Module 6

Public finance and budgeting

Introduction

The dichotomy between public and private goods and the concept of the public sector leads us to explore the subject of public finance. Public finance is sometimes described as public economics. It is concerned with governmental policies that relate to spending, borrowing and taxing decisions (Finkler, 2010).

Most government problems, regardless of whether the government level is national, state or local, often have financial underpinnings that could have been avoided with better budgetary systems and mechanisms of finance. This is because the government is expected to finance social and economic development programmes out of public funds as well as implement them (if need be), at a commercial loss or profit (Choi & Meek, 2008). Public finance could be defined as the method of financing government activities. It could also be defined as a course that explores the financial operations of all levels of government (Mikesell, 2011).

The value of government services is collective as opposed to the individual desires received by purchases of business services. Government finance (for this reason) is fundamentally different from business.

Public finance and budgeting describes what governments do by listing how they spend money. The finances of the government include the raising and disbursement of public funds. Public finance is concerned with the operations of the public treasury. According to Thomas Lynch (1989) and Rubin (1997), public finance and budgeting links financial tasks to be performed to the amount of resources necessary to accomplish those tasks, by ensuring that money will be available to provide education, housing, health care or maintain roads and streets. Controversies about the proper role of the government raise the fundamental questions addressed by the branch of economics known as public finance.

The goal of public finance is to understand the proper role of the government in the economy (Gruber, 2010). Resources are scarce, creating a need for choices to be made. All operating and capital budgets, public, private, individual or organisational, involve choices between possible items of revenue and expenditure. Budgeting is decision-making and reflects the priorities of the organisation making the budget. Public finance places emphasis not simply on raising and spending money but also that it is spent efficiently, effectively and creates value. This idea of spending efficiently and effectively is also stressed by the new public management model.

On the expenditure aspect of public finance questions are raised, such as:

- What kind of services should the government provide?
- Why should the government pay for the provision of public goods and services such as education, highways, health care and national security?

On the revenue aspect of public finance, questions include:

- How should the government raise the money to fund expenditures such as the cost of building highways, schools, fighting wars and providing health care?
- Why are taxes necessary? Who should pay and what should tax money be used for?

According to Bhatia (2008, pp. 18–19), public finance can be viewed as a government household. Such a government household has certain goals that can be grouped into categories, for example:

- stabilisation of prices and employment,
- allocations of resources,
- adjustments in the distribution of income and wealth, and
- covering capital formation and economic growth.

The relevance of the government household is therefore linked to the way public institutions should operate, and to the way the private sector would react to alternative fiscal policies. Such policies may include public expenditure, public debt and taxation (Anderson, 2003).

The public economics perspective stipulates that governments have a role in allocating resources, distributing resources and stabilising the economy.

Assignment two (Case Study # 2 in your student booklet) is to be submitted after completion of this module.

Module Outcomes

Outcomes

Upon completion of this module, you will be able to:

- *Demonstrate* knowledge and understanding of the role of public finance in paying for public policy and the provision of goods and services to the citizens.
- *Explain* the theoretical framework for public finance and why it is important to have knowledge and understanding of the public finance process.
- *Demonstrate* an understanding of how governments' transactional data has been captured within an accounting information system and the principles that govern its accuracy and reliability.
- *Demonstrate* knowledge and understanding of the content of public budget analysis, types of budget, financial statements, the means by which the content has been measured and the purposes of disclosure information.
- *Demonstrate* knowledge and application of a range of financial analysis techniques and tools, and produce a comprehensive interpretation of financial and non-financial statements.
- *Explain* the various budget policies and deficit control requirements and be able to also *describe* the various forms of national economic policies.
- *Explain* the sources and uses of resources in the public sector, including national or federal, state, local government and non-profit organisations.

Why study public finance

Knowledge of public finance is very important for current and future public administrators, including policy makers. Each public administrator or political leader working in any capacity of government will need to generate (and use) financial information. By studying public finance and budgeting, one will be able to read financial reports and interpret budget information, as well as perform straightforward financial analysis (Choi & Meek, 2008; Gruber, 2010). Studying public finance would also help a public administrator appreciate some of the things financial management can do, and know when to call upon a financial expert (Seitz & Ellison, 2005). Knowledge of public finance and budgeting can improve one's ability to use financial information in making decisions.

Nearly all public organisations today are dependent on having fairly good financial resources in order to function properly. According to Finkler

(2010) and Shafritz, Russell and Borick (2011), economic theories stipulate the need to allocate scarce resources among competing uses. A knowledge of financial management will help public managers to provide information about how scarce those resources will be, and how they could be efficiently and effectively used. A good knowledge of public finance and budgeting will give the public administrator the necessary tools they may need to achieve the broad and specific goals of the government.

The importance of public finance and budgeting lies in the flow and management of funds in any political system or government. According to Shafritz et al. (2011), no policy or administrative institution can function without the flow of funds that will make it possible. As indicated in the topics covered in this course, the system of public finance and budgeting rests on designs and reforms adopted over many years by public administration experts. Current and future public administrators need to understand how that system has been designed, what it intended to do, what it is capable of doing (and especially) what it is not capable of doing (Swoboda & Swoboda, 2008; Shafritz et al., 2011).

Most democratic countries formulate their public financial management system using the following six principles:

1. **Equity:** Government should be equitable by treating people in similar circumstances. Raising and spending taxes to provide goods and services to everyone.
2. **Accountability:** Those who deal in public funds can (and should) be regularly called to account for their stewardship through legislative review and audit processes.
3. **Democratic consent:** Taxation and spending should not be done without the explicit consent of the governed citizens.
4. **Transparency:** What governments do in raising and spending funds should be open to public knowledge and scrutiny. The role of budget transparency is crucial in several developed countries. For example, in Canada and the United States the entire budget is published on the Internet.
5. **Probity:** There must be scrupulous honesty in dealing with public funds, of which legislators and administrators are the stewards, not the owners.
6. **Prudence:** Public administrators should not take undue risks with public funds.

(Shafritz et al., 2011; Henry, 2010).

It is, therefore, good to know that on one hand, public finance is the raising by government of revenues that are then spent to fund public policies. On the other hand, revenue is the money that government collects to spend in support of public policies. The money governments spend to fund public policies is also called outlay or expenditure.

Theoretical framework for public finance

Public finance and budgeting could be approached from different accounting methods. Changing economic conditions are the basis of how the normative theories of accounting have been developed. The basis for a theoretical framework is to formulate a consistent accounting principle. According to Seitz and Ellison (2005), the statement of accounting principles was written to provide guidance to the practitioners. Below are a few finance and budgeting theories.

Accounting theory

This theory postulates that the results of the accounting process should be expressed in a set of fundamental financial statements articulated with each other, and rest on the same underlying data. The accounting theory also contends that accounting data should be based on prices generated by past, present or future exchanges that have taken place or are expected (Schroeder, Clark & Cathey, 2008). The results of the accounting process are expressed in terms of specific units or entities. In this respect, the results of operations for a relatively short period are tentative whenever allocations between past, present and future periods are required.

The theory of public expenditure

This theory stipulates that through public expenditure the government participates in (and contributes to) financial flows of the economy. The government can also use the financial flow to influence the economy's demand and supply patterns (Finkler, 2010; Bhatia, 2008). Public expenditure is a major tool for implementing welfare, economic growth, stabilisation and other government public policies. The theory calls for accountability in order for a government to achieve sustainable growth.

The economic and political environmental theory

This theory postulates that quantitative data are very helpful in making rational economic decisions and choices. Money should be the common denominator in terms of which goods and services — including labour, natural resources and capital — are measured. All financial reports must state clearly which monetary unit is being used (Anderson, 2003; Gruber, 2010). Further, all economic activity must take place during a specific timeframe. As a result, all financial reports on activities must specify the period involved.

The theory of maximum social advantage

This theory is concerned about the question of the size of public budget, or the level at which the government should operate. It argues that it should be imperative that the potent tool of public finance should be used with discretion and thoughtful planning (Anderson, 2003; Wildavsky, 1969). The purpose, therefore, is for public finance to be designed so it could help fulfil the policy and operations of the government. By doing so, the government might be able to achieve its maximum goals for the citizens and society.

The pure public good theory

This theory contends that we should entrust the public sector to deliver public goods and services. According to Lynch (1989) and Anderson (2003), if the task of delivering public goods is left in the hands of the private sector, the system is likely to suffer from inefficiency for the following reasons:

1. The market mechanism fails in the case of pure public goods since the users cannot be forced to reveal their demand preferences. Under such circumstances, the suppliers face the problem of free riders.
2. Market mechanism can supply only a priced good. This would automatically enforce the principle of exclusion to its use. Due to this outcome, the good would not be supplied at all, or the suppliers would try to deprive a section of the society from its use. The enforcement of the principle of exclusion will either be impossible or will be very costly to implement.
3. The outcome that some of the external effect of the public goods cannot be priced could further cause a divergence between the private and social marginal costs of the products. Therefore, the supply of goods would not be at an optimum level. It could be either more or less than anticipated.

