.

## Purposes of borrowing by sub-national and local governments

- a) To fund short-term cash short-falls: A common practice, resulting from the uneven pattern of local government revenues and expenditures. This is usually financed through bank overdrafts (in the UK and other developed countries, it may also be financed by exchanges between authorities or short-term deposits from the public).
- b) To finance investment which will generate income ('self-liquidating' projects), for example, for water supplies, markets, etc.
- c) To finance capital development, including plant and machinery, which will not generate income directly: Practices vary widely, with the majority of such development being financed by loans in the UK (but less so than in the past), the USA and India. In most European countries, the bulk of capital investment is financed from current revenue.
- d) To finance deficits in the annual recurrent budget: This is generally not permitted at local level (unlike at national level), but New York was a celebrated case, and the practice of 'creative accounting' disguised deficit financing in certain UK authorities in the 1980s. Deficit financing by default occurs in many local govern-

ments in the developing world, with shortfalls in forecasted revenues and the failure to clear short-term overdrafts (e.g. some Indian states and many local authorities in Kenya).

### **Arguments for and against borrowing by local governments**

Borrowing by local governments for long- or medium-term development projects (e.g. infrastructure, buildings, plant and machinery) can be justified on the following grounds.

- a) It can accelerate development, since borrowing permits a level of investment which is not limited by current fiscal capacity.
- b) Such development may, in turn, generate increased local revenues, albeit indirectly, thus increasing the authority's financial capacity in the future; this is comparable to the private sector's borrowing to finance investment that will generate a profit.
- c) It is fair, on the benefit principle of equity, that future generations, who will benefit from the investment, should contribute to the costs through loan repayments.

In addition, in certain circumstances, e.g. where the rate of inflation exceeds the rate of interest, it may be cheaper to borrow than to finance out of current revenue. However, such circumstances are rare and usually short-lived, and so do not provide a general justification for borrowing.

The arguments against borrowing by local governments are that:

- a) Accountability and financial discipline may be weakened if local taxpayers are not faced immediately with the full cost of the development expenditure;
- b) Excessive borrowing can build up an intolerable burden of debt-servicing in the future;
- c) Public sector borrowing may contribute to inflation, through expansion of the money supply;
- d) Public sector borrowing may attract scarce resources from 'productive' sectors (e.g. commerce, industry or agriculture), to the detriment of economic growth – the 'crowding out' argument.

### **Sources and methods of borrowing**

There are a number of possible sources of loan finance for local governments:

- a) Loans from central government;
- b) Loans from international agencies, e.g. the World Bank, the African and Asian Development Banks or bilateral donors, usually channelled through central government;

- c) Loans from a central credit institution or a loans fund for local authorities (see section on municipal credit institutions);
- d) Loans or overdrafts from the local authority's bankers;
- e) Direct borrowing from the public or the money market, e.g. by issuing local authority bonds (see section on municipal bonds);
- f) Internal borrowing from reserve funds, e.g. superannuation funds and funds for renewal of plant and machinery;
- g) Borrowing from other authorities (but usually only for short-term loans);
- h) Hire purchase or leasing arrangements with equipment suppliers, or contractor finance for construction projects (while not strictly borrowing, the financial implications are much the same – a commitment to pay over a period).

## Loan terms

**Duration:** The duration of a loan depends on its purpose. It may be just overnight for cash-flow requirements or 60 years for a building. Ideally, loan duration should be related to the life expectancy of the asset created. Many sub-national governments in developed countries operate consolidated funds, which borrow wholesale from the market for all purposes and then 'lend out' funds to individual projects on terms appropriate to that project, and which 'average out' the portfolio of repayment terms. Most international lenders want to 'roll over' their loans as quickly as possible, so longer-term finance may be hard to obtain, but central government 'consolidation' arrangements may be able to overcome this problem.

**Interest rates:** In a developed economy, interest rates are competitively determined, with differences in rates reflecting duration and relative perceived risks. In many developing and transitional economies, capital markets may be highly imperfect, with high interest rates reflecting the shortage of loanable funds. Attempts by governments to 'hold down' interest rates may be counter-productive, resulting in a drying up of loanable funds. High interest rates may also be a reflection of inflation; real interest rates are the difference between nominal interest rates and the anticipated rate of inflation.

Borrowing from internal sources (e.g. pensions or plant renewal funds) should be at a 'proper' rate of interest, i.e. one that reflects the interest that could be obtained from bank deposits or alternative investments with equivalent risks, to ensure that these funds are not decapitalised.

**Grace periods:** Loan terms may incorporate grace periods while construction is carried out, but interest is still payable during grace periods (although it may be added to amortisation payments following the grace period). For local governments in many countries, governments (and/or donors) may be the only source of loan finance, and so there may be little choice about terms, or even about the type of project.

**Security:** The relative security of loans to local governments may mean that terms are softer than they would be to riskier borrowers (although in some countries, defaults by local governments have made such lending much higher risk). Lenders normally require some specific security, such as:

- Collateral: the right to foreclose on the local government's assets (e.g. land, buildings or equipment);
- A lien over certain current revenues (e.g. revenues from a market constructed with a loan);
- A guarantee from the central government.

