

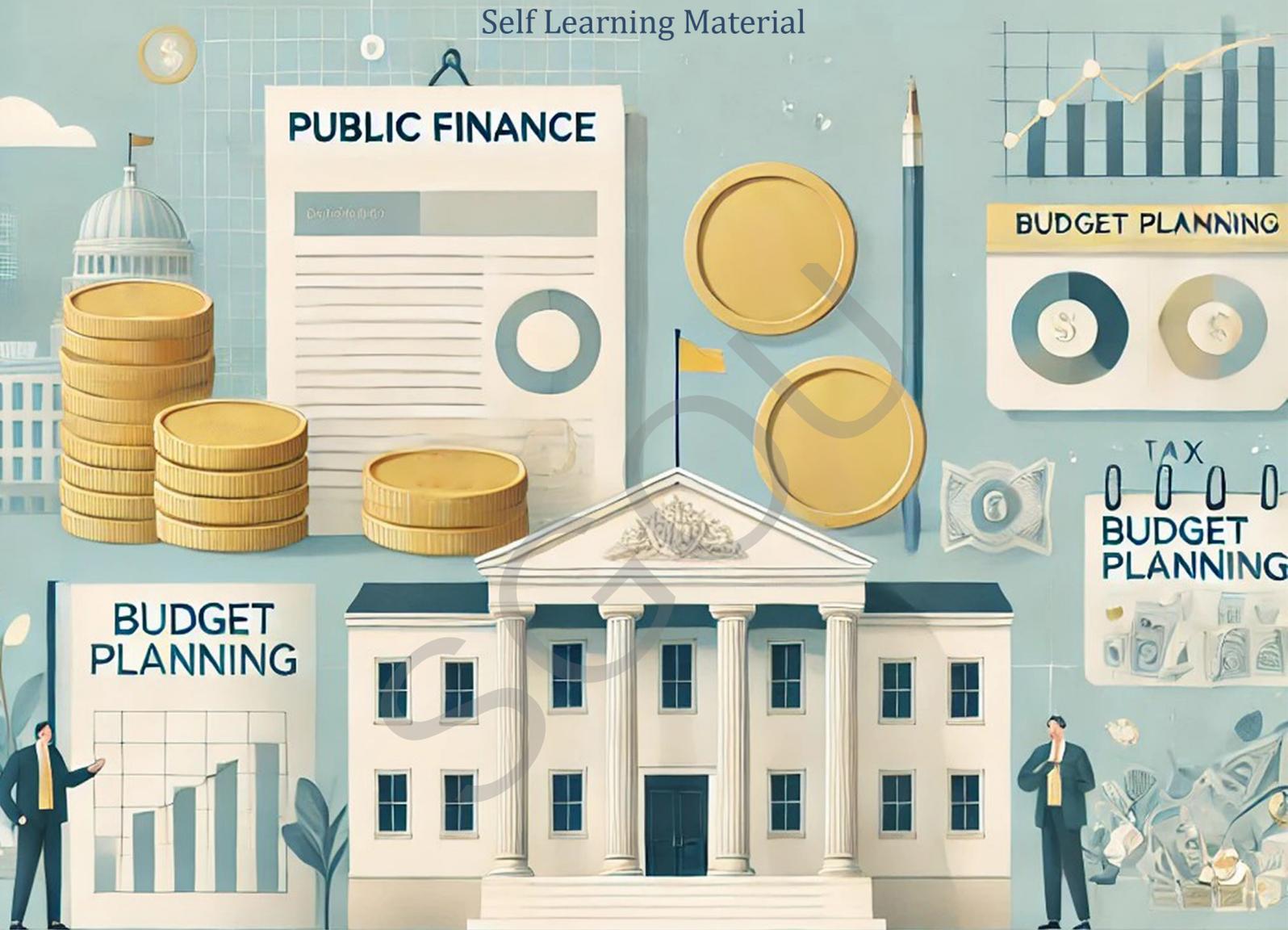
PUBLIC FINANCE

COURSE CODE: M23EC09DC

Postgraduate Programme in Economics

Discipline Core Course

Self Learning Material



SREENARAYANAGURU OPEN UNIVERSITY

The State University for Education, Training and Research in Blended Format, Kerala

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Public Finance
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PUBLIC FINANCE

Course Code: M23EC09DC

Semester- III

Discipline Core Course

Postgraduate Programme in Economics

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MESSAGE FROM VICE CHANCELLOR

Dear learner,

I extend my heartfelt greetings and profound enthusiasm as I warmly welcome you to Sreenarayanaguru Open University. Established in September 2020 as a state-led endeavour to promote higher education through open and distance learning modes, our institution was shaped by the guiding principle that access and quality are the cornerstones of equity. We have firmly resolved to uphold the highest standards of education, setting the benchmark and charting the course.

The courses offered by the Sreenarayanaguru Open University aim to strike a quality balance, ensuring students are equipped for both personal growth and professional excellence. The University embraces the widely acclaimed "blended format," a practical framework that harmoniously integrates Self-Learning Materials, Classroom Counseling, and Virtual modes, fostering a dynamic and enriching experience for both learners and instructors.

The University aims to offer you an engaging and thought-provoking educational journey. The postgraduate programme in Economics builds on the undergraduate programme by covering more advanced theories and practical applications. The course material aims to spark learners' interest by using real-life examples and combining academic content with empirical evidence, making it relevant and unique. The Self-Learning Material has been meticulously crafted, incorporating relevant examples to facilitate better comprehension.

Rest assured, the university's student support services will be at your disposal throughout your academic journey, readily available to address any concerns or grievances you may encounter. We encourage you to reach out to us freely regarding any matter about your academic programme. It is our sincere wish that you achieve the utmost success.



Regards,
Dr. Jagathy Raj V.P.

01-01-2025

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MASTER OF ARTS ECONOMICS



Public goods and Externalities

Block 1



UNIT 1

GOVERNMENT AND PUBLIC GOODS

Learning Outcomes

After completing this unit, learners will be able to:

- understand the role of government in a market economy
- differentiate between public goods and private goods
- discuss the concept of pure and impure public goods

Background

Imagine living in a country where streetlights light up every street, parks are clean and accessible and healthcare and education are available to everyone, regardless of their income. How does such a country ensure these services are provided consistently? Let us take Sweden as an example, where the government provides all these essential services. Sweden's success lies in balancing its market economy with strong government intervention to ensure that all citizens have access to crucial services.

In a market economy, businesses make decisions based on supply and demand, but sometimes this system does not provide for everyone's needs. This is where the role of government becomes important. While markets can provide goods like food or clothing, they often do not supply public goods, such as education, healthcare or public parks; though these are things that everyone needs, but it is hard to make money from them. The government steps in to provide these services, ensuring that all citizens have access to them, not just those who can afford to pay. Public goods have two main characteristics: they are non-rivalrous (one person using them does not prevent others from using them) and non-excludable (no one can be excluded from using them). For example, Sweden's clean parks and streetlights benefit everyone in the community, whether or not they pay for them. Private businesses would not want to provide these because they cannot charge everyone; so, the government takes responsibility for ensuring they are available to all. There are also impure public goods, like public transportation, which have some characteristics of public goods but also have elements of private goods. While public transportation benefits

many people, it is sometimes rivalrous (buses can become crowded) and excludable (you need to pay for a ticket). Governments still provide and manage these services to make sure they remain accessible.

In Sweden, the government's involvement in public goods ensures that citizens have access to essential services, regardless of their ability to pay. This creates a more equitable society, where everyone can enjoy the benefits of public services like healthcare and education. By understanding the role of government and the characteristics of public goods, we can see why some things, like public parks and education, are best provided by the government rather than the market.

Keywords

Market Economy, Pure Public Goods, Impure Public Goods, Non-Rivalry, Non-Excludability, Market Failure

Discussion

- Market economy: decentralised capitalism

1.1.1 Role of Government in a Market Economy

A market economy is an economic system where resource allocation and production decisions are guided by prices established through voluntary exchanges between producers, consumers, workers, and owners of production factors. This system is characterised by decentralised decision making, allowing individuals and groups to make independent choices rather than relying on centralised planning. Typically, a market economy also entails private ownership of the means of production, thus operating within a framework of 'capitalism' or a free market system. The market economy, while efficient in many respects, is not flawless and presents vulnerabilities that can lead to market failures, necessitating corrective actions. They are as follows:

1. Limitations of the Laissez-Faire Doctrine: The laissez-faire doctrine, appealing for its economic liberalism, competition, and focus on self-interest, has proven impractical in reality. The failure of laissez-faire policies became evident during the Great Depression of the 1930s, marking an era where government intervention became important. Economist John Maynard Keynes argued for a form of controlled capitalism, where

- Limitations of laissez-faire and Keynesian intervention

government intervention stabilises economic demand. During economic slowdowns, the State can increase public spending to fill demand gaps, while in inflationary periods, it can reduce excess demand through taxes or loans. The German economist Adolph Wagner proposed the “Law of Ever-Increasing State Activity,” suggesting a natural trend towards expanded State roles in both intensity and scope. This theory was later verified by Peacock and Wiseman, who found evidence supporting Wagner’s law, especially in terms of increasing public expenditure in Britain.

- Market failures and government provision

2. Provision of Collective Goods: Merit Goods, and Public Utilities: In advanced economies, private enterprise within a market economy meets most consumer needs. However, certain situations arise where the market cannot function adequately. Issues like externalities, public goods, uncertainty, and uneven distribution, contribute to market failures. Some goods, especially those benefiting society as a whole such as defence, public safety, and foreign aid cannot be provided efficiently by the market. These collective goods, which serve groups rather than individuals, cannot be withheld from those unwilling to pay for them. Additionally, services like fire protection, judicial administration, public parks, libraries, and schools are essential, but not profitable to provide. The economist Richard Musgrave introduced the concept of “merit goods,” which the government supplies to address basic social needs even if they are technically private wants. Examples include affordable housing, free education, and subsidised meals in schools. The state may also offer subsidies to alleviate poverty and improve living standards among disadvantaged groups. Infrastructural services like healthcare, transport, and communication fall within this priority, as their provision has widespread external benefits that private markets may not fully supply.

- Private vs. social interests’ imbalance

3. Divergence Between Private and Social Interests: A. C. Pigou, in *Economics of Welfare*, highlighted an imbalance between private and social interests in capitalist systems, often due to externalities in production. For example, a paper mill polluting a river negatively affects public health, whereas the establishment of a public park improves local conditions without compensation for the provider. Taxes and subsidies can reduce these issues i.e. by, maintaining social welfare by charging those who benefit and compensating those who incur

losses. The government also plays a regulatory role in discouraging the consumption of harmful substances (e.g., alcohol, drugs) and ensuring consumer safety in various industries.

- Government intervention in income redistribution

4. Redistribution of Income: A major drawback of market economies is the widening income gap between individuals and regions. Capitalists who control production typically enjoy substantial wealth, while labourers may struggle with low wages. To address this, the government redistributes income through social programmes, including welfare, social security, and unemployment insurance. It may also employ progressive taxation to reduce wealth disparities, taxing higher-income groups more heavily.

- Government's role in economic stabilisation

5. Economic Stabilisation Roles: Beyond the factors discussed, the government's responsibility includes general economic oversight to prevent extreme economic downturns or excessive inflation. Stable economic growth is achieved through fiscal and monetary policies, alongside the active participation of public enterprises in economic activities.

- Selective government intervention in capitalism

While the individual remains the best judge of personal interests in a capitalist system, government intervention is validated, when necessary, to reduce market failures. Intervention should thus be exceptional, ensuring that the foundational principles of capitalism remain preserved.

1.1.2 Public Good

- Private goods are excludable and rivalrous, while public goods are non-excludable and non-rivalrous.

To understand the concept of public goods, it is useful to consider their counterpart: private goods. Private goods are commonly exchanged in markets, where buyers and sellers interact through the price mechanism. When a mutually agreeable price is established, the ownership or use of the good or service can be transferred. Consequently, private goods are typically excludable, possessing clearly defined owners and exhibiting rivalry in consumption. For instance, once a slice of cake is consumed, others cannot enjoy it. In contrast, a public good is defined as a commodity or service that is accessible to all members of society without reducing its availability for others. Public goods are generally provided by the government and financed through taxation. Examples include public parks, roads, schools, and national defence, as well as fundamental needs like clean air and drinking water. Economically

speaking, public goods are characterised as non-excludable and non-rivalrous. A good is considered non-excludable if individuals cannot be prevented from enjoying its benefits once it is available. It is non-rivalrous if the enjoyment of the good by one person does not reduce the amount available for others. Clean air is the best of a public good; one person's use does not deplete the air available to others it is not feasible to exclude individuals from using it. Similarly, national defence protects all residents of a nation, with the provision of defence to one person not reducing that protection for others.

- Public bads are harmful, non-excludable, and non-rivalrous goods

A public bad is defined as a harmful unit that is also non-excludable and non-rivalrous. For example, polluted air qualifies as a public bad because, similar to clean air, its negative effects cannot be confined to specific individuals. A perfect example of a private good is food: the consumption of a particular item by one person prevents others from consuming it, and it is possible to exclude individuals from accessing it through property rights. Some goods do not fit clearly into either category, being excludable yet non-rivalrous (like concert tickets) or non-excludable yet depletable (such as a public beach that may become overcrowded).

1.1.2.1 Characteristics of Public Goods

Public goods, by nature, are unlikely to be supplied in a free market due to the challenges firms face in charging for them. This phenomenon arises from two primary characteristics:

- A free rider is a person or entity that takes advantage of a resource or public good without paying for it or earning it.

1. Non-excludable: Once provided, it is impossible to prevent individuals from using these goods, even if they have not paid for them. This creates opportunities for 'free-riders' to enjoy the goods without contributing to their cost.

2. Non-rival: Consumption by one individual does not reduce the quantity available for others.

- Public goods benefits all without depletion

An example of a public good is street lighting. A firm that installs street lights cannot exclude individuals from benefiting from them, and the use of the light by one person does not reduce the light available to others. Other instances of public goods include clean air, street signs, and public parks. The status of public goods can change over time due to technological advancements that change their excludability. For example, encryption technology allows broadcasters to sell individual access to their programming. Examples of public goods

include national defence, clean air and drinking water, parks, schools, town roads, public fireworks etc.

1.1.2.2 Pure Public Goods

A pure public good is characterised by three main characteristics:

- 1. Non-rivalry:** If a good is available to individual A, it can simultaneously be available to individual B without any additional cost. Example: television broadcast signal.
- 2. Non-excludability:** Individual B cannot be prevented from enjoying the good, regardless of their willingness to pay. This aligns with the concept of externalities, where one person can impose costs or benefits on another without financial compensation.
- 3. Impossibility of Rejection:** If a good is provided for individual A, individual B cannot opt out of participating. This characteristic ensures that consumption is uniform among all users.

- Pure public good is non-rivalrous, non-excludable, and impossible to reject

When these conditions are met, every individual must consume the same amount of the good or service. A classic example of a pure public good is national defence, as protection from foreign threats benefits the entire community without exclusion. Examples of pure public goods include lighthouses, street lights, clean air, pollution abatement etc.

1.1.2.3 Impure Public Goods

In reality, it is rare to find goods that fully contain the characteristics of pure public goods, just as pure private goods are uncommon. Most goods exhibit the characteristics of both public and private goods. Goods that do not fit fully into either classification are referred to as impure public goods or quasi-public goods. If the public features exist, the good is classified as public; if private characteristics dominate, it is deemed private. Examples of impure public goods include aerial spraying of pesticides, airports, parks, highway systems, and streets and sidewalks. Pure public goods are defined by their dual traits of non-rivalry and non-excludability, while impure public goods meet these conditions only partially.

- Most goods are impure public goods, having both public and private good characteristics

Summarised Overview

A market economy, characterized by decentralised decision making and private ownership, relies on voluntary exchanges to guide resource allocation. However, it faces limitations, such as market failures, necessitating government intervention. The government's role includes addressing the failures of laissez-faire capitalism, providing collective and merit goods, managing externalities, redistributing income, and stabilizing the economy. While market economies work efficiently in many areas, government intervention becomes crucial in cases where the market cannot provide for social needs or correct imbalances. Public goods are non-excludable and non-rivalrous, meaning they are available to all without reducing availability for others. Unlike private goods, which are excludable and rivalrous, public goods like clean air, national defence, and public parks are typically provided by the government. These goods face the issue of free-riders, where individuals benefit without paying. Public goods can be pure (completely non-rival and non-excludable) or impure (with some private characteristics). Examples of impure public goods include parks and roads, where access can be restricted or crowded.

Assignments

1. Discuss the role of government in a market economy.
2. Discuss the balance between government intervention and the principles of capitalism.
3. Explain the concept of public goods, highlighting their characteristics and differences from private goods.
4. Discuss the challenges of providing public goods in a free market and the role of government intervention in addressing these challenges.
5. Write a note on pure and impure public goods, with examples.

Suggested Reading

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Space for Learner Engagement for Objective Questions

Learners are encouraged to develop objective questions based on the content in the paragraph as a sign of their comprehension of the content. The Learners may reflect on the recap bullets and relate their understanding with the narrative in order to frame objective questions from the given text. The University expects that 1 - 2 questions are developed for each paragraph. The space given below can be used for listing the questions.



SGOU



UNIT 2

PUBLIC AND PRIVATE FINANCE

Learning Outcomes

After completing this unit, learners will be able to:

- distinguish between public and private finance
- explain the concept and structure of public-private partnerships (PPP)
- analyse the significance of local finance

Background

Imagine a country like India, a rapidly developing nation with a population of over 1.4 billion people. As it tries to improve the standard of living for its citizens, India faces a complex challenge of balancing public services with the needs of private enterprises. From the construction of roads and bridges to healthcare and education, the government must manage public funds in ways that benefits society as a whole, while also promoting an environment where private businesses can grow. But how does the government raise money to fund these projects? And how does it ensure that private businesses contribute to the public good? Private finance is about individual and corporate investment, managing profits allocating resources for personal or business gains.

Public finance, on the other hand, deals with how a government collects funds (through taxes and other means) and uses them for the welfare of the public. While both are necessary for economic progress, they operate differently and often require collaboration to achieve the best outcomes for society. Take the case of India's infrastructure development. The government might invest heavily in building highways or public transportation systems. However, private companies might be involved in these projects through Public-Private Partnerships (PPPs), where the risks and rewards are shared. These partnerships combine the efficiency and capital of the private sector with the public sector's responsibility for social welfare. The role of local finance, which focuses on the management of funds at the municipal or regional level, is also important, as cities and states often handle infrastructure, education healthcare services that directly affect citizens' lives.

Keywords

Public Finance, Private Finance, Public-Private Partnership, Infrastructure Development, Local Finance

Discussion

1.2.1 Public Finance and Private Finance

Public finance relates to the management of funds by the government or public sector. It involves the revenue-expenditure processes of government and addresses the economic activities and policies undertaken by the State. Initially, it was defined as managing the public treasury, primarily focusing on the funds raised and spent by the government to maintain basic functions, such as law enforcement and defence. Over time, however, its scope has expanded to include goals associated with welfare economics, such as managing economic stability, promoting growth, addressing unemployment, and reducing income disparities. According to Musgrave, public finance includes the allocation of resources, distribution of income, and stabilisation of prices and employment, through taxation, public expenditure, and public debt.

- Public finance manages government funds, focusing on revenue, expenditure, and economic policies

The key areas within public finance are as follows:

- Public finance covers revenue, expenditure, financial administration, and stabilisation for economic growth

- 1. Theory of Public Revenue:** This area covers the sources of State income, comparing the benefits and drawbacks of each revenue source and guiding principles for selecting among them. Special attention is given to taxation, public debt, and currency creation.
- 2. Theory of Public Expenditure:** Public spending influences economic flows and affects demand and supply patterns, acting as a major tool for welfare, growth, and stabilisation policies.
- 3. Financial Administration:** This involves managing the public budget, including its approval, execution, auditing, and related processes.
- 4. Stabilisation and Growth:** These elements of government economic policy have become so significant that they are often discussed independently within public finance theory.

- Public finance shapes economic outcomes, while private finance optimises resources through market principles

Public finance covers the range of fiscal policies and operations, recognising the role of government in shaping economic outcomes. In contrast, private finance concerns the management of financial resources by individuals, households, or businesses. Its primary aim is to optimise financial activities based on market principles, following the principle of invisible hand of demand and supply. This framework suggests that individuals and private enterprises, operate efficiently in a minimally regulated market environment. Under laissez-faire economics, private finance was considered superior, with minimal government intervention, and it was believed that the private sector could address issues like capital formation and economic growth independently.

1.2.1.1 Similarities between Public and Private Finance

- Public and private finance both manage resources to meet societal needs

- Both public and private finance operate in a monetised economy where most transactions involve financial assets. Both sectors participate in activities like purchasing, selling, production, saving, and investment, which require financial resources.
- Both public and private sectors aim to meet social needs. While the public sector addresses collective needs, the private sector meets individual or business needs, with both sharing limited resources that need prioritisation.
- Both public and private finance face resource limitations and must make decisions that prioritise more pressing needs over others to maximise the effective use of resources.

1.2.1.2 Differences between Public and Private Finance

- A private party generally must work within its means and may engage in deficit spending but only within defined limits. By contrast, the government can engage in long-term deficit financing, relying on its authority to increase debt without the same market restrictions that a private firm faces.
- Governments can often secure loans at lower interest rates due to higher creditworthiness and can avail non-repayable loans or create favourable terms. In contrast, private parties must typically secure loans externally and at higher

rates.

- Public finance can engage in long-term deficit financing

- The government has the exclusive power to create legal tender or currency, which can be used to discharge debt obligations. Private entities lack this authority and must pay back their obligations in full without any option to issue currency as a substitute.
- Private finance operates on the market principle, driven by profit maximisation and economic rationality. Public finance, however, follows the budget principle, with priorities determined by social objectives rather than profit.
- Private finance often focuses on short-term gains. In contrast, public finance considers the economy's long-term welfare, willing to incur short-term losses for broader social objectives, including public welfare programmes.
- Private finance typically bases expenditure on available income, while public finance sets expenditure goals first, then seeks revenue through taxation, borrowing, or currency issuance to meet its budget needs.
- Unlike private finance, which is concerned primarily with individual or organisational welfare, public finance integrates with and supports the broader economic system, promoting balance and ensuring sustainable use of its resource-generation mechanisms.

1.2.2 Local Finance

- Local finance involves revenue and expenditure activities of local governments

Local finance refers to the revenue-raising and expenditure activities of local government bodies, such as municipalities, district councils, and village panchayats, which are responsible for providing essential public services at the grassroots level. Local finance includes all sources of revenue available to these bodies, including both tax and non-tax sources, as well as grants and loans from higher levels of government. The system of local finance in India operates within a framework that includes various local authorities, such as village panchayats, district councils (Zila Parishads), rural boards, and urban entities like municipal committees, municipal corporations, port trusts, and improvement trusts. Local governments form the third tier of governance in India, following the Central and State governments. Local self-governance works on activities that require specialised attention and adaptation of services to suit local needs, which is challenging at the state or national

level. These include functions such as maintaining parks, street lighting, and sanitation, requiring local adjustments based on community preferences and needs.

Functions and Responsibilities of Local Authorities

- **Village Panchayats:** These serve as the primary units of rural self-governance, focusing on judicial, social and economic services. They oversee basic protection, record-keeping (e.g., births and deaths), community vigilance, and they are involved in community education on hygiene, health, and agricultural practices. The panchayats also facilitate minor infrastructure projects such as local roads, irrigation, and drainage.
- **District Councils:** Positioned between state governments and village panchayats, district councils manage functions that are broader than the needs of a single village, but do not include an entire state. Their role is reduced by overlapping state and village authorities.
- **Urban Local Bodies:** These include municipal committees for towns and municipal corporations for cities. Municipal corporations are more autonomous and perform more extensive services such as education, sanitation, public health, and local transport. Municipal bodies like port trusts and improvement trusts focus on specific local functions.
- **Notified Area Committees:** These are established in areas with limited local revenue-generating capacity, such as cantonments, and depend heavily on state or central grants.

• Local authorities manage community-specific services

The components of local finance include:

1. **Tax Revenue:** Local bodies levy various taxes within their jurisdiction. They include:
 - **Property Tax:** Often based on the rental or market value of immovable properties.
 - **Entertainment Tax:** Levied on theatres, events, and places of entertainment.
 - **Profession Tax:** Imposed on professionals, trades, and callings within a local area.
 - **Vehicle and Cart Taxes:** Charged on non-motorised vehicles such as hand-carts and animal-driven carts.

- Local finance includes tax revenue, non-tax revenue, grants, loans, and capital financing

- Octroi (in some states): A tax on goods brought into a local area for consumption or use.
- 2. Non-Tax Revenue:** Includes fees, fines, and charges for specific services provided by local bodies, such as water supply, street lighting, waste collection, and parking fees. In some cases, larger municipalities also earn revenue from self-financing projects, like markets, housing developments, and electricity distribution.
 - 3. Grants and Transfers:** Local governments receive financial assistance from state or central governments to bridge revenue deficits. These grants can be general-purpose or specific-purpose, supporting projects like infrastructure development, health services, and educational facilities.
 - 4. Loans and Advances:** Local bodies can borrow funds from state governments, central governments, or financial institutions for capital-intensive projects, such as road construction, water supply systems, and housing development.
 - 5. Capital Financing and Betterment Levies:** To cover the costs of public infrastructure projects that increase local property values, local bodies may impose betterment levies or use other forms of capital financing.

- Local finance supports public services and development

Local finance plays a key role in enabling local governments to maintain public services, encourage economic development, and improve living standards at the community level. However, local finance can face challenges, such as reliance on grants, limited revenue-raising capacity, and the need for improved financial management. Local bodies in India depend heavily on property taxes and service charges, various recommendations call for improvements in assessment practices, grant stability, and the phased elimination of octroi due to its economic inefficiencies.

1.2.2 Public Private Partnership

- PPPs enable collaboration between the government and private companies to efficiently finance and operate projects

Public-Private Partnerships (PPPs) represent a collaboration between government agencies and private companies to finance, develop, and operate projects, including transportation networks, parks etc. Such partnerships enable projects to work more quickly or in some cases, make them feasible as government funding is limited. PPPs often grant private sector specific advantages, such as tax incentives, reduced liability,

or limited ownership rights, over public assets, or services. This model can bring expertise and efficiency from the private sector into public projects.

Public-Private Partnerships in India

In India, PPPs are tools for executing large-scale infrastructure and development projects. These partnerships are formal agreements established between government agencies and private companies. The model's success lies in the combination of government support with private sector expertise, ensuring projects are completed efficiently and on time. In many cases, private investment can either fully or partially fund the project, depending on the specific PPP model chosen. While it is challenging to pinpoint when PPPs first emerged in India, early examples include investments by wealthy individuals and companies in British-led railway projects. Another landmark instance was Tata's contribution to the Tata Hydroelectric Power Supply Company in the mid-1900s, which supplied power to Maharashtra, alongside significant investments in Calcutta Electric Supply Corporation for Kolkata's power needs. The liberalisation policies introduced in 1991 under Prime Minister P. V. Narasimha Rao allowed private parties to participate in public sectors like power. In 1995, private firms were allowed to engage in the construction and development of national highways, resulting in significant improvements in the quality and extent of the country's highway system.

- Drive infrastructure development through government-private sector collaboration

The key advantages of PPPs are:

- Private firms are held to high standards of quality, addressing common issues associated with government-only projects.
- Risks are distributed between the government and private entities, allowing a balanced sharing of potential financial and operational burdens.
- Private companies bring innovation and efficiency, often introducing new processes, products, and solutions.
- Government resources are freed up for other social initiatives, as private firms finance and manage specific projects.
- PPPs benefit private companies as well, enabling long-term profits. For instance, if a private firm builds a highway, its income from toll collections can generate consistent revenue.

- PPPs offer quality, risk-sharing, innovation, resource optimisation, and long-term profit opportunities



Types of Public-Private Partnership Models

Several PPP models are used in India, each suited to different project needs and financial structures:

- India uses various PPP models like HAM, BOT, BOLT, and EPC for diverse project needs

- Hybrid Annuity Model (HAM): The private sector covers 60% of investment costs, while the government provides the remaining 40%. The private party handles both construction and management, though the government retains ownership.
- Build-Operate-Transfer (BOT): In this model, the private firm oversees planning, construction, and operation, retaining revenues during the concession period. Ownership remains with government.
- Build-Operate-Lease-Transfer (BOLT): The private firm designs and constructs the project, then leases it to the government. Ownership goes back to the government once the lease expires.
- Engineer-Procure-Construct (EPC): Here, the private firm is responsible solely for construction. They receive a fixed payment from the government and have no role in revenue generation or project management after construction.

Notable Public-Private Partnership Projects in India

Here is a list of significant public-private partnership (PPP) projects across various sectors in India:

1. Transportation and Infrastructure

- Delhi Metro Rail
- Mumbai-Pune Expressway
- Bandra-Worli Sea Link, Mumbai
- NHAI Toll Roads

2. Airports and Aviation

- Chhatrapati Shivaji International Airport, Mumbai
- Kochi International Airport
- Jewar Airport, Noida

3. Energy and Power

- Ultra Mega Power Projects (UMPPs)

- Solairedirect Solar Power Projects
- Bhadravati Power Project, Maharashtra

4. Healthcare

- Ayushman Bharat Health Centres
- COVID-19 Vaccine Distribution
- Dialysis Centres in Public Hospitals

5. Urban Development and Housing

- Smart Cities Mission
- Affordable Rental Housing Complexes (ARHC)
- Slum Rehabilitation Scheme, Mumbai

6. Education and Skill Development

- National Skill Development Corporation (NSDC)
- Vedanta and NITI Aayog's PPP for Digital Classrooms
- Operation Blackboard

7. Water Supply and Sanitation

- 24x7 Water Supply Project, Nagpur
- Swachh Bharat Mission
- Ganga Action Plan

8. Telecommunications and IT

- BharatNet Project
- CSC e-Governance Services
- Wi-Fi Hotspots in Railway Stations

9. Agriculture and Irrigation

- Irrigation Projects in Maharashtra
- Food Parks
- Agri-Tech Solutions for Farmers

10. Ports and Maritime

- Jawaharlal Nehru Port Container Terminal (Nhava Sheva)



- Kamarajar Port Limited, Chennai
- Sagarmala Project

11. Railways

- Tejas Express
- Dedicated Freight Corridor
- Redevelopment of Railway Stations

12. Tourism and Hospitality

- Incredible India Tourism Campaigns
- Eco-tourism Projects
- Hotel Management at Heritage Sites

- Notable PPP projects in India span sectors like transportation, energy, healthcare, urban development, etc.

These projects across sectors demonstrate the wide reach and success of PPP models in addressing India's infrastructural, social, and economic challenges, while optimising resources, sharing risks, and promoting innovation. Public-private partnerships have huge potential in India's journey toward becoming a \$5 trillion economy. While PPPs come with challenges such as risks related to land acquisition, demand fluctuations, and maintenance they remain an effective tool for tackling economic and social challenges.

Summarised Overview

Public finance involves the management of government funds, focusing on revenue, expenditure, and economic policies. Its scope includes welfare economics, economic stability, growth, and income redistribution. Key areas of public finance include the theory of public revenue, expenditure, financial administration, and stabilisation for economic growth. In contrast, private finance concerns individuals, households, and businesses managing their financial resources to optimise activities in a market-driven environment. While both sectors aim to meet societal needs and face resource limitations, public finance engages in long-term deficit financing and supports broader economic welfare, whereas private finance operates within market restrictions and prioritises profit maximisation.

Local finance refers to the financial activities of local government bodies, such as municipalities, district councils, and panchayats, aimed at providing essential services at the grassroots level. This includes generating revenue through taxes, fees, grants, and loans from higher levels of government. Local authorities are responsible for community-specific services like sanitation, local roads, and public health. The revenue sources for local finance include property tax, entertainment tax, vehicle taxes, non-tax revenues, grants, and loans. However, local finance faces challenges like reliance on grants, limited

revenue-raising capacity, and the need for better financial management practices.

Public-Private Partnerships (PPPs) involve collaboration between government agencies and private companies to finance, develop, and manage large-scale infrastructure and public projects. This model leverages private sector expertise and efficiency, which help complete projects more swiftly and sometimes makes them feasible when government funding is limited. In India, PPPs have been instrumental in infrastructure development, including transportation, energy, healthcare, and urban development. Various PPP models such as Hybrid Annuity Model (HAM), Build-Operate-Transfer (BOT), and others are used depending on project needs. Notable PPP projects in India include the Delhi Metro, Chhatrapati Shivaji International Airport, and the Smart Cities Mission.

Assignments

1. Discuss the similarities and differences between public finance and private finance.
2. Examine the role of local finance in enabling local governments to provide essential public services and promote economic development at the grassroots level.
3. Analyse the role of Public-Private Partnerships in infrastructure development in India.
4. Discuss the different PPP models employed in India

Suggested Reading

1. Grimsey, D., & Lewis, M. K. (2004). *Public-Private Partnerships: The Worldwide Revolution in Infrastructure Provision and Project Finance*. Edward Elgar Publishing.
2. Ghosh, A. K., & Ghosh, P. (2018). *Public-Private Partnership Models and Trends*. Springer.
3. Ministry of Housing and Urban Affairs, Government of India. Local governance and municipal finance reforms. Retrieved from <https://mohua.gov.in>

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1. Bhatia, H. L. (2021). *Public Finance* (30th ed.). Vikas Publishing House.
2. Ministry of Finance, Government of India. (n.d.). Public-Private Partnership in India. Retrieved from <https://www.pppinindia.gov.in>
3. Grout, P. A. (2003). *Public and Private Sector Discount Rates in Public-Private Partnerships*. *The Economic Journal*, 113(486), C62–C68.



Space for Learner Engagement for Objective Questions

Learners are encouraged to develop objective questions based on the content in the paragraph as a sign of their comprehension of the content. The Learners may reflect on the recap bullets and relate their understanding with the narrative in order to frame objective questions from the given text. The University expects that 1 - 2 questions are developed for each paragraph. The space given below can be used for listing the questions.

SGOU



UNIT 3

CLUB GOODS AND COMMON PROPERTY RESOURCES

Learning Outcomes

After completing this unit, learners will be able to:

- understand the Buchanan model of club goods
- evaluate the Tiebout model of local public goods
- discuss the concept of common property resources
- explain the Tragedy of the Commons

Background

Imagine a country like Nepal, in the Himalayas and home to dense forests, rivers, and fertile lands. These natural resources have been a lifeline for its people for centuries, providing essentials like water, timber, and grazing lands for livestock. In many rural areas, forests are community property, shared by villages for firewood, fodder, and small-scale farming. The success of this communal system depends on trust, cooperation, and agreed-upon rules among community members. However, challenges arise as the population grows, urbanisation expands, and modern industries demand more resources. Overharvesting of timber and overgrazing can lead to deforestation and soil erosion, threatening not only the environment but also the livelihoods of the people who depend on these resources.

A different example can be seen in the fate of global fisheries. Many oceans and seas, such as those surrounding nations like Japan or Norway, are treated as common property, open to all for fishing. Without strict rules or cooperation among nations, overfishing often leads to depleted fish stocks, threatening ecosystems, and economies alike. This phenomenon, known as the tragedy of the commons, highlights how the lack of regulation in shared resources can result in their rapid degradation. These real-world examples reflect the delicate balance required to manage resources that belong to everyone but are owned by no one. To understand how societies address these challenges, economists and policymakers have developed theories and models that explain the behaviours of individuals and communities when managing shared spaces.



Keywords

Buchanan Model, Tiebout Model, Club Goods, Local Public Goods, Common Property Resources, Tragedy of Commons

Discussion

1.3.1 The Theory of Clubs: Buchanan Model

- Buchanan's model of club goods

James J. Buchanan's paper "An Economic Theory of Clubs" in 1965 developed a model for goods that are neither fully private nor purely public. Traditional economic models often consider only two types of goods: private goods (consumed individually) and public goods (shared without diminishing in utility to any user). Buchanan introduces the concept of "club goods" to address scenarios where goods or service is shared within an optimal size group. This is significant because many real-world goods, such as parks, pools and membership-based facilities, fall into this category. By proposing a structured theory for these types of goods, Buchanan provides tools to analyse and determine the most efficient group size for shared consumption.

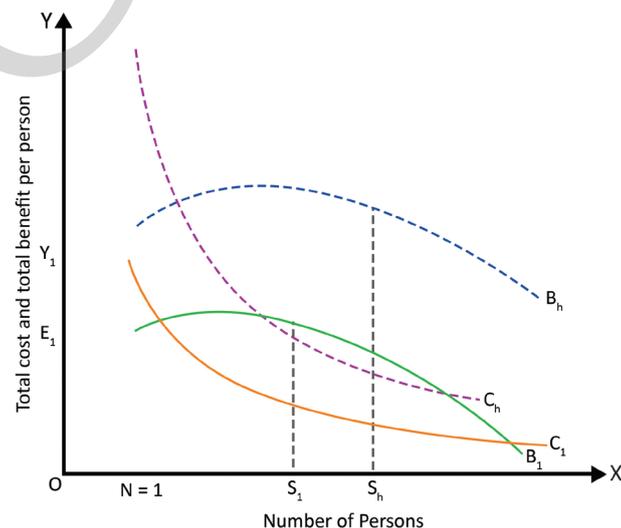


Fig 1.3.1. Total Costs and Benefits per Person

The above given figure illustrates how the size of a group sharing a fixed facility, such as a swimming pool, affects the

costs and benefits per individual. On the x-axis, the number of individuals in the sharing group (club size) is measured, while the y-axis represents the total monetary costs and benefits per person. The Total Cost Curve (C_1) shows that as more individuals join the club, the cost per person decreases because the fixed cost of the facility is distributed among a larger group. For instance, if a swimming pool costs \$1,000, a two-member group pays \$500 per person, whereas a ten-member group pays only \$100 per person. However, the Total Benefit Curve (B_1) initially increases with group size as the shared use increases utility. But, after a certain point, this benefit starts to decline due to congestion effects. For example, as more people use the pool, the experience becomes less enjoyable due to overcrowding. The Optimal Club Size (S_1) is determined where the marginal cost of adding an extra member equals the marginal reduction in benefits caused by congestion. At this point, the group size balances cost savings and utility derived from sharing, offering the maximum net benefit to individuals. Now, let us look at the effect of increasing size of the facility. We can create a total cost curve and a total benefit curve, and find the optimal club size. Another optimum is shown at S_h , based on the quantity of goods represented by the curves C_h and B_h . This process can be repeated for any possible facility size or for each possible quantity of goods. Buchanan expands traditional utility functions to include club size (N), where utility (satisfaction) derived from a shared good is a function of both the goods itself and the number of people sharing it. This reflects how adding more members affects an individual's utility either positively through cost-sharing or negatively through congestion. For purely private goods, optimal club size is one (individual use). For purely public goods, club size approaches infinity. Club goods, however, have a defined optimal membership where the benefits of sharing are maximised before congestion sets in.

- The illustration shows how group size affects costs, benefits, and optimal club size

- Model suggests optimal club size balances shared utility and costs, avoiding overcrowding

Buchanan's modification of utility functions to include club size helps model these intermediate scenarios. In practical terms, this means that a club's membership should be structured so that the shared utility outweighs individual costs, but without overcrowding. For example, a community pool might have optimal utility at 50 members, where costs are minimised, but crowding is still manageable.

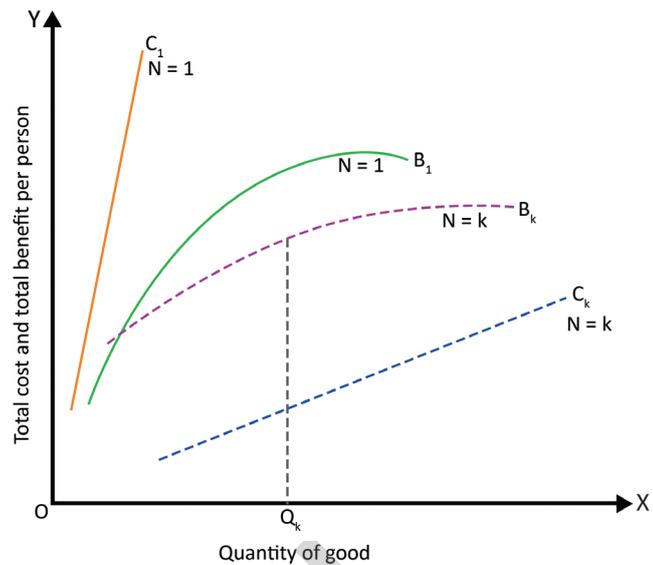


Fig 1.3.2. Goods Quantity and Club Size

The above figure examines how the optimal size of a facility (goods quantity) varies with the number of individuals in the club. The x-axis measures the physical size of the facility, such as the area of a swimming pool, while the y-axis reflects the total costs and benefits per individual. The Total Cost Curve (C_k) rises with an increase in facility size because larger facilities cost more to build and maintain. Meanwhile, the Total Benefit Curve (B_k) initially rises, as larger facilities provide greater utility to individuals. However, beyond a certain point, the benefit curve flattens, showing diminishing returns from additional facility size. For example, a larger swimming pool might allow more people to swim comfortably, but beyond a certain size, the additional benefit becomes negligible. The Optimal Goods Quantity (Q_k) for a specific group size is the point where the cost and benefit curves align. This ensures that the facility is neither too small to handle the group nor unnecessarily large, which would increase costs without proportional benefits. Larger groups generally require larger facilities to maintain the same level of utility per individual.

- The figure shows optimal facility size balancing costs and diminishing benefits

Buchanan introduces marginal conditions that must be met for an optimal club size. In standard economic models, marginal utility and marginal cost are used to determine individual consumption choices. In Buchanan's theory, these must be extended to include the effects of club size. This is done by adding a club-size variable to the marginal rate of substitution (the trade-off rate of different goods). For each item of goods in a shared setting, an equilibrium is reached when the utility

- Theory balances utility and costs to determine optimal club size, accounting for congestion effects

- Theory balances cost-sharing benefits and congestion to determine ideal club size

derived from an additional member equals the additional cost they bring, which may be either positive or negative. The marginal condition implies that individuals in a club should benefit from an additional member only up to the point where added utility equals the increased cost (such as dues or shared fees). This extension of the marginal condition allows us to assess the ideal point of membership where collective benefit is maximised while individual burden is minimised. In cost-benefit analysis of clubs, the total benefit curve shows how an individual's benefit changes as the club size increases with a fixed resource. Initially, the benefits may rise as more people join, for example, as the cost per user decreases. However, once the club exceeds a certain size, the benefits start to decline due to overcrowding, as additional members reduce individual utility. The total cost curve illustrates how the cost per member decreases as the club size grows, with each individual's share of the cost becoming smaller. However, beyond a certain point, the reduction in cost may not offset the decrease in utility caused by congestion. This congestion effect occurs when the optimal group size is exceeded, and overcrowding reduces the overall benefit for each member, leading to diminishing utility from further increases in membership.

The balance between cost-sharing benefits and congestion costs is crucial in club theory, as shown in Buchanan's diagrams. For example, a community park may provide high utility to a small group but becomes less enjoyable as more people use it. The theory helps determine the ideal membership level for any shared facility.