(Bhatia, 2008)

The imperative theory

This theory postulates that accounting reports should be based on a stable measurement unit. As a result, the procedures used in accounting for a given entity should be appropriate for the measurement of its position and its activities and should be followed consistently from period to period. Further, changes in assets and liabilities and the related effect on revenue, expenses, retained earnings and so on should not be given formal recognition in the accounts earlier than the point of time at which they can be measured objectively (Schroeder et al.,2008).

Taxation theories

The taxation theory postulates that the objective of taxation by the government is to raise a certain amount of needed revenue. It is also the goal of the government to decide how best it could be raised so as to confirm criteria of distributing the resulting burden among taxpayers. A modern government should adopt a tax policy to effectively address unemployment, production of goods and services, restrictive trade practices, good health, education and better living standards. It is believed that taxation can also be used in bringing about a more balanced growth between different regions of a country. According to Bhatia (2008) and Anderson (2003), there are two types of taxation theories:

1. **The expediency theory:** This argued that every tax proposal must pass the test of practicability. It assumed that economic and social objectives of the government should be relevant to the tax system adopted. According to Gruber (2010), every system of government tries to protect and promote its own interest and authorities are often forced to reshape tax structure to

accommodate these pressures. Bhatia (2008) contends that taxation provides a powerful set of policy tools to the authorities and should be used effectively in remedying economic and social ills of the political system and citizens. Some predicaments of a political system include regional disparities, income inequalities, poverty, unemployment and poor infrastructure. Because of these predicaments the government must not lose sight of the considerations of equity, economic stabilisation, growth, regional imbalances, health care, good schools, roads and so on.

2. **The socio-political theory:** This theory postulates that social and political objectives should be the deciding factors in choosing taxes. It stipulates that each economic predicament of the society should be looked at in its social and political context, and an appropriate solution found by raising revenue through taxes. From this perspective, a government should introduce a tax system designed to serve individual members of the society. Such a tax system should be used to solve the society's social and economic predicaments. The theory argues that government should use taxation as a basis for reducing income inequalities.

John Maynard Keynes' monetary theory

The Keynes' theory stipulated that government spending could be critical in managing an economy, by stimulating demand when resources were underused and unemployment was high (Lehne, 2006; Swoboda & Swoboba, 2008). Keynes' monetary theory created the notion of budgetary policy as an instrument by which a government could execute its monetary and fiscal policies. Some United States presidents applied Keynes' theory to justify deficit spending to stimulate the economy. Others used the theory to spend more money to stimulate the economy. According to Telser (2008), market drives a modern economy due to the forces of demand and supply. They flourish only with the help of reliable means of payment. Recent changes in the control of money supply in several countries have major implications for monetary policy.

It is important to understand from these theories that public finance and budgeting are different from business finance. According to Finkler, (2010) and Mikesell (2011), public finance uses similar analysis and managerial techniques to allocate and control finances, but governments differ from private business in terms of resources constraint, ownership and objectives. There are three major areas of difference:

1. Governments may tax to enlarge their resources.
2. Ownership of the government is not clear because many stakeholders share a legitimate interest in government decisions.
3. The value of government services is neither easy to quantify nor reflected in a single measure such as the sales or profit of a business enterprise.

(Mikesell, 2011, pp. 123–157)

The quality of government decisions is critical to business and other sectors of society. If a government's policy in education, transportation, health, defence or any other area imposes costs without delivering commensurate benefits, the society is poorer. The government is expected to ensure, within its capacity, that through a proper use of fiscal policy and the public sector, the productive resources of the economy are allocated efficiently; inequalities of income and wealth are reduced. The government also needs to ensure that the merited wants and needs of the society are satisfied and that in the formulation of public budget policies, any inherent contradictions between chosen objectives are resolved to the extent possible in order to sustain good governance.

Activity 6.1

Activity

1. What are the major differences between the two taxation theories?
2. Why is it necessary for a government to impose taxes on its citizens?
3. What use is the accounting theory to the operations of the public sector in your country?
4. Explain the arguments presented by the Keynes' monetary theory.

When should the government intervene in the economy?

It is often assumed that in a perfect competitive market, the economy might reach an equilibrium that is both productively efficient and enhance efficient. In most cases, however, market conditions are not always ideal and perfectly competitive markets then fail to bring about social economic efficiency. According to Gruber (2010), the first motivation for government intervention in the economy is the existence of market failure problems that cause a market economy to deliver an outcome that does not maximise efficiency.

- **Market failure —** Economists assume that markets function properly when a sufficiently large number of customers and merchants come together to exchange goods so that no one can affect the terms of the exchange, that consumers have full information about the consequences of any choice they might make, and that the pricing mechanism fully captures all the consequences of a purchase for the parties and the balance of society. When any of these conditions are not met, economists say that a market failure has occurred. It should be noted, however, that in most cases free markets do not achieve outcomes that are considered to be acceptable to a country. Problems that cause the market economy to deliver an outcome that does not maximise efficiency are not acceptable. According to Finkler (2010), due to unacceptable free-market outcomes, governments would need to intervene in four key areas:

    1. Public goods

2. Imperfect information
3. Inadequate competition, and
4. Externalities

In recent decades the role of government has been to deal with cases where competition in the provision of goods and services did not exist (Choi & Meek, 2008). In order to encourage the provision of goods and services, governments would have to grant monopolies, preventing other companies from competing. Gruber (2010) argued that once this is done, the government could then intervene in ways such as price controls to avoid potential economic predicaments that may be related to monopolistic behaviour. If this is not checked, it could lead to overpricing and underproduction in the economy.

- **Redistribution** — One other element of public finance is related to redistribution — the shifting of resources from some groups in society to others. Shafritz et al., (2011) contend that governments in some countries may carry out such redistribution by taxing those with large incomes at a higher rate and using some of the revenue collected to pay for food, health care and education for those with little or no income.
- **Tax or subsidise private sale or purchase —** One way governments can try to address failures in the private market is to use the price mechanism, whereby government policy is used to change the price of goods in one of two ways:
  1. through taxes, which raise the price for private sales or purchases of goods that are overproduced; or
  2. through subsidies, which lower the price for private sales or purchases of goods that are underproduced (Gruber, 2010).

  It should be noted however, that the government receives its financing from a variety of sources (Mikesell, 2011).
- **Restrict or mandate private sale or purchase —** The government can directly restrict the private sale or purchase of goods that are overproduced, or mandate the private purchase of goods that are underproduced and force individuals to buy that good. For example, the government of Germany mandates that all citizens have health insurance (Choi & Meek, 2008).
- **Public provision —** The government can provide the goods directly, in order to potentially attain the level of consumption that maximises social welfare. For example, Canada (and many Western industrial countries) has publicly provided health insurance for all their citizens (Gruber, 2010).
- **Public financing of private provision —** Governments may want to influence the level of consumption but may not want to directly involve themselves in the provision of goods. In such instances, the government may finance non-profit organisations

and private profit companies to provide the desired level of goods and services. This practice is sometimes referred to as privatisation or contracting out.

Activity 6.2

Activity

1. Discuss some of the ways in which the government of your country may intervene in the economy.
2. Why is it necessary to intervene as a result of market failure?
3. Why is it important for the government of a country to be involved in the redistribution of goods and services among groups in the nation?

Financing the national government

The national government of any country represents a major component of the entire economy. Where does the national government get its money, and how does it spend it?

Table 6.1 shows that the national government has several types of revenue receipts, which it uses to make up the bulk of government collections. Government sources of revenue include:

- income taxes,
- social insurance taxes (in the case of industrial countries), and
- corporate income taxes.

Source	Percentage
Individual income taxes	39%
Borrowing	13%
Social insurance receipts	31%
Corporate income taxes	11%
Excise taxes	2%
Other taxes i.e. estate, gift State inter-governmental revenue State-owned source revenue State taxes	4%

Table 6.1 Sources of national government revenue in the United States

Source: Budget of the United States, fiscal year 2009 figures (cited in Finkler, 2010)

According to Seitz and Ellison (2005) and Mikesell (2011), most governments have a variety of ways of financing their spending requirements each year. These sources of income differ from the past, when tax collection and forced seizure of property were the main strategies of collecting revenue. In the twenty-first century, however, governments must choose from the following methods of collecting revenue:

- Borrow from the public through bonds, or from private lenders through loans.
- Impose an indirect tax.
- Collect revenue by imposing user charges for government customers.
- Impose a direct tax.
- Obtain grants from another level of government or an aid agency.
- Use earnings from savings or investments, if any.
- Make profits from the public enterprises.
- Use innovative finance techniques, public-private partnerships, franchises or the licensing of private sector providers.

It is important to know that each method of raising government revenue involves complex issues of policy, such as incidence, effectiveness, equity and administrative ease cost (Shafritz et al., 2011). According to Mikesell (2011), when a nation faces a situation where the revenue sources are still not enough, the government may turn to privatisation, cost-cutting or the termination of programmes to reduce the scope of what must be financed. Most developing nations in the 1980s and early 1990s had to adopt a structural adjustment policy prescribed by the World Bank. For example, Canada is very successful in the collection of tax revenues, but this is certainly not always the case, particularly with developing countries.