Where the lender is the government or a government institution, the simplest method of security is a lien over future grant payments to the local government, which can then be deducted at source. However, such arrangements reduce the risk to the lender, leading to 'moral hazard' and the risk of excessive lending (since the lender is sure of being repaid). Meanwhile, local taxpayers bear the burden as the flow of transfers is diverted to repay the loans. Government guarantees on loans are also undesirable, since they create a contingent liability on government, and may encourage irresponsible borrowing by the local government.

**Conditionality:** Lenders, especially international finance institutions, may impose conditions, not just about the implementation of the project (e.g. international competitive tendering, reporting, etc.) but also about the policy towards the whole sector (e.g. pricing policy or target beneficiaries). Management and reporting requirements may also be onerous.

## Approvals and scrutiny

Three levels of approval are normally required for borrowing:

- Formal resolution of the governing body of the local government (e.g. the council);
- Permission from the central government to borrow;
- Agreement by the lender.

Approval will be based on the following considerations:

- The technical and financial soundness of the project itself;
- The merits of the scheme and the relative priority of the project in local, regional and national development plans;
- The capacity of the local government to service the debt.

In addition, the central government will be concerned with the overall level of sub-national borrowing and its impact on macroeconomic management. Experience from

Latin America has shown that unrestricted borrowing by sub-national governments can have a serious impact on macroeconomic stability (Ahmad and Devarajan, 2005).

Projects to be financed from loans tend to be subject to a higher degree of technical and financial scrutiny than do projects financed out of the recurrent budget. However, there is no logical reason why this should be so, just because the method of financing is different. In particular, central governments can often, because of their control over loan finance, exert a disproportionate influence on those activities to be financed by loans.

### **Criteria for appraising a project**

For an income-generating project, appraisal is a straightforward projection of costs and revenues (making due allowance for uncertainties in the forecasts), and a comparison of the internal rate of return with the market rate of interest (or opportunity cost of capital).

For projects that do not generate income directly, some form of cost-benefit analysis is required which compares alternative uses for the same capital resources, using an appropriate rate of discount (e.g. the rate of interest which will apply to the proposed loan). Anticipated generation of revenues indirectly (e.g. the increase in property tax revenues that result from the development) will be a factor, as will be increased recurrent costs that arise (e.g. for operation and maintenance).

### **Borrowing capacity**

Lenders – central governments, as well as local governments themselves – need to be sure that a borrowing local government does not become overextended in its borrowing. There is no agreed standard for assessing a local government's ability to repay loans. For income-earning investments, the main consideration will be whether the project fully covers its costs, taking account of the willingness and ability of users/beneficiaries to pay the charges for the service, and with due adjustment for risks. For other projects, the most usual measure is the debt-service ratio (DSR).

### **Debt-service ratio**

The debt-service ratio compares the debt service that arises from the project (i.e. repayments of principal plus interest) with the authority's anticipated revenues. There are certain problems with the calculation of a DSR:

- What revenues should be included in the denominator – all revenues, or only those which are 'uncommitted'?
- Should grants be included as part of revenue? This is the case in the UK and for Union loans to states in India, where grant revenues can be used to pay debt-service charges on the grounds that debt service is part of current expenditure.

- How should revenues be projected, since they can be expected to increase (both because of the project itself and because of inflation) by the time loan repayments are required? (But how certain are we of these increased revenues? Have revised tax and charge rates already been approved? In addition, recurrent costs for operation and maintenance may increase as a result of the project.)
- What is an acceptable ratio of debt service obligations to revenues?

In addition, there are problems in applying the DSR:

- High revenue figures may not imply an ability to service high levels of debt, since there may be a high level of committed expenditure against those revenues;
- Projections of revenues and expenditures can be manipulated to show the desired result;
- Rigid application of a DSR rule may prevent good projects going ahead without preventing inappropriate borrowing.

#### **Alternative indicators of loan service capacity**

- The level of revenues above committed expenditures, and the trends of revenue
- The extent of reserves/balances
- The track record of repayments of past loans
- A more sophisticated analysis of the overall financial health of the authority.

In practice, the DSR is not a widely used measure. No debt-service ceiling is applied in the UK; in the USA, the normal practice of local authorities is to say that debt service should not exceed 20 per cent of an authority's current revenues.

#### **Municipal credit institutions and development funds**

Many countries have some form of central fund for lending to local authorities (El Daher, 2000). These may be known by various names – municipal credit institutions (MCIs) or municipal development funds (MDFs), and may be constituted in various ways (Davey, 1988):

- Instituted and directed by central government (e.g. the Public Works Loans Board in the UK);
- Instituted and subscribed by the local governments themselves (e.g. the Municipal Credit Bank in Belgium);
- Jointly owned and controlled by central and local governments (e.g. the Bank of the Netherlands Municipalities and FUNDACOMUN in Venezuela).