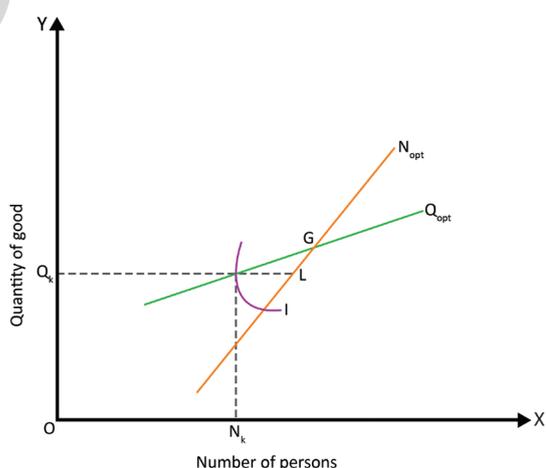


Fig 1.3.3. Combined Analysis of Club Size and Goods Quantity

The figure above combines the understanding from the first two

- The figure shows the equilibrium point where optimal club size and facility size intersect, balancing utility and costs

- Buchanan's uses balance group size and resource quantity to maximise utility and minimise costs

- Exclusion in club theory ensures fair cost-sharing and optimal resource use through membership control

figures to determine the overall equilibrium, considering both club size and facility size. The x-axis represents the number of individuals in the club, while the y-axis measures the size of the facility. The Optimal Club Size Curve (N_{opt}), derived from the first graph, shows the ideal number of members for a given goods quantity. As the facility size increases, the club can accommodate more individuals without causing congestion. The Optimal Goods Quantity Curve (Q_{opt}), derived from the second graph, illustrates the ideal facility size for a specific group. Larger groups require proportionally larger facilities. The intersection of these two curves marks the equilibrium point (G), where both the optimal club size and goods quantity are achieved simultaneously. At this point, the club's resources are used most efficiently, maximising individual utility while minimising costs. For example, a swimming pool of a specific size may provide the best balance of cost and utility for a group of 20 members. Deviations from this point would either overcrowd the facility or result in an underutilised resource.

Buchanan uses a series of diagrams to express equilibrium in terms of both goods' quantity and group size. As shown in his illustrations, an optimal balance exists between group size and the amount of the shared goods. Larger group sizes reduce per-member costs but also reduce individual utility due to congestion. By identifying the optimal combination of group size and resource quantity, the diagrams help find the club's equilibrium point, where individual utility is maximised relative to shared costs and group size.

Exclusion is a central theme in club theory, as the ability to restrict access prevents free-riders (non-paying members) from benefiting without contribution. Buchanan emphasises that flexibility in property rights (such as membership or licenses) can increase optimal club functioning by allowing access control. An example can be the case of a lighthouse: if only licensed ships could benefit from the lighthouse, costs would be shared fairly without non-payers receiving benefits. Flexible exclusion mechanisms are important for the functionality of club goods, where membership fees or dues maintain optimal utility and cost distribution among members. Without exclusion, public resources face overuse and depletion, reducing utility for all. Income plays an influential role in determining whether goods remain club-like or become privatised. Higher incomes allow more people to afford exclusive or private access, which decreases the need for shared resources. Conversely,

in lower-income areas, communal facilities and shared goods become more common as a cost-saving measure. For example, in wealthier neighbourhoods, households may have private pools, whereas middle- or lower-income communities may share public pools. This income effect highlights how economic circumstances influence the choice between private and shared goods, with club goods becoming more common where private consumption is economically impractical.

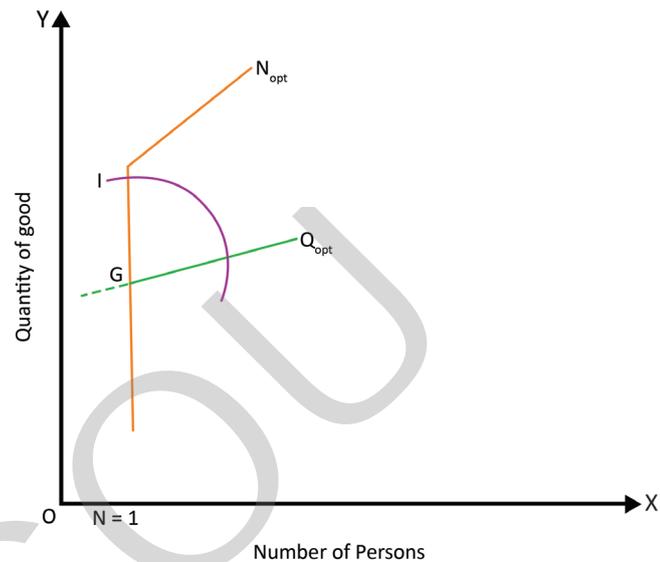


Fig 1.3.4: Special Cases of Purely Private and Public Goods

The above figure explores the extremes of goods classification: purely private goods and purely public goods, highlighting their implications for club size and utility. The x-axis represents the number of individuals in the club, and the y-axis shows costs and benefits per person. For purely public goods, such as national defence, congestion does not occur because the goods is non-rivalrous. The total benefit curve is horizontal, as adding more members does not reduce individual benefits. Furthermore, the cost per person approaches zero as the group size becomes infinitely large. In this case, the optimal club size is infinite, meaning public goods can be shared by an unlimited number of individuals without reducing utility. In contrast, purely private goods, such as personal clothing, offer exclusive benefits to the individual. Sharing such goods reduces their utility significantly. The optimal club size is one, meaning private goods are not suited to sharing arrangements. Any attempt to increase the group size diminishes individual utility, as the goods cannot be used simultaneously by multiple people. Most goods fall between these extremes, making the

- The figure contrasts public goods with infinite club size and private goods with a club size of one

theory of clubs applicable. For example, semi-public goods like swimming pools or golf clubs involve some degree of sharing but require limits to avoid congestion and inefficiency.

Club theory has practical applications in various fields. In government services, optimal club sizes tend to decrease as incomes rise, allowing smaller local governance units to serve to wealthy communities. Public facilities such as parks, swimming pools, and recreational areas operate efficiently within the club model, using entry fees and memberships to regulate access and align costs with utility. Similarly, corporate, and private clubs often apply Buchanan's principles to manage memberships and ensure high levels of utility for their members. Buchanan's theory applies to any context where exclusion is feasible and membership benefits depend on optimal group size. While Buchanan's theory provides a structured approach to club goods, it is limited to scenarios where exclusion is possible. Non-excludable goods, such as clean air or national defence, do not benefit from this theory. Additionally, individual preferences for club members or selectivity are not factored into the model, which could affect real-world applications. Buchanan's contribution remains valuable in understanding and optimising shared resources, highlighting a balance between group size, cost-sharing, and utility. His theory is widely applicable to communal and private clubs, helping establish efficient sharing arrangements for various collective goods.

- Club theory optimises group size, costs, and utility in excludable goods, but does not apply to non-excludable goods

1.3.2 Tiebout's Model

According to Tiebout, communities have two primary strategies to attract more residents. One option is to form a cartel and enforce a standardised tax rate across multiple communities. Alternatively, communities can engage in competitive tax policies to draw individuals to their locality. Tiebout emphasised this tax competition as a key element in allocating local resources independently of government intervention. Local public goods, by definition, benefit only the residents of a particular community rather than the population at large. The fundamental idea here is that individuals must consume all goods both public and private at the same location. In many theories of public goods, consumption of public goods and locational choice are inherently linked. Tiebout argued that if public goods are local, a market-like solution might be feasible, at least approximately, reducing the need for government involvement. The Tiebout model considers

- Tiebout's model emphasises tax competition and voting with feet to efficiently allocate local public goods

multiple communities offering varying levels of public goods. A unique feature of the model, often called “voting with their feet,” suggests that individuals will choose the community that best meets their preferences, thus revealing their demand for public goods and addressing the difficulty of revealing true individual preferences. Foot voting can be an effective way to maintain order within communities.

Assumptions of the Tiebout Model

1. Consumers are perfectly mobile, moving to communities where their set preferences are best satisfied.
2. Consumers have full knowledge of differences in revenue and expenditure patterns and respond to these variations.
3. A large number of communities are available, providing choice for consumers.
4. All income is derived from exogenous dividends.
5. No spillover effects exist between communities, meaning public services create no external economies or diseconomies.
6. The average cost of public goods provision follows a U - shaped curve, indicating an optimal, cost-minimising population size.
7. Communities either seek to expand or contract, depending on whether their population is below or above this optimal size.

- Optimal community sizes, driven by economic pressures and local services, shape residents’ choices for public goods provision

An allocation within the Tiebout model includes a consumption bundle for each resident and a production plan for each business. In cases where a city’s population becomes too large, economic pressures such as rising living costs naturally encourage residents to relocate. Conversely, communities at an optimal size can manage their population stability more easily through zoning laws and realtor agreements. Tiebout argued that under these assumptions, communities would achieve efficient public goods provision, attaining optimal sizes with resident satisfaction in terms of public goods and tax levels. While Musgrave and Samuelson noted that central governments handle many expenditures, local governments often manage services like policing, education, and fire protection, making an analysis of local government activities important. These services and amenities, such as schools, parks, police protection, roads, and parking, strongly influence individuals’ choice of municipality, though non-economic

factors can also play a role.

The Tiebout model uses a general equilibrium framework, incorporating allocation and production plans for consumers and firms. Within this model, each region has a public goods bundle created by the regional government, ensuring one suitable region per consumer. A Tiebout equilibrium exists when the following conditions hold:

- Consumers optimise choices, firms maximize profits, and local governments balance budgets and meet public goods goals

1. Consumers choose their consumption bundles optimally.
2. Consumers select their communities without desiring to relocate, given the public goods levels and tax structure in each region.
3. Firms operate at profit-maximising levels.
4. Markets are balanced.
5. Each local government maintains a balanced budget.
6. Each local government's public goods and tax plan meets its objectives.

- Efficiency requires restrictive assumptions

While efficient outcomes in Tiebout models are theoretically possible, they generally require restrictive assumptions. Important considerations include the appropriate number of communities, the optimal distribution of individuals across them, and the adequacy of each community's public goods provision. Essential model features affecting equilibrium include the objectives of local governments, the available tax mechanisms, the pattern of factor ownership, and the nature of local competition.

In a simplified version of the Tiebout model, the economy consists of identical individuals, each contributing one unit of labour that remains inelastic regardless of residence. Labour produces an output goods, Y , which can be converted into one unit of a private goods, x , or a public good, g . The technology for producing Y follows:

1. $f(0)=0, f' > 0, f'' < 0$

An individual's preference for public good g and private good x_i is represented as:

$$u(g, x_i)$$

For a community of N individuals, total resources are expressed

as:

$$Nx_i + g = f(N)$$

When resources are distributed equally among residents, the allocation is:

$$x_i + \frac{g}{N} = \frac{f(N)}{N}$$

Optimal community size involves a balance, where an increase in N reduces the per capita productive good Y , yet also decreases the per capita cost of providing public goods. The Pareto efficient allocation is obtained through the following optimisation:

Maximise $u(g, x_i)$ subject to $Nx_i + g = f(N)$

The first-order conditions are:

$$U_x - \lambda N = 0$$

$$U_g - \lambda = 0$$

From these, the Samuelson Condition emerges:

$$\frac{NU_g}{U_x} = 1$$

And, when the third condition applies:

$$F'(N) = x_i$$

Thus, combining the resource constraint and these conditions yields:

$$g = f(N) - Nf'(N)$$

When workers or consumers receive rewards equal to the marginal product of labour, at optimal population size, the return to fixed resources like land aligns with the cost of local public goods provision.

Two factors can be noted from this model:

1. Changes in public service costs affect production levels.
2. Mobility costs between communities play a major role.

For instance, if lifeguard wages increase nationwide, taxes



- Increased lifeguard wages raise taxes, affecting mobility and service demand efficiency

in beachside communities rise. Residents with minimal preference for beach access may then reconsider staying, balancing tax savings against moving costs. The extent of such decisions often depends on the availability of alternative communities. Therefore, unlike private markets, mobility costs impact the demand for services in these models, meaning higher relocation costs typically reduce resource allocation efficiency.

- Tiebout model explains local public goods allocation through mobility, competition, and resident preferences

The Tiebout model offers a compelling approach to understanding the efficient allocation of local public goods through a framework of mobility and competition among communities. By “voting with their feet,” individuals reveal their preferences for public goods and taxation levels, thereby overcoming the traditional problem of preference revelation associated with public goods theory. The model’s efficiency is challenged by practical considerations like the costs of mobility, the complexity of maintaining optimal community sizes, and variations in local government objectives. Despite these limitations, the Tiebout model remains a valuable theoretical construct for examining decentralised public good provision and highlighting the relationship between local government policies and resident choice in community.

1.3.3 Common Property Resources

Common Property Resources (CPRs) are resources that are accessible to all members of a community but lack individual ownership rights. While these resources are collectively owned and used by communities, they are subject to certain rules and norms that govern their access and utilisation. The characteristics of CPRs include:

- CPRs are shared, non-exclusive resources managed collectively to ensure sustainability

- No single individual has exclusive rights over CPRs. Access is typically available to a defined community, making it difficult to exclude any member of that community.
- Use of the resource by one individual reduces its availability for others. This means that excessive use by one person can lead to diminished benefits for others.
- Though CPRs are accessible to many, they are often managed collectively by the community or under customary rules to ensure sustainable use and avoid depletion.

Common examples of CPRs include forests, grazing lands, water bodies (like rivers, lakes, and tanks), and fisheries. CPRs in rural and semi-urban areas can be classified broadly

into land, forest, and water resources:

- CPRs include land, forest, and water resources managed collectively by communities

- **Land Resources:** This includes panchayat lands, government-owned lands, village common lands, unclassified forests, and wastelands. These lands are often used for grazing, fodder collection, or as community gathering spaces.
- **Forest Resources:** Unclassified and protected forests can serve as CPRs. Local communities often depend on them for fuelwood, fodder, and non-timber forest products. However, these forests are not reserved areas, so they are open to the community for use.
- **Water Resources:** Natural water bodies like rivers, lakes, groundwater, and wetlands fall under CPRs. Even some man-made resources like tanks, ponds, and canals can be considered CPRs if they are used and managed collectively by the community.

CPRs are essential to the livelihood and survival of rural communities, particularly for economically disadvantaged groups. Some key roles of CPRs are:

- CPRs supports rural livelihoods

- CPRs provide resources like grazing lands for livestock, fuelwood, and other forest products. For those who own little or no private land, CPRs are a lifeline, supporting their income and sustenance.
- CPRs provide uncultivated foods, wild plants, medicinal herbs, and resources that help communities meet their basic needs without monetary exchange.
- Women, especially in rural areas, are often responsible for gathering fuelwood and fodder for the household. CPRs offer easier access to these resources, which directly benefits the household and reduces the time and effort women would otherwise spend on resource gathering.
- CPRs help maintain biodiversity, protect soil, and water quality, and provide habitats for various species. The collective management of these resources also ensures ecological balance in rural regions.
- Tribal communities and other traditional forest dwellers depend heavily on forest CPRs for survival. These resources provide essential products like food, fuel, medicinal plants, and materials for their daily needs.

Despite their importance, CPRs face several significant challenges such as:

- Since CPRs are accessible to everyone in the community, they are prone to overuse. For instance, overgrazing by livestock on community pastures can lead to soil degradation, reducing the land's productivity over time.
- As population pressures increase, CPRs are often encroached and converted for private agricultural or residential use. This deprives the community of shared resources and reduce the sustainability of CPRs.
- In many cases, no clear rules manage CPRs, leading to 'free-for-all' use. This absence of regulated use can quickly result in depletion or ecological damage.
- CPRs often have unclear legal status, with overlapping rights between the state and the community. This can lead to conflicts over usage and affect effective conservation.
- Unsustainable practices, such as excessive groundwater extraction, deforestation, and pollution, contribute to the degradation of CPRs, threatening their availability and productivity for future generations.

• Challenges in managing and sustaining CPRs

• Overuse drains shared resources

The Tragedy of the Commons is a concept introduced by Garrett Hardin (1968) to explain how individual rationality can lead to collective ruin. Hardin illustrated this with the example of shepherds grazing their cattle on common land. Each shepherd wants to increase their number of cattle to maximise their personal gain. However, if all shepherds follow this logic, the land becomes overgrazed, resulting in resource depletion that harms everyone. This phenomenon reflects the issues faced by CPRs: when individuals act in self-interest, the lack of regulation leads to overuse and eventual depletion. While Hardin's example is often applied to open-access resources without ownership, similar challenges can occur with CPRs if there are no effective management or regulatory practices in place.

Ensuring the sustainable use of CPRs is essential for rural development and ecological balance. Some strategies for managing CPRs include:

- Empowering local communities to manage CPRs encourages a sense of responsibility. Communities with established rules for use often achieve sustainable management.

For instance, in some Indian villages, community groups set rules on how many animals each family can graze on shared lands, preventing overuse.

- Sustainable CPR management strategies

- Establishing clear legal ownership and management rights over CPRs can help prevent encroachment and misuse. When communities have formal rights, they are more likely to manage the resources sustainably. India's Forest Rights Act is an example of an attempt to formalise these rights for forest-dwelling communities.
- Educating communities about the environmental importance of CPRs and training them in sustainable resource practices can lead to better conservation. Understanding the link between resource depletion and community well-being encourage responsible usage.
- Offering economic incentives for conservation, such as payments for ecosystem services, can motivate communities to manage CPRs sustainably. For example, communities could receive compensation for maintaining forests that prevent soil erosion or conserve biodiversity.

- Sustainable management of CPRs ensures livelihoods and rural development

Common Property Resources play an important role in the socio-economic landscape of rural India. They provide essential resources for livelihoods, contribute to environmental stability and support marginalised communities. However, CPRs are vulnerable to overuse, mismanagement, and degradation due to unclear ownership and a lack of regulation. To ensure that CPRs remain viable, it is important to adopt sustainable management practices that involve local communities and support their traditional rights. Clear legal frameworks, community management, and awareness programmes can help protect CPRs for future generations, promoting sustainable rural development.

1.3.4 Tragedy of the Commons

- Overuse of shared resources

The Tragedy of the Commons is a concept in economics that describes a situation where individuals, acting in their own self-interest, deplete or degrade a shared resource, even though it is in everyone's long-term interest to preserve it. The term was popularised by Garrett Hardin in 1968, building on earlier work by William Forster Lloyd. It highlights the tension between individual incentives and collective welfare in the context of common-pool resources.

Characteristics of the Tragedy of the Commons:

• Key features of common resources

1. **Rivalry in Consumption:** A common resource is one where consumption by one individual reduces the amount available for others. For example, overgrazing a pasture diminishes the land's ability to support livestock for all.
2. **Non-Excludability:** This means that no one can be effectively excluded from using the resource. For example, anyone can fish in a public ocean, so no one can prevent others from exploiting it.
3. **Scarcity:** A common resource is limited in supply, and as the resource is overused, its availability diminishes for everyone.
4. **Common-Pool Resources:** These resources have both public and private characteristics. They are shared but also limited, which makes them susceptible to overuse.

• Examples of overconsumption and its impact

Over consumption causes significant environmental and social challenges and there are many real-world examples. The growing demand for coffee has caused habitat loss, necessitating sustainable agricultural practices. Overfishing has depleted species like the Pacific bluefin tuna, with 34% of global fish stocks being overexploited. Fast fashion contributes to waste and pollution, as seen with brands destroying unsold goods. Increased road use leads to traffic congestion, transportation inefficiencies, and heightened air pollution, impacting public health. Unsustainable ground water use in areas like parts of the United States results in resource depletion and water shortages, explaining the need for sustainable management.

Solutions to Prevent the Tragedy of the Commons:

1. **Regulatory Approaches:** Imposing restrictions, such as quotas on catching fish or limits on the number of live stock in a common grazing area, can help manage resources sustainably. Assigning exclusive property rights over resources can incentivise individuals to manage resources sustainably.
2. **Collective Action:** Nobel laureate Elinor Ostrom's work shows that local communities can manage resources effectively through shared norms, customs, and self-regulation, avoiding the need for external government intervention.
3. **Behavioural Changes:** Encouraging the use of sustainable resources or switching to alternatives (e.g.,

- Approaches to sustainable resource management

buying sustainable fashion) can reduce overuse of a common resource. Implementing measures preventing over consumption like imposing fees for plastic bags or limiting water use during droughts can motivate individuals to reduce their consumption.

- Tragedy of the Commons and sustainable solutions

The Tragedy of the Commons explains the conflict between individual interests and the collective good. While the pursuit of personal gain may seem rational in the short term, it often leads to the depletion of shared resources, to the loss of society as a whole. Solutions lie in creating incentives to reduce overuse, whether through regulation, property rights or collective action, and encouraging more sustainable behaviours across society.

Summarised Overview

Buchanan's "Economic Theory of Clubs" introduces the concept of club goods, which are shared resources that are neither fully private nor public. These goods, such as parks or membership-based facilities, require an optimal group size for efficient use. Buchanan's model balances the costs and benefits per person in a shared environment. The key insight is that costs decrease with more members, but benefits eventually decline due to congestion. The model helps identify the optimal club size by considering both costs and benefits, with the aim of maximising utility while minimising overcrowding. Buchanan also explores exclusion mechanisms, where limiting access ensures fair cost-sharing and efficient resource use. The theory is applicable to any situation where exclusion is feasible, such as private clubs or public facilities that can manage membership and use. Tiebout's model explains how communities allocate local public goods efficiently through tax competition and mobility, where individuals choose the community that best meets their preferences. This model suggests that consumers are perfectly mobile and will "vote with their feet," moving to communities offering the optimal combination of public goods and tax levels. Tiebout assumes that communities operate independently, each providing a bundle of local services that residents value, and that consumers have full knowledge of these offers. The model highlights the role of competition in local tax policies and the significance of mobility costs in shaping residents' decisions. Though the model offers a framework for efficient allocation, it depends on assumptions such as the absence of spill over effects, full mobility, and optimal community sizes.

Common Property Resources (CPRs) are resources accessible to all members of a community but lacking individual ownership rights. They include land, forest, and water resources managed collectively to ensure sustainability. CPRs play a vital role in supporting rural livelihoods, particularly for economically disadvantaged and marginalized groups, offering resources like grazing land, fuel wood, and medicinal plants. However, CPRs face challenges such as overuse, encroachment, and unsustainable practices, leading to depletion and ecological damage. To manage CPRs sustainably, community-based management,

clear legal frameworks, and educational programmes are crucial for ensuring their long-term viability and supporting rural development. The Tragedy of the Commons refers to a situation where individuals, acting in their own self-interest, over use and deplete shared resources, even though it is in everyone's long-term interest to preserve them. This concept, popularised by Garrett Hardin in 1968, highlights the tension between individual incentives and collective welfare. Key characteristics of such resources include rivalry in consumption, non-excludability, and scarcity. Real-world examples like overfishing, deforestation, and groundwater depletion illustrate the environmental and societal consequences. Solutions to mitigate the Tragedy of the Commons include regulatory approaches, collective action, and behavioural changes that promote sustainable resource management.

Assignments

1. Discuss Buchanan's theory of club goods.
2. How does Buchanan's theory of club goods help in determining the most efficient membership size for shared goods?
3. Explain Tiebout's model of local public goods provision.
4. Discuss the importance of Common Property Resources (CPRs) in rural livelihoods and their role in ecological balance.
5. Evaluate the concept of the Tragedy of the Commons, providing real-world examples.

Suggested Reading

1. Sandler, T., & Tschirhart, J. (1980). The Economic Theory of Clubs: An Evaluative Survey. *Journal Of Economic Literature*, 18(4), 1481–1521.
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1. Buchanan, J. M. (1965). *An Economic Theory of Clubs*. *Economica*, 32(125), 1–14.
2. Tiebout, C. M. (1956). *A Pure Theory of Local Expenditures*. *Journal of Political*

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3. Hardin, G. (1968). *The Tragedy of The Commons*. *Science*, 162(3859), 1243–1248.

4. Chopra, K., & Kadekodi, G. K. (1999). *Operationalising Sustainable Development: Economic-Ecological Modelling for Developing Countries*. SAGE Publications.

Space for Learner Engagement for Objective Questions

Learners are encouraged to develop objective questions based on the content in the paragraph as a sign of their comprehension of the content. The Learners may reflect on the recap bullets and relate their understanding with the narrative in order to frame objective questions from the given text. The University expects that 1 - 2 questions are developed for each paragraph. The space given below can be used for listing the questions.





UNIT 4

VOTING MECHANISMS AND PUBLIC CHOICE

Learning Outcomes

After completing this unit, learners will be able to:

- understand the concepts of public choice
- discuss how public choice influence voter behaviour and public policy outcomes
- analyse the implications of direct democracy and the unanimity rule
- apply the Wicksellian approach to assess the efficiency of public goods

Background

Imagine a real-world example from Switzerland, a country often described as a laboratory of democracy. Switzerland operates under a system of direct democracy, where citizens regularly vote on a wide range of issues - sometimes several times a year. These votes shape policies on education, healthcare, taxes, and even social issues. While this system empowers citizens, it also reveals the complexities of collective decision making. One such incident occurred in 2014, when Swiss citizens voted on a proposal to increase funding for public transportation. The initiative aimed to expand the railway network to address urban traffic congestion, reduce greenhouse gas emissions, and improve connectivity across regions. Urban areas, especially cities like Zurich and Geneva, strongly supported the proposal. For city dwellers, an improved railway network meant faster commutes, reduced pollution, and better public services. However, the situation was different in rural regions. Many rural communities felt that the proposed plan ignored their needs. They argued that instead of investing heavily in railways, resources should go toward upgrading roads, which were more vital for their daily lives. Some rural voters also expressed concerns about bearing the financial burden of projects that would largely benefit urban areas.

This situation presented a challenge: how could the Swiss government ensure a decision that balanced the interests of urban and rural populations? The proposal ultimately went to a nationwide vote, allowing every citizen to have a direct say. While the final decision reflected the majority's will, it also raised questions about fairness, minority

representation, and the role of public choice in democracy. Such examples highlight the trade-offs in democratic decision making. They showcase how governments and citizens must navigate competing interests and limited resources. How does a nation like Switzerland handle these challenges without alienating sections of its population? Can there ever be a perfect system where everyone agrees, or must compromises always be made? Understanding these theories, mechanisms, and frameworks, such as voting rules and theories of public choice, that aim to balance collective decision making with individual preferences will us to understand how democratic systems like Switzerland's attempts to achieve fairness and efficiency in public decisions.

Keywords

Voting, Public Choice, Direct Democracy, Unanimity Rule, Wicksell Approach, Decision making

Discussion

1.4.1 Voting and Public Choice

Voting and public choice are essential aspects of democratic governance, representing mechanisms through which citizens and policy makers make decisions. In economics and political science, these topics are studied under the umbrella of public choice theory, which applies the principles of economics to understand collective decision making. Public choice bridges the gap between individual preferences and collective outcomes. Voting serves as a foundational mechanism for collective decision making in democratic systems. It enables individuals to express preferences over public goods, policies, and leaders. However, translating individual preferences into collective outcomes is complex due to the diverse preferences of voters.

- Voting and public choice theory explore how individual preferences shape collective decisions

The major types of voting systems are as follows:

- Major voting systems include majority, plurality, and proportional representation
- Majority Voting: A system where the choice receiving more than half the votes wins. It is simple but may fail to reflect minority preferences adequately.
- Plurality Voting: The option with the most votes wins, even if it falls short of a majority. This system may result in outcomes that do not reflect broader public support.



- Proportional Representation: Seats are allocated based on the percentage of votes received, promoting inclusivity but often leading to coalition governments.

- Public Choice Theory applies economic principles to political science

Public Choice Theory is an interdisciplinary framework that applies economic principles to political science, focusing on how self-interest, incentives, and institutional structures shape decision making in the public sector. Unlike traditional views that see government as a neutral and benevolent actor, public choice theory highlights how the actions of individuals viz; voters, politicians, and bureaucrats are driven by personal motives. The theory criticises the assumption of purely public decision making and provides insights into inefficiencies in governance. Originating in the works of James Buchanan and Gordon Tullock, public choice theory remains influential in understanding political behaviour and institutional dynamics. Public choice theory treats political stakeholders as rational individuals pursuing self-interest, similar to consumers and firms in economic markets. Politicians aim to maximise votes or power, bureaucrats seek to expand their influence or budgets, and voters choose policies that align with their preferences. This perspective explains political outcomes as the aggregate result of individual behaviours shaped by incentives. It challenges the notion that governments act for the collective good, instead suggesting that political outcomes often reflect the interests of organised groups or influential individuals.

- Public choice theory highlights inefficiencies, paradoxes, and rent-seeking leading to suboptimal governance outcomes

Collective decision making processes, such as voting and legislative actions, are important to public choice theory. However, these processes are full of inefficiencies and paradoxes. For instance, the Condorcet Paradox illustrates how collective preferences can become inconsistent, even when individual preferences are rational and transitive. Arrow's Impossibility Theorem explains that no voting system can perfectly aggregate individual preferences into a collective decision that satisfies all fairness criteria. These show the complexities and inefficiencies in democratic systems. The focus of public choice theory is the phenomenon of rent-seeking, where individuals or groups lobby for policies that grant them economic benefits at the expense of societal welfare. Examples include trade tariffs benefiting specific industries or subsidies favouring small, organised interest groups. Rent-seeking leads to resource misallocation and affects economic efficiency. Similarly, bureaucrats are seen as self-interested agents who may prioritise expanding their

budgets and influence rather than serving public interests. This often results in inefficient government operations and unnecessary regulatory problems.

- Public choice theory explains political dynamics through models highlighting inefficiencies in policymaking and governance

Public choice theory incorporates several models to explain political dynamics. The rational ignorance of voters highlights how individuals often remain uninformed about political issues due to the high cost of acquiring knowledge compared to the impact of their single vote. This lack of voter knowledge can lead to suboptimal policy choices. The median voter theorem says that politicians in majority-rule systems tend to adopt centrist policies to appeal to the median voter, often sidelining minority interests. Log rolling, or vote trading among legislators, illustrates how political agreements can lead to excessive public spending or inefficient policies. Additionally, the principal-agent problem explains the disconnect between voters (principals) and politicians (agents), where agents may act in their own interests rather than prioritising the public good. Public choice theory explains the relation between political and economic phenomena. It explains why taxation and public goods provisions often favour organised interest groups over the broader population. Electoral politics, campaign strategies and policymaking are also better understood through the lens of public choice, as politicians balance competing interests to secure votes. The theory is relevant in analysing government size and growth, and explains how bureaucratic incentives can drive the expansion of public sector budgets and responsibilities. Public choice theory helps in creating institutional rules that promote accountability and individual incentives along with collective welfare.

- Public choice theory faces criticism for underestimating ethics and civic responsibility

Public choice theory's strength lies in its realistic portrayal of political behaviour, with self-interest as a major factor of decisions. It provides a framework for understanding inefficiencies and distortions in governance, enabling the design of policies that reduce government failures. However, the theory has faced criticism, as it tends to overemphasise self-interest while underestimating selflessness, ethical considerations, and civic responsibility. Critics also argue that public choice theory neglects the potential for institutions to encourage cooperative behaviour and public spirited leadership. Public choice theory is a powerful tool for analysing the complexities of political behaviour and governance. By applying economic principles to public decision making, it highlights how incentives, institutional structures, and self-interest influence political

outcomes. Despite its limitations, the theory tries to explain rent seeking, inefficiencies in voting systems, and the challenges of collective decision making. As democracies continue to grow, public choice theory remains a critical framework for addressing governance challenges and designing institutions that promote societal welfare.

1.4.2 Reasons for Public Choice

Public choice theory blends economics and political science and analyses the behaviour of voters, politicians, and bureaucrats. Public choice theory provides a framework to understand collective decision making. Unlike traditional welfare economics, which assumes benevolent governance, public choice critically evaluates how personal interests, incentives and institutional frameworks influence public policy. Public choice theory emerged as a response to the idealised assumptions of government behaviour in welfare economics. James M. Buchanan, one of the pioneers, viewed political agents as self-interested individuals similar to those in market settings. The reasons for adopting a public choice are as follows:

- Public choice theory evaluates governance

- Public choice theorists challenge the notion of a good government. They argue that inefficiencies often arise due to rent-seeking behaviours, bureaucratic expansion, and lack of accountability. Politicians and bureaucrats may prioritise personal or political interests over public welfare, leading to suboptimal policy outcomes.
- Public choice applies economic principles, to political settings. Voters, politicians, and officials try to maximise their personal benefits, at the expense of collective welfare. For instance, voters may favour policies offering short-term benefits despite their long-term costs, reflecting rational ignorance.
- Institutions play a major role in shaping individual behaviour. Poorly designed incentive systems in governance can lead to corruption, inefficiency, and policy failures. For example, the lack of competitive pressures in public sector enterprises often results in inefficiency compared to private firms.
- Public choice theory relies on Mancur Olson's work on collective action. It highlights the challenges of achieving cooperation for public goods due to free rider problems. This explains the difficulty of addressing

issues like environmental degradation or public infrastructure financing without effective institutional mechanisms.

- Public choice critiques governance inefficiencies

- Public choice explains why voter turnout remains low despite the significance of elections. The costs of acquiring information and participating in political processes often outweigh benefits for individuals. This rational ignorance contributes to electoral outcomes where well-organised interest groups have disproportionate influence.
- Rent-seeking refers to efforts by individuals or groups to secure economic gains through political manipulation rather than productive activities. Examples include lobbying for favourable legislation, subsidies or tax incentives, which divert resources from productive uses.
- Public choice considers governments as suppliers of policies and citizens as consumers. The political market mirrors economic markets, where competition and preferences shape outcomes. However, the lack of direct accountability and information asymmetry often affect these processes.

- Public choice emphasises on realistic governance

Public choice theory challenges idealised notions of governance by focusing on the self-interested behaviours of political agents and institutional inefficiencies. Its importance lies in its ability to provide a realistic idea for analysing public policy and decision making processes. By integrating public choice principles with institutional reforms, policymakers can address the complexities of governance and promote collective welfare.

1.4.3 Public Choice under Direct Democracy

- Public choice examines direct democracy's decision making

Public choice under direct democracy focuses on how individuals and groups make collective decisions without intermediaries such as elected representatives. In a direct democracy, citizens have the power to vote directly on policies and laws. The application of public choice theory provides understanding into the behaviour of voters, the role of incentives, and the efficiency of outcomes in this governance model. By analysing its mechanisms and limitations, we can understand the practical and theoretical applications of direct democracy.

Features of Direct Democracy

- **Direct Participation:** Citizens actively engage in the de-



cision making process, voting directly on laws, policies or referendums instead of delegating authority to representatives. This empowers individuals to influence policy outcomes. This direct involvement ensures that decisions reflect the collective will and preferences of the population.

- **Majoritarian Mechanism:** Decisions are determined by majority rule, where the policy option with the most votes is adopted. This method aligns outcomes with the preferences of the majority, ensuring decisions are democratically right. However, it can cause risks to minority rights if their interests are consistently ignored.
- **Transparency and Accountability:** Direct democracy increases transparency by involving citizens directly in governance. This openness builds trust and ensures that policy-making processes are accessible to all stakeholders. Accountability shifts to the electorate, as citizens themselves bear the responsibility for the results of their decisions, encouraging a sense of ownership and investment in democratic governance.
- **Absence of Intermediaries:** The absence of elected representatives in decision making reduces the risks associated with problems, such as lobbying or corruption. Without intermediaries, governance becomes more organised, and citizens maintain a direct relationship with the policies they vote on.
- **Collective Decision making:** Direct democracy enables citizens to consider public issues collectively. This environment encourages public debate, promotes civic education, and strengthens community engagement by giving every individual an equal voice in governance.
- **Citizen Empowerment:** By granting citizens the authority to shape policies directly, direct democracy empowers individuals to have an impact on their society. This can increase political awareness and participation, contributing to a more informed and engaged electorate.
- **Flexibility in Policy Formation:** Direct democracy allows for quick responses to public demands. Citizens can directly propose changes or challenge existing policies through mechanisms, providing a flexible framework for governance.
- **Reduction of Political Misrepresentation:** The elimination of representatives ensures that citizens' voices are

• Direct democracy increases citizen engagement and accountability

heard without distortion or misinterpretation. This reduces unwanted policies resulting from political bargaining or misrepresentation by intermediaries.

These features collectively define the nature of direct democracy, explaining its potential to create a more participatory, transparent, and accountable governance system while addressing the challenges in traditional representative models.

The advantages of direct democracy can be explained as follows:

• Direct democracy promotes transparency, empowerment, and political education

- Direct democracy allows individuals to directly express their preferences on specific policies, reducing the issues of public opinion. Citizens have the opportunity to participate actively, ensuring that policies reflect their true desires and values.
- By bypassing representatives, direct democracy minimises the risk of political misrepresentation, corruption, and lobbying. This ensures that decisions are more likely to align with the public's interests rather than those of intermediaries.
- The decision making process is open and accessible, creating trust in governance. Citizens can observe and participate in policy formation, which strengthens accountability and public engagement.
- Direct involvement in policymaking empowers individuals, making them feel more connected to governance, thereby improving civic responsibility and political awareness.
- Discussions and campaigns around referenda or ballot initiatives promote political education and awareness among the electorate.

The major issues related to direct democracy can be detailed as follows:

- Direct democracy may lead to decisions that affect minority groups, as majority preferences dominate, potentially disregarding the rights and interests of smaller populations.
- Frequent voting can be time consuming and resource intensive, both for the government organising the votes and for citizens participating in the process. This can lead to

voter fatigue and reduced participation.

- Direct democracy faces challenges like majority rule, voter fatigue, and informed decision making

- Citizens may lack the expertise, knowledge or access to information necessary to make informed decisions on complex policy issues. This can result in suboptimal or misinformed choices.
- Individual voting behaviour often prioritises personal benefits over collective welfare. This can lead to under provision of public goods due to free riding or conflicting incentives.
- Policies may change frequently based on shifting public opinion, leading to instability and inconsistency in governance.
- Citizens may vote for policies that are immediately appealing but economically or socially harmful in the long term, driven by short term benefits rather than sustainable solutions.
- Direct democracy may struggle to address highly technical or multifaceted issues that require expert understanding.
- Well funded interest groups and media campaigns can influence public opinion, potentially affecting outcomes in favour of powerful minorities rather than the general will.
- Over reliance on direct democracy can lead to disinterest or disengagement from the political process, particularly if citizens feel overburdened by frequent decision making responsibilities.

- Public choice in direct democracy evaluates voter behaviour and governance challenges

Public choice under direct democracy offers a way to evaluate how individuals and societies use collective decision making. While this governance model empowers citizens and increases transparency, it also faces challenges such as high transaction costs, information asymmetry, and the risk of inefficient outcomes. Theories like the median voter theorem and concepts like cost benefit analysis provide a structured understanding of voter behaviour and policy outcomes. Despite its limitations, direct democracy remains an important experiment in participatory governance in creating collective welfare.

1.4.4 Unanimity Rule - Wicksell Approach

The unanimity rule, formulated by the renowned Swedish economist Knut Wicksell, is a key concept in public economics

- Wicksell's unanimity rule promotes fairness and collective agreement in policy decisions

and political decision making. It presents a normative framework that emphasizes the importance of collective agreement in public policies. According to Wicksell, decisions regarding the allocation of public resources should only be made with the unanimous consent of all members of the community. This principle is rooted in the belief that unanimity ensures that no individual is unfairly burdened or excluded from the benefits of public policy. In contrast to majority rule, which can lead to the dominance of the majority's interests over minorities, Wicksell's unanimity rule incorporates an ideal of fairness, inclusivity, and Pareto efficiency. By requiring every individual's approval, it aims to ensure that public policies generate mutual benefits and are free of compulsion. This approach relates with the ethical principle of voluntary cooperation, making it particularly relevant in contexts where the provision of public goods and services demands collective action. While the unanimity rule offers a theoretically sound and equitable framework, its practical application is filled with challenges such as decision making delays and the risk of strategic behaviour. However, its principles continue to influence modern governance frameworks, highlighting its enduring significance in the discourse of public economics.

Key Concepts of Wicksell's Unanimity Rule

- Wicksell's unanimity rule ensures inclusive, fair, and Pareto-efficient policy decisions

The core of Wicksell's unanimity rule lies in the requirement that all individuals affected by a public policy must agree before it is implemented. This principle ensures that public decisions are inclusive and they consider the preferences and welfare of every member of society. By requiring unanimous consent, the rule eliminates the possibility of imposing policies that benefit some groups at the expense of others. It ensures that no individual or group is forced into accepting unfavourable outcomes. Policies that gain unanimous approval are more likely to reflect arrangements that benefit all stakeholders, leading to a harmonious and cooperative society. The rule encourages voluntary participation in public decisions, reinforcing the ethical foundation of governance and enhancing the legitimacy of public policies. Wicksell's approach stands in sharp contrast to the majority rule, which is a common decision making method in democratic systems. The majority rule allows policies to be implemented even if a significant minority opposes them, leading to potential inequities. Under the majority rule, the preferences of the majority may dominate and override those of the minorities.

This can lead to policies that disproportionately burden smaller groups. In contrast, unanimity safeguards minority interests by ensuring that every individual's consent is required. Unanimity ensures that decisions lead to Pareto-efficient outcomes, where no individual is made worse off without making another better off. Since every individual must agree, the likelihood of resentment or opposition to policies is minimised, ensuring social unity and trust in governance.

- Unanimity rule promotes equitable, efficient, and cooperative public decision-making

Wicksell's rule emphasises the dual objectives of equity and efficiency, making it a balanced framework for public decision making. By protecting minority interests, unanimity ensures that the benefits and costs of public policies are distributed fairly across all individuals. It prevents situations where one group bears disproportionate costs without adequate compensation or benefits. Public goods, characterised by their non-rivalrous and non-excludable nature, are better provided under unanimity. The rule ensures that individuals' willingness to pay aligns with the benefits they derive, avoiding free rider problems. The need for unanimous consent necessitates dialogue and compromise, encouraging stakeholders to work together toward solutions that satisfy everyone's interests. Wicksell suggested that taxation and expenditure decisions should be treated as a single package under unanimity. This prevents situations where taxes are levied without ensuring corresponding benefits to taxpayers. By aligning individual incentives with collective outcomes, unanimity encourages trust and participation in public decision making. While unanimity is difficult to achieve in large populations, it is particularly effective in smaller communities where individual preferences can be more easily accommodated. This promotes rational economic behaviour by ensuring that resources are allocated efficiently based on collective agreement, avoiding wasteful or divisive policies.

Wicksell's unanimity rule has several advantages that make it a highly regarded principle in public economics and decision making processes. They are as explained as given below:

Wicksell's approach ensures that all individual's preferences are considered, making the process inclusive and equitable. The unanimity rule guarantees that no one is compelled to accept a decision they oppose. This level of fairness strengthens the legitimacy of collective decisions and creates trust among stakeholders. By valuing each individual's opinion equally, it

- Unanimity rule ensures fairness, inclusivity, and reduces social tensions

promotes a sense of ownership and collective responsibility for the outcomes of public policies. Since decisions are made with the consent of all parties, the unanimity rule helps in avoiding conflicts that may arise from imposed policies. It eliminates the feeling of alienation or coercion that minorities might experience under majority voting systems. This consensus driven approach reduces social tensions and political polarisation, making it easier to sustain long-term cooperation and harmony.

- Unanimity rule ensures fairness, efficiency, inclusivity, and minimises conflicts

Providing public goods through unanimous agreement ensures that everyone contributes willingly, addressing the issue of free riders who might benefit without sharing the cost. Unanimity ensures Pareto-optimal outcomes where no individual is made worse off without making someone else better off. By creating mutually beneficial agreements, the rule leads to decisions that are economically efficient and socially acceptable. The requirement for unanimous consent motivates thorough discussions and compromises among stakeholders. This deliberative process leads to better informed decisions that reflect a deeper understanding of the issues at hand. It also encourages creative solutions that address diverse perspectives and interests. Since all individuals must agree, the unanimity rule makes it harder for special interest groups to influence policies for their own benefit at the expense of the broader community. This reduces opportunities for corruption and ensures that policies serve the common good rather than narrow interests. The unanimity rule safeguards minority groups from exploitation by ensuring that their consent is required for policy implementation. This is particularly important in diverse societies where unequal power dynamics might otherwise marginalize vulnerable groups. Policies developed through unanimous agreement are less likely to face opposition or reversal since all parties have already consented to their implementation. Wicksell's unanimity rule promotes fairness, inclusivity, and economic efficiency while minimising conflicts and ensuring alignment with the collective preferences of society. Although its practical application may be challenging, the principles underlying this approach provide a framework for designing equitable and sustainable public policies.