Table 6.2 shows the way the United States federal government spends its revenue.

Area of expenditure	Percentage
National defence	12%
Social security	21%
Medicare	13%
Medicaid	7%
Other discretionary spending	18%
Interest on national debt	8%
Unemployment insurance and welfare	12%

Table 6.2 Where the national government spends its revenue

Source: Budget of the United States, fiscal year 2009 figures (cited in Finkler, 2010)

Financing regional (state and local) governments

Regional (state and local) governments also operate just like the national governments. The major sources of their revenue, however, are sales, property and income taxes. In addition, the national government also gives state and local governments huge amounts of revenue each year. It is important to note that different state and local governments rely (to a great extent) on each of these sources and not all has the same mix of revenue. In the United States (for example) most local governments tend to rely heavily on property taxes. On the other hand, most state governments do not depend on property tax. Further, not all states (such as Tennessee) have income taxes on individuals.

Table 6.3 shows the major sources of state and local government revenue in the United States.

Receipts	Percentage
Federal government	20%
Sales and gross receipts tax	19%
Property tax	16%
Individual income tax	14%
Corporate net income tax	2%
Others	29%

Table 6.3 Sources of regional government revenue

Source: State and Local Government Revenues 2001 The Economic Report of the President of the United States (2004)

Table 6.4 shows how state and local governments use their revenue. Education is the single largest cost to regional governments, and represents more than a third of their budget. Next to education are public welfare and highways. Forty per cent of the state and local government budget represents tremendous diversity in spending across the United States (Rubin, 1997; Finkler, 2010).

Area of expenditure	Percentage
Education	355
Public welfare	16%
Highways	7%
Others	43%

Table 6.4 State and local government spending patterns

Source: State and Local Government Revenues 2001 The Economic Report of the President of the United States (2004)

The public finance systems in developing countries are somewhat different from those of developed nations. It is not easy to make a poor nation richer. To promote economic growth might be difficult without structurally adjusting the nation's vision. If expansion could be achieved without regard to resources, there might be little difficulty. It does not take much to start an ambitious programme of development projects on a foundation of foreign loans and hope. According to Bhatia (2008), the day of reckoning in several African and Asian countries often brings serious ethical dilemmas. The costs of financial irresponsibility must, however, be paid when there is good and efficient rule of law. Public administrators and political leaders whose only goal is a balanced budget also take an easy path. Their task is to balance interests in society so that some economic development can be achieved.

One other point, which is often neglected in most developing nations, is when a tax is imposed and collected it involves certain responses from the taxpayer and the economy. The response from the taxpayer may be of great variety and could influence the working of the economy in terms of growth, saving, production, regional differences, investment, inequalities of income, choice of techniques of production, wealth and sustainable development. According to Mikesell (2011), the effect of a tax could be both beneficial and harmful to society.

Table 6.5 shows an average spending pattern of a national government in a developing nation.

Area of expenditure	Percentage
Defence	11%
Interior and penal institutions	19%
Education including universities	15%
Health	9%
Justice	3%
Communication	4%
Housing	4%
Local aid projects	7%
Foreign relations	5%
Construction	10%
Energy	8%
Debt servicing	5%

Table 6.5 Public finance spending pattern in developing countries

Source: United Nations Human Development Index (2009)

Activity 6.3

Activity

1. Discuss the differences in the pattern of national government spending in the United States compared with those of developing nations.
2. What do you consider to be the major sources of revenue for the national and regional governments?
3. Identify the major source(s) of revenue and expenses where you work or have worked.

Financial controls: The master budgeting process

A budget is a planned quantitative allocation of resources for specific activities.

Notice that the definition of budget does not include money. This is because all types of resources can be allocated. For example, units of output are budgeted. Human resources, machines, time and space can also be budgeted. However, for our purposes, when we use the term budgeting, we are referring to the financial budget.

Public budgeting involves the selection of ends and the selection of means to reach those ends (Finkler, 2010; Lynch, 1989). Public budgeting involves the division of society's economic and financial resources between the public and private sectors, as well as the allocation of such resources among competing needs. A public budgeting system is guided by theory, hunch, partisan politics, narrow self-interest, altruism and by many other sources of value judgment.

Public budgets describe what governments do by listing how governments spend money (Schroeder el al.,2008; Rubin, 1997). According to Mikesell (2011), a budget links tasks to be performed with the amount of resources necessary to accomplish those tasks, ensuring that money will be available to wage war, promote housing or maintain streets. Lynch (1989) contends that a budget is a plan for the accomplishment of programmes related to objectives and goals within a defined time, including an estimate of resources available, usually compared with one or more past periods, and shows future requirements.

In several countries public budgets present the planned programme for the year against a background of past experience and future needs. A budget can be referred to as a request for funds to run the government (Gruber, 2010). The financial document sent to the legislature in a democratic political system is traditionally called “the budget”. The budget is often the principle vehicle for developing government plans and policies. From this perspective, a budget reflects choices about what government will and will not do (Dye, 2011). Public budget reflects the relative proportion of decisions made for local and constituency purposes, and for efficiency, effectiveness and broader public goods (Shafritz et al., 2011).

According to Henry (2010) and Gruber (2010), a public budget links citizens' preferences and governmental outcomes. At the federal government level, the budget influences the economy. It influences government fiscal policy as well as the level of employment. According to Anderson (2003) and Finkler (2010), public budgeting is political in all ways. It is important for the public budget to be political because of the specific policy issues reflected within it. For example:

- the scope of government,
- the distribution of wealth,
- the openness of government to interest groups, and
- the accountability of government to the public at large.

It is important to note that the essence of budgeting is that it allocates scarce resources and implies choice between potential objects and expenditure. All budgets, whether public, private, individual or organisational involve choices between possible expenditures.

The steps in the master budgeting process are to develop:

1. the revenue and expenditure operating budgets,
2. the capital expenditures budget, and
3. financial budgeted cash flow, income statement, and balance sheet.

The three steps are illustrated in Figure 6.1.

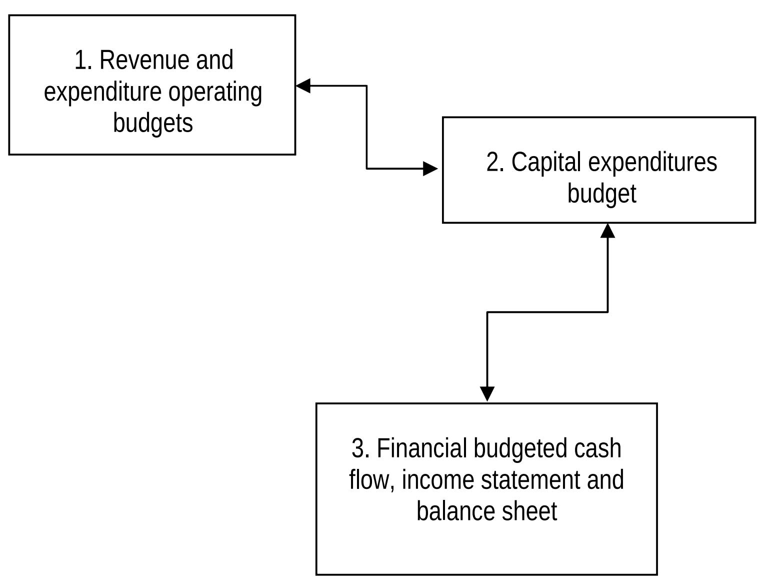

Figure 6.1 Master budgeting processes

Source: Finkler (2010)

The budget usually covers a one-year period, broken down by month. The finance controller is responsible for the budgeting process that results in a master budget for the entire organisation. Each department submits its proposed budget to the controller or committee for approval. During the budgeting process, the use of power and politics is common, and the negotiating conflict management style is typically used to resolve expected conflicts that exist when allocating scarce resources.

Activity 6.4

Activity

1. What are the **three** steps in the master budgeting process?
2. Public budgets clearly have political implications, but what key political decisions are made in the context of budgeting?
3. Why is the public budget considered to be political?

Types of budgets

A budget is a planned quantitative allocation of resources for specific activities. According to Lussier (2006), a budget is the funds allocated to operate a unit or an entire organisation for a fixed period. When that time has passed, a new budget may be needed. The process of developing a budget requires planning skills rather than mathematical skills. In most cases several types of agencies allocate their resources into three types of budget, namely:

1. the core budget, which is the direct operating costs, such as the salaries of employees and ordinary operating expenses;
2. the organisation budget, which includes agency overall expenses, such as management information system and space rental, and the non-core costs of serving clients such as medications; and
3. the programme budget which is the funds appropriated to the agency but passed through to other government organisations.