Capital may derive from various sources:

- From central government, in the form of grants, initial capitalisation, loans, deposited reserves, proceeds of a specific tax, etc.;
- From local authorities, through share capital, deposited reserves, pension funds, a share of the proceeds of a particular tax, etc.;
- From the capital market, through share capital, deposits from the public, issue of debentures, national savings bonds, premiums on national insurance, etc.;
- From international borrowing, whether commercial or from bilateral or multilateral agencies;
- From operating profits;
- From repayment of loans (a revolving fund).

Centralised loans funds have some advantages as a source of loan finance for local governments:

- For those with capital to invest, such funds offer a more accessible and more secure place to invest than an individual local government; they can offer a variety of investment arrangements (bonds, debentures, personal savings accounts, etc.) with different terms to suit different investors.
- The scale of their borrowing means that they may have greater flexibility in timing borrowing according to fluctuating market conditions. It also means that they can gain economies of scale and have access to greater financial expertise. Combined with the greater security, this means that funds can be acquired on better terms than local authorities could obtain individually.
- They are likely to have a better understanding of the needs of local governments than do commercial lending agencies, and can build up expertise in relevant types of project.
- They may be able to represent the needs and interests of local governments in external negotiations.
- They may also be able to provide common technical services for local governments, e.g. in project design and execution (such as FUNDACOMUN in Venezuela).

However, the experience of municipal loan funds in much of Africa has not been happy, with lending often at below market rates, so that repayments are eroded by inflation, and defaults on repayments. As a result, several such funds (e.g. in Kenya and Uganda) have been decapitalised and then wound up.

## Municipal bonds

Municipal bonds are the main way in which local governments in the USA finance capital investment. In recent years, USAID has been 'selling' the idea of bonds in many developing and transitional countries. Bonds can work well for very large city or municipal governments that have some credibility in the capital market, and may give a greater sense of financial autonomy than borrowing through a MCI (although any borrowing is still likely to require central government approval). With municipal bonds, the risks remain with the private sector, rather than becoming a contingent liability on government.

However, municipal bonds have severe limitations, especially where capital markets are undeveloped. In such situations, it may be very difficult for an individual municipality to establish the creditworthiness necessary to float a bond. Since bond issuing normally requires a financial intermediary to underwrite the bond, this is little different from an MCI. In India, there have been some successful schemes for municipalities organised on a state-level basis, but these require quite a high level of government (or donor) intervention to make them work (Blore, Devas and Slater, 2004). The cost of bond issue can be very high.

One positive feature of municipal bonds in emerging capital markets is the development of credit-rating agencies. The detailed analysis which they make of a municipality's financial health may be considerably more rigorous than the central government's scrutiny of local government financial performance. It is said that in India this has resulted in considerably sharpened municipal financial management and reporting. However, the credit-rating process can be very expensive for local governments.

## Alternative sources of investment funds

There are numerous other ways in which capital investment by local governments can be financed, including a variety of public-private partnerships:

- a) **Asset sales:** Where a local government has surplus assets, e.g. land and buildings, these can be sold to finance new investment. It will be important that such asset sales are treated as capital income, so that the revenue is not used up in recurrent expenditure (a frequent problem in post-1990 local governments in central and eastern Europe).
- b) **Private sector investment,** e.g. through a franchise, BOT (build-operate-transfer) or BOO (build-operate-own) arrangements. These have been widely used in south-east Asia to construct new infrastructure such as mass transit systems and highways. There remain questions about the cost-effectiveness of such arrangements (and the transparency of the tendering process in some cases).
- c) **Leveraging:** The local government may put in a certain amount of capital, for



example in land rehabilitation or basis infrastructure, in order to 'lever' a larger amount of private sector investment in new development. This model has been widely used in the UK for urban regeneration projects.

- d) **Joint ventures:** For example, where the local government provides the land and the private sector provides the capital – again, widely used in the past in the UK for regeneration projects.
- e) **Private finance initiative (PFI):** This is the UK name for a system whereby the central government or local government contracts with a private company to construct, maintain and operate a building such as a hospital or prison, with the government leasing the facility on an annual basis. (The public sector still provides the service within the facility.) The rules for PFI in the UK require the private sector to bear sufficient risk, i.e. the contract is not guaranteed over the long term. The main motivation for this model in the UK has been to reduce the public-sector borrowing requirement (PSBR), and some regard PFI as a form of 'creative accounting'. There remain significant questions about the relative costs and quality of PFI schemes.
- f) **Leasing** of capital equipment, vehicles, etc., rather than purchasing, with the capital finance being provided by the private sector. This avoids having to borrow, and it offers flexibility, but long-term lease arrangements involve a payment obligation that can be regarded as the equivalent of loan repayment.
- g) **Sale-and-leaseback** of municipal capital assets, in which assets are sold in order to release capital funds and then are leased back. This was used by some local governments in the UK in the 1980s as a way of avoiding stringent controls on borrowing (and was referred to as 'creative accounting'), but was subsequently made illegal.
- h) **Community investment:** A common practice in developing countries is for communities to undertake the construction of facilities such as schools, health clinics and rural roads, with or without some funding from local or central government. While this can greatly reduce the capital costs for the local government, it may mean imposing a burden on poor communities while better off neighbourhoods benefit from facilities provided in the past by the public sector.

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