The unanimity rule, while theoretically appealing, faces several significant challenges when applied in practice. These challenges arise from the complexities of collective decision

making, the diverse preferences of individuals, and the practical limitations of achieving consensus in large groups. The challenges faced by unanimity rules are as follows:

- Unanimity rule faces challenges such as difficulty in achieving consensus, delays in decision making, and communication issues

Achieving unanimous agreement in a group, especially as its size grows, becomes increasingly challenging. Individuals often have varying priorities, preferences, and perspectives. Reaching a consensus that satisfies everyone is inherently difficult. Unanimity requires extensive deliberation to address all individual's concerns and preferences, leading to significant delays in decision making. The requirement for unanimous consent means that a single opposing voice can block the entire process. In small groups, unanimity may be achievable, but as the number of stakeholders increases, logistical and communication challenges multiply exponentially, making it nearly impossible to secure universal agreement.

- Individuals use their power to gain personal benefits, prolonging negotiations and increasing administrative costs

The unanimity rule can incentivise individuals to act strategically, exploiting the system for personal gain. Individuals may deliberately withhold their consent, using their power to block decisions as leverage to secure additional benefits for themselves. Stakeholders might demand disproportionate compensation or advantages before agreeing, leading to inefficiencies and unequal outcomes. When multiple stakeholders engage in strategic behaviour simultaneously, negotiations can become prolonged and fruitless, delaying or even preventing collective action. The unanimity rule imposes significant demands on the decision making process. Ensuring unanimous agreement requires comprehensive information sharing and transparency, which can be overwhelming and resource intensive. Lengthy discussions and negotiations are often needed to reconcile differing viewpoints, increasing administrative costs. The coordination, communication, and facilitation efforts required to achieve unanimity requires substantial financial and human resource investments.

The unanimity rule inherently favours maintaining the status quo, since any proposed change requires complete agreement. This can hinder innovation or necessary reforms, as even a small minority can resist change. While the rule aims for fairness, it can sometimes lead to inequitable outcomes when powerful individuals or groups use their veto power to prioritise their interests over collective welfare. This undermines the principle of mutual benefit that the rule seeks to achieve. Paradoxically, the need for unanimity may marginalise minority interests

- Unanimity rule affect innovation, delay decisions, and lead to inefficiencies, requiring alternative frameworks for balance

if dominant groups exert pressure on dissenters to conform, undermining the democratic intent of the rule. In cases where quick decisions are needed such as during emergencies, the unanimity rule can be impractical and harmful, as delays caused by prolonged deliberations may worsen the problem. To achieve unanimity, policies may be watered down to the lowest common denominator to ensure everyone agrees. This can lead to suboptimal or ineffective solutions that fail to address the problem comprehensively. While the unanimity rule is an ideal mechanism for ensuring equitable and consensual decision making, its practical challenges often limit its applicability in real-world scenarios. The difficulties of achieving unanimous agreement, combined with the risks of strategic behaviour, administrative complexities, and potential inefficiencies, emphasise the need for modified decision making frameworks. These include qualified majority rules or deliberative mechanisms that balance the principles of equity and inclusivity with the practical demands of governance.

- The unanimity rule with modern adaptations balances with effective governance

The unanimity rule serves as a profound theoretical model by advocating fairness, inclusivity, and efficiency in public decision making. By requiring the consent of every individual, it addresses key concerns about equity and protects minority interests against the risks posed by majority driven policies. While achieving unanimity in practice may be challenging due to logistical and strategic limitations, Wicksell's approach underscores the ethical and economic importance of striving for collective agreement in public policy. Modern adaptations, such as supermajority rules, compensation mechanisms, and deliberative democracy, demonstrate the continued relevance of Wicksell's ideas. These adaptations attempt to balance the ideal of unanimity with the practical need for effective governance. The unanimity rule serves as a guiding principle for creating policies that respect individual preferences while addressing collective needs.

Summarised Overview

Voting and public choice are central to democratic governance, exploring how individual preferences shape collective decisions. Public choice theory applies economic principles to political science, highlighting how self interest, incentives, and institutional structures influence decision making. Voting systems like majority, plurality, and proportional representation demonstrate the complexities of translating individual preferences into collective outcomes. The theory examines inefficiencies such as rent seeking, rational



ignorance of voters, and bureaucratic self-interest, which can lead to suboptimal governance. Models like the Condorcet Paradox, Arrow's Impossibility Theorem, and the principal-agent problem reveal the challenges in democratic systems. While public choice theory provides valuable insights into governance and institutional design, it faces criticism for overemphasising self-interest and neglecting ethical considerations and civic responsibility. Public choice theory merges economics and political science to examine how voters, politicians, and bureaucrats behave in collective decision making. It critiques the idealized view of benevolent governance in welfare economics by emphasizing self-interest and institutional inefficiencies. Public choice theorists highlight issues such as rent-seeking, rational ignorance, and bureaucratic inefficiency, which can undermine public welfare. The theory also underscores the role of institutions in shaping behaviour and the challenges in achieving cooperation for public goods. It likens the political market to economic markets, where competition and preferences influence outcomes but are hindered by accountability issues and information asymmetry. Public choice provides a realistic framework for analysing governance and shaping institutional reforms to address inefficiencies and promote collective welfare.

Public choice under direct democracy explores how citizens make decisions directly without intermediaries like elected representatives. It focuses on voter behavior, decision making incentives, and the efficiency of governance. Key features include direct participation, majority rule, transparency, and citizen empowerment. While it promotes engagement, transparency, and reduced misrepresentation, challenges such as risks to minority rights, voter fatigue, and lack of expertise among citizens can limit its effectiveness. By applying theories like the median voter theorem and cost-benefit analysis, direct democracy offers insights into collective decision making and participatory governance. Wicksell's Unanimity Rule is a principle in public economics advocating that public policy decisions require the unanimous consent of all affected individuals. This ensures fairness, inclusivity, and Pareto efficiency by safeguarding minority interests and fostering voluntary cooperation. However, its practical application faces challenges such as difficulty in achieving consensus, delays, strategic behavior, and administrative costs, especially in large groups. While the unanimity rule promotes equitable decision making, it may hinder innovation and lead to inefficiencies. Modern adaptations, like supermajority rules, aim to balance equity with the practical demands of governance.

Assignments

1. Examine the key aspects of public choice theory.
2. Explain how public choice theory critiques traditional welfare economics.
3. Evaluate the potential and limitations of direct democracy as a model of governance.
4. Discuss Wicksell's Unanimity Rule as a framework for equitable public decision making.

Suggested Reading

1. Mueller, D. C. (2003). *Public Choice III*. Cambridge University Press.
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Space for Learner Engagement for Objective Questions

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SGOU

MASTER OF ARTS ECONOMICS



Public Revenue

Block 2





UNIT 1

Public Revenue

Learning Outcomes

After completing this unit, the learner will be able to:

- understand the basic ideas of public revenue
- know about the source of tax revenue
- identify the various non-tax revenue sources

Background

Public revenue refers to the funds collected by the government from various sources to meet its expenditure needs. It is essential for the functioning of the government and the implementation of public policies, infrastructure development, welfare programmes, and other services, as well as for ensuring economic stability, wealth redistribution and the effective implementation of fiscal policy. To achieve these objectives, governments primarily collect funds through both tax and non-tax revenue. However, when the government collects revenue, it must ensure key principles such as equity, certainty, convenience and efficiency. At the same time, governments face challenges such as tax evasion and avoidance, inefficiencies in tax administration, inflation and economic distortions. In this unit, we will discuss about public revenue, sources of tax and non tax revenue.

Keywords

Public Revenue, Tax, Direct Tax, Indirect Tax, Non-Tax, Special Assessment

Discussion

2.1.1 Public Revenue

- Main Income Source of government

Public revenue is the main source of income for the government. Public revenue refers to the funds earned or received by a government from various sources. These revenues are essential for financing public expenditures and providing necessary services to society. They support infrastructure projects, social welfare programmes, education, healthcare, national defence and other public goods and services. The primary components of public revenue include taxation (both direct and indirect), fees for services, import and export tariffs, fines and penalties, income from natural resources and profits from state-owned enterprises. Effective management of public revenue is critical for ensuring fiscal sustainability, promoting economic development and delivering essential public goods and services for the welfare of society.

2.1.1.1 Importance of Public Revenue

The philosophy of the welfare state, adopted by most countries, has significantly expanded the scope of state activities. As a result, public revenue has become a crucial component of a state's financial operations and a significant area of study in academic circles worldwide. Let us discuss the importance of public finance.

- Public revenue is utilised to cover daily operational activities

1. In underdeveloped countries, governments protect their infant industries from foreign competition through various public finance measures. These include imposing high tariffs on imports, restricting specific imports and providing subsidies to domestic industries to lower production costs.
2. Public revenue plays a pivotal role in the planned economic development of a country. Planning authorities allocate funds according to priorities and implement developmental plans using fiscal tools to ensure steady progress.
3. Governments use public revenue to influence consumption habits. By imposing taxes on goods like alcohol and cigarettes, they discourage their use. Conversely, tax concessions and rebates can encourage the consumption of certain beneficial commodities.



4. Public revenue helps reduce social inequalities through progressive fiscal policies. Governments can impose higher taxes on wealthier individuals and utilise the revenue to provide essential services like free healthcare, education, affordable housing and subsidised food to disadvantaged populations.
5. Public revenue is vital for financing a range of public goods and services such as education, healthcare, infrastructure and national defence. These are essential for social well-being and are often beyond the scope of private-sector provision.

2.1.1.2 Effects of Public Revenue

Public revenue refers to the income generated by the government through various sources, such as taxes, fees, fines and public enterprises. Public revenue is crucial for fostering economic growth and modernisation. It provides funding for large-scale infrastructure projects, including roads, railways, airports and power plants. Additionally, investments in technology parks and industrial zones attract businesses, create jobs and stimulate economic activity. Through effective utilisation of revenue, these initiatives contribute significantly to long-term economic development. The impact of public revenue on the economy and society can be both positive and negative. Let us examine these effects in detail.

- Public revenue fosters economic growth

Taxation serves as a key tool of public revenue. When taxes are imposed, they have direct effects on income. Taxes, such as income tax or corporate tax, reduce the disposable income of individuals and businesses, thereby limiting their ability to consume and save. For households, a decrease in disposable income results in lower consumption, which can reduce demand for goods and services. Additionally, with reduced disposable income, individuals may save less, potentially affecting long-term financial stability and investment. For businesses, taxation on profits reduces the amount available for reinvestment. This can slow down business expansion, hinder economic growth and potentially reduce future income levels.

- Tax directly affects the income of the consumer

Taxation impacts both the current and future generations. When taxes are imposed, they reduce people's ability to spend on goods and save for the future. This can lead to lower efficiency in the economy because people consume less and invest less in productive activities. Over time, this reduction

- Tax burden transfer into future generation

in consumption and investment can limit the growth of wealth and slow down economic progress. Furthermore, the burden of taxes often shifts to future generations in the form of reduced resources for investment and growth.

- Tax distribution ensures a minimal level of sacrifice

The effect of the distribution of taxes refers to how the tax burden is allocated across different individuals, households, or businesses. When we follow progressive taxation, higher-income groups contribute more, ensuring a fairer distribution of the tax burden. This reduces income inequality by easing the financial burden on low-income households. On the other hand, regressive taxation disproportionately affects lower-income groups, leading to reduced fairness, as they may bear a larger share of their income in taxes, affecting their standard of living. Progressive taxation helps to fund social welfare programmes (e.g., healthcare, education), benefiting lower-income groups. Any tax structure followed by the government should aim to ensure a minimum level of sacrifice and should not create an additional burden on the population.

Taxes provide the government with the necessary revenue to fund essential services such as healthcare, education, infrastructure, public safety and social welfare programmes. Additionally, taxes contribute to macroeconomic stability by funding public investments, which can stimulate economic growth.

2.1.1.3 Principles of Public Revenue

The government collects public revenue by following certain principles. Let us discuss them in detail.

- Principles of Least Aggregate Sacrifice
- Principles of Economy
- Principle of Equity
- Principles of Productivity
- Principles of Certainty

Principles of Least Aggregate Sacrifice

As per the principle of least aggregate sacrifice, the states collect taxes from society to generate revenue, which is used for the common welfare of the public. However, tax collection can create a sense of pain or sacrifice. When large amounts are

- Minimise the burden of tax collection

collected from society, it can negatively impact the economy. Therefore, the government should consider ways to minimise the burden on society when collecting taxes. This principle was developed by Professors Arthur Pigou and Hugh Dalton.

Principles of Economy

The principle of economy, as supported by Wicksteed and Jones, is the same as the principle of least aggregate sacrifices. The principle of least aggregate sacrifices means that the burden of taxation should be distributed in a way that minimises the overall sacrifice or discomfort for society. Principles of Economy develop based on minimum cost and maximum revenue. They argue that taxation can be seen as a form of production. Just like in any production process, efficiency plays a central role, which involves minimising waste and maximising output. Minimising the cost of taxation refers to reducing the sacrifices made by taxpayers. Like producers in a market who aim to produce goods at the lowest cost, the goal in taxation is to ensure the least sacrifice by taxpayers while collecting the required amount of revenue. This principle of economy focuses on achieving efficiency while causing the least adversity.

- Principle of economy based on minimising waste and maximising output principle

Principle of Equity

The principle of equity in taxation, as advocated by Adam Smith, Chapman and Robert Jones, identifies equity as the correct basis for taxation. Equity is associated with the concepts of fairness and justice, ensuring that taxation is fair to all individuals. This fairness may imply that people in similar circumstances contribute equally or that the tax burden is distributed justly based on their ability to pay.

- Tax burden is distributed based on the ability to pay

Principles of Productivity

The principle of productivity, as explained by Bastable, considers taxation like production. When production begins, producers aim to minimise costs and maximise profits. In a similar way, Bastable suggests that while collecting taxes, the ratio of sacrifice should be minimised and revenue should be maximised. This concept aligns with the principle of least aggregate sacrifices in taxation.

- Productivity principle is based on the least aggregate sacrifice principles

Principles of Certainty

- Certainty reduces the cost of paying tax

This principle is advocated by President Hardely. According to him, the rate of taxation and the imposition of taxes should ensure certainty. Each taxpayer should know how, when and what taxes are imposed. This provides greater confidence to the government in its estimates, while taxpayers feel certain about their budgets. Certainty reduces the cost of paying taxes for taxpayers and the administrative costs for the government. Moreover, certainty helps to reduce overall costs, thereby increasing welfare.

2.1.2. Source of Public Revenue

- Income generated by the government from the public

Public Revenue refers to the income generated by the government from the public through taxation to meet its expenditure needs such as infrastructure, defence, healthcare, education, social services etc. The nature, volume and method of tax collection affect a nation's wealth and production. They also impact the individuals from whom the taxes are collected. While taxation is a major source of revenue, it is not the only one. Governments also rely on fees, penalties, fines and other sources to contribute to public revenue. The sources of public revenue can be broadly classified into two categories.

1. Tax Revenue and
2. Non -Tax Revenue. Let us discuss each in detail.

2.1.2.1 Tax Revenue

Tax revenue refers to the income generated by the government through compulsory payments made by individuals, organisations and businesses. These payments are imposed by law on income and wealth and taxpayers do not receive any direct benefit in return. Taxation possesses several defining features that highlight its significance. Let us discuss the details.

Compulsory Contribution to the State

Taxation is mandatory for individuals, businesses and organisations. Taxes are levied by a governing authority, typically central, state or local governments and taxation operates within a legal framework. Therefore, taxpayers cannot avoid paying taxes and refusal to comply with tax laws can lead to penalties or punishment. However, if the consumption of a commodity is not applicable to an individual under the law, they are not obliged to pay taxes on that commodity. For example, a person who does not purchase or use a laptop is not

- Tax evasion is illegal and punishable under the law



required to pay taxes on laptops, as they are not participating in its consumption.

Personal Obligation to Pay Taxes

A personal obligation to pay taxes refers to an individual's legal and moral duty to contribute a portion of their income, property or other taxable resources to the government. Tax revenue is collected by the government to fund public benefits, which are received by the people. Humans are social beings and depend on one another. Therefore, taxes are imposed on all citizens so that they can share the collective burden, making it difficult to evade this responsibility.

- Tax is a compulsory payment

No direct relationship between the benefit and tax payment

When a person pays income tax, they do not receive a personal receipt stating how their contribution was spent. Instead, their taxes contribute to services such as national defence, public safety, or disaster relief, which benefit society as a whole. By funding public goods and services, taxation helps build a stable and equitable society, even though the benefits may not always be directly visible or attributable to an individual taxpayer.

- Do not get any personal receipt after tax payments

Based on the nature of taxation, taxes can be divided into two categories viz; direct and indirect taxes. Let us discuss each of them in detail.

1. Direct Tax

A direct tax is levied directly on an individual and is paid directly to the government. The burden of the tax cannot be shifted to another party. Examples of direct tax are income tax, property tax, wealth tax and corporate tax.

2. Indirect Tax

An indirect tax is levied on goods and services. Indirect tax is transferable which means that the burden of the tax can be passed on to the end consumer by the producer or seller. The nature of the indirect tax is regressive; that is, everyone pays the same rate of tax regardless of income. It may disproportionately affect lower-income groups, as in the case of goods and services tax (GST), value-added tax (VAT), customs duty and excise duty. The major difference between the GST and VAT are:

Table 2.1.1.

Aspect	Direct Tax	Indirect Tax
Taxpayer	Paid by individuals or entities	Paid by consumers indirectly
Burden Transfer	Cannot be transferred	Can be shifted to the end consumer
Nature	Progressive (based on income / wealth)	Regressive (same rate for all consumers)
Imposed On	Income, profits or wealth	Goods and services
Examples	Income tax, property tax	GST, customs duty, excise duty

2.1.2.2 Non-Tax Revenue

Non-tax revenue refers to the income earned by the government from various sources other than taxes. Non-tax income is considered supplementary income because it provides additional funds to support government activities without increasing the tax burden on citizens. Like taxation, non-tax income ensures economic stability by generating revenue even during periods of reduced tax collections. Let us discuss the major non-tax source of income in detail.

1. Fees

The government collects fees for specific services provided to individuals or businesses. Examples include court fees, passport fees and licensing fees. These charges are usually based on the cost of the service provided.

2. Fines and Penalties

These are imposed on individuals or businesses who violate laws or regulations. For example, traffic fines or penalties for illegal activities. These are intended both to punish and to deter non-compliance with laws.

3. Special Assessments (Betterment Levy)

These are levies imposed on property owners who benefit from public improvements, like new roads or street lighting. This assessment is usually proportional to the increase in property values due to such improvements.

- Income sources of the government other than taxes



4. Gifts and Grants

Governments may receive financial assistance from foreign countries or international organizations. This includes foreign aid, which can be in the form of military aid, food aid or economic grants. These are typically aimed at supporting the recipient country's development.

5. Profits of State Enterprises

Governments may run state-owned enterprises such as railways, postal services or steel plants. The profits earned by these enterprises contribute to the government's revenue. The surplus from these enterprises is considered a form of non-tax income.

Summarised Overview

Public revenue refers to the income earned by the government from various sources to fund public expenditures such as infrastructure, healthcare, education, social services and national defence. The primary sources of public revenue are classified into tax revenue and non-tax revenue. Tax revenue includes direct taxes, such as income tax, property tax and corporate tax, which are progressive and levied directly on individuals and entities, with the burden not being transferable. Indirect taxes, such as GST, VAT, customs duty and excise duty, are levied on goods and services and are regressive, as they impose the same rate on all consumers regardless of income, often affecting lower-income groups more. Public revenue is guided by principles such as minimising social sacrifice, ensuring fairness and equity, promoting economic efficiency and adhering to economy, uniformity and certainty. The importance of public revenue lies in its role in funding essential public services, reducing income inequality through progressive taxation and welfare programs and fostering economic growth by supporting infrastructure development and creating a stable economic environment. Efficiency in taxation is essential to ensure optimal revenue collection while minimising economic distortions, enabling effective utilisation of public resources for social welfare.

Assignments

1. Explain the importance of public revenue.
2. "Taxation is both a tool for revenue generation and social equity." Discuss this statement with examples from direct and indirect tax systems.
3. Discuss how public revenue contributes to economic growth and development.
4. What are the major sources of Public Revenue?

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UNIT 2 Taxation

Learning Outcomes

After completing this unit, the learner will be able to:

- get an idea about the principles of taxation
- understand the theories of taxation
- know about the problem of double taxation

Background

In an economy, people belong to different income categories. Governments raise taxes from these income groups to meet their day-to-day activities. These funds are utilised to build infrastructure, promote education, improve healthcare facilities and more. When formulating tax-related policies, policymakers often consider various criteria such as how to achieve efficiency, how to avoid errors in tax calculations and how to allocate tax resources effectively. Each policy decision requires answers to these questions. Some argue that taxes should be imposed based on a person's ability to pay, while others believe taxes should be levied according to the benefits individuals receive from the state. When formulating a tax structure, it is essential to follow the principles of equity and efficiency. otherwise, inefficiencies may arise within the system. Therefore, the government must ensure that the tax system is optimal, maintaining maximum equity and efficiency while avoiding deadweight losses. Additionally, they keep in mind double taxation, which can create a heavier burden on society. When double taxation occurs, it increases the tendency for tax evasion among individuals, undermining the effectiveness of the tax system. So, in this unit learners will come across the principles of taxation, optimal taxation, problem of double taxation and measurement of dead weight loss. Let us examine these concepts one by one.

Keywords

Tax, Optimal Tax, Equity, Efficiency, Deadweight Loss, Double Taxation



Discussion

2.2.1 Principles of Taxation

Taxation is a fundamental tool for governments to generate revenue and funds to meet the needs of the public. When policy makers design a tax structure, they should ensure that it is fair, efficient and effective. In this discussion, we focus on two important principles of taxation: the benefit principle and the ability-to-pay principle. These theories of taxation provide a foundation for understanding how taxes can be structured to meet the needs of society.

2.2.1.1 Benefit Principle of Taxation

The benefit principle was widely accepted in the 17th century. According to Adam Smith, “the subjects of every state ought to contribute towards the support of the government in proportion to the revenue they respectively enjoy under the protection of the state.” This statement means that every person should contribute to the government according to their ability. Taxes are also collected based on the income or wealth earned by citizens while being protected by the state. As per the benefit principle of taxation, tax is imposed based on the benefits a person receives from government expenditures. The tax rate and the benefits of expenditure are directly related. A person who receives greater benefits will pay more tax, while a person who receives fewer benefits will pay less tax. Essentially, individuals pay taxes that are proportional to the benefits they receive from government spending. Let us explain this principle based on the figure.

- Tax base should be the benefit a person receives from government expenditure

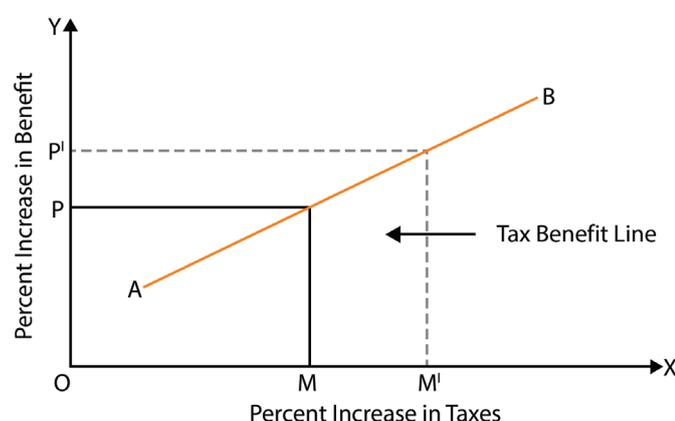


Fig 2.2.1 Benefit Principles of Taxation

- Do not take more than you give

In the figure, the x-axis represents the percentage increase in taxes, while the y-axis shows the percentage increase in benefits. AB is the tax benefit line. When a person receives an OP amount of benefit from the government, they pay an OM amount in tax. If the government raises expenditures, the individual then receives an OP1 amount in benefit and pays an OM1 amount in tax. In summary, this theory is based on the 'do not take more than you give' principle.

2.2.1.2 Ability to Pay Principles of Taxation

- Tax burden based on their ability to pay

The ability to pay theory of taxation emphasises fairness and equity in the distribution of the tax burden. The core principle of this theory is that people should bear the tax burden based on their ability to pay. This means individuals with higher incomes or greater wealth should contribute more to the state in proportion to their financial capacity and vice-versa. The principle is an ethical foundation for tax. The ability to pay principle has been justified on various grounds. Let us discuss the supportive arguments for this theory.

- An equal level of sacrifice relative to their income or wealth

Equality of Sacrifice: This concept is highlighted by John Stuart Mill and it implies that taxation should be designed so that everyone experiences an equal level of sacrifice relative to their income or wealth. For taxation to be equitable, the burden should feel proportionate across all individuals. For instance, consider two individuals: Person A and Person B. Person A earns \$100,000 annually, while Person B earns \$20,000 annually. To ensure equal sacrifice, taxes should be imposed in a way that reflects their differing financial capacities. Person A may be taxed at 20%, contributing \$20,000, while Person B is taxed at 5%, contributing \$1,000. Although the percentages and contributions differ, the relative impact on their financial well-being is intended to be equitable, as Person A has a much higher ability to pay than Person B. Therefore, Person A pays a higher tax than Person B.

- Rich people get lower utility from income so they pay higher tax

Law of Diminishing Marginal Utility: This economic principle states that the utility (satisfaction) derived from each additional unit of income decreases as income increases. In other words, as a person earns more money, the satisfaction they gain from each additional income diminishes. Therefore, for wealthier individuals' utility from additional income is lower. As a result, heavier taxes should be imposed on their income, while poor individuals should either be exempt from

taxation or imposed a small rate of tax.

Index of Ability to Pay

The ability-to-pay principle states that people should pay taxes according to their financial capacity. This ability is determined by factors such as income, property, family size and consumption. Some of these factors are discussed in detail below.

A. Property

Property is a primary indicator of a person's capacity to pay taxes and reflects their well-being. However, it does not always fully represent their financial situation because the nature of property can vary significantly. Property does not generate income continuously; it depends on factors such as the type of property, climate and market conditions. For example, consider two people who hold the same amount of wealth. One person owns property that generates income, like a building, while the other owns jewellery that does not produce any income. In this case, taxes are collected progressively, meaning those with income-generating assets contribute more based on their ability to pay.

- Tax rates vary with the nature of the property

Income

Income is an important index that measures the ability to pay taxes. According to Adam Smith, a person's taxpaying ability should be determined based on net income rather than gross income. Gross income reflects only total earnings without accounting for essential expenses, such as costs of production, maintenance and basic living costs. On the other hand, net income represents the actual disposable income available to a person after these deductions. This remaining amount is a more accurate measure of one's ability to consume or save, directly reflecting economic welfare and practical capacity. Thus, Smith emphasised that taxable income should be income above the level of subsistence.

- Taxable income should be income above the level of subsistence

Size of the family

The size of a family influences a person's ability to pay taxes because a smaller family typically has a higher tax-paying capacity than a larger family with the same income since their cost of living is lower. Consequently, tax authorities should take family size into account when imposing taxes. To measure the ability to pay, two different approaches have been

developed. They are

- Subjective Approach and
- Objective Approach

Subjective Approach

The Subjective Approach focuses on the psychological reactions of taxpayers and emphasises the concept of equal sacrifice to achieve equitable tax distribution. This approach aims to achieve both horizontal equity and vertical equity. Horizontal equity refers to treating individuals in similar situations equally and vertical equity involves treating individuals in dissimilar situations differently. The model emphasises that the concept of equal sacrifice has been understood in various ways. There are three interpretations of equal sacrifice as noted below:

- Equal Absolute Sacrifice
- Equal Marginal Sacrifice
- Equal Proportional Sacrifice

1. Equal Absolute Sacrifice

Equal absolute sacrifice states that after paying taxes, the sacrifice ratio should be the same for all taxpayers, even when they belong to different income groups. This means that individuals with higher incomes should pay more taxes than those with lower incomes. However, the sacrifice resulting from the tax should be equal for everyone. This implies that the utility of income after tax and before tax should be equal across all individuals. This sacrifice ratio is based on the regressive nature of taxation. It suggests that the sacrifice ratio should be the same for all income groups. For example, consider two individuals in society, Person R and Person P, who belong to different income groups. Their sacrifice ratio before and after taxation is expected to be the same. However, most economists reject this concept because of its regressive implications. It can be expressed as

$$\{u(y) - u(y-T)\}_R = \{u(y) - u(y-T)\}_P$$

Where, P and R are the two individuals

u = utility

T = total utility for income for tax amount

(y-t) = income after tax

- Subjective Approach focuses on the psychological reactions of taxpayers

- Equal absolute sacrifice based on the regressive nature of taxation



- Equal proportional sacrifice based on the progressive nature of taxation

2. Equal Proportional Sacrifice

The principle of the Equal Proportional Sacrifice Ratio suggests that the loss of utility due to taxation should be proportional to the taxpayer's total income. This principle ensures that individuals with higher incomes pay more in taxes compared to those with lower incomes, but the ratio of utility loss to income remains the same for all income groups. Such types of sacrifices follow progressive taxation since the marginal utility of money falls as income rises, in mathematical terms, it can be expressed as:

$$\text{Rate of tax} = \frac{\text{Sacrifice of tax payer A}}{\text{Total income of A}} = \frac{\text{Sacrifice of tax payer B}}{\text{Total income of B}}$$

3. Equal Marginal Sacrifice

- Marginal sacrifice for different taxpayers should be equal

Equal marginal sacrifice, also known as least aggregate sacrifice, suggests that the total sacrifice ratio of all taxpayers should be minimised. According to Dalton, the tax should least hurt and leave as they found. In other words, this principle emphasises that the marginal sacrifice, rather than the total sacrifice, for different taxpayers should be equal. Additionally, the aggregate sacrifice of the community as a whole should be minimised. Symbolically, this concept can be expressed as:

Symbolically, $Mu(y-T)_R = Mu(y-T)_P$

$$\text{or} \quad \left\{ \frac{du(y-T)}{du(y-T)} \right\}_R = \left\{ \frac{du(y-T)}{du(y-T)} \right\}_P$$

Where, 'R' and 'P' are the two individual tax payers

'Mu' = Marginal utility of income

y = income

T = tax

Limitation of Subjective Approach

- It assumes that taxes should be designed to equalise the marginal utility or loss of utility among all taxpayers. However, individuals have different tastes, preferences and characters, making it nearly impossible to achieve this in practice.

- Sacrifice is psychological and subjective so it cannot be accurately measured or compared across individuals.
- While idealistic, this approach ignores practical realities, such as the absence of a reliable method to measure individuals' utility or satisfaction loss.
- Prof. Richard Musgrave noted that without a reliable way to measure utility, the subjective concept of ability to pay remains impractical.

Objective Approach to the Ability to Pay Principle

The Objective Approach to Ability to Pay focuses on measurable and tangible factors to determine a taxpayer's ability to pay. It is also referred to as the Faculty Theory of Ability to Pay, popularised by Prof. Seligman. This approach assesses a taxpayer's ability to pay taxes based on income, property, consumption expenditure and family circumstances, thereby ensuring practical criteria. Prof. Seligman argued that taxes should be based on a person's faculty or economic ability to pay, rather than on the benefits received. Consequently, wealthier individuals with higher incomes, greater property or higher consumption capacity should contribute more to state revenue, while poorer individuals should be taxed less. Therefore, it can be concluded that the objective approach is more practical and scientifically grounded compared to the subjective approach.

- Taxpayer's ability to pay taxes based on income, property, consumption expenditure

Limitations of The Objective Approach in Taxation

1. A property tax is considered regressive because it disproportionately affects small property holders. This creates an inequitable tax burden.
2. The assessment of property value for taxation is not uniform, leading to inconsistencies.
3. Property taxes often encourage individuals to hide or under report their property or income to reduce their tax liability. This behaviour distorts the tax system and results in a loss of government revenue.

2.2.2 Impact and Incidence of Taxation

The impact and incidence of taxation describe who bears the burden of a tax and how it affects individuals or businesses. Let us discuss this in detail.

The impact of taxation refers to the immediate burden of tax

- Initial burden of taxation

that falls on the taxpayer at the point when the tax is imposed. The nature of taxation deals with the initial burden of the tax, which is directly felt by the person who is legally responsible for paying the tax. The impact of tax can be shifted to others depending on the circumstances. For instance, a business may pass on the tax burden to consumers by raising prices. In certain cases, the impact of tax cannot be shifted to others. For example, income tax is borne entirely by the individual earning the income.

- Ultimately bears the burden of a tax

The incidence of tax refers to who ultimately bears the burden of a tax. It cannot be shifted to others, meaning the ultimate burden of the tax rests on the individual or entity. In contrast, the impact of taxation can sometimes be shifted to others. The incidence of taxation involves the direct financial responsibility of paying the tax.

Table 2.2.1 Difference Between the Incidence and Impact of Tax

Aspect	Impact of Tax	Incidence of Tax
Definition	Refers to the immediate burden of a tax on the person or entity legally responsible for paying it.	Refers to the ultimate burden of a tax on the person or entity who cannot shift it further.
Focus	Who pays the tax initially	Who ultimately bears the economic burden of the tax.
Shiftability	Can often be shifted to others (e.g., businesses passing tax to consumers through higher prices).	Cannot be shifted further; the final taxpayer bears the burden.
Example	A manufacturer pays a sales tax to the government.	The cost of the sales tax is passed on to consumers through higher product prices.
Type of Tax	Applicable to both direct and indirect taxes.	Most common in direct taxes like income tax.
Nature	Temporary or immediate effect of the tax.	Long-term or final effect of the tax.

2.2.3 Theory of Optimal Taxation and Dead Weight Loss

An optimal tax system explains how to design a tax structure that reduces inefficiencies and distortions in the market while ensuring social welfare. It aims to balance equity (fairness) and efficiency (minimal waste). This concept builds on the assumption that the government must raise revenue from the public. The revenue depends on the type of tax instruments used in the economy. Common tax instruments include income tax, commodity tax or a combination of both. A neutral tax system avoids creating distortions and inefficiencies in the market. Much of the performance of the economic system depends on the type of tax system in place. Let us discuss them in detail.

- Balance equity and efficiency with minimum distortions and inefficiencies

A commodity tax is a tax imposed on goods and services, aimed at reducing economic distortions. For example, goods like designer clothes, high-end electronics or expensive cars tend to have more elastic demand because consumers are more likely to reduce their consumption when prices increase. When policymakers impose higher taxes on these products, which raise the price, the demand for the commodity falls. For such types of commodities, governments should impose lower tax rates to reduce the distortions caused by higher taxes. Therefore, Ramsey proposed that tax rates on commodities should be proportional to the sum of their supply and demand elasticities.

- Lower rate of tax imposed on commodities which reduces the distortions

In the case of income tax, equity should be considered to ensure optimal income taxes. This means that higher-income individuals should pay more in taxes, while lower-income individuals should pay less. Such a system helps reduce inequality. However, efficiency also matters. Higher taxes on income can reduce people's incentive to work and produce, thereby lowering productivity. Therefore, lower taxes on lower-income groups help maintain motivation to work and earn, balancing both efficiency and equity in the context of optimal taxation.

- Lower tax on income which raises productivity

Optimal taxation seeks to strike a balance between fairness and reducing economic distortions, otherwise, it will result in a loss of economic efficiency. When policy makers aim to ensure efficiency in optimal taxation, a lump-sum income tax is required for an optimal tax mix, while commodity taxes are not used. However, if policymakers focus on equity, both

- Optimal taxation reduces the inefficiency

commodity taxes and income taxes are utilised. They must carefully consider the nature of goods (elastic vs. inelastic demand) and who consumes them (rich vs. poor) to design a tax system that benefits society as a whole.

Taxes can make people and businesses behave differently from they would in the absence of taxation. For example, if the government imposes a tax on a product, people may buy less of it, leading to reduced overall production and consumption. This decrease in economic activity results in a loss of both consumer and producer welfare. In such cases, resources are not being used efficiently, which negatively impacts the overall well-being of the economy. This inefficiency creates an excess burden on society. Excess burden refers to the loss of economic efficiency caused by the inefficient allocation of resources. This inefficiency of resources leads to reductions in government revenue. This is also termed as Dead weight Loss (DWL) or Allocative Inefficiency. It can be explained with the help of a figure.

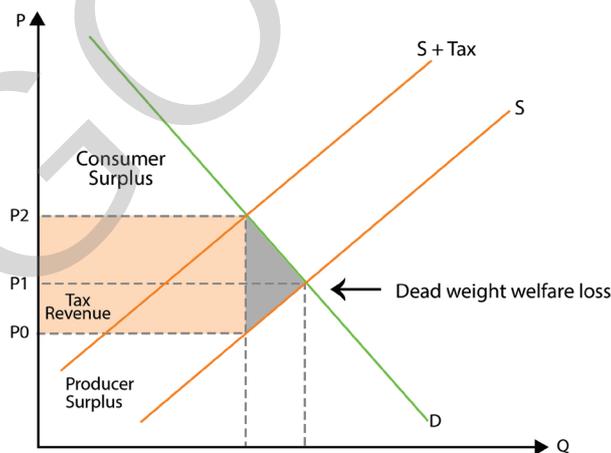


Fig: 2.2.2 Dead weight Loss of Taxation

- Dead weight loss does not create the tax benefit for both the government and the public

The x-axis represents the quantity, while the y-axis represents the price of the commodity. The curve labelled 'D' is the demand curve and 'S' is the supply curve. The point where the demand and supply curves intersect determines the equilibrium price, denoted as P1. When the government imposes a tax, the price rises from P1 to P2. As a result, consumers cannot consume as much as before, which reduces consumer surplus. As a result, the supply curve shifts to the S + T curve. Additionally, the price increase leads to a fall in demand, causing firms to curtail

production. This is because they now have to pay taxes on their profits, which also reduces producer surplus. The government earns tax revenue, represented by the rectangle. However, the shaded triangular area illustrates the deadweight loss caused by taxation. This dead weight loss signifies an inefficiency where the tax generates neither a benefit for the public nor sufficient revenue for the government.

2.2.4 Equity Vs Efficiency

When we allocate resources for the welfare of society, we often hear the terms equity and equality. In economics, equity refers to fairness or justice in distribution, such as how income, wealth, taxes and public services are allocated among individuals in society. On the other hand, equality implies treating everyone the same, regardless of their circumstances. Here we consider equity which focuses on achieving the fairest distribution of resources and benefits by adopting policies that address disparities; such types of policy-making ensure the efficiency of the economy. Equity can be divided into two as horizontal equity and vertical equity. Let us discuss them in detail:

1. Horizontal Equity

Horizontal equity means fairness in the treatment of individuals who are in similar circumstances. For example, people with the same income should be taxed at the same rate. Horizontal equity ensures that people in equal situations are treated equally.

2. Vertical Equity

Vertical equity refers to fairness in the treatment of individuals who are in different circumstances. A policy of taxing the rich more while taxing the poor less and providing subsidies to them is an example of vertical equity, as it recognises the different economic positions of individuals and seeks to address disparities.

3. Intergenerational Equity

This type of equity focuses on the fairness of policies across different generations. For example, if a government borrows large amounts of money to finance current expenditure, it can place a financial burden on future generations through higher taxes and interest payments. Ensuring intergenerational equity means considering the long-term effects of policies on future generations.

- Fairness or justice in the distribution of resources



- Maximum satisfaction derives from the limited resources

The concept of efficiency in public finance can be explained with the help of Samuelson's General Equilibrium Model. This model ensures the efficient allocation of resources, focusing on the balance between private and public goods for two individuals. Suppose the economy produces two types of goods, namely, private goods (P) and public goods (S). Private goods are consumed individually by each person while public goods (S) are shared equally by everyone. In the economy resources are limited, meaning that producing more of one goods requires producing less of the other. That is a trade-off relation which exists between the production of private goods and public goods. Each person derives utility from consuming goods. Efficiency in this context means that both individuals, achieve maximum satisfaction (utility) without wasting resources, all within the constraints of the economy's limited resources. Let us explain with the help of a figure.

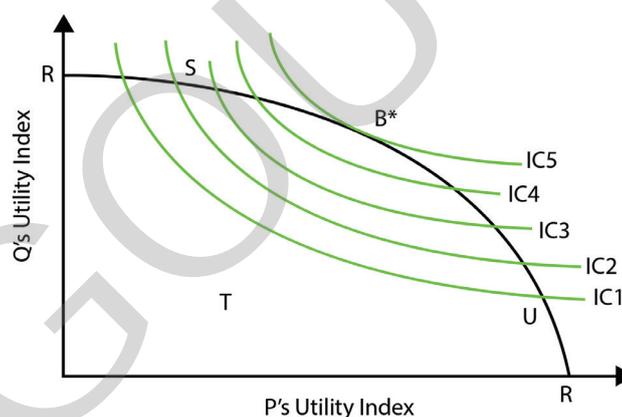


Fig: 2.2.3 Efficient Resource Allocation

The X-axis represents Mr. P's utility and the Y-axis represents Mr. Q's utility. The RR represents the grand utility frontier. On this curve, B* represents the bliss point, which is the point of highest possible social welfare. The economy starts at point T and certain movements can increase welfare without anyone losing. A movement upward along the Y-axis to S benefits Mr. Q while keeping Mr. P's utility unchanged and a movement right along the X-axis to U benefits Mr. P while keeping Mr. Q's utility unchanged. These movements show the Pareto efficiency because one person gains without harming the other. Let us compare social welfare between points S and U. Point S is better because it lies on a higher social indifference curve, reflecting greater overall social welfare. Point S is on the indifference curve IC₃, which represents a lower welfare level compared to IC₅ (at point B*). Moving from S to B* improves

overall welfare (from IC_3 to IC_5), but Mr. P benefits more than Mr. Q and Mr. Q experiences a loss. In this case, Pareto efficiency is not achieved because one individual is made worse off than the other. This situation highlights the trade-off between equity and efficiency. To address this, policymakers may attempt to redistribute resources to compensate Mr. Q for the loss, aiming for greater equity. Focusing only on efficiency, which might lead to unequal outcomes where one person (Mr. P or Mr. Q) has significantly higher utility than the other. Focusing on equity, which may reduce overall efficiency but create a fairer distribution of welfare.

2.2.5 Theory and Measurement of Dead Weight Losses

- Harberger is associated with the concept of deadweight loss

The concept of measuring deadweight loss emerged in the 19th century and is associated with the works of Jules Dupuit (1844) and Fleeming Jenkin (1871/72). In the 1950s and 1960s, the practical measurement of actual deadweight losses began with the pioneering work of Arnold Harberger. In 1964, Harberger developed a formula to approximate deadweight loss and used it to estimate the losses caused by income taxes in the U.S. In 1966, he extended his research to estimate the welfare costs of capital taxes in the U.S.

- Loss of economic efficiency caused by market distortions

Deadweight Loss (DWL) refers to the loss of economic efficiency caused by market distortions, such as taxes or subsidies. It occurs when the reduction in consumer and producer welfare exceeds the tax revenue raised by the government. This inefficiency arises primarily from taxes on goods and services and substitution effects, both of which contribute to deadweight loss. When taxes increase the price of an item of goods, consumers buy less and producers sell less, leading to reduced overall economic activity. Additionally, substitution effects occur when taxes cause consumers to shift their consumption from higher-taxed goods to lower-taxed ones, creating inefficiencies in the market. For example, suppose the government imposes a high tax on imported soda. A soda lover might switch to buying domestic soda to avoid the tax. As a result, the government collects no revenue from this person. At the same time, soda lover's well-being decreases because they can no longer enjoy their preferred soda. This situation demonstrates how taxes can create deadweight loss, where both the government and individuals lose out without any corresponding gain. Deadweight loss caused by taxation can be measured using the following equation.



$$DWL = \frac{1}{2} \times \text{Elasticity of Demand } (\epsilon_d) \times \text{Initial Quantity Consumed } (X_0) \times \left(\frac{\text{Tax } (t)}{\text{Price } (p)} \right)^2$$

This equation shows that DWL depends on demand elasticity, the initial quantity consumed and the square of the tax rate. Suppose the government imposes a tax of ₹8 on a commodity. The initial price of the commodity is ₹40 and the quantity demanded before the tax is 2,000 units. The elasticity of demand for the commodity is 0.6. Using this formula to find out the deadweight loss (DWL). From this question

Elasticity of demand $(\epsilon_d) = 0.6$

The initial quantity consumed $(X_0) = 2,000$ units

Price $(p) = ₹40$

Tax $(t) = ₹8$. Substitute these values into the formula

$$DWL = \frac{1}{2} \times \epsilon_d \times X_0 \times \left(\frac{t}{p} \right)^2$$

First, calculate the tax-to-price ratio: $t/p = 8/40 = 0.2$

Square the ratio: $(t/p)^2 = (0.2)^2 = 0.04$

Now apply these values to the DWL formula:
 $DWL = 1/2 \times 0.6 \times 2000 \times 0.04$

After solving we get the $DWL = 0.3 \times 2000 \times 0.04 = 0.3 \times 80 = 24$
 The deadweight loss (DWL) caused by the tax is ₹24.