Operating budgets

These include the revenue and expense budgets. It must first be determined how much money is available (or will be available), before a plan can be drawn up on how it is to be spent. The first step in the master budgeting process is to determine the revenue, and then expenditure budgets can be determined.

Revenue budgets

This is a forecast of total income for the year. Although sales revenue is the most common form of revenue, many organisations have revenue from investments. Non-profit organisations often get income from fees, donations, grants and fundraisers. The revenue budget projects add all sources of income, such as sales for each product and/or location, together. For example, in the private sector the marketing/sales department commonly provides the revenue figures for the entire firm, based on the sales forecast.

Expense budgets

This is the forecast of total operating spending for the year. It is common for each functional area/department manager to have an expenditure budget. Budgeting requires planning skills more than mathematics and accounting skills.

Expense budget alternatives

The following section explains the differences between line-item and programme budgets, static and flexible budgets, and incremental and zero-based budgets.

Line-item budgets versus programme budgets

When projecting expenses, the format generally takes one of two forms, or it can combine them.

1. A **line-item budget** identifies the major expenses of the department or organisation and is the most commonly used form. Line-item budgeting is the allocation of resources according to the cost of each item, from pens to personnel, used by a government (Henry, 2010, pp. 165–192). This type of budget system tends to fulfill a vital financial function. It shows (in detail) what public administrators are spending their money on. Line-item budgets are very useful as a record of expenditure and the criteria against which audits could measure compliance.
2. A **programme budget** identifies the expenses of specific organisational activities or units. A programme budget is a form of budgeting system that would permit an understanding of expenditure purposes which consolidated spending into programmes. A programme budget can lay foundations for a focus on effectiveness, because the total resources directed to any purpose should now be more readily apparent (Shafritz et al., 2011; Wildavsky, 1992).

Static budgets versus flexible budgets

A static budget has only one set of expenses, whereas a flexible budget has a series of expenses for a range of activities. Flexible budgeting takes into consideration the fact that the actual output level often differs from expectations. Managers must have some way of controlling operations in light of varying levels of activity. The static budget is appropriate in a stable environment in which there is little change in demand for the product. A flexible budget is appropriate in a turbulent environment in which demand for the product changes over a range of activities with variable cost.

Incremental budgets versus zero-based budgets

With incremental budgeting, past funds are allocated with only new expenses being justified and approved. According to Finkler (2010), incremental budgeting tends to respect the outcomes of previous years' budgetary decisions. This is collectively referred to as the base. Incremental budgeting also focuses on the examination of the margin of change from year to year. Zero-based budgeting is a technique that requires annual budget justification of all items in a budget, rather than just the incremental change and all funds must be justified each year. Zero-based budgeting assumes that the previous year's budget should not be the base on which to rework the budget for the next year. This is a budgeting process that rejected the incremental decision-making budget model (Seitz & Ellison, 2005). This budgeting model demands a re-justification of the entire budget submission from zero. Incremental and zero-based budgets do not change the presentation of the funds as the budgets mentioned above do. Their focus is on how the budgeted figures are derived, based on their justification.

By examining alternatives, and the costs and benefits of each approach, zero-based budgeting could be related to the policy-making process of the rational model and the utility of benefit cost analysis. Public managers are placed in a better position to make informed or rational decisions when allocating limited resources (Finkler, 2010). By using the rational approach to determine the budget, each alternative is ranked, with the public administrator considering the costs and benefits of the differing approaches. Zero-based budgeting is an evaluative approach for making budget cuts that will have the least negative impact on the government ministry or department.

Performance budgeting

The emphasis of performance budget is the enhancement of unit costs. It tends to connect inputs to outputs. It also uses budget as a method of limiting spending. Performance budgeting is an approach designed to improve the budget process by focusing more on what the organisation hopes to accomplish. According to Finkler (2010), performance budgeting is a useful approach in a situation that does not have a clear relationship between resources and outcomes. The approach calls upon the manager and organisation to define goals, plan the amount of resources needed to accomplish those goals and then assess how well the goals have been achieved. Lynch (1989) and Swoboda and Swoboda (2008) contend that performance budgeting ties the outcomes involved in a budget unit to performance measures. In this regard, the budget unit's next annual budget would come under examination as the result of how close it came to meeting its performance goals. Performance budgeting requires a performance measure to be stated alongside each line item so that calculations of unit cost and efficiency can be made. It is important to note that line-item and performance budgets are very helpful in addressing issues of control, compliance and efficiency.

Capital expenditures budget

The second step in developing the master budget is to develop the capital expenditures budget. The capital expenditures budget includes all planned major asset investments. The major assets owned by an organisation are those that last and are paid for over several years (Choi & Meek, 2008). The major assets budgeted for may include:

- land,

- new buildings,
- whole new product lines or projects, or,
- acquisition of an existing company.

On a lower level, decisions include whether to replace existing assets such as machinery with new ones, whether to buy or lease assets, whether to make components yourself or to buy them through outsourcing, and whether to rework defective outputs, sell or scrap them (Gruber, 2010). In every case, the objective is to earn a satisfactory return on the invested funds. Although controlling expenses is important, the capital expenditures budget is most important because it is based on developing ways to bring in revenues through new and improved products and projects that create customer value.

Financial statements and budgets

The third step in the master budgeting process is the preparation of financial budgets. Financial budgets are prepared last because the operating and capital expenditures budget figures are needed. If the budgeted financial statements do not meet expectations, the capital expenditures budget and/or operating budgets may need to be revised.

Each statement commonly gives figures for the year, with each month and quarter presented. The difference between the budget and actual statements is that actual statements report past results while the budget projects future results. Budgets are a preliminary control and actual statements are a rework control.

The three primary financial statements are:

1. **The income statement:** Presents revenues and expenses, profit or loss for the stated time period. The income statement primarily covers one year. However, monthly and quarterly income statements are also developed to measure interim performance and for concurrent control when necessary.
2. **The balance sheet:** Presents the assets, liabilities and owners' equity. Assets are owned by the organisation; liabilities are debts owed to others. Owners'/stockholders' equity is the assets minus the liabilities, or the share of assets owned. It is called a balance sheet because the total of the assets always equals the total of the liabilities plus owners' equity for a particular point in time.
3. **The cash flow statement:** Presents the cash receipts and payments for a stated time period. It has two sections: operating and financial activities. Cash flow statements typically cover one year. However, monthly and quarterly statements are also developed to measure interim performance and to be used for concurrent control when necessary. The operating budgets and capital expenditures budget affect the cash flow statement as cash revenue is received and expenses and expenditures are paid.

It is important to note that cash management is important for annual budgeting and in determining surplus and deficits. It is also important to capture the value of long-term assets and liabilities in order to fully understand the fiscal position of the government. Government agencies and ministries should keep some cash on hand or in their bank accounts. According to Finkler (2010), there are three reasons why government agencies should do this:

1. **Transactions**: Cash is needed for the normal daily transaction of any activity. In some cases, cash may be needed to pay employees and buy immediate supplies.
2. **Safety**: It makes sense for government institutions to have a safety cushion available for emergencies.
3. **Investment**: Another reason for holding cash is to have it available if an attractive investment opportunity arises. Investment possibilities are not limited to those that earn a profit; they may represent an opportunity to provide a new, valuable service to the organisation's clients.

Most cash budgets are developed with the operating and capital budgets to ensure they are feasible. One reason ministries' operating budgets are rejected is that the cash budget may show that the department or agency would simply run out of cash if it made the requested payment. In government (just like the private sector) cash is of such importance that many agencies prepare a cash budget for each month of the coming year. In practice, ministries would budget total cash inflow and outflow for the year. Cash budgets normally start with the cash balance expected to be on hand at the beginning of the month (Gruber, 2010).

The ethical values of most government ministries and agencies include that cash requires the greatest care to ensure it is not misappropriated. All money received should be recorded and not disbursed without proper authorisation. In summary, disbursement must be made by cheques, if possible. Two independent signatures should be required for cheques that are large. All cheques should be numbered (Finkler, 2010). It is also important that different people should authorise, write and sign cheques.

Activity 6.5

Activity

1. What is the difference between a zero-based budget and a programme budget system?
2. How is the capital expenditure budget different from the expense budget?
3. Why is the capital expenditures budget considered the most important?
4. Identify the major capital asset expenditures invested in by your present or a past organisation.
5. Does the company you work for, or have worked for, make its financial statements available to the public? If so, why?
6. List the three primary financial statements and what is presented in each of them.

7. What are the differences between the financial statements and budgets?

Sample local government budget

Case study 6.1

Case study

Maro City budget

The recently adopted Maro City budget is a blueprint for what is to be accomplished by the city in fiscal year 000A (July 1, 000A to June 30, 000B). The budget represents a careful balancing of priorities for services with financial resources available to the city. The city's top priority is economic development. The budget provides $369,926 to support the Maro Business Development Corporation, the Maro Convention and Tourism Bureau and Maro Main Street. Another $40,000 will be made available to Maro Main Street through the Special Service Area Tax.

Downtown will remain a priority with the completion of the town square improvements. Low interest façade improvement will be made, and sidewalk improvement will continue. Additional parking areas along the railroad tracks just north and south of West Ososo Street will be designed in anticipation of construction in future years. The city will provide $31,700 from its general fund for Maro Public Library operations. This is the second year of a three-year financial plan to maintain quality library services while gradually increasing the library's property tax levy over a three-year period.

Community policing to strengthen the partnership between citizens and law enforcement will continue to be a priority in the police department. Local Law Enforcement Block Grant funds from the federal government will enable the city to equip squad cars with laptop computers to enhance report writing and, in the future, communications. Grants from the state Department of Justice and the federal Ministry of Justice will enable the Police Department and co-operating agencies to enhance programmes to provide crime victim advocate services and to prevent domestic violence.

The Fire Department is continuing its aggressive posture in cause and origin determination of all fires. There will be further training in hazardous material response. The Fire Department will continue to develop its capability for confined space, vertical and trench rescue. Fire prevention efforts are a critical component of the department's activities.

The Public Works Department will oversee many important capital improvement programme projects as described in this budget. The annual street resurfacing programme will include Ometie Avenue and between Karo and Tega Lane. This will complement the reconstruction of the

Ometie Avenue and from Obaro Street intersection which is part of project to reconstruct Ometie Avenue and Ososo Street. The Meter Service Division will begin a programme for the systematic replacement of water meters to assure accuracy and reliability of meters.

The Planning Services Division will continue implementing the new Comprehensive Plan with an emphasis on the zoning ordinance in the expanded one and half miles area. The Mandatory Rental Housing Inspection Programme conducted by the Building and Neighbourhood Services Division will begin the second round of rental housing inspections. The Building and Neighbourhood Services Division in cooperation with other city divisions will also continue to operate the Housing Rehabilitation Grant programme in Northeast and a portion of Northwest Maro. Efforts of the City Attorney's office will continue to lead an initiative for a comprehensive update to the Maro Revised Code.

The Community Services Department will place a major emphasis on youth through activities such as co-ordinating the Maro Youth Council, publishing the Youth Resource Directory and Youth Activity Guides and working with community agencies and organisations providing youth services, including those interested in the development of a teen centre.

Item	Budget	Percentage
1. Personal services	$12,269,280	41.9%
2. Services and charges	$798,059	2.7%
3. Direct operating charges	$4,510,760	15%
4. Debt services	$3,286,414	11.2%
5. Expenditures transferred out	$933,894	3.2%
6. Capital outlay and improvement	$933,894	12.9%
7. Non-operating charges	$1,341,442	4.6%
8. Depreciation on fiscal assets	$1,480,613	5.1%
9. Contingencies	$97,000	3%
TOTAL	$27,404,877	100%

Table 6.6 Total fiscal year 000B budget line-item expenditure

The principal determinants of the budget's contents are the policies established by the city council as representatives of the citizens of Maro City. The adopted budget contains goals, objectives and strategies relating to the policies. The four major community goals and policies are:

1. Promote economic development.
2. Provide quality services with fiscal responsibility.
3. Encourage citizens' participation and community pride.
4. Strengthen and promote neighbourhood living.

Within each goal area there is a discussion of the policies and statement of goals and objectives. Each area also contains strategies which explain what will be done to reach the goals and objectives.

Item	Budget	Percentage
1. Public works	$8,086,093	29.5%
2. Police department	$4,671,908	17%
3. Other financing issues	$786,733	2.9%
4. General government	$2,670,953	9.7%
5. Community services department	$1,190,363	4.3%
6. Debt services	$3,060,223	11.2%
7. Finance department	$1,014,876	3.7%
8. Fire department	$1,897,991	7%
9. Capital improvements	$2,925,238	10.7%
10. Development services	$1,100,499	4%
TOTAL	$27,404,877	100%

Table 6.7 Total fiscal year 000B budgeted expenditures and other financing uses

The capital improvement programmes in the FY 000B budget total $2,953,580. This represents the amount to be spent during FY 000B. Some projects span more than one fiscal year and the cost is spread out over those years. Unless otherwise indicated, the activity to be conducted will include complete construction of the project. The dollar amount is for FY 000B expenditures only.

Public building $145,399

University City Building Demolition, (Ziks and Mandela building) Street Department Equipment Storage Building

Parking system: $22,382

Town Square Southwest Quadrant parking Lots Reconstruction Completion.

Sanitary sewers $93,903

Reverend Kolo Road and Edhere Road sanitary sewer extension completion.

Special projects: $980,946

Mill Street Underpass — land acquisition and relocation of building occupants Town Square-East, and Main Street Beautification, Outdoor Aquatic Centre.

Storm sewers: $139,545

Deer Lake Drainage, Tatum Height Ditch Improvement design.

Replace Corrugated Metal Pipes in Southwest Maro study.

Streets; $1,362,815

Ososo Avenue begin construction.

Obaro Road begin construction.

Green Street Improvements.

Omtaie Avenue begin construction.

New Era Road intersection improvements.

Forest Road modification.

Sidewalks: $50,000

Replace existing sidewalks (scattered locations)

Wastewater treatment: $36,694

North Route 51 Sanitary Sewer Lift.

Station Reconstruction complete.

Upgrade Southeast Wastewater.

Treatment plant-study.

Water system: $101,896

Green Street water main to Ometie Avenue.

Springer Street water main replacement.

Ososo Avenue to Tega Road.

Revenue source	Amount	Percentage
1. Contribution and assessment	$1,273,908	4.9%
2. Inter-governmental	$4,543,566	17.6%
3. Fines	$489,763	1.9%
4. General property tax	$1,016,9723	3.9%
5. Service, charges and permits	$6,896,576	26.73%
6. Sales and service tax	$9,436,251	36.5%
7. Franchise taxes	$373,475	1.5%
8. Other financing sources	$810,519	3.1%
9. Use of money and property	$998,622	3.9%
TOTAL	$25,839,652	100%

Table 6.8 Total fiscal year 000B budgeted revenue and other financing sources

Finally, the FY 000B City Budget continues the city's policy of minimising the city's use of property tax revenues to finance the budget. As Table 6.8 shows, property taxes will account for only 3.9 per cent of the city's budget. Unlike schools and the Park District, which rely heavily on property taxes, the city is able to use authority granted by the state legislature and under home rule to access various sources of revenues. Sales and service taxes provide more than one-third of the city's budget revenues. Service charges, permits and fees (such as for water, sewer and refuse services) account for more than one-quarter of city revenues. Inter-governmental revenue, such as grants and the city's share of the state income tax, represents nearly 18 per cent of the city's income.

For FY 00B the city budget allocates property tax funds as follows:

- $49,600 to the state government, municipal retirement fund contributions;
- $233,600 to fire fighters' pension fund;
- $366,300 to police pension fund;
- $105,600 for street lighting;
- $26,000 to local improvement fund (for sidewalk); and
- $235,500 for debt services for the bonds issued to build the new City Hall and Civic Centre.

Altogether these represent $1,017,000 in property taxes that will be used to support the city government's operations. In addition to the previously listed sums, the budget also provides $376,000 for the property taxes that the Maro City Public Library has requested.

Activity 6.6

Activity

1. What are the various sources of revenue for the City of Maro in the fiscal year under consideration?
2. Discuss some of the initiatives in the fiscal year's budget.
3. What is the type of budget system applied in the City of Maro?
4. What are the major differences between the source of revenue for the City of Maro and Table 6.3?

Analysis applied to budgeting

Most analysis used in budgeting is not complex. Such a financial analysis contains the detail of estimated receipt, proposed expenditures and other disbursements under various headings. A budget analysis enables the authorities to decide about each individual item of revenue and expenditure in the overall context of its policies. According to the financial theories covered earlier in this module, no government can afford to take taxation, borrowing, expenditure and other fiscal decisions at random. The good analysis of their budget must form a part of the government's overall set of objectives. A budget, from this point of view, becomes both a description of the fiscal policies of the government and the financial plans corresponding to them. Analysis of the budget becomes very necessary and quite systematic if chaos and wastage are to be avoided.

The methods of budget analysis include:

- trend chart,
- scatter diagrams,
- simple regression,
- marginal cost analysis,
- discounting to present value, and
- Kraemer’s chi square.

Simple regression analysis

Often the relationships involving budget request, final budget, year-end estimates of current express, and actual performance are important in budget analysis. If a relationship can be established, then the budget analyst’s job is made easier. Normally, relationships are best described using a conventional scale, but sometimes a logarithmic scale or index numbers can be employed to better highlight the significance of the data (Finkler, 2010; Gruber, 2010). In many situations, the relationship between two variables is more difficult to determine. One approach is to place the two variables on axes, as illustrated in the following diagram.