Let us discuss this concept with the help of a figure

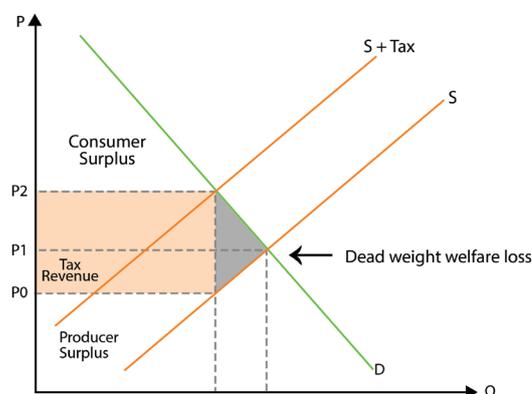


Fig:2.2.4 Deadweight Loss of Welfare

- Deadweight loss emerged as a result of the tax

The x-axis represents the quantity, while the y-axis represents the price of the commodity. The curve labelled 'D' is the demand curve and 'S' is the supply curve. The point where the demand and supply curves intersect determines the equilibrium price, denoted as P1. When the government imposes a tax, the price rises from P1 to P2. As a result, consumers cannot consume as much as before, which reduces consumer surplus. As a result, the supply curve shifts to the S+TAX curve. Additionally, the price increase leads to a fall in demand, causing firms to curtail production. This is because they now have to pay taxes on their profits, which also reduces producer surplus. The government earns tax revenue, represented by the rectangle. However, the shaded triangular area illustrates the deadweight loss caused by taxation. This deadweight loss signifies an inefficiency where the tax generates neither a benefit for the public nor sufficient revenue for the government.

2.2.6 Problem of Double Taxation

- Taxing the same thing or base more than once during the same period

Double taxation refers to taxing the same thing or base more than once during the same period. It is not about taxing the same individual twice but rather taxing the same asset or income by the same or different authorities. For instance, imagine you own a company. The company earns a profit of ₹10,000 and the government charges a corporate tax of 20%. As a result, the company pays ₹ 2,000 in taxes. After paying the corporate tax, the company distributes the remaining ₹8,000 as dividends to shareholders. When you, as a shareholder, receive your share of the dividends, you are taxed again at 10%. So, the same profit (₹10,000) is taxed twice. First, as corporate tax and then, as dividend tax.

2.2.6.1 Forms of Double Taxation

Double taxation occurs when the same income, property or financial transaction is taxed more than once, either by different authorities or by the same authority. Let us discuss this in detail under two headings. They are;

1. Double Taxation by Two Competing Authorities
2. Double Taxation by the Same Authority

A. Double Taxation by Two Competing Authorities

Taxes may be imposed on the same income or asset by two separate governments, either within the same country or in different countries. For instance, a person earning income in



- Taxes imposed on the same income or asset by two separate governments

one country but residing in another may face taxation from both countries. In such cases, taxes are levied based on the origin of the income and the domicile of the individual. This situation creates a barrier to the free flow of capital, labour and resources across borders. Additionally, it discourages foreign investment and hinders international economic cooperation. The negative impacts of double taxation can be avoided through various measures.

1. Clear criteria on the Basis of Taxation

Taxes should be levied based on clearly defined criteria to avoid conflicts between countries. One such criterion is the source of income, where taxes are imposed in the country where the income is earned. Another is residence, where taxes are based on the domicile or permanent residence of the individual. Clear guidelines on these criteria ensure consistency and fairness in taxation while minimising disputes between nations.

2. Provision of Bilateral Relief

Two countries enter into agreements to avoid double taxation on shared tax bases. For instance, SAARC countries signed a multilateral agreement in 2005 to avoid double taxation on customs duties. These agreements lower the total tax liability of taxpayers and promote economic cooperation.

Double Taxation by the same Authority

In this case, tax is imposed by the same authority on the same income, property, or financial transaction more than once. For example, a company's profits are taxed first at the corporate level. When these profits are distributed to shareholders as dividends, they are taxed again at the individual level. This means that the same income is taxed both before and after distribution. How can this be avoided? Is it possible? Let us discuss solutions to avoid double taxation within a country.

- Tax is imposed by the same authority on the same income

1. Centralisation of Finances

Taxes are imposed by the central government and the revenue is distributed among union and state governments to prevent the inefficiency of double taxation.

2. Introduce a Uniform Tax Criteria

Central and state governments can establish a uniform set of taxation criteria through mutual negotiations and legislation. This ensures consistency and reduces instances of double taxation.

3. Reciprocal Tax Agreements

States within a country can enter into reciprocal agreements to avoid double taxation. Reciprocal tax criteria refer to agreements or arrangements between two or more governments. These agreements are based on mutual understanding, where each government agrees on how to tax individuals or businesses to ensure that the same income, asset or transaction is not taxed twice. For example; American and Canadian states have reciprocal tax arrangements for income tax and duties.

4. Exclusive Tax Jurisdictions

Exclusive tax jurisdictions refer to the union and state governments ensuring that each authority has specific areas of responsibility for levying taxes. This prevents overlapping taxation on the same income, asset or transaction, thus avoiding conflicts and inefficiency.

- Tax is imposed by the same authority on the same income

The impact of double taxation, whether caused by multiple authorities or the same authority, creates inefficiencies and barriers in economic activities. It affects both individuals and businesses, often requiring international agreements and domestic policies to mitigate its negative effects.

Summarised Overview

The benefit principle suggests that individuals should pay taxes based on the benefits they receive from public goods or services. In contrast, the ability-to-pay principle focuses on fairness, advocating that taxes should be levied based on an individual's capacity to pay, often measured by income or wealth. Optimal taxation seeks to balance equity and efficiency, designing tax systems that maximise social welfare while minimising distortions in economic behaviour. Deadweight loss refers to the inefficiency caused by taxation, where the tax reduces the total surplus available to consumers and producers without corresponding benefits to the government or society. The debate between equity and efficiency underscores the trade-off in taxation policy ensuring fairness often comes at the expense of economic efficiency and vice versa. Double Taxation occurs when the same income or asset is taxed twice, such as corporate profits being taxed at the company level and again as dividends for shareholders.

Assignments

1. Elucidate the concept of the ability-to-pay principle in taxation.
2. Explain the concept of optimal taxation and its role in balancing equity and efficiency.
3. Analyse the causes and consequences of deadweight loss in taxation.
4. Evaluate the trade-off between equity and efficiency in taxation policies.
5. Explain the concept of double taxation.

Suggested Reading

1. Dalton, Hugh. *Principles of Public Finance* (2003) - Vol. 1. Psychology Press.
2. Hyman, David N. (1973), *Economics of Government Activity*, Holt, Rinehart and Winston Inc.
3. John Cullis and Philip Jones (2009), *Public Finance and Public Choice – Analytical Perspectives*, 3rd edition, Oxford University Press.

Reference

1. Musgrave, R. A. and Musgrave, P. B. (1989)- *Public Finance in Theory and Practice*, McGraw Hill, New York.
2. Joseph E. Stiglitz (2000), *Economics of the Public Sector*, 3rd edition, W. W. Norton and Co.

Space for Learner Engagement for Objective Questions

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UNIT 3

Shifting Theories of Taxation

Learning Outcomes

After completing this unit, the learner will be able to:

- get an idea about the shifting of taxation
- understand the diffusion theory
- know about the concentration theory
- discuss the demand and supply theory of taxation

Background

Policy makers must identify who truly bears the burden of a tax when designing a tax structure. While formulating tax policies, they need to ensure that the tax system does not disproportionately affect vulnerable groups. The shifting theories of taxation are instrumental in achieving this goal. The shifting theories of taxation explain how the burden of a tax can be transferred from one party to another. These theories analyse how the tax burden is distributed among various groups in the economy. They provide valuable insights into the economic impacts of taxation, aid in achieving equity by understanding how taxes affect different income groups and help governments design optimal tax structures that minimise unintended consequences, such as excessive burdens on businesses or individuals. The shifting theories of taxation also reflect the broader impacts of taxation on individuals, businesses and the overall economy. They help assess the fairness of tax policies, ensuring that the burden is distributed equitably. Furthermore, these theories improve decision-making in tax policy formulation, supporting balanced economic growth and enhanced social welfare. In this unit, we will learn about the various theories of tax shifting. Let us examine them.

Keywords

Shifting, Forward Shifting, Backward Shifting, Diffusion of Taxation

Discussion

2.3.1 Shifting of Taxation

The concept of shifting of taxation refers to the process through which the tax burden is passed from one entity to another. The entity initially responsible for paying the tax may not fully bear the tax burden. Instead, the costs associated with the tax are transferred to another party through changes in prices or wages. Tax shifting can be broadly divided into two categories, viz, forward shifting and backward shifting.

- Tax burden is passed from one entity to another

Forward shifting occurs when a business passes the cost of a tax onto consumers through higher prices. Suppose the government imposes a sales tax on businesses. The businesses might raise the price of their products to compensate for the tax. In this case, consumers end up bearing the cost of the tax through higher prices. The backward shifting of tax occurs when the tax burden is transferred from the purchaser to the seller. This situation can arise when a tax is imposed on a wholesaler, but the wholesaler cannot increase the price of their goods due to market competition. As a result, the wholesaler may accept lower payments from the producer to absorb the tax burden. For instance, suppose where a government imposes a sales tax on wholesale fruits. If the wholesaler cannot raise the selling price because of stiff competition or price-sensitive buyers, they might negotiate with farmers (producers) to reduce the purchase price of the fruits. In this case, the tax burden is effectively shifted backward to the producers.

2.3.2 Theories of shifting taxation

We know that the shifting process is a result of tax incidence. Therefore, the incidence theories of taxation are essentially theories of shifting. The major theories of shifting are:

1. Concentration Theory
2. Diffusion Theory
3. Demand and Supply Theory of Taxation. Let us discuss them in detail.

2.3.2.1 Concentration Theory of Taxation

The concentration theory of taxation is associated with the Physiocrats. They argued that the burden of taxation ultimately falls on one particular class of taxpayers, regardless of who



- Tax imposed on surplus income

initially pays the tax. According to the Physiocrats, agriculture is the only productive sector, as it generates real income, while other sectors are not considered productive. Therefore, they believed that only the productive sector should bear the tax burden, without passing it on to other groups. In their view, agriculturalists should pay taxes and should not shift this burden onto other classes because they are only generating income. If a tax imposed on land does not allow surplus income, the tax burden may shift elsewhere.

- Taxes are diffused among the members of a community

2.3.2.2 Diffusion Theory of Taxation

N. F. Canard, the French economist, propounded the diffusion theory of taxation. This theory states that all taxes are diffused among the members of a community, meaning that the burden of taxation is scattered throughout society. Furthermore, all taxes are equitably distributed across society and the shifting of the burden reaches every section of society until it ultimately ends. This theory is supported by Pro. Lord Mansfield, who says: “tax is like a stone falling into a lake and making a circle till one circle produce and gives motion to another and the whole circumstance is agitated.”

- Entire tax burden to buyers by increasing prices

2.3.2.3 Modern Theory or Demand and Supply Theory of Taxation

The modern theory of taxation was introduced by Hugh Dalton, with supporters such as E. R. A. Seligman and F. Y. Edgeworth. This theory is considered one of the most widely accepted approaches to taxation. The Modern Theory focuses on the role of market forces in analysing the incidence of taxation. A tax imposed on factors of production raises the cost of production, which affects the prices of final products made using those inputs. Producers / suppliers generally attempt to transfer the entire tax burden to buyers by increasing prices. However, this may not always be possible. The extent to which the tax burden is shifted from producers to consumers depends on the elasticity of demand and supply of the product. Let us explain with the help of figures

Situation One: When the unitary elasticity of demand and supply exists, buyers and sellers share the burden of tax equally. Let us explain with the help of figure:

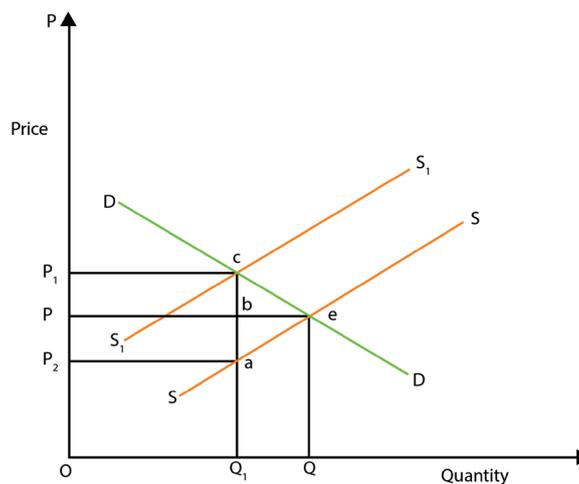


Fig :2.3.1 Tax burden equally shared between the buyers and sellers

• Burden of tax falls on both buyers and sellers

In the figure, the x-axis represents quantity and the y-axis represents price. In the figure, DD denotes the demand curve and SS denotes the supply curve. OP is the original equilibrium price. When the government imposes a tax, the price rises to OP1 and the quantity demanded and supplied decreases to OQ1. The tax burden is measured as ac (the difference between P2 and P1). The distribution of this tax depends on the elasticity of demand and supply. In the figure, ab represents the producer's tax incidence and bc represents the buyer's tax incidence. The buyer pays OP1 (or Q1c), while sellers receive only Q1a. The government collects the remaining ac in the form of taxes. Thus, bc is the buyer's tax incidence and ab is the producer's tax incidence. We can conclude that buyers and sellers share the tax equally because the elasticity of demand and supply are similar.

Situation 2: Here the demand curve is less elastic compared to the supply curve. In this scenario, consumers are less responsive to price changes, meaning they cannot easily reduce their demand when prices rise. On the other hand, suppliers have a more elastic supply, meaning they can adjust production more easily in response to changes in price. As a result, producers are better able to pass on the tax burden to consumers by raising prices. Let us explain with the help of figures.

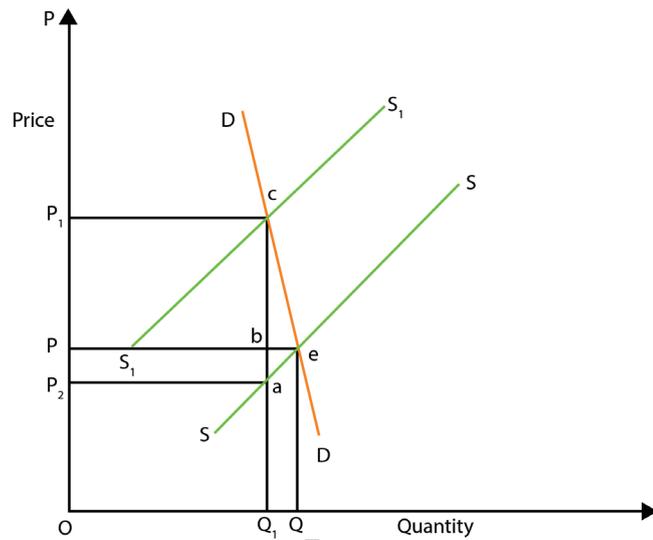


Fig:2.3.2 Tax burden falls on the consumers

In the figure, the x-axis represents quantity and the y-axis represents price. In the figure, DD denotes the demand curve and SS denotes the supply curve. OP is the original equilibrium price. When the government imposes a tax, the price rises to OP₁ and the quantity demanded and supplied decreases to OQ₁. The tax burden is measured as ac (the difference between P₂ and P₁). Here, the incidence of the tax falls more heavily on buyers, represented by bc, while producers absorb a smaller portion of the tax (ab). This reflects the imbalance in tax incidence due to differences in elasticity. In this case, buyers bear a larger share of the tax burden when demand is less elastic compared to supply.

- Burden of tax fall on consumers

Situation 3: When the demand curve is more elastic than the supply curve, it means that consumers are highly responsive to changes in price. In other words, a small increase in price will lead to a significant decrease in the quantity demanded. Due to this elasticity, suppliers are less able to pass on a large portion of a tax to consumers because the drop in demand reduces their overall revenue. As a result, producers are forced to bear a larger share of the tax burden, while buyers bear a smaller portion. Let us explain with the help of figures.

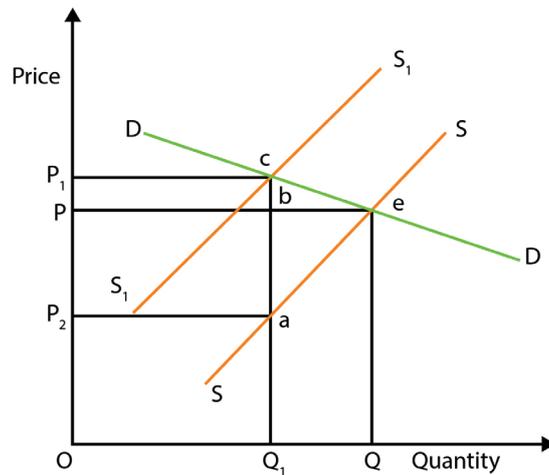


Fig: 2.3.3. Tax burden falls on producers

- Burden of tax fall on producers

In the figure, the x-axis represents quantity and the y-axis represents price. In the figure, DD denotes the demand curve and SS denotes the supply curve. OP is the original equilibrium price. When the government imposes a tax, the price rises to OP1 and the quantity demanded and supplied decreases to OQ1. The tax burden is measured as ac (the difference between P2 and P1). Here, a larger tax burden falls on the producers, as shown by $(ab > bc)$. This occurs because any increase in price leads to a significant reduction in the quantity demanded, thereby reducing the supplier's total revenue.

Situation 4: When the supply curve is relatively inelastic, it means that the quantity supplied of a product does not change significantly in response to changes in price. In this case, producers are less able to reduce their supply of the product in response to a tax because their production capacity is limited. However, buyers can more easily reduce the quantity demanded when prices rise. As a result, producers are unable to shift a significant portion of the tax burden onto consumers. The tax burden is mostly borne by producers because they cannot fully offset the tax through price increases due to limited supply. Let us explain with the help of figures.

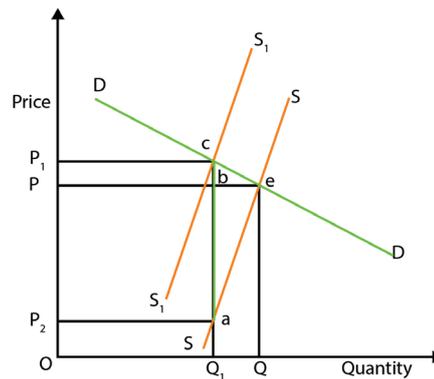


Fig:2.3.4 Tax burden falls on the producers

- Tax burden fall on the producers

In the figure, the x-axis represents quantity and the y-axis represents price. In the figure, DD denotes the demand curve and SS denotes the supply curve. OP is the original equilibrium price. When the government imposes a tax, the price rises to OP₁ and the quantity demanded and supplied decreases to OQ₁. The tax burden is measured as ac (the difference between P₂ and P₁). The producer's revenue decreases from OP₂aQ₁, while the government collects the remaining tax revenue. The larger tax burden on producers is due to the inelasticity of the supply curve.

Situation 5

When the supply curve is more elastic than the demand curve, producers can adjust their supply relatively easily in response to price changes, while consumers are less responsive to price changes due to the inelastic demand curve. A larger share of the tax burden falls on consumers because their demand does not decrease significantly despite the price increase caused by the tax. Producers, having an elastic supply, can adjust their production more easily and bear a smaller portion of the tax burden. In short, the burden of the tax falls more heavily on the buyers.

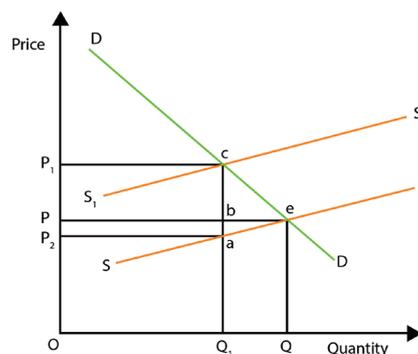


Fig:2.3.5 Tax burden falls on the buyers

- Burden of tax falls on the buyers

In the figure, the x-axis represents quantity and the y-axis represents price. In the figure, DD denotes the demand curve and SS denotes the supply curve. OP is the original equilibrium price. When the government imposes a tax, the price rises to OP1 and the quantity demanded and supplied decreases to OQ1. The tax burden is measured as ac (the difference between P2 and P1). Here, the incidence of tax falls more heavily on the consumers than on the producers, which is represented by $bc > ab$.

Summarised Overview

In this unit, we have studied the theories of taxation. Firstly, shifting of taxation referring to how the burden of a tax is passed from the entity initially responsible for paying the tax to others in the supply chain. Shifting of taxation can be divided into two types: backward shifting and forward shifting. The concentration theory focuses on imposing taxes on those who are best able to bear the burden. The diffusion theory of taxation suggests that taxes should be spread widely across various income groups and activities to avoid placing too much burden on any one sector or group. The modern theory of taxation aims to balance efficiency and equity. It focuses on designing tax systems that minimise distortions while ensuring fairness and generating sufficient revenue.

Assignments

1. Explain the concept of shifting of taxation.
2. What is the Concentration Theory of Taxation?
3. Describe the Diffusion Theory of Taxation.
4. How does the Modern Theory of Taxation attempt to balance efficiency and equity?

Suggested Reading

1. Dalton, Hugh. *Principles of Public Finance* (2003) - Vol. 1. Psychology Press.
2. Hyman, David N. (1973), *Economics of Government Activity*, Holt, Rinehart and Winston Inc.
3. John Cullis and Philip Jones (2009), *Public Finance and Public Choice – Analytical Perspectives*, 3rd edition, Oxford University Press.



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1. Musgrave, R. A. and Musgrave, P. B. (1989)- *Public Finance in Theory and Practice*, McGraw Hill, New York.
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UNIT 4

Distributional Aspects of Public Finance

Learning Outcomes

After completing this unit, the learner will be able to:

- get an idea about the distributional aspects of public finance
- understand the concepts of monetary and fiscal policy
- know about the idea of a balanced budget multiplier
- able to understand the zero-based budget.

Background

The economy can achieve social welfare through the effective utilisation of resources. This goal is accomplished through fiscal policy and monetary policy. Fiscal policy helps in the efficient distribution of resources while maintaining economic stability, promoting job creation and promoting growth. Similarly, monetary policy enables central banks to control the money supply and interest rates, ensuring price stability and supporting economic growth. Both policies provide valuable tools for addressing economic challenges. Efficient resource allocation requires proper planning. This planning and implementation of resources are carried out through the budget document. Various budget formats are available for resource allocation, but here we focus on the balanced budget and zero-based budget. Both concepts emphasise the effective utilisation of resources. In this unit, we also explore how these aspects impact different sections of society and highlight the importance of equitable development.

Keywords

Allocation, Distribution, Monetary Policy, Fiscal Policy, Balanced Multiplier, Zero-Based Budget

Discussion

2.4.1 Distributional Considerations in Public Finance

- Effective utilisation of resources

Distributional considerations refer to how taxes and public expenditures influence the distribution of income and wealth among different individuals or groups in a society. The primary goal is the efficient utilisation of scarce resources while addressing the disparities in income and consumer preferences. Income distribution is influenced by the distribution of factor endowments, which is determined by the process of factor pricing. Under perfect competition, factors receive payments equal to the value of their marginal product, leading to an efficient allocation of resources. However, under imperfect competition, factors receive less than their marginal product value, resulting in inefficiencies and income inequalities.

Even when factor prices are determined competitively, fairness in income distribution is not guaranteed. The concept of fairness is subjective, varies across societies and is challenging to define or implement. Governments play a crucial role in addressing income distribution issues through various redistribution policies, including:

- **Tax Redistribution:**

Progressive taxation imposes higher taxes on high-income groups, redistributing income by financing subsidies for low-income groups. This helps to reduce income inequality.

- Effective distributor policies reduces inequality

- **Targeted Programmes:**

Revenue generated from progressive taxation is used to fund programmes that directly benefit low-income groups, such as welfare schemes, healthcare and education.

- **Tax-Subsidy Combination**

The “Tax-Subsidy Combination” refers to a public finance policy where governments use taxes on specific goods or services that are mainly consumed by high-income groups and provide subsidies for goods or services that are predominantly consumed by low-income groups.

Although these policies aim to reduce income inequalities, they come with efficiency costs. For instance, imposing higher taxes may discourage production and investment, leading to welfare losses and reducing overall economic efficiency.



- Inefficient resource allocation put down the economic growth

Additionally, redistribution policies can result in changes to consumer and producer surpluses, causing economic distortions. These efficiency costs are key challenges associated with redistribution efforts. While governments try to achieve equitable outcomes, it is crucial to minimise these efficiency costs to ensure sustained economic growth.

2.4.2 Fiscal and Monetary Policies

- To maintain stability with the help of fiscal and monetary policy

Fiscal and monetary policies are fundamental tools used by governments and central banks to regulate economic activity and ensure stability. These policies influence various aspects of the economy, such as the supply of money, credit availability, interest rates and inflation, thereby shaping the overall economic environment. Fiscal policies, implemented by governments, focus on taxation and public spending, while monetary policies, managed by central banks, aim to regulate liquidity and credit to maintain economic balance.

2.4.2.1 Fiscal Policy

- Fiscal policy is the policy of the government

The term fiscal originates from the Greek word “fisc,” meaning a basket, which symbolises a government’s treasury. Fiscal policy focuses on a government’s income and expenditure and it involves decisions about taxes, public spending, borrowing, debt management and addressing budget deficits. The concept of fiscal policy was introduced by the British economist Keynes. He stated that fiscal policy could be used by governments as a tool to stabilise the business cycle and regulate economic output. According to Keynes, markets alone cannot maintain equilibrium, making fiscal policy essential. Fiscal policy aims to balance the economy, ensuring stability and promoting growth. Therefore, fiscal policy can be defined as a government’s strategy to maintain economic stability and foster growth. Fiscal policy is a strategy used by governments to manage spending and taxation in the economy to influence aggregate demand (AD). Depending on the nature of aggregate demand, it can be divided into two types:

Expansionary Fiscal Policy: Expansionary fiscal policy is used to increase aggregate demand. To achieve this, the government increases spending or reduces taxes. This injects more money into the economy, leading to higher levels of consumption and investment.

- Aggregative demand can be controlled through fiscal policy

- The main objective of the fiscal policy is to maintain stability

- Efficient resource allocation ensures through fiscal policy

Contractionary Fiscal Policy: Contractionary fiscal policy is used to reduce aggregate demand. It includes measures such as decreasing government spending or increasing taxes, which withdraw money from the economy to prevent inflation.

We know that fiscal policy helps stabilise the economy and achieve macroeconomic goals. To do this, the government uses budgetary instruments such as taxes, non-tax revenues and government spending, which influence overall economic activity while ensuring sound public finances. The objectives of fiscal policy are largely similar in both developed and underdeveloped economies. In underdeveloped countries, the goals of fiscal policy are to promote investment, maintain stability and reduce extreme wealth and income inequalities. Similarly, in developed economies, the focus is on economic growth, stability and fair income distribution. Some key objectives are given below:

1. Mobilising resources for sustainable economic growth.
2. Achieving full employment,
3. Restraining price instability to ensure economic stability,
4. Achieving equitable distribution of income and wealth.

Let us discuss them in detail.

1. Economic Growth

Fiscal policy plays a key role in directing the economy's resources efficiently which promotes overall economic stability and growth. The government achieves this by allocating resources between private and social goods. Private goods are provided through the market and are characterised by rivalry which means one person's consumption reduces availability for others and excludability which means consumers can be prevented from using the goods. On the other hand, social goods are typically non-excludable; that is, users cannot be prevented from consuming them and non-rival denotes that one person's consumption does not affect another's. The market fails to provide such goods effectively; so the government intervenes by funding them through budgetary finance. In this allocation, the government aims to ensure that resources are directed to socially desirable ones and avoid misallocating resources to undesirable goods; e.g., harmful products. Additionally, the government should shift resources from unproductive sectors to more productive ones to promote growth and development.

- Mobilisation of savings leads to economic development

To sustain growth, the economy needs a high saving capacity. Taxation alone may not generate enough revenue to meet the demands for development. Therefore, the government uses public borrowing as an important tool in this process. It enables the government to mobilise savings for economic development. To maintain growth, the higher levels of production and consumption are essential. To achieve this the government uses fiscal policy tools such as efficient taxation, tax concessions and subsidies that can encourage consumer spending and investment, thus supporting economic stability and development.

2. Achieving Full Employment

Fiscal policy helps to maintain full employment and keep the economy stable. Full employment means that everyone who is seeking a job can find one at the current wage rates. In reality, it is challenging to achieve full employment because markets are not perfect. In particular, developing countries often face disguised unemployment which means that more people are working in a job than necessary, for, example, in farming. Here we find that the effective utilisation of fiscal policy is essential to attain full employment. The government uses fiscal policy tools such as spending and taxation to achieve this goal.

- Fiscal policy used as a tool to maintain full employment

- **Government Spending:** The government increases expenditure on infrastructure projects, public works, and social programmes to create jobs. This spending boosts overall demand in the economy, which encourages businesses to invest and hire more workers.
- **Lowering Taxes:** Reducing tax rates, such as income tax or corporate tax, allows individuals and businesses to have more money to save and invest. This creates more job opportunities in the economy. After achieving full employment, the government continues to use fiscal measures to ensure that jobs are not lost and that employment levels remain stable.

3. Price Stability

Fiscal policy helps maintain economic stability. Economic stability means maintaining steady growth in the economy without extreme fluctuations like inflation or deflation. It also involves ensuring smooth transitions during different phases of economic growth. Instability arises in the economy due to aggregate demand shocks, that is, when demand is either too high or too low. In such situations, fiscal policy can be

used to address these issues. How does fiscal policy address instability? Here we consider two situations: inflation and deflation.

Situation one : Inflation

Inflation occurs when demand exceeds supply leading to rising prices. To control inflation, the government can use the following fiscal tools:

- Fiscal policy helps to reduce the inflationary pressure

- **Raise Taxes:** Higher tax rates reduce people's purchasing power, which helps decrease demand.
- **Reduce Government Spending:** Lowering government expenditure slows down economic activity, thereby reducing aggregate demand.
- **Public Borrowing:** By borrowing money from the public, the government reduces their ability to spend, which further helps to control inflation. These fiscal measures collectively work to curb inflation and restore economic stability.

Situation Two : Deflation

When the economy faces deflation, it means there is a decrease in the general price level of goods and services. In other words, deflation is negative inflation. To address deflation, the government can:

- Fiscal policy helps to reduce the deflationary pressure

- **Increase spending on public works and employment programmes:** This raises aggregate demand by creating jobs and stimulating economic activity.
- **Reduce Taxes:** Lowering taxes or giving tax rebates, increases people's disposable income, allowing them to spend more, which raises demand for goods and services.
- **Encourage Production:** By reducing taxes, producers have more profits, which can incentivize them to increase production, further raising aggregate demand. These fiscal measures help to boost demand and counteract the negative effects of deflation.

4. Equitable Distribution of Income and Wealth

The equitable distribution of income and wealth is essential for the welfare of the economy. In this context, the government ensures a fair and just distribution of income and wealth in society,



- Fiscal policy helps to reduce the income disparity

which is crucial for achieving the well-being of a nation. To attain this, fiscal policy plays a key role in ensuring distributive justice within the economy. How can the government achieve this? The government uses progressive taxation, where higher taxes are levied on wealthier individuals. This helps reduce income disparity. Additionally, the government provides subsidized services (such as healthcare and education) that primarily benefit lower-income groups. Through the effective utilisation of fiscal policy, the government can strike a balance between fairness and economic growth, promoting both equity and prosperity in society.

Instruments of Fiscal Policy

Fiscal policy is an essential tool for governments to manage the economy by adjusting spending and taxation. It aims to achieve key goals such as economic growth, stability and full employment. The government can use expansionary or contractionary fiscal policies depending on the economic situation. For the effective implementation of fiscal policy, three tools are used:

- Fiscal policy used is a tool to adjusting spending and taxation

- Public expenditure
- Taxation
- Public Borrowing. Let us discuss these tools in detail, focusing on their use in inflation and deflation.

Public Expenditure

Public expenditure refers to the money spent by the government on goods and services, this includes spending on things like infrastructure, healthcare, education, defence, social welfare programs and public safety. The purpose of public expenditure is to meet the needs of society, promote economic stability and ensure the functioning of public services. It plays a key role in economic management, especially during times of inflation or deflation. Suppose the economy faces inflation. Inflation arises due to a demand-supply mismatch, that is, demand for goods is greater than its supply which leads to a rise in prices. To control inflation, the government may reduce public expenditure to reduce overall demand in the economy. For instance, during periods of high inflation, the government may cut back on spending for public projects, such as infrastructure development or social programmes, to reduce the amount of money circulating in the economy. This reduces demand for goods and services, helping to control rising prices.

- Government reduces the spending during inflation

- Government raises the spending during deflation

On the other hand, if the economy faces deflation, which happens when there is a decrease in the general price level of goods and services, often caused by a fall in demand, the government can increase public expenditure to stimulate demand and boost economic activity. For instance, during a period of deflation, the government might increase spending on public works projects, such as building roads, bridges or schools. This creates jobs, increases income and encourages spending in the economy, helping to raise demand and prevent further price declines. In both cases, the government adjusts its spending to either reduce excess demand during inflation or stimulate demand during deflation, helping to stabilize the economy.

Taxation

Taxation is a powerful tool used to maintain economic stability. The government adjusts taxes to influence the overall level of demand in the economy, either by reducing demand (during inflation) or stimulating demand (during deflation). During inflation, the government may increase taxes to reduce overall spending in the economy. For instance, higher taxes reduce the disposable income of individuals and businesses, which in turn brings down consumption and investment. Lower demand helps to stabilize prices and reduce inflationary pressures. For example, during a period of high inflation, the government may increase income taxes, sales taxes, or corporate taxes. As a result, people and businesses have less money to spend, leading to a decrease in demand for goods and services, which helps stabilise the economy.

- Higher the tax rate reduces the inflationary pressure

During a deflationary situation, the government can use taxation as a tool to combat the adverse effects of deflation. Deflation refers to a sustained decrease in the general price level of goods and services, which negatively impacts business investment activities. This often leads to higher unemployment and reduced consumer spending, further affecting overall economic activity. To address deflationary tendencies, the government can reduce tax rates. Lowering taxes can stimulate investment activities as entrepreneurs achieve higher profits, encouraging them to increase production. Reduced tax rates can also lower the prices of consumer goods, making people feel wealthier because their purchasing power increases. As a result, consumers demand more goods and services, boosting economic activity further. In this way, reducing taxation not only supports investment and production but also enhances



consumer confidence and spending, creating a positive cycle of increased economic activity to counteract deflation.

Public Borrowing

Public borrowing is another fiscal policy tool that can influence aggregate demand in the economy. The government can raise funds through loans from both external and internal sources to meet its financial requirements and ensure economic stability.

- Higher rate of borrowing reduces the inflationary pressure

During periods of inflation, characterised by excessive demand or limited supply leading to higher prices, the government can borrow from the public by issuing bonds. Issuing bonds reduces the money available for households and businesses to spend, thereby lowering their purchasing power. This decrease in aggregate demand helps to cool inflationary pressures. Additionally, when the government raises funds internally, it often leads to higher interest rates. These higher rates discourage private sector borrowing and spending, further reducing inflationary demand. Public borrowing can also absorb excess money supply in the economy, particularly when inflation is driven by excessive liquidity. By reducing the amount of money circulating in the market, public borrowing helps to ease inflationary pressures.

- Spend the borrowed funds to overcome deflationary pressure

Another situation is deflation, which refers to a sustained decrease in the general price level of goods and services over time. The economy can overcome this situation by raising aggregate demand, boosting employment and encouraging investment. To achieve this, the government can reduce public borrowing, which enhances the availability of money and raises purchasing power. Additionally, borrowed funds can be used for infrastructure development, welfare programmes or subsidies, directly injecting money into the economy. This increase in demand encourages businesses to invest and produce more. Furthermore, government spending financed through borrowing can create jobs in public projects, reducing unemployment and increasing disposable income. This, in turn, boosts consumer spending and helps to stimulate economic activity in a deflationary situation.

2.4.2.2 Monetary Policy

Monetary policy is a key tool used by a country's central bank (e.g., the Reserve Bank of India) to achieve macroeconomic objectives. It involves managing the supply of money and credit in the economy. The primary goal of monetary policy

- Policy of the monetary authority

is to ensure price stability while fostering overall economic development. Price stability means controlling inflation or deflation, ensuring that prices neither rise nor fall too rapidly. Efficient monetary policy creates favourable conditions for businesses and households, contributing to stable economic growth. Other objectives include:

- Maintaining exchange rate stability.
- Safeguarding the balance of external payment
- Ensuring financial system stability.

According to the situation, the authorities use two types of monetary policy: expansionary monetary policy and contractionary monetary policy. Expansionary monetary policy refers to the actions taken by monetary authorities such as a central bank to increase the money supply by lowering interest rates. It is mainly used during periods of low demand, recession, or deflation to stimulate economic activity. On the other hand, contractionary monetary policy is used to reduce the rate of monetary expansion and control inflation by raising interest rates.

Next, we consider how expansionary monetary policy and contractionary monetary policy are used to address economic conditions such as recession and inflation, respectively. Suppose the economy faces a recession. In this case, the central bank uses expansionary monetary policy or easy money policy, which involves increasing the money supply through methods such as:

- Expansionary monetary policy is helpful to avoid recession

- Buying government securities
- Reducing the discount rate. The discount rate is the interest rate charged to commercial banks for borrowing from the central bank.
- Lowering the required reserve ratio which means that the fraction of deposits that banks must keep on hand, which allows them to lend more.

As a result, lower interest rates make borrowing cheaper, encouraging businesses to borrow and invest more. Increased investment boosts aggregate demand, leading to a rise in production and income.

When the economy is experiencing inflation, the authorities use contractionary monetary policy or tight money policy to control inflation by reducing the money supply and slowing down economic activity. The central bank adopts various measures such as:

- Selling government securities,
- Increasing the discount rate,
- Raising the required reserve ratio to reduce the money supply.

- Contractionary monetary policy is helpful to avoid inflation

As a result, a decrease in the money supply leads to higher interest rates. The higher interest rates discourage borrowing and investment, which reduces aggregate demand and slows down economic growth. This helps to control inflation by reducing excessive spending and price increases in the economy

2.4.2.3 Comparative Analysis of Fiscal and Monetary Policies

Monetary and fiscal policies are both essential tools used by governments and central banks to manage the economy. While they both aim to achieve macroeconomic objectives like economic growth, employment and price stability, they operate through different mechanisms, have different timelines and are suited to different economic conditions.

1. Objectives

The primary objective of monetary policy is to maintain price stability, control inflation and stabilise the economy through the manipulation of interest rates and money supply. It also aims to promote economic growth and ensure financial stability in the economy. The fiscal policy aims to achieve economic growth, full employment and price stability through government spending and taxation. Its main goal is to manage the level of aggregate demand in the economy and address economic imbalances like inflation or recession.

- The main goal of fiscal and monetary policy is to achieve stability

2. Mechanisms

Monetary policy mainly operates through the central bank or monetary authority and it involves some tools like

- Open market operations which mean buying and selling government securities

- Interest rates
- Required reserve ratio, that is, adjusting the fraction of reserves banks must hold

- Different patterns of mechanism followed by both policies

It directly affects the money supply and credit availability in the economy. The fiscal policy is managed by the government. Fiscal policy involves changing tax rates and public spending. It directly influences aggregate demand through government expenditure and tax policies, stimulating or contracting economic activity.

3. Speed and Flexibility of policies

- Monetary policy is faster to implement than fiscal policy

Monetary policy is faster to implement than fiscal policy. The central bank can quickly adjust interest rates or engage in open market operations, which can have immediate effects on financial markets. On the other hand, fiscal policy is slower to implement. It requires approval from the government or parliament and often involves lengthy legislative processes, creating longer implementation lags. Changes in taxes or government spending take time to implement as they go through bureaucratic and political channels.

- Monetary policy targets short-term stability

4. Long-Term vs Short-Term Focus

Monetary policy is primarily focused on the short-term stabilisation of the economy, particularly in terms of controlling inflation and smoothing out economic cycles, while fiscal policy is often aimed at achieving long-term goals, such as infrastructure development, income redistribution and overall economic development.

- Monetary policy directly impacts markets

5. Influence on Financial Markets

Monetary Policy directly influences interest rates, exchange rates and liquidity in the financial markets, affects the overall cost of borrowing and investor sentiment in the economy. Fiscal policy indirectly influences financial markets through its impact on government borrowing, public debt levels and taxation.

- Monetary and fiscal policies regulate demand and inflation

6. Impact on Aggregate Demand

Expansionary monetary policy stimulates demand by encouraging borrowing, investment and spending, while contractionary monetary policy reduces demand by discouraging borrowing and investment, helping to control inflation through higher interest rates and a reduced money supply. In the case of fiscal policy, expansionary fiscal policy such as increased government spending and tax cuts boosts

demand by directly increasing government expenditure and raising disposable income. Conversely, contractionary fiscal policy such as reduced government spending and tax increases reduces demand and helps cool down an overheated economy.

2.4.3 Balanced Budget Multiplier

A budget is a financial document that outlines the expected income and expenditures over a specific period, typically for a year. It helps governments plan, manage and control financial resources to achieve specific objectives. Based on the nature of the budget, it can be divided into three, each of which reflects the health of an economy.

Deficit Budget: Occurs when expenditure exceeds income. It stimulates economic growth during a recession by boosting aggregate demand through increased government spending.

- Financial documents of the expected income and expenditure

Surplus Budget: Occurs when government income exceeds its expenditure. It can lead to increased government savings for future investments and help reduce public debt.

Balanced Budget: Refers to a situation where government income equals its expenditure. It has a neutral impact on economic growth and promotes financial stability.

- Initial changes in investment or income led to overall changes in the economy

The multiplier explains how initial changes in investment or income led to overall changes in the economy. In the early 1930s, R. F. Khan developed the Employment Multiplier, which focused on the relationship between changes in investment and their resulting impact on employment levels. Later, Keynes refined and expanded the concept in his General Theory. His version, known as the investment multiplier, explains the impact of an initial change in investment on the total income or output in the economy.

- A balanced budget creates an expansionary effect on the economy

We know that a balanced budget occurs when government expenditure is equal to tax receipts. Classical economists believed that a balanced budget is neutral, meaning that any increase in government spending offset by an equal increase in taxes would have no impact on national income or output. However, Keynes and his followers argued that a balanced budget creates an expansionary effect on national income. This occurs due to the Balanced Budget Multiplier.

The Balanced Budget Multiplier (BBM) refers to the idea that

when government spending increases, accompanied by an equal increase in taxes, it creates multiple expansions in the income. The BBM is represented by:

$$BBM = \frac{1}{1 - MPC}$$

Suppose the government increases spending by \$100 million and raises taxes by \$100 million to balance the budget, with an assumed MPC of 0.75. Therefore, the Balanced Budget Multiplier (BBM) is

$$BBM = \frac{1}{1 - MPC} = \frac{1}{1 - 0.75} = 4$$

The effect of the government spending of \$100 million is $100 \times 4 = \$400$ million.

The effect of taxation is $100 \times 0.75 = \$75$ million. The net effect of this process results in a total income increase is \$400 million (spending effect) - \$75 million (tax effect) = \$325 million.

- The value of a balanced budget multiplier is less than one

The value of the BBM is 1. This means that in a perfectly balanced budget when government spending increases and is fully offset by an equal increase in taxes, there is no net effect on total aggregate demand. The spending directly increases national income, but the higher taxes reduce disposable income, leading to less consumption. Therefore, the total income effect is a simple 1:1 ratio, meaning for every dollar spent, there is an equivalent dollar lost due to taxation. In practice, the BBM may be less than 1 but still positive.

2.4.4 Zero-Based Budget

Zero-based budgeting is a budgeting method that is developed without any reference to the previous year. The new budget starts from a “zero base” and is justified based on its merits. It was developed by Peter Pyhrr in 1969. In India, ZBB was first introduced in 1986 to determine the expenditure budget. The goal of ZBB is to identify and eliminate redundant expenses and focus on priorities.

Advantages

- **Better Cost Control:** By justifying each expense, unnecessary spending can be reduced.
- **More Accountability and Efficiency:** Since every expense is checked, organizations have to be more responsible and focused on achieving their goals.
- **Encourages Creativity:** It forces organisations to think outside the box and find new ways to meet their goals without wasting money.

Disadvantages

- **Time-Consuming:** ZBB takes a lot of time and effort to carefully review every expense.
- **Complex and Expensive:** Since much paperwork and justification are needed, it can become costly and complicated.

Summarised Overview

The distributional aspects of public finance, deals with the allocation, distribution and stabilisation of resources by the government. Its primary aim is to ensure a fair distribution of wealth and income through taxation, public spending and subsidies to address issues such as income inequality and economic disparities. Monetary Policy, refers to the control of the money supply by the monetary authority to manage inflation, stabilise the economy and promote employment. Tools such as adjusting interest rates, open market operations and reserve requirements are used to achieve these goals. Fiscal Policy, involves the use of government spending and taxation to influence economic activity, aiming to stabilise the economy and promote growth. The Balanced Budget Multiplier, refers to the impact of balanced fiscal policies (where government spending matches tax revenues) on the economy. The balanced budget multiplier suggests limited effects on output, as any increase in government spending is offset by higher taxes, leading to expansionary effects on income. Zero-Based Budgeting (ZBB), requires all expenses to be justified from scratch for each budget cycle, ensuring efficiency and accountability. This contrasts with traditional incremental budgeting, which builds upon previous budgets with minor adjustments.

Assignments

1. Explain the distributional aspects of public finance.
2. Describe the concept of Monetary Policy and its tools.
3. What is Fiscal Policy and how does it influence economic activity?
4. Define the Balanced Budget Multiplier.
5. Explain the concept of Zero-Based Budgeting (ZBB).

Suggested Reading

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1. Musgrave, R. A. and Musgrave, P. B. (1989)- *Public Finance in Theory and Practice*, McGraw Hill, New York.
2. Joseph E. Stiglitz (2000), *Economics of the Public Sector*, 3rd edition, W. W. Norton and Co.

Space for Learner Engagement for Objective Questions

Learners are encouraged to develop objective questions based on the content in the paragraph as a sign of their comprehension of the content. The Learners may reflect on the recap bullets and relate their understanding with the narrative in order to frame objective questions from the given text. The University expects that 1 - 2 questions are developed for each paragraph. The space given below can be used for listing the questions.

SGOU

MASTER OF ARTS ECONOMICS



Public Expenditure and Debt

Block 3





UNIT 1

Public Expenditure

Learning Outcomes

After completion this unit, the learner will be able to:

- get aware of the reasons for growth of public expenditure in an economy
- understand the role of public expenditure
- familiarise be familiar with with the criteria for public expenditure

Background

Public expenditure holds a central place in the study of public finance due to its significant impact on economic and social welfare. Historically, during the 19th century, economists paid little attention to public expenditure as there was no systematic classification of spending by central, state, and and local governments. Furthermore, there were no established principles guiding public expenditure. At that time, the functions of the government were primarily limited to maintaining justice, law enforcement, and and national defence. It was commonly believed that government spending was wasteful and that private individuals could utilise resources more efficiently. However, with the passage of time, economic activities became more complex, prompting a shift in perspective. The evolving economic landscape highlighted the need for governments to play a more active role in addressing collective needs, leading to increased attention on public expenditure. Today, public expenditure is recognised as a key area of public finance due to its vital role in supporting both economic and social development.

Public expenditure refers to the spending by public authorities including central, state, and and local governments aimed at satisfying the collective needs of citizens and promoting social and economic welfare. The development functions of public expenditure encompass areas such as education, public health, social security, irrigation, infrastructure development, and and public utilities like roads and canals. These activities have expanded significantly, leading to a considerable increase in public spending over time. In modern public finance, public expenditure is as major as consumption in general economics.

Keywords

Public Expenditure, Welfare State, Economic Planning, Efficiency, Equity

Discussion

3.1.1 Public Expenditure

Public expenditure has witnessed a significant and consistent increase over the years in almost every country. This upward trend reflects the growing role of the state in addressing economic, social, and political challenges. The transition from the laissez-faire policy to a more interventionist state has been a primary driver of this phenomenon. As C. C. Plehm observed, public expenditure expands in response to the increasing scope and intensity of government activities, which include both traditional functions and new responsibilities in modern societies. Adolph Wagner's law, which posits that the activities of the state expand with economic and social progress, has been empirically validated in this context. We will deal with Wagner's Law later. The key factors contributing to the growth of public expenditure are as follows.

- State activities involving traditional and modern roles

1. Emergence of Welfare States

Modern states, whether capitalist or communist, increasingly assume the role of welfare providers. Governments prioritise improving the economic, social, and political well-being of their citizens. This involves addressing collective needs such as education, healthcare, and social security. Functions like unemployment relief, pensions, affordable healthcare, and housing have become essential. In developing countries like India, public expenditure is rising rapidly to reduce social inequalities and accelerate economic development through planned interventions.

- Involves welfare of society

2. Defence Needs

Advancements in science and technology, particularly in military weaponry, have heightened global defence concerns. Nations allocate substantial resources to modernise their armed forces, develop advanced weapons, and maintain military readiness. For instance, India's defence expenditure



has surged since conflicts with China (1962) and Pakistan (1965, 1971). Expenditures covers personnel, equipment, and and strategic defence planning, significantly adding to the public spending burden.

3. Agricultural Development

Agriculture remains the backbone of many developing economies, such as India. Governments invest heavily in this sector to enhance productivity and ensure food security. Initiatives for agricultural development generally includes the following:

- Agriculture for economic development

- Subsidised loans, fertilizers, and and pesticides
- Infrastructure development for irrigation and storage
- Research and conservation programmes

Such efforts promote agricultural-industrial linkages, driving overall economic growth while increasing public expenditure.

4. Urbanisation

Rapid urbanisation has necessitated substantial government investment in urban infrastructure and services. Increasing population density in cities drives higher expenditures on the following:

- Involves ensuring amenities at urban space

- Water supply, electricity, and and waste management
- Transportation and traffic control systems
- Healthcare, education, and and public safety

The demand for enhanced civic amenities has led to significant growth in public expenditure.

5. Democratic and Socialistic Government Structures

Democratic governance involves considerable costs, including election administration, legislative processes, and and public communication. Additionally, the global shift towards socialism has increased government responsibilities in social welfare and economic regulation. Nationalisation of industries and expansion of public sector enterprises further raise public spending. In India, democratic commitments, such as fulfilling electoral promises and implementing welfare policies, contribute substantially to this trend.

- Reduce regional inequalities

6. Rural Development

In countries with large rural populations, governments allocate significant resources to rural development schemes aimed at poverty alleviation and community upliftment. In India, programmes such as Integrated Rural Development Programme (IRDP), Drought Prone Areas Programme (DPAP), and Mahatma Gandhi National Rural Employment Guarantee Programme (MGNREG) have substantially increased rural spending.

7. Industrial Development

After economic crises like the Great Depression, governments recognised the need for active participation in industrial development. By establishing public sector enterprises, controlling monopolies, and subsidising essential goods, governments increase productivity and consumer welfare. This role has led to a notable increase in public expenditure.

8. Population Growth

Rising populations, particularly in developing nations, intensify the demand for basic services such as food, housing, education, and sanitation. Governments also invest in family planning initiatives to curb population growth, further increasing expenditure.

- Involves development of infrastructure and industry for growing population

9. Expansion of Transport and Communication

Efficient transportation and communication networks are vital for economic growth. Governments invest heavily in infrastructure like roads, railways and telecommunications, ensuring accessibility and promoting development in remote areas.

10. Economic Stabilisation Measures

Governments use fiscal policy to stabilise economies during business cycles. In periods of recession or depression, increased public expenditure stimulates demand and employment. This counter-cyclical spending has become a major tool for economic stability.

11. Adoption of Economic Planning

Countries adopting planned economic development allocate substantial resources to public sector initiatives. For instance, India's Five-Year Plans have consistently prioritised

infrastructure and industrial development in earlier plans, which also lead to increased public expenditure.

12. Inflation and Rising Prices

Global inflation trends, particularly since World War II, have increased the cost of goods and services purchased by governments. Higher prices necessitate larger budgets, driving up public expenditure.

- Considers growth with stability via proper planning

13. Rising National Income

Economic growth often leads to higher national income, which in turn increases public revenue through taxation. This expanded fiscal capacity enables governments to undertake more extensive public expenditures.

14. Expansion of Traditional Functions

Governments have significantly expanded traditional roles such as law enforcement and national defence. Investments in advanced technologies, judicial infrastructure, and external security contribute to rising public expenditure.

15. Social Progress Initiatives

Modern governments emphasize reducing social disparities and uplifting marginalised communities. In this regard, initiatives in broader forms are given below:

- Welfare programmes for scheduled castes and tribes.
- Subsidies for economically weaker sections.
- Development of backward areas.

These efforts align with the goal of fostering a socially equitable society, increasing public spending.

16. Administrative Inefficiencies

Inefficient administration often results in wastage of resources and redundant processes, further inflating public expenditure.

- Includes administrative functions together with meeting emerging society needs

17. Changing Public Expectations

Modern societies increasingly rely on governments for welfare and economic stability. This shift in perception has expanded the scope of government responsibilities, necessitating higher expenditure.

3.1.2 Role of Public Expenditure

Public expenditure is more than a financial mechanism. It

- Financial mechanism to achieve social, economic objectives of the State

serves as a tool to achieve social and economic objectives. Traditional economic theories, particularly those held by classical economists, advocated minimal government intervention in economic activities. However, this perspective underwent a significant transformation after the Great Depression of the 1930s. Keynes revolutionised economic thought by emphasising the key role of public expenditure in achieving specific economic goals. In modern governance, particularly in democratic systems, public expenditure is essential to performing a range of functions aimed at improving the welfare of citizens. This encompasses areas that the private sector may not adequately address, such as infrastructure, social services, and economic stabilization.

Objectives of Public Expenditure

Prof. Hugh Dalton categorised the objectives of public expenditure into two broad areas:

1. Security of Human Life: Protecting against external aggression, internal disorder, and and injustice.
2. Promotion of Social Welfare: Improving the collective well-being of society through economic and social initiatives.

Additionally, public expenditure is aimed at:

- Stabilise economy and ensure welfare

- Stabilising economies during downturns.
- Encouraging investment to maintain employment and economic growth.

Economist Richard Musgrave outlined the key functions of public expenditure in achieving these objectives:

1. Resource Allocation: Addressing market imperfections and reallocating resources for greater efficiency.
2. Income Redistribution: Reducing inequalities through progressive measures.
3. Economic Stability: Mitigating business fluctuations and maintaining economic equilibrium.
4. Support for Commercial Activities: Facilitating conditions for private enterprise to thrive.

- Though efficient resource and income allocation



Key roles of public expenditure are as follows.

- 1. Development of Infrastructure** - Infrastructure development is fundamental to economic growth. Public expenditure supports the creation of transportation systems, power generation, education, and healthcare facilities, which collectively boost productivity and employment opportunities.
- 2. Efficient Resource Allocation** - Market economies often prioritise profit over societal needs, leading to inefficient allocation of resources. Public expenditure corrects these imbalances by funding essential goods and services and encouraging private sector participation through subsidies and incentives.
- 3. Promotion of Key Industries** - Industries such as steel, cement, and engineering serve as the backbone of economic development. Public expenditure often plays a critical role in establishing these industries, which require substantial initial investment and have long gestation periods. Such investments create opportunities for ancillary industries and enhance productivity across sectors.
- 4. Utilisation of Idle Resources** - Many economies face underutilisation of resources, such as manpower, minerals, and forests. Public expenditure can mobilise these resources for productive use, leading to increased employment, higher production, and a more equitable distribution of income.
- 5. Improving Productivity and Willingness to Invest** - Investments in education, healthcare, and technology through public expenditure enhance the efficiency and productivity of labour. These measures increase disposable income, savings, and investments, fostering overall economic growth.
- 6. Addressing Regional Disparities** - Public expenditure can reduce regional inequalities by directing investments towards underdeveloped areas. Establishing industries and improving agriculture in these regions promotes balanced growth, creates jobs, and reduces income disparities.
- 7. Promotion of Research and Development (R&D)** - Economic growth often depends on technological advancements and innovation. Public expenditure on R&D facilitates the development of efficient production techniques and optimizes resource utilization, thus

- Efficient resource allocation for industrial growth

driving economic progress.

- Public expenditure reduce regional inequality

8. Development of Labour-Intensive Industries - Labour-intensive industries, especially small-scale ones, create significant employment opportunities with relatively low capital investment. Public expenditure directed at supporting these industries helps absorb surplus labour, particularly from agriculture.

9. Encouraging Private Sector Participation - Governments often provide financial support to private enterprises through loans, grants, tax exemptions, and subsidies. These initiatives stimulate private sector growth and contribute to economic development.

3.1.3 Criteria for Public Expenditure

Public expenditure refers to the spending by government authorities on various functions and activities to promote economic development and social welfare. For effective resource utilisation and to achieve desired outcomes, it is essential that public expenditure adheres to well-defined criteria. These criteria ensure that public funds are used efficiently and contribute optimally to the objectives of economic stability, growth, and equity.

The following are the major criteria for public expenditure:

1. Economy

- Advocates prudent use of public funds

The principle of economy emphasises minimising costs while achieving desired outcomes. It advocates for prudent use of public funds, ensuring that government spending does not result in wastage or inefficiency. Public expenditure should prioritise cost-effective measures without compromising the quality of services or goods provided. For example, procuring raw materials or services through competitive bidding helps the government save costs while maintaining quality standards.

2. Efficiency

- Minimise cost efficiently

Efficiency ensures that public spending maximises the output or benefits derived from the resources utilised. Public expenditure should aim to achieve the highest possible returns, either in terms of economic growth or social welfare. This criterion also involves choosing projects or programmes that deliver results effectively with minimal waste of time, effort, and resources. Take the case of investment in renewable energy projects. It not only reduces dependency on fossil fuels but also provides long-term environmental and economic



benefits.

3. Equity

Equity focuses on ensuring fairness in the distribution of resources and benefits of public spending. Public expenditure should aim to reduce income disparities, promote social justice, and uplift marginalised and disadvantaged sections of society. It should strike a balance between growth-oriented initiatives and welfare measures to achieve inclusiveness. Initiatives like subsidised healthcare services for low-income groups ensure that essential services are accessible to all citizens, irrespective of economic status.

- Fair distribution of resources considering economic situations

4. Flexibility

Flexibility in public expenditure is crucial to addressing changing economic and social needs. Government spending should be adaptable to respond to unforeseen circumstances, such as natural disasters, pandemics, or economic downturns. This ensures that public expenditure remains relevant and effective over time. During the COVID-19 pandemic, governments worldwide reallocated budgets to strengthen healthcare systems and provide financial support to affected individuals and businesses.

5. Productivity

Productivity emphasises that public expenditure should lead to increased economic output and development. The funds spent should contribute to enhancing the productive capacity of the economy, creating employment opportunities, and improving infrastructure. Government investments in infrastructure, such as roads, railways, and power supply, stimulate economic activity and increase overall productivity.

6. Stability

Public expenditure should contribute to economic stability by mitigating fluctuations in economic activity. It should aim to stabilise the economy during periods of inflation, recession, or unemployment through countercyclical fiscal policies. During a recession, increased government spending on public works projects can stimulate demand, create jobs, and revive the economy.

- Increasing output and ensuring consistency

7. Transparency and Accountability

Transparency and accountability are essential to ensure that public funds are used for their intended purposes. The government must establish mechanisms for tracking and

evaluating expenditures and provide regular reports to stakeholders. This builds trust and ensures that public spending aligns with national priorities. Publishing annual budget reports and audit findings allows citizens and policymakers to scrutinise government spending.

8. Sustainability

Sustainability ensures that public expenditure does not compromise the needs of future generations. Governments should avoid excessive borrowing or creating fiscal deficits that could burden future taxpayers. Public spending should also consider environmental sustainability to ensure long-term benefits. For example, investing in green energy projects reduces environmental degradation and ensures sustainable economic growth.

9. Priority and Allocation

Prioritisation ensures that scarce public resources are allocated to areas of highest importance and urgency. Government spending should align with national development goals and focus on areas that yield maximum social and economic benefits.

- Ensuring trust through tracking and auditing

Summarised Overview

Public expenditure refers to government spending on goods, services, and infrastructure to fulfil its economic and social responsibilities. Growth driven by factors like population growth, urbanisation, economic development, inflation, and evolving public needs creates growth in public expenditure. Expansion of government roles in welfare, healthcare, education, and defence also increases growth of public expenditure. The main role of public expenditure is on economic development where it enhances infrastructure, supports industrialisation, and promotes balanced regional growth. Social welfare provides healthcare, education, and social security to improve living standards. Stabilisation addresses economic fluctuations through fiscal policies, ensuring stability and growth. Redistribution of wealth reduces inequalities through targeted subsidies and welfare programs.

Criteria for Public Expenditure are efficiency which ensures optimal use of resources to maximise output, equity promoting fairness in resource allocation and addressing social disparities, accountability where public spending must be transparent and subject to scrutiny, productivity where expenditures should contribute to long-term economic and social development.

Assignments

1. Highlight how the emergence of welfare states, defence needs, and and urbanisation impact government spending. Provide examples from developing economies like India to support your arguments.
2. Analyse the role of public expenditure in addressing economic and social disparities.
3. Critically assess the growth of public expenditure in contemporary economies. Examine the criteria for effective public expenditure .
4. Discuss principles such as efficiency, equity, transparency, and and sustainability. Explore how these criteria guide the prioritisation and allocation of public resources in government budgets.
5. Compare the impact of public expenditure on rural and urban development.

Suggested Reading

1. Brown, Charles Victor, and and Peter McLeod Jackson (1990) *Public Sector Economics*. Vol. 76. Oxford: Basil Blackwell.
2. Joseph E. Stiglitz (2000), *Economics of the Public Sector*, 3rd edition, W. W. Norton and Co.
3. Harvey, Rosen, and and Ted Gayer. *Public Finance* (2013)- McGraw-Hill Higher Education,
4. Dalton, Hugh. *Principles of Public Finance* (2003) - Vol. 1. Psychology Press.,

Reference

1. Musgrave, R. A. and Musgrave, P. B. (1989)- *Public Finance in Theory and Practice*, McGraw Hill, New York.
2. Gupta Janak Raj *Public Economics in India – Theory and Practice*, Atlantic Publishers and Distributors.

Space for Learner Engagement for Objective Questions

Learners are encouraged to develop objective questions based on the content in the paragraph as a sign of their comprehension of the content. The Learners may reflect on the recap bullets and relate their understanding with the narrative in order to frame objective questions from the given text. The University expects that 1 - 2 questions are developed for each paragraph. The space given below can be used for listing the questions.

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UNIT 2

Theories of Public Expenditure

Learning Outcomes

After completing this unit, the learner will be able to:

- understand pure theories of public expenditure
- be familiar with the general theories of public expenditure

Background

Public expenditure refers to the government's spending on goods, services, and infrastructure to meet the economic, social, and developmental needs of its citizens. Over time, economists have developed various theories to explain the principles, trends, and factors influencing public expenditure. Among these, the Pure Theories of Public Expenditure, Wagner's Law, and the Wiseman-Peacock Hypothesis hold significant importance. Pure theories focus on the allocation of resources between public and private goods to achieve economic efficiency and societal social welfare. They emphasise the role of the government in addressing market failures, such as non-excludability and non-rivalry in public goods. Theories by economists like Samuelson and Lindahl explore how the optimal provision of public goods can be achieved through equitable cost-sharing among beneficiaries.

Adolph Wagner, a 19th-century economist, proposed that as economies grow and develop, public expenditure tends to increase at a faster rate than national income. This relationship, known as Wagner's Law, attributes the rise in government spending to increasing demand for education, healthcare, infrastructure, and other welfare services in progressive societies. Wagner argued that industrialisation, urbanisation, and rising income levels naturally expand the scope of government functions. Developed by economists Alan T. Peacock and Jack Wiseman, Wiseman - Peacock hypothesis explains the growth of public expenditure as a result of 'displacement effects' during times of social or economic crises. They observed that during wars or economic downturns, governments increase spending to address immediate challenges. Post-After the crisis, the higher level of expenditure often becomes the new normal as citizens grow accustomed to the expanded role of the state. This theory highlights the dynamic and adaptive nature of public expenditure in response to societal social needs.

Keywords

Ability to pay, Voluntary Exchange model, Wagner's Law, Wiseman - Peacock Hypothesis

Discussion

- Modern State – Welfare State
- Classical – No government intervention

- Considers optimal provision of public goods

3.2.1 Theories of Public Expenditure

In the modern world, the state is considered as a welfare state where governments have a number of responsibilities to perform, mainly dealing with provisions of public service. During the time of Classical school of thought, the Government was considered as an administrative institution without much role in influencing the economy. They believed in the Laissiez-faire system where market plays a role in affecting the economy. It was a fiscal theorist like Adolph Wagner, who propounded an early theory related to role of government in affecting economy via public expenditure.

Theories of public expenditure can be divided into pure theories and general theories. Let us explain them in detail.

3.2.1.1 Pure Theories of Public Expenditure

The principles that consider the optimal provision of public goods are referred under the pure theories of public expenditure. Mostly, the main theories under pure theories works with two concepts, viz; the ability to pay principle and the benefit principle. The ability to pay principle is put forward by A. C. Pigou and benefit principle mainly by Lindahl. There are mainly four theories under pure theories, viz., Pigou's Ability to pay theory, Lindahl's Voluntary Exchange Theory, Samuelson's theory, and Johansen theory.

1. Pigou's Ability to Pay Theory

The ability to pay theory considers the determination of optimum level of public expenditure by giving importance to the principle of ability to pay. Pigou recognised current transfer expenditure and non-transfer expenditures. Current transfer expenditures include amount under pensions, old age pensions and, debt services which are irrevocable contracts. However, most non-transfer expenditures are discretionary. The amount of this optional expenditures may be decided based on the burden involved with generating funds to meet these types of

expenditures. Here, equilibrium is reached when the benefit from the last unit of fund via government expenditure is equal to the loss of satisfaction from the last unit of fund raised for the government expenditure.

The following are the conditions underlined by Pigou for government expenditure:

- a. Government expenditure will be high when the aggregate income of the society is high.
- b. The optimum level of public expenditure is higher given the aggregate income and population, and greater the concentration of income with rich persons.
- c. With greater new opportunities for public expenditures and the opposite with respect to private expenditure, the equilibrium between marginal benefit of expenditure and marginal disutility of revenue is at a higher point.

- Amount of expenditure be is fixed based on efforts to raise the fund

2. Benefit Principle and Voluntary Exchange Theory of Lindahl

The benefit principle is best used to explain the optimal determination of public expenditure under the voluntary exchange model put forward by Eric Lindahl. Later, it was refined by Johansen and Bowen. When considering the provision of public goods or services, it is important to recognise that they are consumed collectively, meaning public goods cannot be divided and sold to individuals as private goods. Hence, it is not easy to find a price mechanism for the provision of public goods as done under private goods under microeconomic theory. It is also important to note that the public goods are consumed by the society irrespective of whether it is has been paid by the individuals or not. Though there is a difference between the features of public and private goods and difficulty in considering price mechanism, a theory of public expenditure based on price mechanism was developed. The definite statement of this theory was provided by Lindhal in 1919. The theory is presented in the book 'Classics in the Theory & Public Finance' edited by R. A. Musgrave and Allan T. Peacock.

- Theory of public expenditure based on price mechanism

“The determination of public expenditure in connection with the distribution of the corresponding tax burden among the groups within the community. The distribution ratio for this burden will then play a role similar to that of prices in the adjustment

between supply and demand in any ordinary market.” Lindahl, in this theory, stated that in order to decide on the revenue-expenditure process as a phenomenon of economic value and price, a decision is required in three aspects:

i. The first is the choice between satisfaction of alternative wants by private individuals. With respect to deciding the relative distribution of tax shares between various taxpayers, it is important that a choice be made between the satisfaction of alternative wants by private households.

Suppose if there are two tax payers, A and B, and a particular sum is to be raised from the taxpayers jointly. If B pays a larger share of the total tax, A pays less tax and vice versa.

ii. The second is deciding a choice between the satisfaction of alternative wants in the public sector.

Consider defence and education as two public goods. Spending on one good reduces the spending on another. If more is spent on defence, less can be spent on education.

iii. The third is making a choice between the satisfaction of public wants and private wants so that the total revenue to be collected and spent are determined.

- Three decisions need to be taken jointly as they are mutually interdependent

Here, with lower public expenditures, tax collection required will be in smaller quantity and there will be less curtailment of private spending.

- Benefits from public goods are not divisible

In the theory, general economic processes considered for private goods are followed in the case of public goods too. When two public goods, X and Y, are considered, the supply price of the goods considering their demand is taken to decide on allocation of total cost of production of both products and not according to the cost input. Suppose there are two consumers, A and B, and A purchases X and B purchases Y. Depending upon of the willingness to share the total cost of production of one consumer, the share of another is decided. This shows that the benefits derived from the supply of public services are not divisible into individual benefits. They are received jointly by all members of the community.

Let us explain the figure to understand the allocation of total cost of production of public goods between the individuals.



- Represents the willingness to contribute to total cost of production of public goods

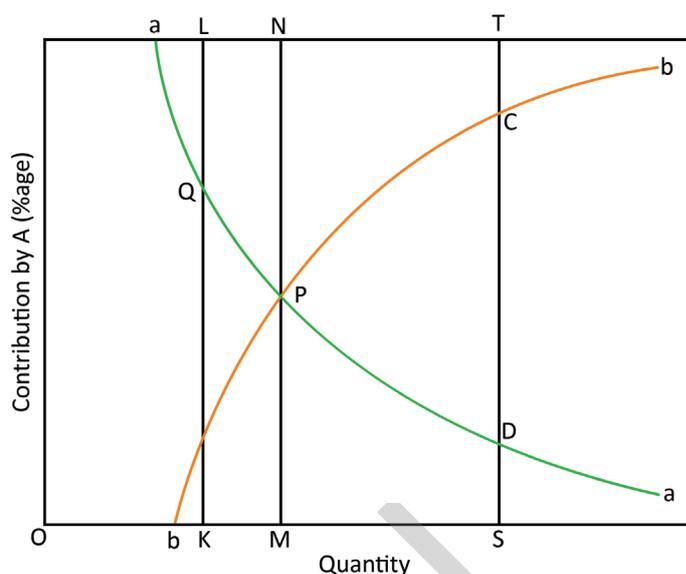


Fig 3.2.1 Lindahl Theory of Voluntary Exchange

There are two consumers cum taxpayers, A and B. In the figure, the percentages of total cost contributed by A are measured along the vertical line, while the quantities of public goods which they purchase are measured on the horizontal axis. The line 'aa' shows the willingness of A to contribute to the total cost of production of X and Y by representing the varying percentages of total costs incurred in providing these goods. So, the line 'bb' shows the willingness of B with respect to the percentages of total costs which B will be willing to share. In the figure, the maximum amount of the public good that is produced is OM, and the willingness to contribute from A is PM percentage of the total cost of production and from B is PN percentage. OM is considered the equilibrium amount since any other amount makes the total cost contributed more than or less than required. See the amount of production at K. OK amount of public goods produced with the willingness to contribute from A is KQ and that from B is LR. The total willingness to contribute to the cost of production add up to KQ + LR which is greater than the actual cost of production, LK. Now, consider the amount of public good, OS. Here, the willingness of A to contribute to the total production is DS and B is TC. The total of DS+ TC is less than the actual cost of production, TS. CD portion is short of willingness to contribute. The figure represents the situation when there are only two tax payers having the same bargaining ability.

- Optimum quantity of public good is when the willingness to contribute add up to total cost of production of the public goods

However, the bargaining power may differ even with two tax payers only.

3. Samuelson's Theory

Italian and Austrian writers played a key role in reviving the benefit approach, focusing primarily on the efficient allocation of resources. Samuelson's pure theory of public expenditure builds upon the contributions of these writers. We know that the public goods are provided collectively. Usually, they are not provided by the individuals or private agencies. When it comes to private goods, they are provided considering the individual preferences showed via market transactions. Using market principles for public goods is a different one. Here, in a democratic society, the desire of the society would be the reason for the provision of the public goods, even though, Government by itself influence the preferences. In order to apply market principles in deciding the optimal way of financing public goods, let us consider supply and demand.

- Market principles for determining optimal provision of public goods and its finance

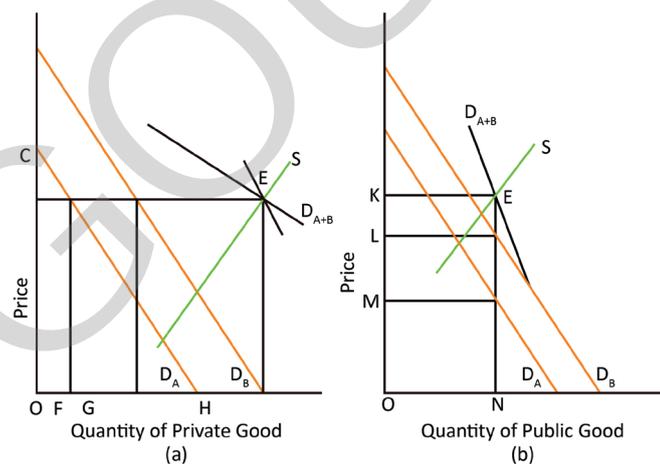


Fig 3.2.2 Samuelson's Theory explaining Quantity of Public Goods and Private Goods

The panel 'a' of the figure shows the demand curves for a piece of private goods and an item of social goods for two individuals A and B, given the income and price of other goods. Here, D_A and D_B are demand curves for the private goods for the individual A and B. The market demand curve is the horizontal summation of individual demand curves, D_{A+B} . The supply curve is S . Price of the private goods, X is OC for both the consumers. It is determined at the intersection of market demand curve and supply curve S at E . Quantity demanded by A is OF and B is OG . Hence, totally, they demand OH of

- Market demand for public goods is the vertical summation of individual demands

private goods. The panel 'b' of the figure shows that D_A and D_B are demand curves for the public goods for the individual A and B and the market demand curve is the vertical summation of individual demand curves. Both A and B consume equal amount of public goods which is ON amount. The price is OK.

Let us first examine the Pareto efficiency of private goods to see the efficient resource use. There are two private goods X and Y and two consumers A and B. The three conditions that are needed to fulfil the optimum state of consumption and production are given below:

- Optimum Production:** It shows the best mix of X and Y where the greatest possible amount of Y is produced with given the amount of X and given technology.
- Optimum Exchange:** It shows that the Marginal rate of Substitution in consumption is the same for commodities X and Y for the consumers.
- Optimum Product-mix:** Marginal Rate of Substitution between X and Y is same as Marginal Rate of Transformation of X and Y in production.

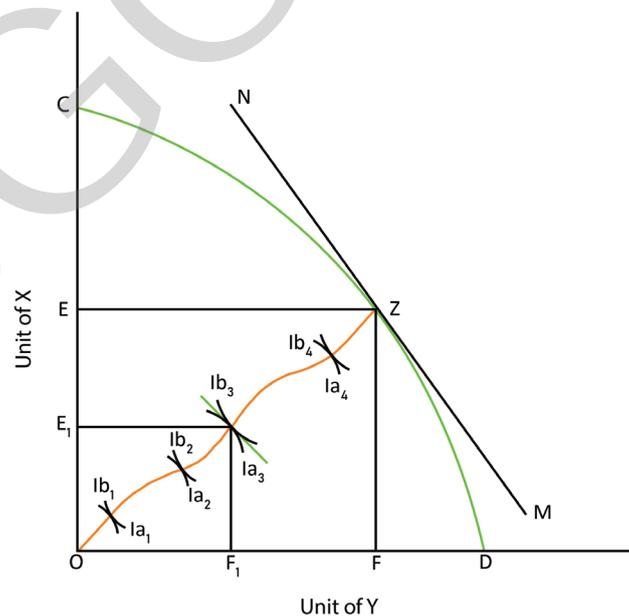


Fig 3.2.3 Optimum Allocation of Product Mix

Optimum allocation of output mix is OF of Y and OE of X. OF of Y is divided into OF1 and FF, and OE of X is divided into OE1 and EE between the consumers. Here, all the points

on the production possibility curve are equally preferred. The pareto optimality rule cannot predict which point on the PPC is chosen.

4. Johansen Theory

In Samuelson's Theory of General Equilibrium Analysis, under the assumption of given preferences and distribution of income, it solves two problems. The problems solved are division of total output between public goods and private goods, and division of total private goods between two consumers A and B. The solutions are Pareto Optimal. Under welfare maximisation, the optimum is decided based on the social utility function. However, the theory does not suit well when application of fiscal policy or implementation of the policies to solve the specific issues are considered. It does not satisfy those who intend to apply fiscal theory to partial problems and specific issues. In the Johansen Theory, he has tried to solve some of these issues.

- Improvement to Samuelsons' theory

Let us see the graphical representation of Johansen Theory.

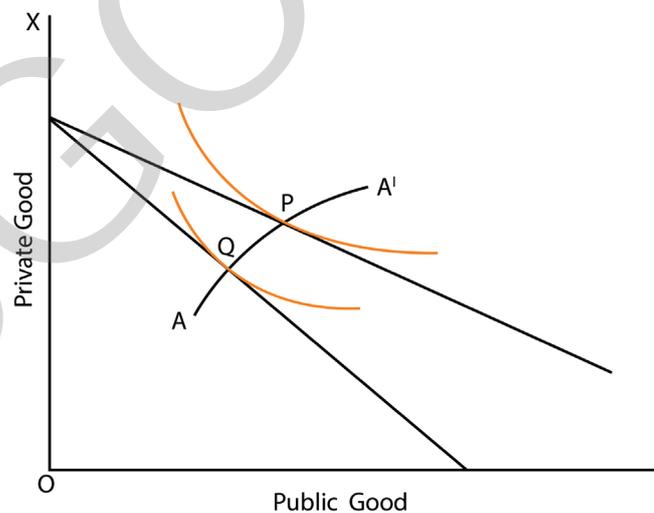


Fig 3.2.4 Johansen Theory showing Private and Public Goods

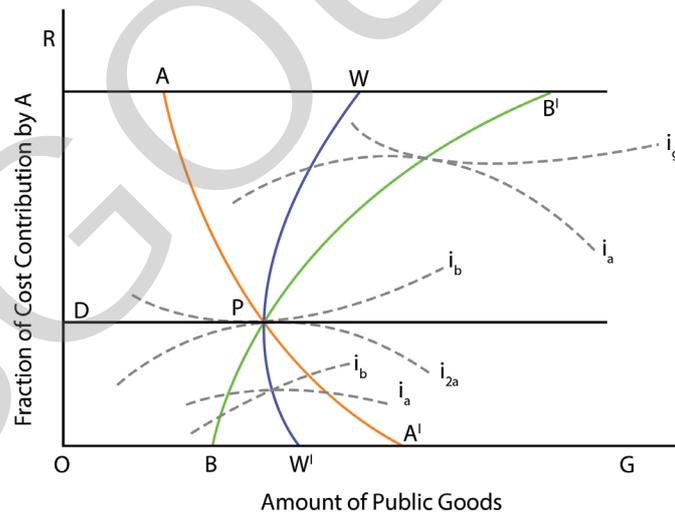
According to Johansen, a fraction of the total cost of producing a public goods (denoted as G) is borne by one taxpayer, A, while the remaining portion is paid by taxpayer B. The share borne by A is represented as h , and the share borne by B is therefore $1 - h$. Johansen considers the preferences of taxpayer A with respect to two goods viz. a private goods (X) and a public goods (G). The preferences of A are represented by

- Budget line shows the preference

budget lines for different values of G . The steeper the budget line, the higher the value of the public goods. These budget lines represent the trade-offs between the private and public goods for A, given the distribution ratio of G . The point of tangency between the budget line and the indifference curve indicates the optimal combination of the private goods and the public goods for A.

- Interaction of tax payers, preference at intersection AA' and BB'

The points of tangency, such as P and Q, represent combinations of private goods X and public goods G that are preferred by A for different cost shares. Connecting these points forms the curve AA', which shows A's most preferred values for various cost shares. This curve is redrawn in the below figure to represent A's preferences for different cost-sharing ratios. Similarly, a smaller curve BB' represents the preferences of taxpayer B. The interaction of the two taxpayers' preferences occurs at point P, where the indifference curves of both A and B are tangent.



- Contract curve optimum points which represents allocation of public goods to corresponding cost share

Fig 3.2.5 Johansen Theory explaining amount of Public Goods

The contract curve, denoted as WW', represents the locus of points where the indifference curves of both A and B are tangent to each other. This contract curve shows the possible allocations of the public goods G and the corresponding cost shares that satisfy both taxpayers' preferences. Point P is the most preferred allocation, as it lies on both the AA' and BB' curves. It is a point where both taxpayers achieve their most preferred combination of public goods G and private goods X , given their respective cost shares.

- P is Pareto Optimal

For Johansen, Point P is one of many Pareto optimal solutions. This is because P lies on the contract curve WW', but there are several other points along this curve that could also be considered Pareto optimal. A Pareto optimal solution is one where no one can be made better off without making someone else worse off. Therefore, any point along the contract curve represents an allocation of public and private goods that is mutually acceptable to both A and B, given their preferences and the cost-sharing arrangement.

Till now, we have discussed the pure theories of public expenditure. Let us now explain the general theories of public expenditure, viz., Wagner's law or hypothesis and Wiseman Peacock Hypothesis.

3.2.3 Wagner's Hypothesis

Adolph Wagner, a renowned German fiscal theorist, proposed a significant theory regarding the growth of public expenditure in industrialising economies. Wagner's key proposition, known as the Law of the Increase of State Activities, suggests a functional relationship between the growth of an economy and the expansion of the public sector. In other words, as an economy grows, the size and role of government increase proportionally. Wagner emphasised that, in progressive societies, both central and local governments experience continuous expansion in their activities. This growth is both extensive (expansion of new functions) and intensive (improving the efficiency and scope of existing functions). Wagner's hypothesis suggests that as industrialised nations experience increases in per capita income and output, the public sector necessarily grows in proportion to the total economic activity. Wagner's theory is rooted in the observation that, with economic development, governments gradually take on new responsibilities and perform both old and new functions more effectively. This process of expansion of state activities is seen as an inherent characteristic feature of industrialising economies.

- With growth, public expenditure increases
- With industrialisation, output increases leading to the expansion of public sector

The following graph shows the relationship between economic growth and the expansion of public sector activities. The horizontal axis of the graph represents the real per capita income of the economy, while the vertical axis represents the real per capita output of public goods.

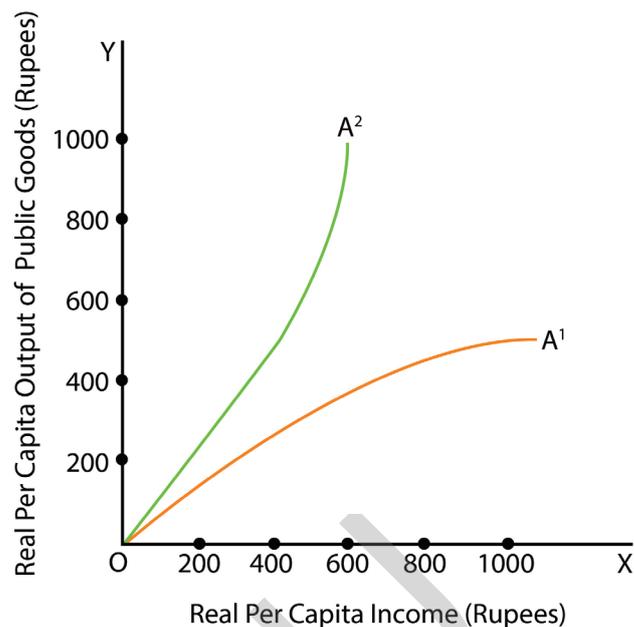


Fig 3.2.6 Wagner's Hypothesis

- Public sector expands with the expansion of production

Here, A^1 represents a situation where the public sector maintains a constant proportion of total economic output over time and A^2 demonstrates Wagner's Law, where the proportion of total resources devoted to public goods expands over time, reflecting the growth in government activity as the economy develops.

Wagner's hypothesis was supported by other economists, such as F. S. Nitti, who found empirical evidence that this law applied to all kinds of Governments though they are different in their size of the economy, type of government system etc. Several factors contribute to the persistent increase in public expenditure, according to Wagner's theory.

- i. **Continuous Extension of Social Activity** - In the past, governments were primarily concerned with defence and maintaining law and order. However, in modern societies, governments are tasked with promoting economic, political, and social well-being. This includes addressing business cycles, maintaining full employment, and promoting social welfare. As governments take on these additional responsibilities, public expenditure increases.
- ii. **War and Preparation for War** - National defence is one of the most significant drivers of public expenditure. The increasing sophistication of military technology and

the necessity for constant preparedness for conflict lead to substantial government spending on defence.

iii. Growth of Population and Urbanisation - The expansion of population and urban areas places additional demands on the government to provide services like public health, education, housing, food, and infrastructure. As urbanisation increases, the government's role in regulating and supporting these areas grows, thus increasing public expenditure.

iv. World Depression - The Great Depression of 1930's demonstrated the need for government intervention in the economy. This led to a broader acceptance of government involvement in economic affairs, further expanding public expenditure.

v. Inflation - Inflation leads to increased costs for governments in purchasing goods and services, thereby raising public expenditure. Additionally, governments must find additional financial resources to meet these growing costs.

vi. Democratic Institutions - While democratic institutions do not directly cause increased expenditure, they play an indirect role. Democratic governments require substantial resources for legislative functions, diplomatic relations, and ceremonial activities. Moreover, democratic nations increasingly allocate funds for international development aid to assist underdeveloped countries, adding to public expenditure.

vii. Economic Planning - Many governments have adopted economic planning as a means to accelerate economic growth. These planning activities often require significant public investment, contributing to rising public expenditure.

viii. Modern Complexities of Life - The growing complexity of modern life, including technological advances, welfare needs, and social services, necessitates increased government spending. Governments are tasked with addressing a wide array of social issues, further driving up public expenditure.

ix. Role of the Public Sector - The efficiency of the public sector also contributes to the increase in public expenditure. As public sector organisations often prioritize social welfare over profit maximisation, their activities expand, leading to higher government spending in comparison to the private sector.

- For growing population, war needs, economic fluctuations



Criticism of Wagner's Hypothesis

While Wagner's Law has been influential, it has also faced several criticisms from economists such as Allan Peacock and Jack Wiseman. The key criticisms objections are as follows:

- i. Lack of Interdisciplinary Approach** - Wagner's analysis lacks a comprehensive interdisciplinary framework. To fully understand the dynamics of public expenditure, theories should incorporate political science, economics, and sociology. Additionally, cultural characteristics of societies must be considered, as these can influence the growth of state activities.
- ii. Limited Analytical Framework** - Although Wagner's hypothesis does a good job of explaining the historical trends of state expenditure, it lacks a robust and comprehensive analytical framework. This means it does not fully account for the complexities of modern economies.
- iii. Not Universally Acceptable** - Wagner's theory is based on an organic view of the state, suggesting that the state's growth is a natural process. This perspective is not universally accepted, particularly in Western countries where there are differing views on the role of the state in economic affairs.
- iv. Ignores the Role of War** - Wagner's Law does not sufficiently account for the impact of war on public expenditure. War and military conflicts are significant drivers of government spending in modern times, and the theory does not adequately incorporate these factors into its analysis.