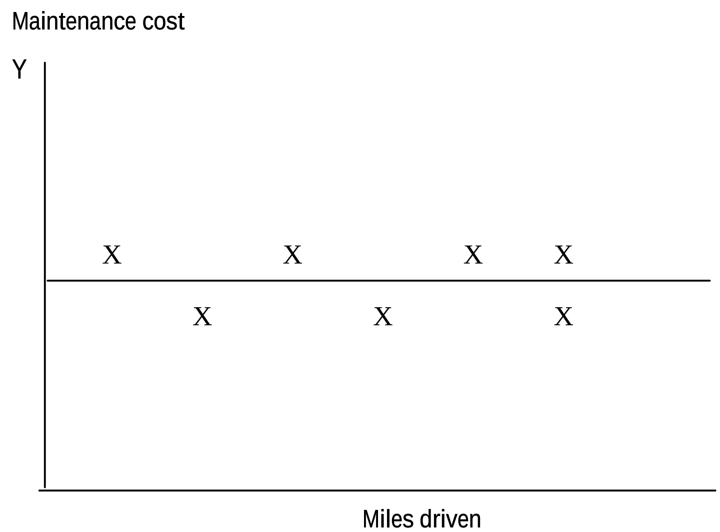

Figure 6.2 Car maintenance costs per mile driven

Source: Dibie (2003)

The analyst then places a dot representing each simultaneous occurrence of the two variables. The result is a scatter diagram that may indicate a relationship between the two variables. The figure 6.2 above shows such a relationship for a car maintenance cost and miles driven. The line is a simple regression analysis defining that relationship.

Marginal cost analysis

In the marginal cost technique for analysing budgeting, the initial cost of a government programme is often expensive, which, after further efforts, leads to lower unit costs. This means that in many circumstances the analyst should understand that marginal costs are lower. This might prove to be highly significant. For example, if a government agency is asking for a proportionate increase in funding, the analyst might question this request because marginal costs should not increase proportionately. In order to perform marginal cost analysis, the data must be separated into one-time fixed cost, and recurring costs. Common one-time fixed costs include:

- research,
- project planning,
- engineering,
- tests,
- evaluations,
- land purchase and facility construction, and
- equipment and initial training.

Common recurrent costs include:

- personnel expenses,
- employee benefits,
- maintenance,
- direct contributions to people,
- payments for services, and
- overall and replacement training.

The fixed costs remain the same, but the recurrent costs increase with added units. As the units increase, the unit cost decreases. This data can be plotted on a simple chart or described in a simple statistical expression.

Discounting to present value

This technique is used for the analysis of budgets. It simply states that a dollar received or spent in the future is not equivalent to a dollar received or spent today. Therefore, adjustment should be made if comparison is to be made. The technique is similar to the statistical concept used to compute compound interest at the bank. This technique is useful when a comparison must be made, but the two subjects must not occur during the same time period or involve different financial methods. Table 6.9 is an example of this important arithmetic.

Saving in the year X at 8 per cent discount factor = present value

$10,000	.926	$9,260
$10,000	.857	$8,570
$10,000	.794	$7,940
$10,000	.735	$7,350
$10,000	.681	$6,810

Therefore, $50,000 present value of annual savings = $39,930

Table 6.9 Discount factor example

Table 6.9 shows that discounting is a method for presenting the fact that the options are nearly equal, but the contracting will save the government some money. Caution must be stressed in using the discount technique (Choi & Meek, 2008; Finkler, 2010). Numbers have a way of seeming final and clear. Realistically, the ingredients in the question should be carefully weighted in terms of their sensitive character. An output of a programme is sensitive when the results can be altered by minor changes in a variable.

Cross-work

One of the most useful analytical tools for the budget examiner is the cross-work. It is a simple matrix table relating different categories. It serves as a conceptual bridge between two organisational means to describe and control agency activities. By constructing several bridges, the examiner can explore various organisational perspectives on what should be done and what is done as well, to check important interrelations. According to Bhatia (2008), some categories that can be cross-worked are:

- programmes, projects, activities and tasks;
- uniform object classifications;
- appropriations structure;
- major organisational units;
- objectives used in connection with management-by-objectives (MBO) or programme evaluation; and
- funds (including grants-in-aid) used in government accounting.

A very useful cross-work is between the programme and the uniform object classification (also line-item). In many sophisticated budgets, both programme and line-item categories are used. In order to maintain consistency, the cross-work is a valuable tool because it shows the inter-relationship of two ways of looking at the budget. In addition, a careful examination of the cross-work helps to isolate potential problems, such as inadequate resources for some line-items in some programmes. Another useful cross-work is between fund and line-item. Often an agency can draw upon several funds in its daily operations. A given line-item expense may be associated with two or more funds. The appropriation-to-unit cross-work is also useful. Sometimes the legislature provides funds that are used by several organisational units. A tool to keep track of which unit is responsible for each portion of the money is the cross-work.

In federal governments, the programme and authorisation cross-work is very useful at the agency level. In the executive branch of government, budgets are prepared using the programme concept. In the legislative branch, budgets are justified and discussed in terms of legal authorisation language. The agency budget official must use both the programme concept of programmes and legal authorisation in justifying and defending requests for funds. Choi and Meek (2008) contend that an unused but potentially significant cross-work is between the management-by-objective (MBO) and the programme structure or appropriation structure. MBO can be an extremely useful public management technique but it is applied without reference to the budget.

Determining consistency

The budget examiner can ask to see various cross-work for the reason suggested by determining consistency. Essentially, cross-work helps the examiner determine if the agency has internally consistent management direction and control capability. Cross-work can also be used to check for external consistency of management direction with past publicly announced position and orders of higher authorities. A set of cross-works is among the best evidence of the exact management policies of an agency. Budget examiners can also determine if the policy direction from the cross-works matches public positions and policy established by higher authorities. If there is inconsistency, further probing may be warranted to determine the reason for it.

Revenue forecasting

Forecasting focuses on how public managers make predictions of expenses, revenue, and other items in the budget. There are three main approaches used in revenue forecasting. They are:

1. qualitative approach,
2. time series analysis, and
3. causal analysis.

According to Rubin (1997) and Van Horne, Dipchand and Hanrahan (1999), the standard approach is to determine and then make the forecast based on assumptions and the determined pattern. Forecasting is merely a sophisticated form of questioning that depends on good data and judgement. Forecasting is often determined by experience. The techniques of forecasting range from the simple to the complex, but all should be used with the principle of conservatism in mind. That is, underestimating revenue and overestimating expenditures.

Quantitative approach

Also called the judgemental approach, the quantitative approach is (in essence) based solely (or primarily) on human judgement, but maths can be involved. Normally, economists constituted the “expert” groups of forecasters, but occasionally politicians were included. Expert judgement is best used when key revenue elements are highly variable, or revenue is strongly influenced by political consideration (for example, inter-governmental transfers).

Time series approaches (for example, trend analysis)

Time series analysis is based on data collected over time and shown chronologically on graphs. One such approach involves using the last completed year as a basis for the revenue estimate. Another simple technique is the method of averages. This involves the arrangement of revenue generated over the last three to five years. The assumption is made that there is a growth trend in the tax source rather than a decline or unevenness. A more sophisticated method involves moving averages and attributing greater weight to more recent revenue yields. When using time series techniques, the forecaster is especially interested in the nature of seasonal fluctuations that occur within a year, the nature of multi-year cycles and the nature of any possible long-run trend that might underlay the seasonal and cyclical fluctuation. The major weakness of this approach is that economic turning points are not easily identified. Trend analysis should be used to forecast revenue items that are not highly variable and that:

- amount to minor percentages of the budget, or
- are not dependent on economic or political considerations.

Causal methods

Causal methods deal not with the history of a single variable, but with the historical inter-relationship between two or more variables. One or more predictors' variables forecast yield directly or indirectly by first forecasting the future tax base. For example, multiplying the estimate of the average tax to be collected by an estimate of the number of taxpayers may result in a forecast of income tax revenue. According to Seitz and Ellison (2005) causal models may consist of a single regression equation or several regression equations.

The benefit-cost analysis

Benefit-cost analysis is based on the rather simple belief that projects should be on the basis of project cost versus project benefits. At best, benefit-cost analysis is a guide for investment decisions (Gruber, 2010). Benefit-cost analysis compares the costs and benefits of an action or programme. The technique takes into consideration not only private costs and benefits but public ones as well.

According to Mikesell (2011), benefit-cost analysis is a technique that compares social costs and benefits of proposed programmes or policy action. All losses and gains experienced by society are included and measured in monetary terms. The net benefits created by action are calculated by subtracting the losses incurred by some sectors of society from the gains that accrue to others. Alternative actions are compared, so as to choose one or more that yield the greatest benefits, or ratio of benefits, to cost.

It can help decision makers decide if specific expenditure should be undertaken, if the scale of the project is appropriate and what the optimum project size should be. Some scholars treat benefit-cost analysis as a framework for a general theory of government investment. However, the inclusion of all gains and losses to society in benefit-cost analysis distinguishes it from cost-effectiveness analysis, which is a more limited view of costs and benefits.

Cost-effectiveness is sometimes confused with benefit-cost analysis, but there are advantages to maintaining the distinction. Cost-effectiveness assumes benefits and does not compare them with cost as a benefit-cost analysis. In cost-effectiveness analysis, the analyst wishes to determine the least costly means to achieve the objective. Frequently, all methods of analysis using input alternatives and outputs means costs-effectiveness analysis including benefit-cost. However, cost-effectiveness can often be the more effective analytical technique and blurring the distinction between the techniques tends to blind practitioners to the comparative advantages of both. Both have their advantages, but often cost-effectiveness can be used where benefit-cost is a meaningless technique. Benefit-cost analysis involves defining a choice set, analytical constraint measurements, and a choice model (Anderson, 2003; Ulbrich, 2011).

Analysis must be made manageable so that work can be done within a reasonable timeframe. Parameters or range of projects must be established. Analytical constraints must be understood, stated and either treated as side considerations of the analysis or included in the analytical objective functions. However, the choice model is the means used to relate the estimated costs and benefits. It is the formula. The model (formula) is used to decide how the measurement will be incorporated into the overall analysis.

Stages of budget execution

Budget plays a vital role in government. It provides information about government and its transactions to aid resource allocation decisions by public institutions. If the information reported is reliable and useful, scarce resources are allocated in an optimal fashion and, conversely, resource allocations are less than optimal when information is less reliable and useful.

While the effort to reduce budgeting procedures and analysis is important in its own right, a number of additional factors contribute to the growing importance of understanding the budgeting processes in government.

These factors stem from significant and continuing reductions in government revenues and fiscal policies. Public budgeting and finance is, therefore, one of several attempts to effectively allocate funds to public managers in order to contribute to the fortunes of their organisation and to the vitality and growth of the provision of a government's services and the entire economy.

The following are stages in the budget execution or implementation processes:

1. **Authorisation:** This is the law (or statute) which permits spending for a specified purpose. Governments can only spend money for activities they are legally permitted to carry out.
2. **Appropriation:** This is the legal authority to spend up to a certain amount of funds during the budget period. For most local governments, the annual budget document is the same source for all or most appropriations.
3. **Allocation:** This may be used by the chief executive, central budget office and even large agencies to provide further deficits to the appropriation approved by the city council, state legislature or other government bodies.
4. **Allotment:** The ability to divide appropriations or allocations, if any, into time periods, such as quarters, months or the fiscal year,

covered by the approved budget. While some agencies may spend money evenly throughout the year, there is a seasonal pattern to many activities. The allotment device is critical to ensuring that spending is carried out according to the budget as far as is possible.

5. Adjustment: May be necessary as revenues and spending vary from the projections contained in the annual budget documents. Procedures for making adjustments vary from government to government, but usually are multi-level. Some adjustment in the budget is considered sufficiently major that the legislature itself must act. This may occur on an ad hoc basis or as part of a comprehensive supplemental budget approval process, which usually happens sometime near the final quarter of the fiscal year.

Summary

Summary

This module has examined public finance and budgeting scope and practices. It contends that public finance and budgeting encompasses a broad range of diverse phenomena. Any system of public financial control rests on an underlying technology of tools and approaches. This unit attempted to eradicate (or at least mitigate) some of the ambiguity which results from the particular usage of the term budget. It is necessary to relate budget to the following definitions:

- Budget is a financial plan serving as a pattern for a control over future operations.
- Budget is any estimate of future costs.
- Budget is a systematic plan for the use of manpower, materials or other resources.

Two major functions are, however, immediately discernible. First, a budget may serve as a plan, indicating requirements of certain factors (such as cash-producing capacity) at some future date which serves the function of providing information for subsequent decisions and possibly guiding them. Second, a budget may serve as a control, containing criteria of cost or performance which will be compared with actual data on operations. It helps with evaluations and possibly encouraging (or even enforcing) some measures of efficiency.

The emphasis in budgets may be on the various kinds of activities, services or equipment for which public funds are to be expended, as in the line-item budget. The emphasis also was on the major objects or programmes of public spending as in performance or programme budgets. One point that needs to be stressed is that as the objects of public finance and budgeting become more complicated, approaches and tools of analysis of corresponding power must be developed. Complexity requires that the total budget process be factored into manageable pieces. While the national government revenue may come from income tax and several insurance trust funds (such as social security), state and local government revenue depends on a variety of sources such as property tax, income tax, sales taxes, user charges, lotteries and federal grants.

Public administrators who are users of government financial reports must be interested in many of the same things as those analysing other types of public agencies or non-profit organisations. Understanding the financial conditions of government requires additional types of information and, in some cases, modifications to the basic financial statement analysis approach. Government financial analysis must take into account factors such as:

- debt per capita,
- tax rates, and
- citizens’ income and wealth.

Special issues related to evaluating the financial conditions of government have been the focus of this module.

Finally, public budgeting is the single most important decision-making process in government. The public budget itself is also a jurisdiction’s most important reference document. Public finance and budgeting is so important because the process by which a nation’s public administrators manage its business, trade and finances generally consists of three dimensions:

1. monetary policy;
2. fiscal policy; and
3. those other facets of public policy with economic implications, such as energy policy, farm policy and labour union policy.

In the next module some contemporary issues that impact upon inter-governmental administration will be discussed. This module will examine the basis of intergovernmental relations and will base its discussion on a federal system model or federalism.

Assignment 2

Assignment

Due date:	XX/XX/XXXX
Value:	15 per cent
Format:	Case study analysis #2 (3000–3500 words)
Modules covered:	Modules 3–6 (modules 1 and 2 may also be used)

Assignment question

Answer the questions within the case study analysis which can be found in your Student Booklet.

References

References

Anderson, J. (2003). *Public finance*. Boston, MA: Houghton Mifflin Press.

Bhatia, H. L. (2008). *Public finance* (26th ed). Jangura, India: Vikas Publishing Press.

Choi, F. & Meek, G. K. (2008). *International accounting* (6th ed.). Upper Saddle River, NJ: Prentice Hall.

Dibie, R. (2003). *Public management and sustainable development in Nigeria*. Alderfort, England: Ashgate Press.

Dye, T. (2011). *Understanding public policy*. Upper Saddle River, NJ: Prentice Hall.

Finkler, S. (2010).*Financial management for public health and non-for profit organizations* (3rd ed.). Upper Saddle River, NJ: Prentice Hall.

Gruber, J. (2010). *Public finance and public policy* (3rd ed.) New York, NY: Worth Publishers.

Henry, N. (2010). *Public administration and public affairs*. Upper Saddle River, NJ: Pearson/Prentice Hall.

Lehne, R. (2006). *Government and business*.Washington, DC: Congressional Press.

Lussier, R. (2006). *Management fundamentals*. Mason, OH: Thomson Higher Education.

Lynch, T. (1989, Fall). Budgeting system approach. *Public Administration Quarterly*, 321–341.

Mikesell, J. (2011). *Fiscal administration* (8th ed.). Boston, MA: Wadsworth Press.

Rubin, I. (1997). *The politics of public budgeting* (3rd ed.). Chatham, New Jersey: Chatham House of Publishers.

Schroeder, R., Clark, M., & Cathey, J. (2008). *Financial accounting theory and analysis*. Danver, MA: John Wiley Inc. Press

Seitz, N. & Ellison, M. (2005). *Capital budgeting and long term financing decisions*. Mason, OH: Thomson/South Western Press.

Shafritz, J., Russell, E. W., & Borick, C. (2011). *Introducing public* *administration* (7th ed.). New York, NY: Longman/ Pearson.

Swoboda, D. & Swoboda, G. (2008). Managing non-profit financial and fiscal operations. New York, N.Y.: Management Concepts.

Telser, L. (2008, July). Securing the means of payment: The ultimate requite of the modern economy. *Economists' Voice*. Retrieved from www.bepress.com/ev/ retrieval date needed

The Economic Report of the President of the United States, (2004) Washington D.C.: United States Government Printing Office, p.385.

Ulbrich, H. (2011). Public finance in theory and practice. New York, N.Y.: Routledge.

United Nations Human Development Index. (2009). New York, N.Y: Oxford University Press

Van Horne, J., Dipchand, C., & Hanrahan, R.(1999). *Fundamentals of financial management*. Upper Saddle River, NJ: Prentice Hall.

Wildavsky, A. (1969, March–April). Rescuing policy analysis from PPBS. *Public Administration Review 29*, 231–256.

Wildavsky, A. (1992). *The new politics of the budgeting process* (2nd ed.). New York, NY: HarperCollins.

Further reading

Reading

Caiden, N. & Wildavsky, A. (1990). *Planning and budgeting in poor countries* (pp. 120–130). New York, NY: John Wiley.

Gosling, J. J. (2009). *Budgeting politics in American government* (pp. 131–140). New York, NY: Routledge Press.

Lee, R., Jr. & Johnson, R. W. (1998). *Public budgeting systems* (6th ed.), (pp. 136–173). Gaitherburg, MD: Aspen Publishers.

Ripley, S. & Colby, P. W. (1997). *Practical government budgeting*. New York, NY: SUNY Press.