- Does not fully captured the dynamics of public expenditure

3.2.4 Wiseman Peacock Hypothesis

The Peacock-Wiseman hypothesis, developed by economists Allan Peacock and Jack Wiseman, offers an alternative perspective on the growth of public expenditure. Their study, focused on Great Britain during the period 1890-1951, suggests that the increase in public spending follows a discrete, step-like pattern rather than a smooth, continuous trend. According to their theory, public expenditure rises in response to major social or economic disturbances, such as wars or financial crises, that expose the limitations of

- Expansion of public expenditure is discrete

existing public revenue and necessitate higher government spending. The hypothesis introduces several key concepts to explain the patterns of growth in public expenditure. These include the displacement effect, the inspection effect, and the concentration effect. Each of these concepts provides a framework for understanding how and why public spending increases in response to external shocks.

i. Displacement Effect

The displacement effect is central to the Peacock-Wiseman hypothesis. It refers to the process by which a major social or economic disturbance leads to a shift in the level of public expenditure and taxation. Following such disturbances, governments often find that the previous levels of taxation and expenditure are insufficient to meet new challenges. As a result, a new, higher level of public spending is adopted. Once the disturbance subsides, the new level of spending and taxation becomes stabilised, and society becomes accustomed to supporting this higher level of expenditure. This new level of government activity persists, even in the absence of the original disturbance.

- Social disturbances shift the level of public expenditure to a new one

For example, during periods of war or major crises, governments are compelled to expand their fiscal activities. Once the crisis is over, however, the public's tolerance for higher taxes and spending remains, as society has recognised its capacity to support greater government involvement. Therefore, the increased expenditure becomes a permanent feature of the economy, even though the specific conditions that caused the increase may no longer be present.

- New level of government activity persists even after the cause is over

ii. Inspection Effect

The inspection effect refers to the tendency for government intervention to expand into new areas of economic activity in response to social or economic disturbances. When a crisis arises, such as a war or an economic depression, governments are often forced to address problems that were previously neglected or ignored. For instance, during times of war, governments might be prompted to establish new infrastructure or undertake initiatives in sectors like healthcare, transport, and housing — areas that may not have been a priority during peacetime. This effect highlights the dynamic nature of government expenditure, as new responsibilities and functions are introduced to address emerging societal needs. Thus, government spending may not just increase in existing areas

- Expanding to new areas of public expenditure
- Represents dynamic nature of government

but may also extend into entirely new domains as a response to external pressures.

iii. Concentration Effect

The concentration effect refers to the tendency for central government spending to grow faster than that of local or state governments during periods of economic growth. This effect is closely linked to the political and administrative structure of the country. As national governments take on more economic responsibilities, particularly in larger and more complex economies, the central government's share of total public expenditure tends to increase. This may be due to a variety of factors, including centralisation of fiscal power, coordination of national policies, and the need for large-scale economic management at the national level.

- Greater amount of public expenditure at Central level than State and Local levels

3.2.4.1 Peacock-Wiseman vs. Wagner's Hypothesis

The Peacock-Wiseman hypothesis provides a different perspective on the growth of public expenditure compared to Wagner's Law. While Wagner's theory suggests that public expenditure increases steadily and proportionally with economic growth, the Peacock-Wiseman hypothesis emphasizes that government spending increases in discrete steps triggered by social disturbances. The Peacock-Wiseman model is more dynamic in its description of how public expenditure evolves. It does not claim to be an immutable economic law, but rather a description of the pattern of government spending in response to external shocks and the structural changes within an economy. This makes the Peacock-Wiseman thesis more flexible and applicable to different historical and social contexts.

- Wagner – Public expenditure expands with growth
- Wiseman Peacock – Public expenditure triggered by disturbances are discrete ones

Summarised Overview

Pure theories of public expenditure focus on the fundamental principles and economic rationale behind government spending. The key areas of analysis include allocation of resources and how public expenditure influences resource distribution. Public goods have characteristics like non-excludability and non-rivalry, necessitating government intervention. Market failures are situations where the private sector cannot efficiently provide certain goods or services, justifying public expenditure.

Under Wagner's law of increasing state activities, Wagner proposed that government expenditure tends to increase as a nation develops economically. With economic development, industrialisation and modernisation require increased public services such as education, infrastructure, and social welfare. Wagner observed this trend in Germany during the 19th century, arguing that it is a natural outcome of economic progress. Wiseman-Peacock hypothesis is developed by Jack Wiseman and Alan Peacock. This hypothesis explores the growth pattern of public expenditure, emphasizing concepts like displacement effect where major events like wars or crises lead to spikes in public expenditure, creating a "new normal." Inspection effect refers to public tolerance for higher taxation increases during emergencies, facilitating larger public budgets even post-after the crisis. Social needs and adaptation means the government's role expands to meet new societal demands over time.

Assignments

1. Explain the differences between pure theories of public expenditure and practical approaches to government spending. Provide relevant examples.
2. Critically analyse Wagner's Law and discuss its relevance in the context of contemporary developing economies.
3. Discuss the Wiseman-Peacock hypothesis and evaluate its applicability during global crises such as the COVID-19 pandemic.
4. Compare and contrast the views of Wagner and the Wiseman-Peacock hypothesis regarding the growth of public expenditure.
5. Identify and explain three instances where public expenditure addresses market failures. How do these examples align with pure theories of public expenditure?

Suggested Reading

1. Brown, Charles Victor, and and Peter McLeod Jackson (1990) *Public Sector Economics*. Vol. 76. Oxford: Basil Blackwell.
2. Joseph E. Stiglitz (2000), *Economics of the Public Sector, 3rd edition*, W. W. Norton and Co.
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UNIT 3

Public Investment and Cost Benefit Analysis

Learning Outcomes

After completing this unit, learner will be able to:

- understand the criteria of public Investment
- be Aware of social cost- benefit analysis
- be familiar with public expenditure management and control

Background

Public investment serves as a cornerstone of economic development by fostering growth, addressing inequalities, and delivering essential public goods and services. It acts as a catalyst for creating infrastructure, improving access to education and healthcare, and stimulating job creation, which collectively enhance the overall quality of life. By addressing market failures such as under-provision of public goods and externalities governments ensure that resources are allocated where they are most needed. For example, investments in rural electrification or public health campaigns can generate significant social benefits that private markets might overlook due to limited profitability. In this context, public investment becomes a strategic tool for driving inclusive and sustainable development.

To maximise the impact of public investments, governments must adhere to robust criteria for decision-making. These criteria include assessing economic feasibility, promoting social equity, and ensuring environmental sustainability. Economic feasibility ensures that projects generate sufficient returns relative to their costs, while social equity ensures that investments address disparities and benefit marginalised communities. Furthermore, integrating environmental considerations into public investment decisions is crucial for long-term sustainability, ensuring that development does not compromise the needs of future generations. Such a multi-dimensional approach ensures that public investments align with national development goals and address the diverse needs of society.

Methodologies like Social Cost-Benefit Analysis provide the analytical tools to evaluate the viability and impact of public investment projects. It offers a structured framework to measure both tangible and intangible costs and benefits, helping policymakers prioritise projects with the highest net social returns. On the other hand, effective public expenditure management ensures that allocated funds are used efficiently, transparently, and in alignment with fiscal objectives. Together, these methodologies not only enhance the efficiency of public investments but also strengthen accountability and trust in government spending, creating a solid foundation for sustainable economic and social progress.

Keywords

Growth Maximisation, Capital-Output Criterion, Social Marginal Productivity Criterion, Cost-Benefit Analysis.

Discussion

3.3.1 Criteria of Public Investment

Public investment decisions are vital for fostering economic growth and ensuring efficient resource allocation. Several criteria have been developed to guide these decisions. Let us explain them in detail.

1. Growth Maximisation Criterion

This criterion focuses on maximising the rate of economic growth while maintaining price stability and promoting equitable wealth distribution. Here, the important thing to notice is that the public investments, especially in economic infrastructure, often have long gestation periods and delayed returns. Investments initially raise factor incomes, potentially leading to inflationary pressures before returns materialise.

- Focuses on growth but creates inflationary pressures

2. Capital-Output Criterion

The capital-output ratio evaluates the efficiency of investment by analysing the relationship between incremental investment and the resulting increase in output.

$$C_r = \frac{I_1 - I_0}{Q_1 - Q_0} = \frac{\Delta I}{\Delta Q}$$



- Sector specific investment and output combination can be analysed

Here, C_r is Incremental capital-output ratio, I_1 is the investment in period one and I_0 in period zero, Q_1 is the quantity of output in period one and Q_0 in period zero, ΔI is the increment in investment and ΔQ is the increment in output.

Here, sector-wise application is possible where capital coefficients can be estimated for specific sectors or projects to determine their efficiency and feasibility.

3. National Product Test Criterion

Suggested by Tinbergen, this criterion measures the direct and indirect effects of a project using shadow prices, which represent the opportunity cost of non-market commodities. Shadow prices are used to estimate the value of outputs like health and education, which lack market prices. Tinbergen suggested two types of effect of a project which are Direct and Indirect effects. Direct effects mean immediate impacts without changes in national income. Indirect effects mean consequential changes in production due to variations in national income.

- Use shadow pricing

4. Social Marginal Productivity Criterion

Developed by A. E. Kahn and H. B. Chenery, this criterion ensures efficient allocation by equalising the social marginal productivity of capital across different uses. The public policies are ranked based on social marginal productivity. Here, policies having greater productivity are considered in place of those are low ranked. A mathematical formula for ranking the project is given below.

$$\text{Social Marginal Productivity} = \frac{V + V_1 - (M + L + O + D)}{\Delta I}$$

- Public projects are selected for implementation based on Social Marginal Productivity

Here, V is the value of output, V_1 is the value of external economy, V and V_1 are taken for the benefit, M , L , O , and D are the cost of materials, labour, overheads, and depreciation, and together $M + L + O + D$ are taken as the cost.

$$\text{So, SMP} = \frac{\text{Benefits} - \text{Cost}}{\Delta I}$$

However, the criterion has some limitations viz. static nature

unsuitable for dynamic economies. It ignores multiplier effects and distributive aspects of development.

5. Reinvestment Criterion

Proposed by Galenson and Leibenstein, this criterion prioritises projects that maximise reinvestment potential, particularly in labour-abundant, capital-scarce economies. Leibenstein argued that the principle of social marginal productivity, which suggests prioritising industries with lower capital-labour ratios, is not suitable for achieving significant economic growth in developing countries. He noted that maximising national product alone is insufficient because these economies typically exhibit a high marginal propensity to consume.

In such contexts, profit receivers are the primary savers, making savings essential for capital formation. To address this, Leibenstein advocated for public investment in projects with higher capital-labour ratios. This approach aims to maximise profits, which can then be reinvested to drive sustainable economic development.

- All profits are reinvested
- Capital intensive method of production is good for growth

$$r = \frac{P - eW}{C}$$

Here, P is the output per machine, e is the number of workers per machine, w is the wage rate and c is the cost per machine. It is considered that all profits are reinvested and wages are consumed. So, rate of profit is also the coefficient of reinvestment. So, even in developing countries, Leibenstein favours capital intensive method of production. Here, it is important to increase per capita income so that the saving is increased to ensure enough capital formation.

6. Employment Absorption Criterion

This criterion emphasises maximising employment through labour-intensive projects, particularly in underdeveloped economies. Here, the key considerations are to prioritise low capital-turnover ratios and labour intensive methods of production. However, there is a risk that excessive focus on employment may result in low productivity if marginal labour productivity is negligible.

- Prioritising labour intensive method

7. Balance of Payments Criterion

This criterion considers the impact of investment projects on a nation's balance of payments, particularly in developing

- Prioritise projects that economise BOP

economies where foreign exchange is scarce. So, priority is to be given for export-oriented initiatives and import-substitution industries.

3.3.2 Social Cost- Benefit Analysis

Before going to cost benefit analysis, let us discuss the evaluation of projects. Project evaluation is a systematic micro-planning technique used to assess the social, economic, technical, financial, and managerial desirability of a project, particularly in the context of public expenditure. It involves analysing the costs and benefits of investment proposals to determine their operational efficiency and overall impact on society. Hyman defines project evaluation as “the procedures of fact-finding about the results of planned social action, which in turn move the spiral of planning ever upward.” It is a critical component of rational action, serving as a methodological tool for systematic and objective appraisal. The Indian Planning Commission describes evaluation as an essential aid to policy formulation and an integral part of development programmes. Project evaluation examines the rate of returns of projects, social profitability, and side effects on population growth, employment, and investment rates. While beneficial for both developed and developing nations, it is particularly valuable for developing economies with resource constraints and specific economic challenges.

- Evaluates the desirability of projects from many angles

Significance of Project Evaluation for Developing Countries

The project evaluation technique is more critical for developing countries for several reasons:

- a. **Distorted Market Prices:** In developing economies, market prices often fail to reflect true social costs and benefits due to factors like:
 - A. Inflation - Persistent price increases affect cost estimations.
 - B. Currency Overvaluation - Artificially strong currencies distort international trade impacts.
 - C. Wage Disparities - Wages often deviate from marginal productivity.
 - D. Imperfect Capital Markets - Limited financial infrastructure hampers accurate cost-benefit estimation.

- E. Export Inelasticity - Demand for exports is less responsive to price changes.
- F. Protectionist Policies - Tariffs and subsidies skew market signals.
- G. Absence of Market Economies - Non-market factors dominate decision-making.
- H. Resource Scarcity - Developing nations face acute shortages of human and material resources, necessitating optimal and rational resource utilisation for economic development.

Social Cost-Benefit Analysis

Cost-benefit analysis is essential for allocating resources in the public sector, especially when market signals are absent or unreliable. It ensures that decisions about public goods such as roads, education, and healthcare are guided by objective economic criteria rather than subjective political considerations. In a market economy, resource allocation is governed by supply and demand. However, public sector projects often lack clear pricing signals due to externalities or subsidised services. Social cost benefit analysis provides a conceptual framework to evaluate such projects, ensuring optimal use of scarce resources. It evaluates the economic desirability of investment projects by analysing costs and benefits over their entire lifecycle. It accounts for both direct and indirect impacts, allowing a comprehensive assessment of alternative approaches and overall project objectives.

- Evaluates the desirability of projects and optimise resources

CBA is a structured approach involving several key steps:

a. Statement of Objectives

Clearly define the project goals in alignment with social welfare. Goals may range from specific (e.g., irrigating 5,000 hectares of land) to broader objectives (e.g., poverty alleviation or regional development). The sharper the goal definition, the more effective the analysis.

b. Exploration of Alternatives

Identify viable alternatives to achieve the project goals. For instance, consider different locations, timings or construction methods. While not all alternatives are analysed, the major ones are compared for their relative costs and benefits.

c. Analysis of Benefits



Benefits are categorised into direct and indirect benefits. Direct benefits are which accruing directly to users (e.g., reduced travel time due to a new road) whereas indirect benefits are which accruing to others (e.g., reduced traffic congestion on alternate routes).

d. Cost-Benefit Balance Sheet

Summarise all costs and benefits in a balance sheet format. This aggregation enables decision-makers to compare alternative projects objectively and choose the one maximising social welfare.

e. Determination of Costs

Costs are defined as the present value of resources used in a project, measured by their opportunity cost. Costs include direct cost and indirect cost. Direct Costs are capital, operating, and maintenance expenses. Indirect Costs include costs borne by other governmental agencies or society at large, often ignored in conventional evaluations. Like benefits, costs face measurement challenges. For example, air pollution-related costs are complex to quantify comprehensively.

f. The Role of Discounting

Projects involve costs now and benefits in the future. Due to time preference and interest, future benefits/costs are less significant than their present equivalents. Discounting adjusts future values to present terms.

Selecting an Appropriate Discount Rate involves following:

Social Time Preference Rate: Reflects how society values present consumption over future consumption.

Private Investment Returns: Represents the opportunity cost of diverting resources from private to public investment.

Government Borrowing Rate: Based on the interest rate at which governments can secure funds.

g. Criteria for Cost-Benefit Analysis

Four key criteria are commonly applied:

1. B – C

2. $B - C / I$
3. $\frac{\Delta B}{\Delta C}$
4. B / C

Here, B is the benefit, C is the cost, I is the direct investment, and Δ is the increment.

- B/C is the efficient ratio

$B - C / I$ is used to determine total annual return on particular investment to economy. If private investment is very high, higher benefit may not help economy. $\frac{\Delta B}{\Delta C}$ is used to determine the size of the project. $B - C$ shows large project to beneficial. B/C is the benefit to cost ratio which is the most efficient ratio.

Practical Challenges in Cost-Benefit Analysis

- Challenges in identifying affected ones, opportunity cost, value of non priced items.

1. **Redistribution Effects:** Identifying and compensating those adversely affected by projects (e.g., noise pollution) is challenging.
2. **Market Price Issues:** Prices distorted by taxes, subsidies, or imperfect competition may not reflect true opportunity costs.
3. **Valuation of Non-Market Factors:** Assigning monetary values to intangibles like noise reduction, life-saving, and environmental benefits remains subjective.
4. **Uncertainty and Externalities**
5. **Defining the time horizon for benefits and costs.**
6. **Determining the weight of “shadow prices” for unpriced externalities.**

Limitations of Cost-Benefit Analysis

- Ineffectiveness to fit into the requirements of Government expenditure analysis

1. Ineffectiveness in addressing government expenditure priorities.
2. Limited usefulness for broad-based or cross-objective programmes (e.g., comparing highways with housing).
3. Difficulty in optimising public good provision.
4. Inadequate guidance for national priorities (e.g., defence vs. education).
5. Challenges in quantifying public goods and uncertainties in measurement.
6. Lack of contribution to defining social welfare functions and income distribution preferences.

Merits of Cost-Benefit Analysis

- Structured framework allowing comparison with alternatives

1. Provides a structured framework for evaluating projects with similar goals.
2. Facilitates comparison of alternative expenditures within a given budget.
3. Assesses distributional impacts of programmes.
4. Assists decision-making by quantifying benefits and costs.
5. Reduces biases and identifies inefficient projects.

3.3.3 Public Expenditure Management and Control

- Aligning public expenditure with social needs

Effective control and management of public expenditure are essential to ensure the efficient use of public funds and prevent misuse. Control does not necessarily mean reducing expenditure but ensuring that it aligns with social welfare and the financial resources available to the government. As Taylor aptly states, “control implies that expenditures are economic, meaning resources limited in quantity are devoted to their most productive uses.”

The key mechanisms for controlling public expenditure are as follows.

(a) Budgetary Control - Budget preparation is the foundational step in expenditure control. The budget serves as a comprehensive plan of governmental activities for the upcoming year. It outlines the specific purposes for which public funds will be utilised, the allocation of funds to various departments and their specific targets, the expected outcomes or physical achievements tied to the expenditure. This well-structured approach ensures that public resources are allocated effectively and efficiently.

(b) Legislative Control - Once the budget is prepared, it must be approved by the legislature. During this stage, legislators debate the budget, seek clarifications, and evaluate the justification for expenditure programmes. Based on these deliberations, the proposed expenditures may be adjusted to reflect the priorities and needs of society.

(c) Administrative Control - Administrative rules and regulations play a critical role in ensuring that funds are spent only with proper authorisation and for the intended purposes. Responsibility for public expenditure is assigned to specific officials. These officials are accountable to their

- Control via planning

departmental heads, who, in turn, report to higher authorities. This framework minimises fraud and ensures compliance with established financial norms.

(d) Audit Control - Scrutiny of accounts and audits ensures adherence to financial propriety and efficiency. Internal Audit include each department has its own accounts section to oversee expenditure and verify compliance with regulations. Under External Audit, the Comptroller and Auditor General (CAG) conducts independent audits of public expenditure, ensuring proper utilisation of funds and adherence to rules.

(e) Parliamentary Control - Parliamentary committees are instrumental in the oversight of public expenditure. Public Accounts Committee (PAC) examines audit reports and appropriation accounts. It investigates unauthorised or improper expenditure, misuse of funds and cases of misappropriation. Estimates Committee evaluates the financial operations of the executive. It recommends measures for optimising expenditure efficiency while maintaining effectiveness. These committees ensure accountability and transparency in government spending.

- Supervision at executive, administrative, and policy levels

(f) Debt and Tax Limitation - Some countries impose restrictions on debt and taxes for local governments to control public expenditure. Debt limitation establishes a ceiling on borrowing to prevent excessive expenditures beyond revenue collections. However, rigid debt limits can be counter productive during economic downturns or emergencies. Tax limitation restricts local governments from increasing taxes, which may limit their ability to fund critical activities.

(g) Pay-As-You-Go Policy - Under this policy, borrowing is prohibited, and current expenditures are restricted to the amount of current revenue. While this approach ensures fiscal discipline, it is typically applied to local governments. However, it can prove detrimental if mandated rigidly, especially during unforeseen crises.

Summarised Overview

Criteria of public investment are economic feasibility, social equity, sustainability, strategic alignment. Social cost-benefit analysis is a systematic evaluation of the economic, social, and environmental impacts of public investment projects. Cost assessment includes direct and indirect costs, including environmental impacts and opportunity costs. Benefit measurement means quantifying tangible and intangible benefits such as improved health, education, or infrastructure. Net social benefit compares costs and benefits to determine a project's overall value to society. Discounting and time frame uses discount rates to account for future costs and benefits.

Under public expenditure management and control, efficient management and control of public expenditure are essential for fiscal discipline and effective resource allocation. Budgeting and planning resort to comprehensive frameworks for planning and monitoring public spending. Transparency and accountability ensure expenditure aligns with its intended purpose and preventing corruption. Performance evaluation means regular assessment of outcomes to measure efficiency and effectiveness. Fiscal rules set limits on borrowing and expenditure growth to maintain macroeconomic stability.

Assignments

1. Discuss the key criteria for public investment decisions. How can these criteria guide governments in prioritising development projects?
2. Explain the importance of Social Cost-Benefit Analysis (SCBA) in evaluating public investment projects. Provide an example of a project that would benefit from SCBA.
3. Evaluate the role of Public Expenditure Management and Control in achieving fiscal discipline. Discuss how transparency and accountability can be enhanced in public expenditure.
4. Analyse the challenges governments face in balancing economic feasibility and social equity when making public investment decisions.
5. Discuss the relevance of sustainability in public investment. How can SCBA incorporate environmental considerations in project evaluation?

Suggested Reading

1. Brown, Charles Victor and Peter McLeod Jackson (1990) *Public Sector Economics*. Vol. 76. Oxford: Basil Blackwell.
2. Joseph E. Stiglitz (2000), *Economics of the Public Sector*, 3rd edition, W. W. Norton and Co.
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UNIT 4 Public Debt

Learning Outcomes

After completing this unit, learner will be able to:

- understand different views related to public debt
- be familiar with the sources of public debt and burden of public debt
- be aware of the principles of public debt management and repayment.

Background

Public debt is a critical instrument used by governments to finance various expenditures, especially when revenue generation through taxes is insufficient. Governments may resort to borrowing either from domestic or international markets to fund infrastructure, social programmes, and other public services that drive economic growth. The theories surrounding public debt are varied and evolve based on different economic contexts. Classical views focus on the economic implications of public borrowing, while compensatory theories examine how debt can be used strategically to stabilise economies. Managing public debt involves assessing its sources, understanding its long-term burdens, and adhering to principles that ensure its sustainability, including repayment mechanisms. In both developed and developing nations, public debt plays a crucial role in shaping fiscal policy and economic stability. However, excessive borrowing or mismanagement can lead to significant challenges, such as inflation, higher taxes, or reduced public investment.

Keywords

Compensatory View of Public Debt, Internal Source of Debt, external Source of Debt



Discussion

3.4.1 Theories of Public Debt:

Theories of public debt include classical and Keynesian views on public debt.

3.4.1.1 Classical View of Public Debt

The perspectives of classical and neo-classical economists on public debt evolved over time, reflecting the economic conditions and theoretical frameworks from the late 18th to the early 20th centuries. Thinkers like Adam Smith, Bastable, and Dalton made significant contributions to this discourse, emphasising different aspects of public debt and its implications. Classical and neo-classical economists often linked their views on public debt with their stance on budget balancing. Public debt and budget balancing are two sides of the same coin. They recognised that the failure to balance government budgets defined as covering all expenditures through taxes or revenue from government services could lead to concerns about the growing public debt.

- Classical and Neoclassical stood for budget balancing

Classical Viewpoint of Full Employment and Resource Allocation

Classical economists operated under the assumption that the economy tends toward full employment. Therefore, their focus on public debt emphasised its real, rather than monetary, effects. In a fully employed economy, government borrowing inevitably competes with the private sector for scarce resources, diverting them from private to public use. Importantly, classical thinkers did not advocate for the absence of government. Instead, they argued that the transfer of resources to the government should be minimised. Their reasoning was that individuals and businesses, under normal circumstances, could employ resources more efficiently than the government.

- At full employment, government expenditure means scarce resources at private sector

Taxation vs. Borrowing

In a fully employed economy, both taxation and borrowing transfer resources from the private to the public sector. However, classical economists generally favoured taxation over borrowing. They presented several arguments against government borrowing:

- Borrowing creates burden
- Inefficiency in the system

- 1. Ease of Borrowing and Government Extravagance:** Borrowing was seen as an easier method of financing government operations, which could lead to excessive and irresponsible spending. Over time, this could burden the economy with an unsustainable level of debt.
- 2. Future Taxation Challenges:** Servicing debt requires future taxation. If the government's tax base is limited by constitutional or statutory restrictions, an increasing debt burden can create inflexible budgetary constraints, complicating future financing.
- 3. Interest Payments:** Borrowing often entails interest payments, which add to the cost of government functioning. These compulsory expenditures reduce the funds available for other public purposes.
- 4. Risk of Inflation:** Persistent deficits and rising public debt could lead to currency devaluation and price inflation, undermining economic stability.
- 5. Marginalist Perspective on Budget Balancing:** As marginalist principles were integrated into classical economics, the argument for balanced budgets gained further traction. A balanced budget provided a clearer framework for transferring resources from the private to the public sector. Public expenditure was justified when the marginal benefit to society exceeded or equalled the marginal cost of raising resources. This approach was sharper and more effective when expenditures were financed through taxation rather than borrowing.
- 6. Perceived Inefficiency of Government Borrowing:** A recurring theme in classical thought was the belief that government borrowing often diverted resources from productive private uses to less efficient public uses. While not entirely dismissing the role of government, they emphasised that restrained borrowing and debt could contribute to the growth and vitality of the private sector.

3.4.1.2 Compensatory view of Public Debt

The Keynesian perspective on public debt marked a significant departure from classical economic thought. While the classical economists generally viewed public debt with scepticism, some dissenters, including Malthus, and later Keynes himself, challenged these ideas. Their arguments laid the foundation for modern macroeconomic policy, emphasising the role of

government spending in addressing economic imbalances.

- Debt has role in creating effective demand

Even in the 19th century, classical views on public debt did not go unchallenged. Thomas Malthus argued against the blanket rejection of public debt. According to Malthus, the groups supported by borrowed funds and interest payments such as statesmen, soldiers, and bondholders contributed to the economy by sustaining effective demand. This argument underscored the role of government spending in maintaining economic activity, even when financed through borrowing.

- Ensure effective utilisation of resources and ensure demand

John Maynard Keynes, in his seminal work *The General Theory of Employment, Interest and Money* (1936), fundamentally questioned the classical assumption of a self-equilibrating economy at full employment. Keynes argued that economies might tend toward underemployment equilibrium, characterised by idle resources and prolonged periods of low economic activity. In such circumstances, government intervention becomes essential to boost demand and utilise idle resources. This intervention does not necessarily deprive the private sector of resources, instead, it can complement private sector activity by raising total production and income.

Keynesian Insights on Financing Public Expenditure

Keynes emphasised the importance of financing government spending in a way that supports economic stability and growth. He argued that deficit-financed government spending could compensate for a decline in private sector demand. Key insights into how public debt could be financed effectively include:

- 1. Borrowing Idle Funds:** When the government borrows funds that are otherwise idle, it mobilises resources that would have remained unproductive. This process stimulates economic activity without impacting private sector spending.
- 2. Borrowing from Banks:** Borrowing from the banking system can be managed in a way that ensures private sector financing is not constrained. If banks are supplied with adequate reserves, lending to the government will not reduce the availability of funds for private borrowers.
- 3. Borrowing from the Central Bank:** Keynes highlighted the potential benefits of government borrowing from the central bank. This approach allows deficit financing without creating a scarcity of

- Borrowing compensates less private spending

funds in the private sector. By purchasing government securities, the central bank ensures liquidity in the economy, enabling public expenditure to stimulate demand effectively.

Government Spending as a Tool for Economic Stability

Keynesian economics views public debt not as a burden but as a powerful tool for stabilising the economy. When private sector demand falls, government spending financed through borrowing can fill the gap, preventing deeper economic downturns. This spending draws on idle resources, such as unemployed labour and underutilised capital, thereby boosting economic output and income. Keynesian theory also stresses the role of deficit financing in raising aggregate demand. This approach challenges the classical notion that government borrowing inevitably crowds out private investment. Instead, Keynes argued that in times of underemployment, public debt could play a constructive role in revitalising the economy.

- Public expenditure boosts output and income

3.4.2 Sources of Public Debt

Public borrowing plays a crucial role in meeting the financial needs of a government which is later considered as public debt. These borrowings can be broadly categorised into two sources: internal and external. Internally, governments borrow from individuals, commercial banks, financial institutions, charitable trusts, and the central bank of the country. Externally, borrowing sources include individuals, banks, international financial institutions, and foreign governments. The impact of public borrowing significantly depends on the sources of borrowed funds. Below, we delve into these sources to understand their mechanisms and implications.

- Internal and external sources of borrowing

3.4.2.1 Internal Sources of Borrowing

a. Borrowing from Individuals

Governments can borrow from individuals by issuing government bonds. This process diverts funds from private use to public use, typically with minimal disruption to consumption or business investment. Individuals often subscribe to these bonds either by cutting current consumption, redirecting funds meant for personal business ventures or reallocating idle savings. The advantages of this type of borrowing are that funds that might otherwise remain unused or invested in private securities can be directed toward large-scale public projects.



The collective contributions of individuals support significant government initiatives. Borrowing from individuals generally does not reduce consumption or business growth significantly.

b. Borrowing from Non-Banking Financial Institutions (NBFIs)

NBFIs, such as insurance companies, trusts, and savings banks, contribute to government borrowing by investing in government bonds. These institutions reduce their idle cash reserves by purchasing bonds, attracted by their security, negotiability, and liquidity. NBFIs view government bonds as safe investments backed by state guarantees. The liquidity of these bonds ensures they can be easily traded or converted into cash. Despite these advantages, some NBFIs may opt for high-risk, high-return securities over government bonds.

- Use idle cash reserves for public investment

c. Borrowing from Commercial Banks

Commercial banks contribute to government borrowing through a process known as credit creation, whereby they generate additional purchasing power by extending loans or purchasing government bonds. Commercial banks can create loans beyond their excess cash reserves, providing significant financial support to the government. The process involves depositing funds into borrower accounts, which, when circulated, generate further lending opportunities. If the economy operates at full employment, this credit expansion may lead to inflationary pressures. Unlike borrowing from individuals or NBFIs, credit creation injects new purchasing power into the economy, making it an expansionary approach.

- Creates new purchasing power

d. Borrowing from the Central Bank

The central bank can also fund government borrowing by purchasing government bonds, effectively creating new purchasing power. This method is the most expansionary among all sources of internal borrowing. The central bank credits the government's account upon purchasing bonds. These funds are used by the government for expenditure, and the subsequent deposits by creditors boost the reserves of commercial banks. These increased reserves facilitate further credit creation within the banking system. Central bank borrowing is expansionary as it not only provides funds to the government but also enhances the banking system's ability to lend. In contrast, borrowing from individuals and NBFIs merely transfers funds from private to public use without

- Funds government investment and helps banking system

increasing overall purchasing power.

3.4.2.2 External Sources of Borrowing

Governments may also borrow from external sources to address various needs, such as financing development projects, purchasing defence equipment or managing adverse balance of payments.

a. International Financial Institutions

Prominent international financial institutions, such as the International Monetary Fund (IMF), International Bank for Reconstruction and Development (IBRD), International Development Association (IDA), and International Finance Corporation (IFC), provide loans to member countries. They give short-term and long-term loans. Short-Term loans address temporary balance of payment challenges whereas Long-Term Loans Fund large-scale development projects.

- For balance of payment challenges and development projects

b. Government Assistance from Friendly Nations

Governments may receive financial assistance from allied or friendly countries. This support is often directed toward development projects and is particularly significant in developing nations.

3.4.3 Burden of Public Debt

The burden of public debt refers to the economic, financial, and social implications of government borrowing. It can be categorised into two types viz. Internal Burden of Public Debt and External Burden of Public Debt

1. Internal Burden of Public Debt

Internal debt refers to loans raised by the government from individuals or institutions within its jurisdiction. According to Prof. Dalton, “A loan is internal if subscribed by persons or institutions within the area controlled by the public authority which raises the loan.” Internal debt does not result in the outflow of money from the national economy. Instead, it involves the redistribution of purchasing power within the country. However, this redistribution can have various effects, which are discussed below.

- Burden within the jurisdiction of public institution



A. Direct Money Burden

- Redistribution of purchasing power

The direct money burden is the cost borne by the public due to taxes levied to repay loans and interest. Taxpayers transfer purchasing power to bond holders when taxes are raised for debt repayment. If taxpayers and bond holders belong to the same group, the burden is negligible, as money circulates within the community. However, if taxpayers are from poorer sections and bond holders are wealthier, the redistribution leads to income inequalities. According to Dalton, “all transactions connected with an internal debt resolve themselves into a series of transfers of wealth within the community. Hence, there can never be any direct money burden or benefit of an internal debt.”

B. Indirect Money Burden

- Debt to fund long term projects create inflationary pressures, affects savings, investments and growth

When loans are used for development projects, they can create demand for goods and services, leading to price inflation. A rise in prices imposes a financial strain on society. There will be impact on taxation. Increased taxes for debt repayment reduce people’s ability and willingness to save and invest, which may hinder production and growth. A criticism here is that the debt financed through progressive taxation may restrict private investment and reduce national income.

C. Direct Real Burden

- Redistribution from poor tax payers to rich lenders

Internal debt repayments often involve taxation, which redistributes income from poorer to wealthier sections of society. Wealth shifts from active, productive groups (taxpayers) to passive groups (bondholders). This redistribution can harm economic equity and national interests.

D. Indirect Real Burden

- Economic inequality

The imposition of heavy indirect taxes to repay internal debt often disproportionately affects poorer sections of society. Economic inequalities increase. Taxation discourages individuals from saving or working harder, adversely affecting productivity and economic growth.

2. External Burden of Public Debt

External debt refers to loans borrowed from foreign individuals, institutions or governments. As defined by Prof. Dalton, “a loan is external if subscribed by persons or institutions outside

- Debt outside the jurisdiction of public institution

this area.” External debt involves a transfer of wealth from the borrowing country to the lending country. The repayment of principal and interest has implications for the national economy.

- Burden in the form of payment of foreign exchange

A. Direct Money Burden

The debtor nation must make substantial payments in the form of foreign exchange for loan repayment and interest. Principal repayment requires exports without compensation, referred to as “unrequited exports.” This results in the loss of goods and services for the debtor nation, creating a direct financial burden.

- Exhaust of domestic resources reducing welfare

B. Indirect Money Burden

Repayments in the form of goods and services lead to increased exports, which can create shortages and inflate prices domestically. Indirect money burden includes exhaust of domestic resources, reducing economic welfare. While external debt may initially boost production, its repayment diverts resources away from domestic development, leading to long-term inefficiencies.

- Loss of social welfare

C. Direct Real Burden

The direct real burden refers to the loss of economic welfare caused by debt repayment. New taxes imposed to repay external debt disproportionately affect weaker sections of society. This creates financial hardship and reduces overall social welfare.

- Reduction in expenditure of social welfare programmes

D. Indirect Real Burden

Taxes imposed for external debt repayment negatively impact the economy by discouraging individuals from working or saving, by reducing public expenditure on socially beneficial programs, such as healthcare, education, and infrastructure, by stifling production and economic growth.

3.4.4 Principles of Public Debt Management and Repayment

Public debt management refers to the process of formulating and implementing policies for floating, refunding, and repaying government debt. The aim is to ensure that public borrowing

- Formulating and implementing policies to control and repay debt

does not cause inflationary or deflationary pressures on the economy. Prof. Abbot defines it: “Public debt management is concerned with the decisions of forms of public debt, in terms of which new bonds are sold, maturing debts are redeemed or refunded, the proportion in which different forms of public debt should be issued, the pattern of maturities of debt and its ownership.”

Key Components of Public Debt Management:

- A. Structuring the issuance of public securities.
- B. Determining how public debt is refunded.
- C. Managing the proportion and types of debt issued.
- D. Establishing interest rate patterns for securities.
- E. Deciding ownership and distribution of bonds.

- Structuring, managing, and repaying debt

Significance of Public Debt Management:

Public debt management is integral to fiscal and monetary policies. It ensures optimal resource utilisation while avoiding adverse effects on economic stability. Public debt levels influence economic performance. Effective management ensures that debt utilisation fosters growth without causing disruptions. It helps in economic development. Debt management policies can promote or hinder national economic development, depending on how they are implemented. Knowledge of debt requirements is essential for successful planning and execution of national policies. Moreover, it ensures optimal resource allocation. Effective management ensures resources are utilised to meet national priorities without overburdening the economy.

- Optimal resource allocation leading economic development

Objectives of Public Debt Management:

- a. Support Economic Policy:** Debt management should align with the government’s economic objectives, such as increasing purchasing power during depressions or curbing inflation during booms.
- b. Fund Requirements:** It should ensure adequate funds are available for war efforts, economic development or other priorities.
- c. Benefit Maximisation:** Debt management should aim to be a beneficial activity for the government and society.
- d. Minimise Adverse Effects:** Policies should avoid nega-

- Align with government policies, maximise benefits and minimise adverse effects

tive impacts on the economy, such as excessive inflation or instability.

- e. **Strengthen Money Markets:** Proper management fosters a robust and stable money market.

Principles of Public Debt Management:

According to Prof. Phillip E. Taylor, effective debt management is guided by three key principles such as

- A. **Ease of Public Contribution** - Policies must provide for debt extraction without undue coercion.
- B. **Market Stability** - Borrowing and repayment should not disrupt economic growth.
- C. **Market Timing** - Debt issuance should avoid inconvenient timing that could destabilise markets.

Let us explain this in detail.

- a. **Minimising Interest Costs:** Interest rates on government debt should be kept as low as possible to reduce the financial burden on the economy. However, extremely low rates may lead to inflation under full employment conditions.
- b. **Investor Satisfaction:** Public debt policies should address investor preferences for security types and terms. Attractive conditions encourage investments and maintain stability in the bond market.
- c. **Converting Short-Term to Long-Term Debt:** Converting short-term borrowings into long-term debt ensures economic stability. Proper precautions must prevent undue interest rate increases that could discourage private investment.
- d. **Coordination with Fiscal and Monetary Policies:** Debt policies should align with fiscal and monetary strategies to maintain stability and promote economic growth. For instance, low bank rates to reduce public debt costs should not lead to inflation.
- e. **Maturity Adjustments:** Properly adjusting debt maturities ensures liquidity in the market, preventing premature monetization of debt obligations.

- Minimise cost of interest, preference to investor satisfaction, coordination with policies



Management of Foreign Debt

Managing foreign debt is an essential part of macro economic policy. It involves aligning fiscal and monetary policies with the level and structure of foreign borrowing.

Major concepts related to management of foreign debt are given below.

- Regulate the level and composition, ensure higher growth than long term interest, focus on long term strategies

- a. Regulation of Foreign Debt:** Governments must decide the appropriate level of foreign borrowing to avoid excessive dependence on external sources.
- b. Debt Composition:** The composition of foreign debt should balance short-term and long-term obligations while supporting economic growth.
- c. Managing Debt Levels:** Foreign debt sustainability depends on economic growth and export performance.
- d. Sustainability Metrics:** The growth rate of the economy must exceed the long-term interest rate to maintain solvency. Also, export growth must surpass interest payments to avoid liquidity issues.
- e. Control Mechanisms:** Governments may impose statutory controls and regulations to manage foreign debt levels. Challenges in recent years have highlighted the need for:
 - f. Improved monitoring of short-term and banking debts.
 - g. Integration of debt management with overall economic policies.
 - h. A focus on long-term strategies rather than short-term objectives.

Summarised Overview

The classical view of public debt suggests that public debt is harmful in the long run. According to economists like David Ricardo and Adam Smith, borrowing today creates an obligation to repay in the future, leading to higher taxes or reduced government spending, which could negatively impact economic growth. The burden of debt, therefore, must be offset by future generations. In contrast, the compensatory view, advanced by economists such as John Maynard Keynes, argues that borrowing can be beneficial when used to stimulate economic growth, especially during times of recession. Public debt, when managed properly, can compensate for a reduction in private sector investment, thus promoting economic recovery.

Public debt can be classified into two major categories based on its source. Domestic sources include borrowing from domestic financial institutions, banks, and the public through the issuance of government bonds or treasury bills. Domestic debt tends to have lower interest rates and eliminates foreign exchange risk. Foreign sources include borrowing from foreign governments, international financial institutions or private foreign investors. While foreign debt can provide access to larger amounts of funds, it may come with higher interest rates and the risk of currency fluctuations. The burden of public debt refers to the economic cost of servicing the debt. This includes both interest payments and the repayment of principal amounts over time. Principles of debt management and repayment means effective management of public debt requires adherence to principles that ensure its sustainability.

Assignments

1. Compare the classical and compensatory views on public debt. Which view do you believe offers the most appropriate framework for contemporary economic challenges?
2. Examine the various sources of public debt and discuss the advantages and disadvantages of borrowing from domestic versus foreign sources.
3. What are the main factors contributing to the burden of public debt? Analyse the explicit and implicit costs associated with long-term government borrowing.
4. Discuss the principles of public debt management and repayment. How can governments ensure the sustainability of their debt while maintaining economic growth?
5. Critically assess the impact of excessive public debt on economic development. What measures can governments take to avoid the negative consequences of high levels of borrowing?

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MASTER OF ARTS ECONOMICS



Fiscal Federalism

Block 4



UNIT 1

Centre-State Financial Relations and Fiscal Imbalances in India

Learning Outcomes

After completing this unit, learner will be able to:

- comprehend the concept of centre-state financial relations
- identify vertical and horizontal imbalances
- recognise key mechanisms for fiscal transfers

Background

India is a federal country, which means it has multiple levels of government - primarily the central government and state governments, each with its own responsibilities. For the system to function effectively, both levels need financial resources to deliver public services like education, healthcare and infrastructure. However, the ability to generate revenue and the responsibility to spend it are not always equal between the Centre and the States. This leads to financial imbalances.

The central government collects the majority of taxes, such as income tax and GST, but states are responsible for providing many essential services like law and order, local development and education. This mismatch creates a vertical imbalance, where states often rely on financial transfers from the Centre to meet their expenditure. At the same time, not all states have the same economic strength. Wealthier states, like Maharashtra and Tamil Nadu, generate higher revenues compared to poorer states, like Bihar or Odisha. This creates a horizontal imbalance, where the financial capacity of states varies widely, affecting their ability to provide equal levels of public services to their citizens.

To address these imbalances, the Indian Constitution provides mechanisms for transferring resources from the Centre to the states. These transfers aim to ensure equitable development and efficient governance across the country. In this unit, we will examine the centre-state financial relations in India, along with other related aspects.