Wildavsky, A. (1984). *The politics of the budgeting process* (4th ed.), (p. 29). Boston, MA: Little Brown.

Activity feedback

Feedback

Activity 6.1

1. The major differences are:

   a) The expediency taxation theory: This theory argued that every tax proposal must pass the test of practicability. It assumed that economic and social objectives of the government should be relevant to the tax system adopted.

   b) The socio-political theory of taxation: This theory postulates that social and political objectives should be the deciding factors in choosing taxes. It stipulates that each economic predicament of the society should be looked at in its social and political content, and an appropriate solution found by raising revenue through taxes.

2. The government has to impose tax because the objective of taxation by the government is to raise certain amounts of needed revenue. It is also the goal of the government to decide how best it could be raised so as to confirm criteria of distributing the resulting burden among the taxpayers. A modern government should adopt a tax policy to effectively address unemployment, production of goods and services, restrictive trade practices, good health, education and better living standards. It is believed that taxation can also be used in bringing about a more balanced growth between different regions of a country.

3. This theory postulates that the results of the accounting process should be expressed in a set of fundamental financial statements that are articulated with each other and rest on the same underlying data. The accounting theory also contends that accounting data should be based on prices generated by past, present, or future exchanges that have actually taken place or are expected. The accounting theory is useful because it fosters a value for public financial managers to record price data generated by past, present or future exchanges that have actually taken place or are expected — good accounting data and reporting methods.

4. Keynes's theory stipulates that government spending could be critical in managing an economy by stimulating demand when resources were underused and unemployment was high.

   Some political leaders have used Keynes's theory to justify deficit spending to stimulate the economy. Others have also used the theory to spend more money to stimulate the economy.

Activity 6.2

1. When there is a market failure
    - Redistribution
    - Tax or subsidise private sale or purchase
    - Restrict or mandate private sale or purchase
    - Public provision
    - Public financing of private provision
2. A problem that causes the market economy to deliver an outcome that does not maximise efficiency is not acceptable. According to Finkler (2005 query – references say 2010), due to unacceptable free-market outcomes, governments would need to intervene in four key areas:
    - Public goods
    - Imperfect information
    - Inadequate competition
    - Externalities

    In recent decades the role of government has been to deal with cases where competition in the provision of goods and services did not exist.
3. Governments in some countries may carry out such redistribution by taxing those with large incomes at a higher rate and using some of the revenue collected through that income tax to pay for food or health care and education for those with little or no income.
    - To spend more money to stimulate the economy.
    - To use taxation to provide a powerful set of policy tools for authorities. It should be effectively used in remedying economic and social ills of the political system and citizens. Some of the predicaments of a political system include regional disparities, income inequalities, poverty, unemployment and poor infrastructure.

    A modern government should adopt a tax policy to effectively address unemployment, production of goods and services, restrictive trade practices, good health, education and better living standards. It is believed that taxation can also be used in bringing about a more balanced growth between different regions of a country.

Activity 6.3

1. **The United States spends its revenue on:**

National defence	12%
Social security	21%

Medicare	13%
Medicaid	7%
Other discretionary spending	18%
Interest on national debt	8%
Unemployment insurance and welfare	12%

Developing countries spend their budget on:

Defence	11%
Interior and penal institutions	19%
Education including universities	15%
Health	9%
Justice	3%
Communication	4%
Housing	4%
Local aid projects	7%
Foreign relations	5%
Construction	10%
Energy	8%
Debt servicing	5%

The major difference is that developing countries do not spend their revenue on social security, medicare and medicaid.

2. The major sources of revenue for the national government are:
    - Individual income taxes 39%
    - Social insurance receipts 31%

    The major sources of revenue for regional government are:
    - Federal government 20%
    - Sales and gross receipts tax 19%
3. This answer will be student-specific, however, an example is outlined below:

    Example:

    The major source of revenue for the organisation where I work (State University) is:
    - State government 60%
    - Student fees 40%

Activity 6.4

1. The three steps in the master budget are:
    a) revenue and expenditure operating budgets,
    b) capital expenditures budget, and
    c) financial budgeted cash flow, income statement and balance sheet.
2. During the budgeting process, the use of power and politics is common, and the negotiating conflict management style is typically used to resolve expected conflicts that exist when allocating scarce resources.

   Public budgeting is political in all ways. It is important for the public budget to be political because of the specific policy issues reflected in the budget.
3. Public budgeting is political in all ways. It is important for the public budget to be political because of the specific policy issues reflected in the budget. A public budget links citizens' preferences and governmental outcomes. At the federal government level, the budget influences the economy. It influences government fiscal policy as well as the level of employment.

Activity 6.5

1. Zero-based budgeting assumes that the previous year's budget should not be the base on which to rework the budget for the next year. Zero-based budgeting is a process that rejected the incremental decision-making budget model.

   A programme budget identifies the expenses of specific organisational activities or units. A programme budget is a form of budgeting that would permit an understanding of expenditure purposes, which consolidated spending into programmes.
2. The capital expenditures budget includes all planned major asset investments. The major assets owned by an organisation are those that last and are paid for over several years (Choi & Meek, 2008). The major assets budgeted for may include land, new buildings, whole new product lines or projects, or acquisition of an existing company.

   An expense budget is the forecast of total operating spending for the year. It is common for each functional area/department manager to have an expenditure budget. Many managers fear developing budgets because they have weak maths or accounting skills. In reality, budgeting requires planning skills rather than maths and accounting skills.
3. The capital expenditures budget is the most important budget because it is based on developing ways to bring in revenues through new and improved products and projects that will create customer value.

4. This answer will be student-specific, however, an example answer is provided below:

   Example:

   - Building a science complex
   - Building a physical-health education and wellness centre.

5. This answer will be student-specific, however, an example is provided below:

   Example:

   Yes, my university makes its financial statement public because it is a state government institution that is funded with taxpayers' money.

6. The three primary financial statement inclusions are:

   - The income statement presents revenues and expenses and the profit or loss for the stated time period.
   - The balance sheet presents the assets and liabilities and owners' equity.
   - The cash flow statement presents the cash receipts and payments for the stated time period.

7. Financial statements are the income statement, balance sheet and cash flow statement.

   The difference between the budget and actual statements is that actual statements report past results while the budget projects future results. Budgets are a preliminary control, and actual statements are a rework control.

Activity 6.6 (case study 6.1)

1. The various sources for revenue for the City of Maro in the fiscal year are:

Contribution & Assets	$1,273,908	4.9%
Intergovernmental	$4,543,566	17.6%
Fines	$489,763	1.9%
General Property Tax	$1,016,972	3.9%
Service, Charges & Per.	$6,896,576	26.73%
Sales & Service Tax	$9,436,251	36.5%
Franchise Taxes	$373,475	1.5%
Other Financing Source	$810,519	3.1%
Use of Money & Property	$998,622	3.9%
TOTAL	$25,839,652	100%

2. The four major community goals and policies for the fiscal year are as follows:

- Promote economic development.
- Provide quality services with fiscal responsibility.
- Encourage citizens participation and community pride.
- Strengthen and promote neighbourhood living.

The goals or initiatives are implemented in the following projects:

a) Public building ($145,399) — University City building demolition, (Ziks and Mandela building) Street Department Equipment Storage Building.

b) Parking system ($22,383) — Town Square Southwest Quadrant parking lots reconstruction completion.

c) Sanitary sewers ($93,903) — Reverend Kolo Road and Edhere Road Sanitary sewer extension completion.

d) Special projects ($980,946) — Mill Street underpass — land acquisition and relocation of building occupants Town Square East and Main Street beautification, outdoor aquatic centre.

e) Storm sewers ($139,545) — Deer Lake drainage, Tatum Height Ditch improvement design. Replace corrugated metal pipes in Southwest Maro study.

f) Streets ($1,362,815) — Ososo Avenue begin construction, Obaro Road begin construction, Green Street improvements, Ometie Avenue begin construction, New Era Road intersection — improvements, Forest Road modification.

g) Sidewalks ($50,000) — Replace existing sidewalks (scattered locations).

h) Wastewater treatment ($36,694) — North Route 51 sanitary sewer lift station reconstruction — complete upgrade Southwest Wastewater Treatment plant study.

i) Water system ($101,896) — Green Street water main to Ometie Avenue Springer Street water main replacement, Ososo Avenue to Tega Road.

3. Line-item budgeting system.
4. See Table 6.3

Sources of regional government revenue:

Federal government	20%
Sales and gross receipts tax	19%
Property Tax	16%
Individual Income Tax	14%
Corporate net Income tax	2%
Others	29%

City of Maro source of revenue:

Contribution and assets.	4.9%
Intergovernmental	17.6%
Fines	1.9%
General property tax	3.9%
Service, charges & Per.	26.73%
Sales and service tax	36.5%
Franchise taxes	1.5%
Other financing source	3.1%
Use of money and property	3.9%
Total	**100%**

More revenue — 20 per cent — came from the federal government in Table 6.3. Inter-governmental revenue is not specific.