Keywords

Centre-State Financial Relations, Vertical Imbalance, Horizontal Imbalance, Intergovernmental Transfers

Discussion

4.1.1 Centre-State Financial Relations in India

Federalism is a system where sovereignty is divided between a central government and state or regional governments, allowing each level to operate independently within its defined jurisdiction. The federal principle in governance requires the Central and State governments to operate independently within their respective areas, by coordinating each other. For this principle to work in practice, both levels of government must control enough financial resources to perform their designated functions effectively. The State government should have the resources to meet regional needs just as the Central government must have adequate funds for national requirements. However, achieving this ideal balance of resources and responsibilities is challenging.

- Federalism divides power, but funding remains challenging

Revenue Distribution and Constitutional Provisions in India

To ensure a clear allocation of taxing powers, the Constitution of India divides revenue sources between the Centre and States in the seventh schedule. The Union List allows the centre to collect major taxes like customs duties, income tax excluding agricultural income, corporation tax and excise duties, except on alcohol. The State List empowers States to collect taxes such as land revenue, agricultural income tax, alcohol excise and earlier, sales tax on goods, now replaced by GST. States also manage taxes listed in the State List, such as property and land taxes, independently. The Concurrent List does not grant direct taxation powers but allows both Centre and States to make laws on economic matters with financial implications.

- Constitution divides taxation powers between Centre and States

The 80th and 88th Constitutional Amendment Acts brought significant changes to the sharing of tax revenue between the Centre and States. Article 268 allows the Centre to impose certain taxes, like stamp duties, but these are collected and

- Constitutional amendments redefined Centre-State tax revenue sharing

appropriated by the States. Previously, service tax was imposed by the Centre and shared with States under Article 268-A, but it has now been replaced by GST. Article 269 deals with taxes on inter-State trade, where the Centre collects the revenue but assigns it to States based on parliamentary rules. Similarly, Article 269-A governs GST on inter-State sales, with the Centre collecting the tax and sharing it with States as recommended by the GST Council. Following the recommendations of the Finance Commission under Article 270, taxes from the Union List are shared between the Centre and States. However, surcharges under Article 271 are exclusively retained by the Centre.

Institutional Mechanism to Manage Financial Relations Between Centre and States

- India's Fiscal federalism ensures equitable resource distribution

India has established key institutions to manage the financial relations between the Centre and States, for ensuring a balanced and cooperative federal system. The Finance Commission, established under Article 280 every five years, plays an important role in recommending how tax revenues should be shared between the Centre and States, as well as among States themselves. It also suggests measures to improve the financial condition of States, considering factors like population, area and fiscal needs. The Goods and Services Tax (GST) Council, created under Article 279A, ensures a unified tax structure by deciding how GST revenue is shared between the Centre and States. In 2015, the Planning Commission was replaced by NITI Aayog, which promotes cooperative federalism by acting as a think tank and advisory body for the Centre and States. Unlike its predecessor, NITI Aayog no longer allocates funds. Additionally, the Centre provides grants to States for specific purposes, such as development projects and welfare programmes, thereby ensuring that financially weaker States receive support for balanced growth.

4.1.1.1 Centre State Conflict on Finances

The financial relationship between the Union and States in India has become increasingly contentious, primarily due to political and ideological differences between the parties governing at both levels. Initially, the Indian Constitution allowed the Centre to provide grants and loans to States facing financial difficulties, with the goal of promoting balanced development. However, over time, this mechanism has led to several issues. In recent years, the Centre has

- States demand more financial autonomy from Centre

expanded its control over State finances through these grants and loans. States, feeling pressured by the Centre's growing dominance, are now demanding a review of the financial relationship to gain more political and financial autonomy. This call for greater financial independence is reflected in several reports and committees, including the J. K. Thavaraj Committee, which examined taxation issues in Kerala, the Rajamannar Committee on Centre-State relations appointed by the DMK government of Tamil Nadu and the 1978 West Bengal document on Centre-State relations. These documents emphasised the need for States to have more control over their own finances and called for limiting the Centre's financial powers over them.

Reasons of Conflict Listed by States

- States seek more autonomy

Several Indian states, including West Bengal, Jammu and Kashmir, Punjab, Maharashtra and others in the South, have voiced concerns over the need for greater autonomy. They argue that the current Constitution favours a strong central government, leaving the states weak and dependent. These states believe that a strong centre also requires equally empowered states, especially in the given cultural and linguistic diversity across India. Since Independence, the central government has expanded its role in these areas by creating its own departments and programmes for education, health and other areas originally designated as state responsibilities. This central influence was further entrenched during the emergency period (1975-77) and continues with central forces like the Border Security Force and Industrial Security Force being used within states' jurisdictions, infringing on what they see as their own domains of governance. Financially, the states feel disadvantaged as the central government controls more flexible revenue sources, leaving states reliant on central funds for essential services due to their relatively limited and inelastic financial resources.

- GST and CSS strain State finances

The introduction of GST (Goods and Services Tax) was aimed to simplify India's tax system by centralising tax collection. To ensure that States did not lose revenue, the centre guaranteed GST compensation for any shortfall. However, delays in these payments have caused tension in Centre-State financial relations, making it harder for States to manage their finances. Another challenge is Centrally Sponsored Schemes (CSS). These schemes are funded by the Centre but require States to share costs, which increases their financial burden. After the introduction of GST, States have less flexibility in raising

their own revenue, as most indirect taxes are now centralised under GST. The COVID -19 pandemic further strained State finances due to reduced revenues and increased spending on healthcare and welfare. States requested more borrowing limits and additional grants from the Centre to manage the crisis.

Measures to Strengthen Centre - State Financial Relations

To improve Centre-State financial relations, several measures can be taken. First, Fiscal Responsibility and Budget Management (FRBM) targets should be set at both levels to maintain fiscal discipline. Centrally Sponsored Schemes (CSS) need reforms to give States more flexibility in designing schemes and reduce their financial burden. Ensuring timely GST compensation is also important to avoid delays that affect State budgets. The Finance Commission should be given a broader mandate to tackle new fiscal challenges. Finally, enhancing revenue autonomy for States by providing more revenue sources and greater control over taxation policies would allow them to manage finances more independently.

- Improve Centre-State relations through fiscal discipline, autonomy

4.1.2 Vertical and Horizontal Imbalance in Intergovernmental Transfers in India

In a federal system, fiscal equity is essential to ensure fairness in the distribution of resources and responsibilities among governments. Two important concepts in this regard are horizontal equity and vertical equity. Vertical imbalance refers to the mismatch between the revenue-raising powers and expenditure responsibilities of the Centre and States, often leaving States dependent on central transfers. Horizontal imbalance arises when different States have unequal capacities to raise revenue due to varying economic conditions. This leads to disparities in public services across States. Intergovernmental transfers aim to address both imbalances for equitable development. The Finance Commission plays a central role in implementing these principles. To promote horizontal equity, it uses criteria like population, income distance (gap in per capita income of a state with the one with the highest), geographical area and specific needs such as health or education to allocate resources equitably among states. For instance, states with similar levels of poverty or underdevelopment, like Bihar and Odisha, receive comparable grants to improve their public services.

- Fiscal equity addresses imbalances via transfers



- Vertical equity redistributes resources to support poorer states

For vertical equity, the central government collects a larger share of taxes, such as income tax and GST and redistributes these resources to the states. Wealthier states, like Maharashtra and Tamil Nadu, contribute more to the central pool, while states with lower fiscal capacities, such as Uttar Pradesh and Jharkhand, receive higher transfers to meet their developmental needs. This redistribution ensures that poorer states can provide essential public services despite their limited revenue-raising capacity. The Goods and Services Tax (GST) regime also demonstrates vertical equity. Since GST centralises tax collection, the central government compensates states for any revenue loss, particularly benefiting states with weaker economies. Similarly, centrally sponsored schemes like the National Health Mission (NHM) allocate funds based on the specific needs of states, ensuring that those with weaker health indicators receive greater support. Let us look into the details.

4.1.2.1 Horizontal Fiscal Imbalance and Remedy

- Horizontal equity ensures fairness across states

Horizontal fiscal equity in a federation ensures fairness in tax payments and public benefits across states. It means that individuals with similar income levels in different states should face the same tax burden and enjoy comparable benefits from public services, regardless of where they live. To measure this fairness, economist J. M. Buchanan introduced the concept of fiscal residue. The principle of fiscal residue refers to the idea of determining whether individuals or groups in a society are net contributors to or net beneficiaries of, government activities, particularly public spending and taxation. It is essentially about calculating the balance between the taxes paid by individuals and the benefits received from public services.

- Calculating fiscal residue is challenging and complex

The principle of fiscal residue requires assessing the benefits of public services for individuals, which can be complex. Public expenditure, such as spending on education, healthcare or infrastructure, provides benefits to individuals. But assigning the value of these benefits to specific individuals or groups is challenging because some benefits, like public infrastructure or national defence, are non-excludable and non-rival; they benefit everyone simultaneously and cannot easily be attributed to specific individuals. Other benefits, like education or healthcare, are individual-specific but still depend on assumptions about use and impact. Thus, the principle of fiscal residue involves estimating the net benefit individuals receive from public spending, but the complexity

lies in accurately valuing and assigning these benefits due to the collective and multifaceted nature of public services.

- Requires inter-state resource redistribution mechanisms

Horizontal fiscal imbalance arises when states have unequal capacities to generate revenue or provide services due to differences in their economic conditions. For example, richer states may collect more taxes and offer better services, while poorer states struggle to match this level of provision. This disparity means individuals in poorer states might face higher disutility from taxes or receive fewer benefits from public expenditure, creating inequity. To address horizontal fiscal imbalance, inter-state resource transfers are essential. These transfers involve redistributing funds from richer states to poorer ones. This redistribution helps to equalise *per capita* income and ensures that people in poorer states receive a level of public services comparable to those in wealthier regions. Only through such transfers can equal per capita taxation or public expenditure achieve fairness in fiscal residue. Another way to address horizontal fiscal imbalance is by applying the benefit principle of taxation, as proposed by economist Richard Musgrave. According to this principle, taxes should be based on the benefits individuals receive from public services. However, achieving true horizontal equity requires more than just balancing the benefits and costs within each state.

- Resource transfers promote fairness between richer and poorer states

States differ widely in their economic conditions, which impacts how they balance the benefits and costs of public spending and taxation. The Social Marginal Benefit (SMB) is the extra benefit society gains from public expenditure, while the Social Marginal Cost (SMC) is the cost of raising funds through taxes. Poorer states often have both higher SMB because public spending can greatly improve welfare and higher SMC because raising taxes is more burdensome. As a result, simply ensuring a balance between SMB and SMC within each state does not address the disparities between richer and poorer states. To reduce these differences, transferring resources from richer to poorer states is essential. Such transfers enable poorer states to improve public services without overburdening their citizens with taxes. This redistribution promotes fairness, or horizontal fiscal equity, ensuring that everyone has access to quality public services regardless of where they live.

4.1.2.2 Vertical Fiscal Imbalance and Remedy

Vertical fiscal imbalance occurs when the revenue sources of state and local governments do not match their expenditure

- Vertical fiscal imbalance requires coordination

responsibilities. In federal systems, state and local governments often face increasing expenditures due to welfare programmes like education, healthcare, urban transport and economic development schemes. However, their revenue sources are usually inelastic; they do not grow significantly over time. In contrast, the central government has more elastic and robust revenue sources and possess surplus resources. Such resource gaps between the centre and the states are referred to as vertical fiscal imbalance. To address this imbalance, fiscal federalism promotes vertical coordination between the central, state and local governments. This ensures that resources are distributed in accordance with expenditure responsibilities. Some key methods to achieve vertical fiscal equity includes the following:

Tax Sharing: The central government shares its tax revenue with states to support their expenditure in accordance with available resources. The principles for sharing taxes may be constitutionally defined or determined by an expert committee.

Tax Credit: This mechanism enables individuals to offset their tax liability to one government by the amount already paid to another on the same tax. For example, if both the central and state governments impose a tax on property, the tax paid to the state government can be deducted (credited) from the central government's tax bill. This ensures fair taxation, reduces overlapping tax burdens and promotes efficient revenue collection.

- Tax sharing, tax credits and grants address fiscal imbalances

Grants-in-Aid: Central grants are used to fill the revenue gap that tax sharing cannot cover.

General or Unconditional Grants: These are funds given by the central government to state governments without any specific conditions on how they should be spent. The money comes from a shared pool of resources and is meant to help in reducing financial gaps between the central and state governments.

Specific or Conditional Grants: These are allocated for specific purposes, such as social services. States must use them as intended or return the funds.

Matching Grants: These are funds where states must contribute part of the money for projects, promoting joint funding between the central and state governments.

These tools help in reducing disparities and promoting fiscal equity within a federation.

Summarised Overview

India's Centre-State financial relations face challenges due to revenue imbalances, central dominance and GST implementation. States demand financial autonomy, reform of Centrally Sponsored Schemes, timely GST compensation and enhanced revenue from the centre. In India, the Centre-State financial relationship is marked by vertical and horizontal imbalances due to disparities in revenue generation and expenditure responsibilities. Vertical imbalance occurs when the Centre has elastic revenue sources, while states rely on inelastic sources, which grow slower than their expenditure obligations. States face increasing spending on welfare, infrastructure and development but lacks sufficient revenue, which creates dependency on central transfers. Its remedies include tax sharing, grants-in-aid, tax credits, general or unconditional grants, specific or conditional grants and matching grants.

Horizontal imbalance arises due to variations in state's revenue capacities and developmental needs. Wealthier states generate more revenue and provide better public services, while poorer states face challenges in service delivery. This inequity leads to fiscal residue disparities, as richer states often enjoy better social and economic outcomes. Remedies focus on redistributive mechanisms such as equalisation transfers and inter-state resource transfers.

Assignments

1. Discuss the key challenges in Centre-State financial relations in India and suggest measures to address them.
2. What are the key factors contributing to vertical fiscal imbalance in Centre-State financial relations in India?
3. How does the redistribution of resources address horizontal fiscal imbalance among Indian states?
4. How do tax-sharing and grants-in-aid address fiscal imbalances in India?
5. What challenges do states face in achieving financial independence under the current Centre-State financial framework?

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UNIT 2

Finance Commission and its Role in Fiscal Federalism

Learning Outcomes

After completing this unit, learner will be able to:

- comprehend the role and purpose of the finance commission
- explain the key recommendations made by the fifteenth finance commission
- identify the challenges in implementing the recommendations.

Background

The finance commission is a constitutional body established under Article 280 of the Indian Constitution. It plays a vital role in India's federal system by ensuring a fair distribution of financial resources between the Central and State governments. Every five years, a Finance Commission is constituted to make recommendations on how tax revenues should be shared between the centre and the states (vertical devolution) and among the states themselves (horizontal devolution) as you learned in the previous unit. Finance Commission also suggests grants-in-aid to states for specific purposes and advises on measures to improve the overall financial stability of both the central and state governments.

The Fifteenth Finance Commission (2021-26) was tasked with making recommendations during a period of unique challenges, including the implementation of the Goods and Services Tax (GST), rising fiscal deficits and the economic impact of the COVID-19 pandemic. These factors added complexity to its mandate of balancing the financial needs of states with the central government's fiscal constraints.

Let us discuss the Finance Commission in this unit, focusing on the recommendations of the Fifteenth Finance Commission and the challenges related to equitable resource distribution in India's fiscal federalism.

Keywords

Finance Commission, Tax Devolution, Income Distance, Fiscal Roadmap, Centrally Sponsored Schemes.

Discussion

4.2.1 Finance Commission

- Finance Commission ensures equitable resource distribution

- The Finance Commission has a chairman and four members

Article 280 of the Constitution of India establishes the Finance Commission as a quasi-judicial body. Finance commission has the authority to address financial matters and provide recommendations to resolve disputes related to the distribution of resources between the central and state governments. The Finance Commission is created by the President of India every five years or earlier if the President considers it necessary. This body plays a key role in maintaining financial balance and ensuring equitable distribution of financial resources.

The Finance Commission consists of a chairman and four members appointed by the President. The members hold office for a period specified by the President and are eligible for reappointment. The qualifications and method of selecting these members are determined by the Parliament. As per these rules, the chairman must have significant experience in public affairs. The four other members are chosen based on their specialised knowledge and expertise in different fields. These include: (1) a person who is either a judge of a High Court or qualified to be appointed as one, (2) an expert in the finance and accounts of the government, (3) someone with extensive experience in financial matters and administration and (4) a person who has specialised knowledge in the field of economics. This ensures that the commission has a well-rounded team of experts capable of addressing the complex fiscal and economic challenges faced by the government.

4.2.1.1 Functions of the Finance Commission

The Finance Commission plays a vital role in ensuring a fair and balanced distribution of financial resources between the central and state governments in India. It is required to make important recommendations to the President of India on various fiscal matters as follows.



Distribution of Tax Revenue: The Finance Commission decides how the net proceeds of taxes collected by the central government should be shared between the Centre and the States. It also determines how this shared amount should be allocated among the different states to ensure equity and fairness in resource distribution.

Grants-in-Aid: It recommends the principles for providing grants-in-aid to states by the central government. These grants are given from the Consolidated Fund of India to help states manage their financial needs and maintain fiscal balance.

- Finance Commission advises on resource sharing and grants

Strengthening Local Governance: The Commission suggests measures to boost the Consolidated Fund of a State to enhance the financial resources available to panchayats and municipalities. These recommendations are based on the inputs provided by the State Finance Commissions, ensuring that local governments can fulfil their responsibilities effectively.

Other Financial Matters: The President may also refer other financial matter to the commission that are crucial for ensuring sound financial management in the country.

In the early years after the Constitution came into effect, until 1960, the Finance Commission recommended financial grants to the states of Assam, Bihar, Odisha and West Bengal. These states were major producers of jute and jute products, which were important export goods for India. However, the revenue collected from the export duty on these products was kept entirely by the central government and the states did not receive a share of it. To compensate this, the Finance Commission suggested giving these states special grants for a temporary period of ten years, for helping them to manage their finances during this time. These grants were provided temporarily for ten years.

- Finance Commission recommended temporary grants to states

The Finance Commission submits its report to the President, who presents it before both houses of the Parliament. This report includes recommendations and an explanatory memorandum detailing the actions taken by the government based on these recommendations.

4.2.1.2 Advisory Role of the Finance Commission

The Finance Commission in India serves as an important advisory body, but its recommendations are not binding on the government. This means that while the commission provides expert suggestions on financial matters, such as how much

- Recommendations are advisory, not binding

money the central government should grant to the states, it is ultimately up to the Union government to decide whether to implement these recommendations. To put it simply, the Indian Constitution does not mandate that the government follow the Finance Commission's recommendations. This also means that the states, as beneficiaries, do not have a legal right to claim the funds suggested by the commission. However, the commission's recommendations carry significant weight because it is a quasi-judicial body established under the Constitution and its role is to ensure fairness in financial distribution across the country.

- Finance Commission's role often overshadowed by the Planning Commission

Dr. P. V. Rajamannar, who was the Chairman of the fourth Finance Commission, emphasised this point by stating that since the Finance Commission is a constitutional body with quasi-judicial authority, its recommendations should not be rejected by the central government unless there are very strong and justifiable reasons. The Constitution envisions the Finance Commission as the "balancing wheel of fiscal federalism" in India. This means that it plays a crucial role in maintaining financial harmony between the Centre and the states. However, until 2014, the role of the Finance Commission was often overshadowed by the Planning Commission, which was a non-constitutional and non-statutory body. The Planning Commission, set up in 1950, had significant influence over federal fiscal transfers, leading to an overlap in the functions and responsibilities of the two bodies. Dr. Rajamannar also pointed out this issue of overlapping roles, which sometimes created confusion in Centre-state financial relations.

In 2015, the Planning Commission was replaced by the NITI Aayog (National Institution for Transforming India), a think tank that focuses on policy-making and development planning without directly handling financial transfers. This change reduced the overlapping of responsibilities, allowing the Finance Commission to take a more central role in addressing fiscal federalism in India.



Table 4.2.1 List of Finance Commissions Appointed in India

Finance Commission	Chairman	Appointed In	Submitted Report	Period of Implementation of Report
First	K. C. Neogy	1951	1952	1952–57
Second	K. Santhanam	1956	1957	1957–62
Third	A. K. Chanda	1960	1961	1962–66
Fourth	Dr. P. V. Rajamannar	1964	1965	1966–69
Fifth	Mahavir Tyagi	1968	1969	1969–74
Sixth	Brahmananda Reddy	1972	1973	1974–79
Seventh	J. M. Shelat	1977	1978	1979–84
Eighth	Y. B. Chavan	1982	1984	1984–89
Ninth	N. K. P. Salve	1987	1989	1989–95
Tenth	K. C. Pant	1992	1994	1995–2000
Eleventh	A.M. Khusro	1998	2000	2000–2005
Twelfth	Dr. C. Rangarajan	2002	2004	2005–2010
Thirteenth	Dr. Vijay Kelkar	2007	2009	2010–2015
Fourteenth	Y. V. Reddy	2013	2014	2015–2020
Fifteenth	N. K. Singh	2017	2020	2020–2026 (expected)

Source: GoI sources

4.2.2 Recommendations of Fifteenth Finance Commission

The 15th Finance Commission, chaired by Mr. N. K. Singh had the unique responsibility of submitting its recommendations in two parts. The commission submitted its initial report for the financial year 2020-21, which was presented in Parliament in February 2020. This report provided short-term recommendations to guide resource allocation for one

- Submitted recommendations in two parts

year. The commission's final report, covering the five-year period from 2021 to 2026, was submitted to the President and subsequently tabled in Parliament on February 1, 2021. This comprehensive report included detailed recommendations aimed at promoting fiscal stability and equitable resource sharing between the Centre and the States.

The key recommendations outlined in the report for the period 2021-26 includes the following:

A) Share of States in Central Taxes

The share of states in central taxes for the period 2021-26 has been recommended to remain at 41%, the same as in 2020-21. This is slightly lower than the 42% share suggested by the 14th Finance Commission for the 2015-20 period. The 1% reduction accounts for the resources needed to support the newly formed Union Territories of Jammu and Kashmir and Ladakh. These Union Territories are now directly funded by the central government, which adjusts their share from its own resources.

- States receive 41% of central tax revenue

Criteria for Devolution

The Finance Commission determines how the central tax revenue is divided among states using specific criteria and assigns weights to each of these criteria. The table below shows the criteria used by the 14th Finance Commission (2015-20) and the 15th Finance Commission for two periods; 2020-21 and 2021-26. While the criteria remain the same for the 2020-21 and 2021-26 periods, the reference years for some calculations, such as income distance and tax efforts, differ. This can lead to changes in the individual share of states. Below is the table and an explanation of the criteria.

- Criteria weights affect states' tax revenue shares

Table 4.2.2 Criteria for Devolution (Weightage)

Criteria	14 th FC (2015-20)	15 th FC (2020-21)	15 th FC (2021-26)
Income Distance	50	45	45
Area	15	15	15
Population (1971)	17.5	-	-
Population (2011)	10	15	15

Demographic Performance	-	12.5	12.5
Forest Cover	7.5	-	-
Forest and Ecology	-	10	10
Tax and Fiscal Efforts	-	2.5	2.5
Total	100	100	100

Source: Reports of the 14th and 15th Finance Commissions; PRS

Income gap determines resource allocation

Income Distance: Income distance measures how far a state's income is from the income of the richest state in the country. The income of a state is calculated using the average *per capita* Gross State Domestic Product (GSDP) during the three years from 2016-17 to 2018-19. This criterion is used to promote equity among states by allocating a higher share of resources to states with lower per capita income. This ensures that less developed states have sufficient funds to improve their economic condition and reduce disparities. Its weight has been reduced from 50% in the 14th FC to 45% in the 15th FC.

Area: Larger states require more resources for infrastructure and public services. The weight for this is 15% across all periods.

• Rewards states for population control

Demographic Performance: Initially, the 14th FC used the 1971 population to encourage population control. However, the 15th Finance Commission uses 2011 population data to evaluate the demographic performance of states. States that have made significant efforts in controlling their population, such as achieving lower fertility rates, are given better scores. This approach rewards states for their effective population management policies and encourages other states to adopt similar measures. By linking resource allocation to demographic performance, the criterion promotes sustainable development.

• States with larger forest areas are rewarded for conservation

Forest and Ecology: The forest and ecology criterion focuses on the environmental contribution of states. It is based on the share of each state's dense forest area in the total dense forest area of all states. States with a larger proportion of dense forests are rewarded to recognise their role in preserving the environment and maintaining ecological balance. This criterion ensures that states with significant forest cover are

supported for their efforts in conservation and sustainability.

- States with better tax performance receive more funds

Tax and Fiscal Efforts: This criterion rewards states for their tax collection efficiency and fiscal responsibility. It is calculated by comparing the average *per capita* tax revenue of a state with its average per capita GSDP during 2016-17 to 2018-19. States that perform better in generating revenue from their own sources are allocated more funds. This encourages states to improve their fiscal performance and reduce dependency on central transfers.

B) Grants

During the 2021-26 period, various grants will be provided by the central government to states and local bodies to address specific needs. These grants are categorised as follows:

Revenue Deficit Grants: A total of ₹2.9 lakh crores will be allocated to 17 states to eliminate revenue deficits, ensuring that their essential expenditure is met despite limited revenue generation.

- Grants allocated for deficits, sector and state-specific needs

Sector-Specific Grants: ₹1.3 lakh crores will be provided for eight key sectors, including health, school education, higher education, agricultural reforms, maintenance of PMGSY roads, judiciary, statistics and aspirational districts and blocks. A part of these grants will be linked to performance, it encourages states to achieve specific targets.

State-Specific Grants: ₹49,599 crores will be allocated to address unique state-level needs in areas such as social welfare, governance, infrastructure, water and sanitation, preservation of cultural and historical monuments, high-cost physical infrastructure and tourism. To ensure effective use of these grants, the Finance Commission recommends establishing a high-level committee at the state level for review and monitoring.

- ₹4.36 lakh crores allocated for local bodies

Grants to Local Bodies: A total of ₹4.36 lakh crores will be allocated to local bodies, supporting all three tiers of Panchayats (village, block and district) as well as urban local bodies. This includes ₹2.4 lakh crores for rural local bodies, ₹1.2 lakh crores for urban local bodies and ₹70,051 crores in health grants. The health grants will focus on strengthening healthcare infrastructure, including converting rural sub-centres and Primary Healthcare Centres (PHCs) into Health



and Wellness Centres (HWCs), improving diagnostic infrastructure for primary healthcare and supporting urban HWCs, sub-centres, PHCs and public health units at the block level.

Grants to local bodies (excluding health grants) will be distributed to states based on two criteria, viz; population and area. The population will carry 90% weightage, while the area will have a 10% weightage. To access these grants, the Finance Commission has set two specific conditions, known as entry-level criteria. These include:

- Grants require transparency and property tax reforms

i. Publishing Accounts: States must publish provisional and audited accounts of local bodies in the public domain to ensure transparency and accountability.

ii. Property Tax Reforms: States need to set minimum floor rates for property taxes and improve their collection efficiency. For urban local bodies, meeting this requirement becomes mandatory from 2021-22 onwards.

Additionally, states must establish a State Finance Commission and implement its recommendations. If a state fails to do so by March 2024, no further grants will be provided to its local bodies.

Disaster Risk Management: The Fifteenth Finance Commission recommended retaining the existing cost-sharing patterns between the central and state governments for funding disaster management. The recommended cost-sharing structure is as follows:

- Disaster management funding shared between the centre and states

1. North-Eastern and Himalayan States: The central government will contribute 90% of the funds, while the state governments will provide the remaining 10%.
2. Other States: The central government will bear 75% of the cost, with the state governments covering the remaining 25%.

Additionally, the Commission proposed that the State Disaster Management Funds (SDMFs) should have a total corpus of ₹1.6 lakh crores, with the centre's share being ₹1.2 lakh crores. This arrangement aims to ensure efficient resource allocation and equitable financial support for disaster management across all states in India.

C) Fiscal Roadmap

Fiscal Deficit Targets: The Commission recommended that the central government should reduce its fiscal deficit to 4% of GDP by 2025-26. For states, it suggested fiscal deficit limits as a percentage of Gross State Domestic Product (GSDP) of 4% in 2021-22, 3.5% in 2022-23 and 3% during 2023-26. Additionally, if a state does not use its full borrowing capacity in a given year (within the 2021-25 period), it can carry over the unused portion of that borrowing limit to the following years, within the broader 2021-26 period. This flexibility allows the state to borrow more in the future years if it did not borrow the full amount initially allocated to it.

- States can carry over unused borrowing limits

Extra Borrowing for Power Sector Reforms: States can be allowed additional borrowing of up to 0.5% of GSDP annually during 2021-25 if they implement specific reforms in the power sector. These reforms include reducing operational losses, closing the revenue gap, adopting direct benefit transfers (DBT) to replace cash subsidies and lowering tariff subsidies as a percentage of revenue.

- Reforms for borrowing, reducing debt, ensuring fiscal discipline

Reducing Total Liabilities: The Commission observed that adhering to the recommended fiscal deficit targets would help reduce the total liabilities of both the central and state governments. For the central government, liabilities would decline from 62.9% of GDP in 2020-21 to 56.6% of GDP by 2025-26. For states (combined), liabilities would decrease from 33.1% of GDP in 2020-21 to 32.5% of GDP by 2025-26.

Reviewing Fiscal Responsibility Framework: The Commission proposed forming a high-powered inter-governmental group to review the existing Fiscal Responsibility and Budget Management (FRBM) Act and recommend a new framework for both the Centre and the States. This group would also oversee the implementation of the new FRBM framework to ensure fiscal discipline across all levels of government.

- Streamline property valuation methods

Revenue Mobilisation: The Commission recommended strengthening income and asset-based taxation to diversify revenue sources. To reduce the over-reliance on income tax from salaried individuals, the scope of Tax Deduction at Source (TDS) and Tax Collection at Source (TCS) provisions should be expanded. At the state level, stamp duty and registration fees hold significant untapped potential. Integrating computerised

property records with transaction registration and capturing the market value of properties can improve tax collection. Additionally, state governments should streamline property valuation methodologies to enhance revenue efficiency.

- Resolve GST issues and simplify structure

Goods and Services Tax (GST): The Commission noted that the inverted duty structure under GST, where taxes on intermediate inputs are higher than those on final outputs, should be resolved. It also recommended restoring the revenue neutrality of the GST rate, which has been affected by the multiple rate structures and frequent rate reductions. Rationalisation of rates by merging the 12% and 18% slabs into a single rate was suggested to simplify the tax structure. Furthermore, states need to intensify their efforts in expanding the GST base and ensuring compliance through effective field operations.

- Transparency through accurate accounting, reporting and forecasting

Financial Management Practices: To improve public financial management, the Commission suggested developing a comprehensive framework. An independent fiscal council with advisory powers should be established to assess financial records of both the centre and the states. The adoption of standard-based accounting and financial reporting should be phased, eventually transitioning to accrual-based accounting. Accrual-based accounting is a method of recording financial transactions where income and expenses are recognised when they are earned or incurred, regardless of when the cash is actually received or paid. The Commission recommended avoiding off-budget financing and other non-transparent methods of funding expenditures. Additionally, a standardised framework for reporting contingent liabilities should be developed to improve financial transparency. Both the centre and states should work on making more accurate and consistent predictions about the economy and finances to ensure better planning and management.

- Ensure consistent debt legislation

State-Level Fiscal Reforms: The Commission suggested that states amend their fiscal responsibility legislation to ensure consistency with the Centre's legislation, particularly in the debt component. States should also have more options for short-term borrowings, apart from the Ways and Means Advances and the overdraft facility from the Reserve Bank of India (RBI). To manage borrowing efficiently, states may establish an independent debt management cell to oversee their borrowing programmes effectively.

D) Other Recommendations

Health: The Commission recommended that states increase their health spending to more than 8% of their budget by 2022. It suggested that primary healthcare should account for two-thirds of the total health expenditure during the same year. Additionally, centrally sponsored schemes (CSS) in the health sector should be designed with flexibility to allow states to adapt and introduce innovations. The focus of these schemes should shift from inputs such as infrastructure and staffing to outcomes such as improved health indicators. The Commission also proposed establishing an All India Medical and Health Service to strengthen the healthcare system.

- Increase health spending focus on outcomes and innovation

Funding for Defence and Internal Security: To address funding gaps in defence and internal security, the commission suggested creating a dedicated non-lapsable fund called the Modernisation Fund for Defence and Internal Security (MFDIS). This fund is expected to have a total corpus of ₹2.4 lakh crores over the five-year period (2021-26). Of this amount, ₹1.5 lakh crores will come from the consolidated fund of India, while the remaining will be raised through measures such as disinvestment of defence public sector enterprises and monetisation of defence lands. This fund will primarily support capital outlays for modernising defence and internal security infrastructure.

- Primarily supports modernisation and security infrastructure

Centrally Sponsored Schemes (CSS): The Commission recommended introducing a threshold for annual allocation to centrally sponsored schemes (CSS). If a scheme's annual budget falls below this limit, it should be reviewed. Schemes that are no longer useful or impactful should be phased out. This will help avoid wasting resources on low-priority or ineffective programmes. The goal is to focus funds on important schemes that deliver results. By doing so, government spending becomes more efficient and meaningful. To improve the effectiveness of these schemes, a third-party evaluation should be completed within a stipulated timeframe. Furthermore, the funding pattern for CSS should be determined in a transparent and stable manner to avoid uncertainties.

- Set funding limits and evaluate CSS effectiveness

4.2.3 Challenges in Implementing the Recommendations of the 15th Finance Commission

The 15th Finance Commission, which decides how taxes are shared between the central and state governments in India,

faced significant challenges in implementing its suggestions. These challenges arose from financial difficulties, state concerns and the need to balance different priorities. Let us discuss these challenges briefly.

- COVID-19 led to revenue shortfalls and increased spending

Impact of the COVID-19 Pandemic: The COVID-19 pandemic disrupted the Indian economy, leading to a sharp fall in tax collections. Both the central and state governments struggled with lower revenues while their spending needs increased. This made it difficult to stick to the Finance Commission's plan for resource distribution and fiscal targets. For example, the fiscal deficit, which was meant to remain below 3% of GDP, increased significantly during the pandemic years due to higher spending and lower revenue collection.

- Population-based funding caused fairness issues in implementation

Population-Based Allocation: The Commission decided to use population data from the 2011 Census instead of 1971, which had been used earlier. This change affected how funds were distributed among the states. Southern states like Tamil Nadu and Kerala, which had effectively managed population growth through family planning, felt that this decision might reduce their share of the revenue. They believed they were being unfairly penalised for their success in population control, as states with larger populations (based on the 2011 Census) could receive more funds. To address these concerns, the Commission also included incentives for states that performed well in controlling their population and achieving other development goals. This was an attempt to ensure fairness while considering both population size and developmental efficiency.

- States opposed defence fund, fearing reduced allocations

Defence Fund Allocation: The Finance Commission recommended setting up a dedicated fund for defence and internal security, to be financed from central taxes. While this was important to strengthen national security, states opposed it because it would reduce the amount of money available for them under tax devolution. This created tension between the states and the central government, as the states felt their financial needs were being sidelined.

- Limited funds made sector allocation challenging

Health Sector Challenges: The COVID-19 pandemic highlighted the need for better healthcare systems and the FC recommended higher spending on health. However, the limited availability of funds meant that other sectors like education and infrastructure had to compete for the same money. This made it difficult to decide how much money should go to

each sector, as all of them are important for the country's development.

- Pandemic increased difficulty in maintaining fiscal discipline

Fiscal Discipline: The Finance Commission asked both the central and state governments to control their spending and maintain fiscal discipline. It recommended limits on borrowing and deficits, but achieving these targets was difficult for many states. The pandemic made this even harder as governments had to spend more on relief measures while earning less from taxes.

- States felt central government priorities strained relations

Balancing Federal Relations: One of the biggest challenges was maintaining a balance between the central and state governments. Many states felt that the 15th Finance Commission's recommendations favoured the central government, particularly with the proposal to allocate a portion of central taxes to a Defence and Internal Security Fund. States argued that this reduced the pool of funds available for their development needs, leaving them with less flexibility to address their unique challenges. Additionally, some states viewed the reduced share of tax devolution as an encroachment on their fiscal autonomy, further straining federal relations.

The challenges faced in implementing the 15th Finance Commission's recommendations underline the complexity of managing a diverse federal system like India. Balancing the needs of states with national priorities, especially during a crisis like the COVID-19 pandemic, requires careful negotiation and collaboration. Addressing issues like fiscal deficits, equitable resource sharing and sectoral funding will demand innovative solutions and transparent policymaking. Strengthening trust and co-operation between the central and state governments remains crucial for achieving sustainable and inclusive economic growth.

Summarised Overview

The Finance Commission, under Article 280 of the Indian Constitution, recommends how financial resources are shared between the Centre and States. Constituted every five years, it includes a chairman and four members. Its main functions are to decide the distribution of tax revenue, recommend grants-in-aid and suggest measures to strengthen the financial resources of local governments.

The Fifteenth Finance Commission, chaired by N. K. Singh, submitted two reports,



viz., an initial report for 2020-21 and a final report for 2021-26. It recommended keeping the state's share in central taxes at 41%, slightly reduced from 42% due to funding needs for union territories. Key criteria for tax devolution included income distance, area, population (2011 census), demographic performance, forest and ecology and tax efforts. It proposed various grants, including revenue deficit grants, sector-specific grants and grants to local bodies. Disaster management funding patterns were retained and fiscal deficit targets were suggested for both Centre and States. The Commission emphasised improving revenue mobilisation, financial management and GST reforms. It recommended increased health spending, flexible centrally sponsored schemes and a dedicated fund for defence and internal security modernisation.

The 15th Finance Commission faced challenges due to financial constraints and state concerns. The COVID-19 pandemic reduced tax revenues and increased spending needs, making fiscal targets difficult. Using 2011 census data caused disputes among southern states, while the proposed Defence fund reduced states' tax shares. Limited funds and centre-state tensions complicated its implementation.

Assignments

1. Explain the primary functions of the Finance Commission under the Indian Constitution.
2. Examine the changes in criteria weights for tax devolution from the 14th to the 15th Finance Commission.
3. Describe the recommendations of the 15th Finance Commission of India.
4. Evaluate the measures suggested by the 15th Finance Commission to address fiscal deficit targets for the Centre and states.
5. Explain the impact of the COVID-19 pandemic on the implementation of the 15th Finance Commission's recommendations.

Suggested Reading

1. Thomas, T. M. I., Chakraborty, L., & R. Mohan. (2023). *Challenges to Indian fiscal federalism*. Left Word Books Publication.
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2. The 15th Finance Commission's Report for the period 2021-26 <https://fincomindia.nic.in/commission-reports-fifteenth.aspx>.
3. Bhatia, H. L. (2022). *Public Finance* (30th ed.). S. Chand Publishing.

Space for Learner Engagement for Objective Questions

Learners are encouraged to develop objective questions based on the content in the paragraph as a sign of their comprehension of the content. The Learners may reflect on the recap bullets and relate their understanding with the narrative in order to frame objective questions from the given text. The University expects that 1 - 2 questions are developed for each paragraph. The space given below can be used for listing the questions.



SGOU



UNIT 3

Sources and Composition of Revenue and Public Debt in India

Learning Outcomes

After completing this unit, learner will be able to:

- comprehend the sources of revenue for the Union, State and Local Governments
- explain the composition and sources of public debt in India
- analyse the indirect taxation in India, from VAT to GST

Background

Governments need money to run the country, to provide services and to build infrastructure like roads, railways, schools, hospitals etc. This money is called revenue and it comes from different sources. In India, the central government, state governments and local bodies like municipalities and panchayats have their own source of revenue. These are decided based on the Constitution, which clearly defines what each level of government can tax or earn.

As you are aware, public debt means borrowing money when tax revenue is not enough to meet expenses. Governments borrow from within the country or from other countries and institutions like the World Bank. In this unit, learners will get an idea on public debt and the associated facts as it is important to know how governments manage their finances.

Taxes are one of the most important sources of revenue. India has moved to a system called Goods and Services Tax (GST), which replaced many older taxes like VAT (Value Added Tax). GST is a unified tax system that helps to make trade and business smoother across the country. It is also an example of how the union and states work together in India's federal system to collect and share taxes.

By learning about these concepts from this unit, learners can better understand how the government functions, how money flows in the economy and why taxation and borrowing are key to a country's development.



Keywords

Revenue, Public Debt, Value Added Tax, Goods and Services Tax, Fiscal Framework

Discussion

4.3.1 Sources of Revenue in the Union, States and Local Bodies in India

- Constitution of India clearly divides taxation powers

In India, the Constitution ensures a clear division of taxation powers between the central government and the state governments and ensure smooth tax administration. Taxes are categorised based on their jurisdiction, with some being exclusive to the central government, others to the state governments and a few shared between both. Additionally, any new form of tax not mentioned in the Constitution falls under the residuary powers of the Central government.

- Central government collects national taxes, including GST

The central government collects taxes that have national importance. These include direct taxes like corporate tax, income tax, other taxes on income and expenditure, wealth tax, security transaction tax and other tax and duty on commodities and services. The introduction of the Goods and Services Tax (GST) in 2017 streamlined indirect taxation. The indirect taxes of the central government include central GST, union excise duty on petroleum products and tobacco and customs duties. Out of these, levying and collection of union excise duty on products outside GST and customs duty is done solely by the Union Government.

- State governments levy taxes on local needs

State governments handle taxes that address local needs. These include State GST (SGST) as part of the GST framework, land revenue and taxes on agricultural income. States also levy taxes on alcohol production, property transactions, vehicle use, professional incomes and electricity consumption.

In addition to the Central and State governments, local bodies in India, such as municipal corporations, municipalities and panchayats, also have their own sources of revenue. Local bodies primarily generate revenue through property tax, levied on buildings and land within their jurisdiction. Other significant sources include user charges for services like water supply, street lighting and waste collection, as well as

- Local bodies generate revenue through taxes, fees, bonds

entertainment tax, advertisement tax and tax on non-motorised vehicles. They also collect tolls and fees for licenses issued for trade, construction and other activities. Additionally, many urban local bodies receive funds through municipal bonds, enabling them to finance large infrastructure projects. Apart from these, local bodies receive grants and transfers from the Central and State governments under programmes like the Finance Commission's recommendations and schemes like the Smart Cities Mission. Let us discuss these components in detail.

4.3.1.1 Sources of Revenue for the Union Government of India

The Union Government of India generates its revenue through tax revenues (direct and indirect taxes) and non-tax revenues. These sources ensure that the government has sufficient funds to implement policies, administer public services and support development initiatives. Below is a detailed explanation of the sources of revenue for the union government with latest data from the Budget 2024-25.

1. Tax Revenue

Tax revenue is the primary source of income for the government, consisting of direct taxes and indirect taxes. Together, these taxes form a substantial portion of the total revenue.

A. Direct Taxes

Direct taxes are collected directly from individuals and corporations based on their income or profits. They constitute a significant portion of the union government's tax revenue and promote fairness as they are levied on the taxpayer's ability to pay.

- Corporate tax revenue estimated at ₹10.2 lakh crores

a) Corporate Tax

Corporate tax is levied on the profits of companies. For the fiscal year 2024-25, the revenue from corporate tax is estimated to be ₹10,20,000 crores, up from ₹9,22,675 crores in 2023-24. This shows the strong performance of Indian businesses and the government's efforts to create a favourable tax environment.

b) Income Tax



Income tax applies to the earnings of individuals, Hindu Undivided Families (HUFs) and non-corporate entities. The income tax collection for 2024-25 is projected at ₹11,87,000 crores, marking a significant increase from ₹10,22,325 crores in 2023-24. The Budget 2024 also introduced the following changes.

- Income tax collection projected at ₹11.87 lakh crores

Increased Standard Deduction: For salaried employees opting for the new tax regime, the standard deduction has been raised from ₹50,000 to ₹75,000. Similarly, the family pension deduction increased from ₹15,000 to ₹25,000.

Capital Gains Tax Simplification: Short-term capital gains on specific financial assets will now be taxed at 20% and long-term capital gains are taxed at a unified rate of 12.5%, with an increased exemption limit of ₹1.25 lakhs annually.

c) Securities Transaction Tax (STT)

The Securities Transaction Tax (STT) is a tax levied on the purchase and sale of securities such as stocks, bonds and derivatives in India. In the Union Budget 2024, the government proposed significant changes to the Securities Transaction Tax (STT) rates, effective from October 1, 2024, to regulate trading activities in the derivatives segment. The STT rates were increased as follows:

- STT rates increased for options and futures transactions

Options: The STT on the sale of options in securities was increased from 0.0625% to 0.1% of the option premium.

Futures: The STT on the sale of futures in securities was increased from 0.0125% to 0.02% of the contract value.

Apart from this, Taxes on income and expenditure includes taxes levied on specific forms of income and expenditure not covered under general income or corporate taxes. This category reflects contributions from smaller, non-major taxes. The Wealth tax, abolished in 2015, no longer contributes to direct tax revenue. In its place, the government relies on increased surcharge rates for high-income individuals to address wealth-based taxation. Other Tax and Duty on Commodities and Services includes miscellaneous direct taxes that do not fit under primary heads like corporate or income tax.

- Minor taxes and surcharges contribute to revenue

B. Indirect Taxes

Indirect taxes are levied on goods and services and are collected from consumers through intermediaries.

a) Goods and Services Tax (GST)

Introduced in July 2017, GST has simplified indirect taxation by replacing several older taxes like excise duty and service tax. The union government expects to collect ₹10,61,899 crores from GST in 2024-25, up from ₹9,56,600 crores in 2023-24.

b) Customs Duty

It is a tax on goods imported into or exported from India. Its contribution is estimated at ₹2,37,745 crores in 2024-25, marking an increase from ₹2,18,680 crores in the previous year.

c) Excise Duty

Excise Duty in India is a type of indirect tax levied on the manufacture or production of goods within the country, primarily levied on petroleum products. Its collections are expected to generate ₹3,24,000 crores in 2024-25, up from ₹3,08,100 crores in 2023-24.

- GST, customs, excise and UT taxes contribute to revenue

d) Taxes from Union Territories

These include local taxes collected in Union Territories like Delhi and Chandigarh. Its contribution is estimated at ₹9,426 crores in 2024-25.

Overall Tax Revenue (Net to Centre)

After deducting the states' share of taxes, the net tax revenue for the union government is projected to be ₹25,83,499 crores in 2024-25, compared to ₹23,23,917 crores in 2023-24.

2. Non-Tax Revenue

Non-tax revenue refers to income generated from sources other than taxes. This category is vital for diversifying the government's income streams.

a) Dividends and Profits



It includes the earnings from public sector enterprises and the Reserve Bank of India (RBI). Its contribution is expected to reach ₹2,89,134 crores in 2024-25, a significant increase from ₹1,54,407 crores in 2023-24.

b) Interest Receipts

Income from loans provided to states, union territories and other entities. Its contribution is estimated at ₹38,224 crores in 2024-25.

c) Other Non-Tax Revenue

- Non-tax revenue increased significantly in 2024-25

It includes fees for government services, penalties and other charges. Its contribution is projected at ₹2,15,433 crores in 2024-25.

d) Receipts from Union Territories

These are non-tax revenues collected in Union Territories. Its contribution is estimated at ₹2,910 crores in 2024-25.

Total Non-Tax Revenue

The total non-tax revenue is projected to be ₹5,45,701 crores in 2024-25, showing substantial growth compared to ₹3,75,795 crores in 2023-24.

3. Non-Debt Capital Receipts

In addition to tax and non-tax revenues, the government also earns from capital receipts that do not create debt.

- Loan recoveries and disinvestment generate non-debt capital

a) Recoveries of Loans: It refers to the loan repayments made to the union government. Its contribution is estimated at ₹27,999 crores in 2024-25.

b) Disinvestment Proceeds: It means the sale of government stakes in public sector enterprises. Its contribution is projected to generate ₹50,000 crores in 2024-25.

Total Non-Debt Capital Receipts: These are projected at ₹77,999 crores for 2024-25.

Total Revenue Receipts for the Fiscal Year 2024-25

The union government's gross tax revenue for 2024-25 is projected at ₹38,40,170 crores, with the net tax revenue to the centre estimated at ₹25,83,499 crores after sharing with the states. Additionally, non-tax revenue is expected to contribute ₹5,45,701 crores. This brings the total Revenue Receipts to ₹31,29,200 crores, which shows a significant increase compared to the previous year. The union government's revenue generation strategy relies heavily on direct and indirect taxes, complemented by non-tax revenues. Efficient tax administration, broadening of the tax base and higher economic growth have contributed to increased revenues. The rising contributions from GST, corporate tax and non-tax revenues such as dividends indicate a balanced and sustainable approach to fiscal management.

- Revenue increased significantly from tax and non-tax sources

4.3.1.2 Sources of Revenue for the State Governments in India

States derive revenue from various sources, broadly categorised into revenue receipts, capital receipts and public account receipts.

I. Revenue Receipts

Revenue receipts are the primary source of income for states and include tax and non-tax revenues.

1. Tax Revenue

Tax revenue is one of the most important sources of income for states in India. It provides the foundation for funding public services and developmental activities. A key component of tax revenue is the State Goods and Services Tax (SGST), which is levied on the supply of goods and services within the boundaries of a state. SGST, implemented as part of the nationwide GST system in 2017, has become a major source of revenue for states. It ensures that states receive their fair share of taxes collected on intra-state transactions.

- SGST is a major source of state tax revenue

Another significant contributor is taxes on sales, trade and excise. These taxes include duties on alcohol, which remains outside the purview of GST, as well as value-added tax (VAT) on items like petroleum products and electricity, which are also exempted from GST. These taxes are vital for states with



diverse industrial and consumer bases.

- Vehicle registration taxes contribute to state revenue

Taxes on vehicles form another important revenue stream, generated primarily through the registration of motor vehicles. This category of tax is directly linked to the level of urbanisation and economic activity in the state, as vehicle registration increases with rising income levels and infrastructure development.

- Land revenue, stamp duty and property taxes are state revenues

Income from land revenue and stamps and registration fees also plays a crucial role. Land revenue pertains to charges on the use of land, while stamps and registration fees are collected during property transactions. These fees vary depending on the property's value and they constitute a steady source of income for states, especially those experiencing rapid urbanisation and real estate growth. As per the division of taxation powers in the seventh schedule of Indian Constitution, Taxes on property and entertainment tax also fall under the state's jurisdiction.

- Agricultural income tax is not a major source of state revenue

Under the Constitution of India (Entry 46 of the State List), the taxation of agricultural income falls under the exclusive jurisdiction of state governments. This means states have the legal authority to levy taxes on income derived from agriculture. Despite the constitutional provision, most states do not actively levy agricultural income tax. Historically, states like Assam, Bengal and Kerala had imposed it, but it is no longer a significant source of revenue due to practical and political considerations. While agricultural income tax exists on paper, it is not a major contributor to state revenues. Instead, agricultural activity contributes indirectly through taxes on related inputs and outputs, like land revenue, irrigation charges and market fees.

2. Non-Tax Revenue

Non-tax revenue is an important source of income for states. A significant portion of this revenue comes from mining and royalties, especially in states rich in natural resources. These royalties are paid by industries for extracting minerals like coal, iron ore and other valuable resources, making it a crucial source of income for resource rich regions. Another contributor is the interest, dividends and profits earned by the state government from its investments in state-owned enterprises and financial institutions. These returns reflect the financial performance of public sector undertakings and provide a steady income stream. Additionally, states generate non-tax revenue through

- Mining royalties, investments and fees are state non-tax revenues

fees collected for public services, such as charges for irrigation systems, educational institutions and public utilities like water supply and electricity. Fines and penalties collected by the state government, along with income from lotteries, betting and gambling, serve as significant sources of non-tax revenue for several states.

- Central government supports states through tax devolution and grants

3. Transfers from the Central Government

The central government supports states through the devolution of union taxes, where a percentage of its tax revenue is shared with them. Additionally, grants-in-aid are provided for specific purposes like rural development, health and disaster management. Centrally Sponsored Schemes (CSS) offer targeted funding for initiatives such as MGNREGA and Pradhan Mantri Awas Yojana. Furthermore, Finance Commission transfers include grants for disaster relief, local body development and revenue deficit compensation, based on the recommendations of the Finance Commission.

- Capital receipts fund long-term state projects

II. Capital Receipts

Capital receipts are primarily used to fund long-term infrastructure and development projects. These include borrowings from internal sources like market borrowings and banks, as well as external loans from the central government. Another component is the recoveries of loans and advances, which involve the repayment of loans previously issued by the state to local bodies or organisations. Additionally, disinvestment involves the sale of state-owned assets or enterprises and the proceeds from the sale or lease of state-owned land also contribute to the capital receipts.

- Government holds public funds in trust for specific purposes

III. Public Account Receipts

Public account receipts refer to financial transactions where the government acts as a custodian of funds, rather than the owner. These receipts include contributions to small savings schemes, provident funds and reserve funds, collected from individuals, organisations or other entities. The government holds these funds in trust and uses them for specific purposes, such as financing welfare programmes or maintaining reserves for emergencies. Additionally, deposits from the public, including security deposits and earnest money, contribute to these receipts, as do remittances representing inter-state transfers, although this is less prominent. While these receipts

are not part of the consolidated fund, the net balance remaining after disbursements serves as an additional resource for the state's financial management.

4.3.1.3 Sources of Revenue for Urban Local Bodies in India

Urban local bodies, such as municipal corporations, municipal boards and cantonment boards, generate revenue through a variety of sources to manage urban infrastructure and public services. The main sources of revenue for urban local bodies include taxes, fees, grants and loans.

I. Taxes

A significant portion of revenue for urban local bodies comes from property taxes, which are levied on the annual value of properties within the jurisdiction. These taxes are typically based on the size, location and use of the property. House taxes are charged on residential properties, while land revenue taxes apply to landowners. Professional taxes are imposed on individuals engaged in professions or trades within the area.

- Urban local bodies rely on property taxes for revenue

In many cities, octroi (a tax on goods entering the city) and terminal taxes are crucial for urban revenue, although octroi has been largely replaced by GST. Additionally, betterment taxes are levied on landowners when urban development or improvements, such as infrastructure projects, increase the value of their properties. Some municipalities also charge a theatre tax on cinemas and entertainment establishments and a tax on advertisements in public spaces.

- Urban taxes include octroi, betterment, advertisements

II. Fees and Charges

Urban local bodies also earn significant revenue through service fees, such as water charges, sanitation fees, waste disposal charges and parking fees. These charges are directly linked to the services provided to the public. Market fees are another important source of revenue for urban local bodies, generated from the operation and maintenance of public markets.

- Earn revenue from service and market fees

III. Grants and Loans

Urban local bodies receive grants-in-aid from the central and state governments for specific purposes such as urban

- Urban bodies get grants and loans for development

development, sanitation, health and education. These grants can be both recurring and non-recurring and they help local bodies to meet the financial demands of infrastructure development. Local bodies may also obtain loans from the state or central government for large-scale projects like road construction or public transport systems.

4.3.1.4 Sources of Revenue for Rural Local Bodies in India

Rural local bodies, which include zila parishads, block samitis and gram panchayats, have different revenue sources compared to their urban counterparts, primarily due to the distinct needs and functions of rural areas.

I. Taxes

Rural local bodies generate income through taxes on property, land revenue and house taxes, similar to urban areas but on a smaller scale. Tax on animals and vehicles is also relevant in rural areas where agriculture and livestock are central to the economy. In some areas, taxes on profession are levied on individuals engaged in certain occupations. However, rural bodies often face challenges in tax collection due to the lower income levels in many villages, which limits the effectiveness of property and land taxes. Cattle taxes and taxes on village-based trades provide additional revenue, but these sources are often less significant than in urban areas.

- Rural bodies earn from property, land and livestock taxes

II. Fees and Charges

Rural local bodies collect fees for services such as water supply, sanitation and public health services. These fees are necessary for maintaining the rural infrastructure, such as providing clean drinking water and ensuring waste management. Market fees are also an important source of revenue for rural panchayats that manage local markets. Public health services, including immunisation campaigns and health clinics, also generate fees that help to fund local administration. In some states, rural bodies charge a water tax for the maintenance of public water systems, especially in areas where piped water is available for drinking and irrigation.

- Rural bodies earn from service fees and market fees

III. Grants and Loans

Rural local bodies depend heavily on grants-in-aid from

- Rural bodies rely on grants and loans

the central and state governments for funding development programmes, infrastructure projects and welfare initiatives. For instance, the central government allocates funds for rural sanitation, education and health under schemes like MGNREGA and the Pradhan Mantri Awas Yojana. These grants are essential for executing large-scale rural development projects and social welfare programmes. Additionally, loans from state governments and the central government, especially for infrastructure projects such as road construction, irrigation and electrification, are a critical source of funding for rural local bodies. Grants and loans are often tied to specific development schemes and are crucial for improving rural infrastructure and living standards.

- Rural bodies earn from cesses, fees and enterprises

Other Sources of Revenue

Rural local bodies also generate revenue from cesses and fees levied on services and commodities. These include income from fairs, fines for violations of local rules and fees for services like marriage registration and land records maintenance. Moreover, remunerative enterprises, such as local poultry farms, community-run markets and small-scale manufacturing, can provide additional revenue to gram panchayats.

4.3.2 Composition and Sources of Public Debt in India

- Public debt is government borrowing to finance deficits

Public debt is the money that a government borrows to finance its spending, especially when it faces budget deficits. It includes loans the government takes from the public, often in the form of securities like bonds or treasury bills. In advanced countries like the USA, public debt represents the total amount the government has borrowed to cover past deficits. According to economist Prof. Findlay Shirras “national debt is a debt which a State owes to its subjects or to the nationals of other countries.” In India public debt refers to a part of total borrowings by the central government which includes items such as market loans, special bearer bonds, treasury bills and special loans and securities issued by the Reserve Bank. It also includes the outstanding external debt. However, it excludes the items like, (1) Small savings, (ii) Provident fund, (ii) Other accounts, reserve funds and deposits. The aggregate borrowings by the Union Government comprises the public debt and these other borrowings are generally known as “Net liabilities of the Government.”

4.3.2.1 Sources of Public Debt in India

There are two major sources of public borrowing, internal and external sources.

1. Internal Sources

Borrowing from Individuals: The government raises funds by borrowing from individuals through the sale of government bonds. These bonds are essentially investment instruments that allow citizens to lend money to the government. To purchase these bonds, individuals often use their savings or adjust their spending habits.

Borrowing from Non-Banking Financial Institutions: Another important source of internal borrowing is Non-Banking financial Institutions (NBFIs) such as insurance companies, mutual funds and investment trusts. These institutions invest in government bonds as a way to manage their surplus cash. Government bonds are an attractive option for NBFIs because they are considered low-risk and highly liquid.

- Government borrows from individuals, financial institutions and the Central Bank

Borrowing from Commercial Banks: Commercial banks also play a significant role in financing the government. These banks lend money to the government by purchasing its bonds. They do this by creating new loans using their excess reserves and leveraging the banking system's ability to expand credit. This process increases the money supply in the economy.

Borrowing from the Central Bank: The Reserve Bank of India (RBI), which is the central bank of the country, helps the government by purchasing its bonds. When the RBI buys these bonds, it essentially creates new money by crediting it to the government's account. This provides the government with funds to make payments for its activities. As a result, the money supply in the economy increases, as when commercial banks purchase government bonds. However, excessive reliance on this method can lead to inflation if too much money is created without a corresponding increase in goods and services.

2. External Sources

Borrowing from International Financial Institutions: India can borrow from international institutions like the IMF, World Bank and International Development Association. These



- Government borrows from international institutions and foreign governments

institutions provide loans for both short-term balance of payments support and long-term development projects.

Borrowing from Foreign Governments: The government may also receive loans or assistance from friendly foreign nations, usually for specific development projects or emergency purposes such as war or disaster recovery.

4.3.2.2 Composition of Public Debt in India

Public debt in India can be classified into various forms based on different criteria like origin, repayment conditions and purpose of borrowing.

- Government borrows internally and externally

Internal and External Debts: Internal debt is raised within the country from its citizens, banks and financial institutions, while external debt is borrowed from foreign governments, individuals or international financial institutions. External debt may involve a transfer of wealth between countries and may impact foreign exchange reserves.

- Productive debt generates income

Productive and Unproductive Debt: Productive debt is invested in projects that generate income, such as infrastructure, which helps to repay the principal and the interest. Unproductive debt, such as loans for war or relief efforts, does not generate income and adds to the country's financial burden.

- Redeemable debt is repaid

Redeemable and Irredeemable Debts: Redeemable debts have a set maturity date and the government repays the principal along with interest. Irredeemable debts, however, are never repaid and the government only pays the interest regularly.

- Funded debt is long-term

Funded and Unfunded Debts: Funded debts are long-term and are repaid after a long period, while unfunded debts are short-term loans, usually for less than a year. It is used to cover temporary budget deficits.

- Loans vary in duration

Short, Medium and Long-Term Loans: These loans vary in duration. Short-term loans typically last 3 to 9 months, medium-term loans last a few years and long-term loans are for development projects and may last 10 years or more.

Voluntary and Compulsory Loans: Voluntary loans are taken by the public willingly, while compulsory loans are imposed by the government in exceptional circumstances.

- Government debt varies by source, market and net value

- India's public debt consists of internal and external debt

- Internal debt composed of marketable securities and non-marketable debt

- India's external debt is primarily from multilateral institutions

Marketable and Non-Marketable Debt: Marketable debts can be bought and sold in the stock market, while non-marketable debts, like savings bonds, cannot be traded.

Gross and Net Debt: Gross debt includes all borrowings, while net debt is the total debt minus any assets or funds reserved for repayment.

India's public debt, as explained in the status paper on government debt published by the Ministry of Finance, Department of Economic Affairs, Budget Division, New Delhi, consists of two main components. Internal debt and External debt. Internal debt is the larger portion, accounting for 94.6% of the total, while external debt makes up 5.4%.

As of March 2023, internal debt stood at ₹130.7 lakh crores, equivalent to 48.5% of the country's GDP. This internal debt is further categorised into marketable securities and non-marketable debt. Marketable securities, amounts to ₹99.9 lakh crores (37.1% of GDP) and constitutes 72.3% of public debt. Marketable securities include dated securities worth ₹91.6 lakh crores (34.0% of GDP), with maturities ranging from 2 to 40 years and treasury bills worth ₹8.2 lakh crores (3.1% of GDP), issued for short-term funding. Non-marketable debt totals ₹30.8 lakh crores (11.4% of GDP) and includes components such as special securities against small savings worth ₹22.8 lakh crores (8.5% of GDP), along with compensation bonds, securities issued to financial institutions and 14-day treasury bills. Thus, the major part of India's debt arises from internal borrowing, with marketable securities forming the largest share.

As of March 2023, India's external debt amounted to ₹7.5 lakh crores, constituting 2.8% of the GDP. This debt is primarily obtained from multilateral institutions like the World Bank and Asian Development Bank. These loans are predominantly denominated in Indian rupees and offered at fixed interest rates, thereby minimising the exposure to exchange rate fluctuations and market volatility. Such stable borrowing terms reduce financial risks for the government. External debt is strategically utilised to finance critical state development projects, infrastructure development and public welfare. Its low share in GDP indicates a manageable burden on the economy.

4.3.3 VAT and GST in the Federal Set-up in India

- India transitioned from VAT to GST

In India, the system of taxation has evolved from Value Added Tax (VAT) to the Goods and Services Tax (GST), both of which operate within the country's federal structure. These taxes are important in regulating and managing the country's economy by ensuring a fair distribution of revenue between the central and state governments.

- VAT is a consumption tax levied on value addition at each stage

VAT (Value Added Tax) was introduced in India in 2005 as a replacement for the earlier sales tax system. VAT is a consumption based tax levied on the value added to goods at each stage of production and distribution. In the VAT system, let us consider a chair as an example. The manufacturer sells the chair to a retailer for ₹500 and at a 10% VAT rate, the VAT charged by the manufacturer is ₹50, making the total payment ₹550. The retailer then sells the chair to a customer for ₹800, charging 10% VAT, which amounts to ₹80. Therefore, the customer pays ₹880 in total. However, the retailer can claim an input tax credit of ₹50 for the VAT already paid to the manufacturer. So, the retailer's net VAT liability is ₹80 (VAT on the sale) minus ₹50 (input tax credit), which equals ₹30 and the retailer pays ₹30 to the government. Under the federal system, VAT was managed by state governments. This meant that each state had the authority to levy and collect VAT on sales made within its borders (intra-state sales). On the other hand, central taxes like excise duty were applied to sales made between states (inter-state sales). This created complexities, as industries had to deal with different VAT rates and rules in each state. As a result, the tax system became fragmented and complicated.

- GST is a unified tax system levied by central and state governments

GST (Goods and Services Tax), introduced in 2017, was aimed at replacing multiple indirect taxes, including VAT, excise duty and service tax, with a single unified tax system. GST is a dual tax system where both the central and state governments share the power to levy taxes on goods and services. The central government imposes CGST (Central GST), while the states impose SGST (State GST) on intra-state transactions. For inter-state transactions, IGST (Integrated GST) is levied, which is collected by the central government and then redistributed to the states.

GST aims to create a single, unified market across the country. It helps to remove the problem of double taxation (tax cascading) and makes the tax system simpler and easier

- GST ensures co-operative federalism

to follow. GST is a destination-based tax, in which the tax revenue goes to the state where the goods or services are used or consumed, instead of the state where they are produced. Under the federal system, GST has brought about co-operative federalism, as the central and state governments share the revenue generated. States have a say in decision making through the GST Council, which ensures that the interests of both levels of government are considered. However, the transition from VAT to GST faced challenges, particularly related to the compensation mechanism for states that lost revenue in the initial years.

Summarised Overview

In India, revenue sources for the Union, State and Local Bodies are constitutionally defined. The Union government relies on direct taxes like corporate tax, income tax and indirect taxes such as GST, customs and excise duties, complemented by non-tax revenues like dividends, profits and interest receipts. State governments generate income through SGST, sales tax, land revenue and non-tax sources like mining royalties, investments and grants from the Centre. Local bodies derive revenue from property taxes, user charges, municipal bonds and government transfers, financing urban and rural infrastructure and services. Rural bodies focus on land, livestock taxes and market fees, while urban bodies derive revenue from property taxes, betterment levies and service fees.

India's public debt includes internal and external borrowings to finance deficits. Internal debt, constituting 94.6% of total debt as of March 2023, includes marketable securities like bonds and treasury bills and non-marketable debt like small savings. External debt, at 2.8% of GDP, comes mainly from multilateral institutions like the World Bank and funds critical development projects. Taxation has evolved from VAT, a state-level value-added tax, to GST, a unified system implemented in 2017. GST simplifies tax processes, eliminates cascading and promotes cooperative federalism, with revenue shared between the centre and states through mechanisms like the GST Council.

Assignments

1. List out the major sources of revenue for the Union Government in India.
2. Explain the primary sources of revenue for State Governments in India.
3. What are the key revenue sources for local bodies in India? Provide examples of urban and rural local body revenues?



4. Define public debt and explain its composition in India.
5. Discuss the differences between Value Added Tax (VAT) and Goods and Services Tax (GST) in India's federal setup.

Suggested Reading

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4. Government of India. (2024). *Budget Document 2024*. Ministry of Finance.

Space for Learner Engagement for Objective Questions

Learners are encouraged to develop objective questions based on the content in the paragraph as a sign of their comprehension of the content. The Learners may reflect on the recap bullets and relate their understanding with the narrative in order to frame objective questions from the given text. The University expects that 1 - 2 questions are developed for each paragraph. The space given below can be used for listing the questions.

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UNIT 4

Fiscal Responsibility and Budgetary Framework

Learning Outcomes

After completing this unit, learner will be able to:

- comprehend the concept of fiscal imbalance
- differentiate between revenue, fiscal and primary deficits
- explain the Fiscal Responsibility and Budget Management (FRBM) Act
- know the budgetary process

Background

Governments, like individuals, have to manage their income and expenses. The income of a government comes from taxes, fees and other sources like profits from public sector enterprises, while its expenses include spending on public services like education, health, infrastructure and defence. However, there are times when the expenses of the government exceed its income. This situation is known as fiscal imbalance. Fiscal imbalance is a crucial issue because it can affect the stability and growth of the economy. To understand it better, learners should be aware about the key terms like revenue deficit, fiscal deficit and primary deficit. These terms measure how much a government is borrowing or falling short in meeting its financial commitments.

Governments borrow money to cover the gap between income and expenditure. But excessive borrowing can lead to problems like rising debt and high-interest payments, making it harder to spend on essential services. This is where fiscal discipline becomes important. To ensure responsible financial management, India introduced the Fiscal Responsibility and Budget Management (FRBM) Act. The FRBM Act sets rules for the government to reduce deficits and manage its finances prudently. Learning about these concepts from this unit will help the learners to understand how governments balance their finances, what challenges they face and how policies like the FRBM Act play a role in ensuring economic stability.

Keywords

Fiscal Imbalance, Deficit, Fiscal Responsibility, Budget Management, Budget Process

Discussion

4.4.1 Fiscal Imbalance: Revenue, Fiscal and Primary Deficits

Fiscal imbalance in India occurs when the government's expenditure exceeds its revenue, resulting in a budget deficit. This means the government is spending more than it is earning from taxes and other sources of income. The budget deficit is typically classified into three categories, viz., revenue deficit, fiscal deficit and primary deficit. Before discussing the components of these deficits, learners should first familiarise themselves with certain related terminologies.

- Fiscal imbalance occurs when government overspends

In economics, revenue refers to the income generated by a government without increasing its financial liabilities. This includes money earned through taxes, non-tax sources and foreign grants. Non-revenue sources, on the other hand, are funds raised through borrowing, which increase financial liabilities.

- Revenue means income without increasing liabilities

Receipts are the total amount of money a government receives, both from revenue and non-revenue sources. Revenue receipts are classified into two types, viz., tax revenue receipts and non-tax revenue receipts. Tax revenue receipts include money earned by the government through direct and indirect taxes. Non-tax revenue receipts include income from sources other than taxes, such as profits and dividends from public sector undertakings (PSUs), interest on loans, income from fiscal services like currency printing, issuing postal stamps etc. and fees from penalties and fines.

- Government revenue includes taxes and non-tax sources

Revenue expenditure refers to the money spent by the government on goods and services that do not create productive assets. This includes interest payments on loans, salaries and pensions for government employees, subsidies, defence spending, law and order expenditure and social services like

- Revenue expenditure funds day-to-day government operations



education, healthcare and poverty alleviation. These expenses are necessary for running the government and its services but do not contribute to the creation of new infrastructure or capital.

4.4.1.1 Revenue Deficit

A revenue deficit occurs when a government's total revenue receipts are less than its total revenue expenditure; which means the government is spending more on its routine activities than it is earning through its revenue sources. The term revenue deficit has been used in India since the fiscal year 1997-98.

- Government spending exceeds revenue

Revenue expenditure is expenditure on immediate needs, such as paying salaries, subsidies and interest on loans. These are considered consumptive or non-productive because they do not contribute to creating long-term assets or infrastructure. In fiscal policy, this is often seen as problematic, as it means the government is spending money that could have been used for productive investments, like infrastructure or development projects.

- Government spends on immediate needs, not long-term assets

A revenue surplus, on the other hand, occurs when revenue receipts exceed revenue expenditure. This is generally considered a positive fiscal outcome because it suggests that the government has extra funds that could be invested in creating productive assets. However, the way the surplus is managed is important. For example, during the Second Plan in India, the country had a revenue surplus, but it was criticised because the policies that led to it, such as high tax rates, caused negative consequences like tax evasion, corruption and the creation of black money.

- Government earns more than it spends

Revenue deficit can be presented in two ways, i.e., either as the gross deficit in absolute currency terms or as a percentage of GDP for that particular year. The latter is commonly used for both domestic and international fiscal analysis. A high revenue deficit relative to GDP suggests that the government's fiscal health is weakening and it may need to borrow to fill the gap. This will further increase the public debt.

- Revenue deficit weakens government's fiscal health

In the union budget 2023-24 Revised Estimates, the revenue deficit was ₹7,65,624 crores (2.6% of GDP). For 2024-25, the revenue deficit is estimated at ₹5,80,201 crores (1.8% of GDP). This represents a reduction of ₹1,85,423 crores in

- Government aims to reduce revenue deficit in 2024-25

absolute terms and a decline of 0.8 percentage points as a share of GDP, which reflects the government's effort to improve fiscal discipline and in reducing non-productive expenditures.

4.4.1.2 Capital Budget

The capital budget is the section of the government's budget that deals with its capital related receipts and expenditure.

a) Capital Receipts

- Capital receipts support development

Capital receipts are a crucial part of government finances, especially in the context of a developing economy like India. These are non-revenue receipts that either create liabilities for the government (e.g., borrowings) or lead to a reduction in its assets (e.g., disinvestment). While they are primarily intended for investment and developmental purposes, they are also used to bridge fiscal deficits, particularly in challenging economic situations.

- Capital receipts include loans, borrowings and selling of asset

In India, capital receipts include loan recoveries, such as repayments from loans previously granted by the government to states, Union Territories, Public Sector Undertakings (PSUs) or international entities. The interest earned on these loans, however, is classified under revenue receipts. Another major source is government borrowings, which can be internal through treasury bills, bonds and market loans from the Reserve Bank of India (RBI), commercial banks and financial institutions or external, through loans from institutions like the World Bank, the International Monetary Fund (IMF) and foreign governments. Additionally, other receipts play a significant role, including funds raised via small savings schemes (e.g., Kisan Vikas Patra, National Savings Certificates), Provident Fund contributions and government bonds. In recent years, disinvestment proceeds, where the government sells stakes in PSUs, have gained prominence as a critical source of capital receipts.

b) Capital Expenditure

Capital expenditure refers to the government's spending on creating, acquiring or maintaining assets that have a long-term impact on the economy. This type of expenditure is crucial for economic development and includes the following components.



Loan Disbursals: Loans extended by the government to states, Union Territories (UTs), Public Sector Undertakings (PSUs) and foreign entities for development purposes.

Loan Repayments: Principal repayments of loans previously borrowed by the government. Interest payments on these loans are categorised as revenue expenditure.

Planned Development Expenditure: Investments in planned infrastructure and social development projects, along with financial assistance to states and UTs for their developmental initiatives.

Defence Capital Expenditure: Spending on modernising defence forces, acquiring equipment and maintaining defence infrastructure, which remains a significant priority in India.

- Government spends on assets, loans, infrastructure and defence

General Services: Capital investments in critical sectors like railways, postal services, education, water supply, health and rural development to strengthen the country's infrastructure.

Repayment of Liabilities: Fulfilment of obligations arising from schemes like the Provident Fund (PF) and other public liabilities, which have expanded due to growth in public sector employment and pension commitments.

Capital Deficit

Although not a formal term, "capital deficit" is often used in news to describe the government's struggle to meet its funding needs for public expenditure, particularly for capital-intensive projects. This issue is common in developing economies due to their high demand for capital investments.

- Developing economies face funding gaps for investments

4.4.1.3 Fiscal Deficit

Fiscal deficit in India refers to the situation where the total expenditure of the government exceeds its total receipts, excluding borrowings, during a fiscal year. It shows the gap between the government expenditure and its non-borrowed revenue. Mathematically, the fiscal deficit is expressed as follows.

- Government spends more than its revenue

Fiscal deficit = Total Budget Expenditure – Total Budget Receipts excluding Borrowings.

OR

Fiscal Deficit = (Revenue Expenditure + Capital Expenditure) – (Revenue Receipts + Capital Receipts excluding Borrowings).

- India consistently faced fiscal deficits

The concept of fiscal deficit has been formally used in India since the fiscal year 1997–98. Fiscal deficit can be expressed in two ways as shown below.

1. **Quantitative Form:** The total value of the deficit in terms of currency.
2. **Percentage of GDP:** This is more commonly used for comparing deficits across different years or countries.

India has consistently faced fiscal deficits, often at high levels. This indicates that the government has been spending beyond its means. The Union Budget 2024-25 provides a detailed picture of the revenue, fiscal and primary deficits. For the 2024-25 budget, the fiscal deficit is estimated at ₹16,13,312 crores, which is 4.9% of GDP.

4.4.1.4 Primary Deficit

- Primary deficit = Fiscal deficit – Interest payments

The primary deficit represents the fiscal deficit of a government after excluding the interest payments it makes on its loans and liabilities for a given year. In simpler terms, it shows how much of the fiscal deficit is due to the government's current spending rather than repayments on past borrowings. Calculation of primary deficit is represented by the following formula.

Primary Deficit = Fiscal Deficit – Interest Payments.

This concept has been used in India since the fiscal year 1997-98. The primary deficit is often expressed both as a total amount in currency terms and as a percentage of GDP, making it useful for analysing the fiscal health of a country.

- Primary deficit reflects borrowing for current spending

The primary deficit is a key tool for understanding government spending patterns. It shows whether the government is borrowing primarily to cover new spending needs or just to pay off old debts. Comparing primary deficits across years can reveal important trends, such as a government's reliance on loans for meeting expenses or whether declining interest payments have reduced the overall fiscal deficit. In the 2024-25 budget, the primary deficit is estimated at ₹4,50,372



crores, amounting to 1.4% of GDP. This shows how much of the fiscal imbalance comes from current spending rather than paying off old debts.

4.4.2 Fiscal Responsibility and Budget Management Act

- FRBM Act promotes fiscal discipline and transparency

The Fiscal Responsibility and Budget Management (FRBM) Act, enacted in 2003, is a significant law in India aimed at promoting fiscal discipline. The primary objectives of the FRBM Act are to reduce fiscal deficits, to control government debt and to enhance transparency in fiscal operations. Its main features are as follows:

i) The government was required to reduce fiscal deficit (FD) and revenue deficit (RD) to eliminate the revenue deficit by March 31, 2008 (later revised to March 31, 2009) and build a revenue surplus thereafter.

ii) Annual reduction targets were set, i.e., revenue deficit to be reduced by 0.5% and fiscal deficit to be reduced by 0.3% per annum.

iii) Fiscal deficit and revenue deficit targets could only be exceeded in cases like national security, calamities or exceptional situations.

iv) The government was prohibited from borrowing from the RBI, except through Ways and Means Advances (WMAs).

v) From 2006-07, the Reserve Bank of India (RBI) has been restricted from directly purchasing government bonds from the government through the primary market. Instead, the government must raise funds by selling these bonds to investors in the open market, such as banks, financial institutions or the public. This shift ensures that government borrowing is market-driven and subject to competitive forces.

vi) Measures were introduced to ensure greater transparency in fiscal management.

vii) The government must present three key statements in Parliament every year along with the Budget:

- Fiscal Policy Strategy Statement (FPSS): Outlines the

government's fiscal policies for the upcoming financial year.

- FRBM Act sets fiscal targets, promotes transparency

- Medium-Term Fiscal Policy Statement (MTFPS): Provides a three-year rolling target for specific fiscal indicators.
- Macroeconomic Framework Statement (MFS): Describes the overall economic outlook, including growth and inflation projections.

viii) The finance minister is required to review the trends in government receipts and expenditures every quarter and present the findings to Parliament.

- Flexibly adjusted fiscal targets

Over time, the FRBM Act has undergone several amendments to adjust fiscal targets and accommodate changing economic conditions. For instance, in 2018, the Act was amended to set a fiscal deficit target of 3% of GDP by March 31, 2021 and to aim for a central government debt-to-GDP ratio of 40% by March 31, 2025. In recent years, the government has faced challenges in adhering to these targets, especially due to unforeseen events like the COVID-19 pandemic, which necessitated increased public spending. Consequently, the fiscal deficit target was relaxed, with the government aiming to reduce it to below 4.5% of GDP by 2025-26.

4.4.3 Budget Process

- Constitution refers budget as “annual financial statement”

The Indian Constitution refers to the budget as the “annual financial statement” under Article 112. Interestingly, the term “budget” itself is not mentioned in the Constitution; it is simply the popular term used for the annual financial statement. The budget outlines the estimated receipts and expenditure of the Government of India for a financial year, which starts on 1st April and ends on 31st March of the following year.

Apart from providing estimates of government revenue and spending, the budget includes other essential details. These are;

- Estimates of revenue receipts and capital receipts (money earned and raised by the government).
- Ways and means of raising revenue (how the government plans to generate income).
- Estimates of expenditure (how the government plans to



- Budget outlines revenue, spending, policies and projections

spend money).

- A review of the actual receipts and expenditures of the previous year, explaining any deficit or surplus.
- The economic and financial policy for the upcoming year, including tax proposals, expected revenue, spending plans and introduction of new schemes or projects.

- Union budget combines railway, general budgets

Until 2017, the Government of India prepared two separate budgets, i.e., the railway budget and the general budget. In 2017, the central government merged the railway budget into the general budget, creating a single comprehensive Union Budget for the Government of India. The Union budget is prepared by the finance minister with the help of advisors and bureaucrats. Before preparing the budget, the finance minister consults industry leaders, economists and financial organisations to gather suggestions. However, the actual preparation and decision making largely remain in the hands of bureaucrats. The process usually begins in the third quarter of the financial year and has four stages: (1) estimating expenditures and revenues, (2) calculating the first estimate of the deficit, (3) narrowing the deficit and (4) presenting and approving the budget.

- Budget estimates prepared through ministries and consultations

In the first stage of the budget preparation process, estimates of expenditure and revenues are prepared. Ministries and departments provide detailed estimates for their expenditure, which were earlier classified as plan (development-related) and non-plan (administrative and obligatory) expenditure. However, since 2017, the distinction between plan and non-plan expenditure has been discontinued.

For development-related expenditure, consultations take place with officials from the NITI Aayog (formerly the Planning Commission). Administrative and fixed expenditure, such as interest payments, salaries and subsidies, are prepared by the ministries' financial advisors and consolidated by the expenditure secretary in the Ministry of Finance. On the revenue side, estimates are prepared for capital receipts and revenue receipts.

Next, the first estimate of the deficit is calculated by comparing expected revenues with expenditures. The government then decides on the required borrowings, both domestic and external, to cover the shortfall.

Finally, in the narrowing of the deficit, adjustments are made. If needed, tax rates may be revised and plan expenditure adjusted. Non-plan expenditure, due to political sensitivity, are less flexible. After finalising these steps, the budget is presented in the parliament.

- Budget preparation involves estimates, deficit calculations and adjustments

The process of passing the Union Budget in India involves six main stages in Parliament, viz; Presentation of the Budget, General Discussion, Scrutiny by Departmental Committees, Voting on Demands for Grants, Passing of the Appropriation Bill and Passing of the Finance Bill.

1. Presentation of the Budget

Traditionally, the finance minister presents the budget in the Lok Sabha on the 1st of February. The presentation begins with a budget speech, outlining the government's financial plans. After this, the budget is laid before the Rajya Sabha, which can discuss it but cannot vote on Demands for Grants. The budget can be presented in parts and no discussion happens on the day of presentation. Key documents include the Annual Financial Statement, Demands for Grants, Appropriation Bill, Finance Bill and various statements required by the FRBM Act, such as the Macro-Economic Framework Statement and Fiscal Policy Strategy Statement. Additionally, documents like Expenditure Budget, Receipts Budget and Outcome Budget provide detailed financial data.

- Finance minister presents the budget in Parliament

2. General Discussion

A few days after the presentation, a general discussion takes place in both houses of Parliament, lasting three to four days. Members discuss the overall budget or key principles but cannot propose amendments or vote at this stage. The finance minister replies to the discussion at the end.

- No amendments or voting in general discussion

3. Scrutiny by Departmental Committees

After the general discussion, the budget is examined in detail by 24 Departmental Standing Committees. These committees review the demands for grants of various ministries and submit detailed reports to both houses of Parliament. This system, introduced in 1993 and expanded in 2004, ensures thorough scrutiny of government spending.

- Ensures thorough scrutiny



4. Voting on Demands for Grants

- Lok Sabha votes on grants and propose cut motions

The Lok Sabha votes on the Demands for Grants for each ministry, which become grants once approved. This stage is exclusive to the Lok Sabha; the Rajya Sabha cannot vote on these demands. However, expenditure charged on the Consolidated Fund of India (such as salaries of judges and the President) are not votable, though they can be discussed. Members may propose Cut Motions to reduce grants. Although cut motions allow focused discussion and ensure government accountability, they are rarely passed since the government usually holds a majority. If passed, a cut motion signals a loss of confidence in the government, potentially leading to its resignation. Any unresolved demands are settled through a process called the Guillotine, where the Speaker puts them to a vote on the final day.

5. Passing of the Appropriation Bill

- Appropriation Bill authorises government spending

The Constitution requires that no money be withdrawn from the Consolidated Fund of India without Parliamentary approval. The Appropriation Bill authorises the government to spend money, covering both voted grants and charged expenditure. Once passed by Parliament and approved by the President, it becomes the Appropriation Act, which enables the government to withdraw funds. Until the Appropriation Bill is passed, the government may need funds for immediate expenses. To address this, Parliament passes a Vote on Account, allowing the government to spend a portion typically one-sixth of the budget for two months.

6. Passing of the Finance Bill

- Finance Bill implements tax proposals

The Finance Bill implements the government's tax proposals and financial policies for the coming year. It follows the procedures of a Money Bill, allowing amendments related to tax changes. According to the Provisional Collection of Taxes Act of 1931, the Finance Bill must be enacted, i.e., passed by the Parliament and assented to by the president within 75 days. Once signed into law by the President, it becomes the Finance Act, legalising the revenue side of the budget and completing the budget enactment process.

Summarised Overview

Fiscal imbalance occurs when government expenditure exceeds revenue, leading to deficits. Revenue deficit arises when revenue receipts fall short of revenue expenditure, indicating non-productive spending. Fiscal deficit represents the shortfall between total expenditure and total receipts excluding borrowings. Primary deficit is fiscal deficit minus interest payments. The Fiscal Responsibility and Budget Management (FRBM) Act 2003, aims to ensure fiscal discipline by reducing deficits and promoting transparency. It mandates annual fiscal targets, provision for borrowing and requires regular fiscal reviews.

The Indian Constitution refers to the budget as the “annual financial statement” under Article 112. It estimates government receipts and expenditure for a financial year. Prepared by the finance minister with inputs from various stakeholders, the budget process involves four stages, viz; estimating expenditures and revenues, calculating the deficit, narrowing the deficit and presenting the budget. The budget is presented on February 1 and passes through six stages, viz; presentation, general discussion, committee scrutiny, voting on Demands for Grants, passing the Appropriation Bill and passing the Finance Bill.

Assignments

1. Examine the concept of revenue deficit and its implications for the economy.
2. Explain the difference between fiscal deficit and primary deficit with examples.
3. What is the Fiscal Responsibility and Budget Management (FRBM) Act? Highlight its main objectives.
4. Discuss the significance of reducing fiscal imbalance in promoting sustainable economic growth.
5. Describe the various stages involved in the budget process in India.

Suggested Reading

1. Singh, S. K. (2014). *Public Finance in Theory and Practice* (5th ed.). S. Chand Publishing
2. Chakraborty, L. S. (2016). *Fiscal Consolidation, Budget Deficits and the Macro Economy*. Sage Publications.
3. Shah, A. (2007). *Budgeting and Budgetary Institutions*. World Bank Publications.



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1. Gupta, J. R. (2007). *Public Economics in India: Theory and Practice*, Atlantic.
2. Lekhi, J. S. (2016). *Public Finance* (11th ed.). Kalyani Publishers.
3. <https://www.indiabudget.gov.in>
4. <https://www.rbi.org.in>
5. <https://finmin.nic.in>

Space for Learner Engagement for Objective Questions

Learners are encouraged to develop objective questions based on the content in the paragraph as a sign of their comprehension of the content. The Learners may reflect on the recap bullets and relate their understanding with the narrative in order to frame objective questions from the given text. The University expects that 1 - 2 questions are developed for each paragraph. The space given below can be used for listing the questions.

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