Chapter 1: Introduction to Public Finance

Why Study Public Finance

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What is Public Finance?

- Public finance is the study of the role of the government in the economy.
- It addresses fundamental questions about government intervention, spending, taxation, and their effects.

A Broader View of Government

- Humans are social beings $\rightarrow$ cooperation crucial for survival.
- Nation states extend cooperation into:
  - Defense, education, health care, retirement benefits.
- Government size reflects social nature of human behavior.

Limits of Pure Market Solutions

- Markets cannot always replace social institutions.
- Examples:
  - Education: public funding avoids lifetime student debt traps.
  - Retirement: without institutions, most people cannot save enough.
  - Health care: private markets inefficient; governments play large role.
- Economists' role: identify when markets fail, when government improves outcomes.

Questions to Keep in Mind

- When should the government intervene in the economy?
- How might the government intervene?
- What is the effect of those interventions on economic outcomes?
- Why do governments choose to intervene in the way that they do?

1. When Should the Government Intervene?

- Government intervention is typically justified by:
  1. **Market Failures**: Problems causing the market economy to deliver an inefficient outcome (e.g., negative externalities like under-vaccination).
  2. **Redistribution**: Shifting resources from some groups to others to achieve a desired social distribution, even if it entails efficiency losses (equity-efficiency trade-off).

Market Failure Example: Epidemics

- Lack of vaccination creates a negative externality, increasing risk for others.
- Government intervention (public encouragement, subsidies) significantly increased immunization rates.
- Resurgence due to "anti-vaccine" movement highlights ongoing policy challenges.

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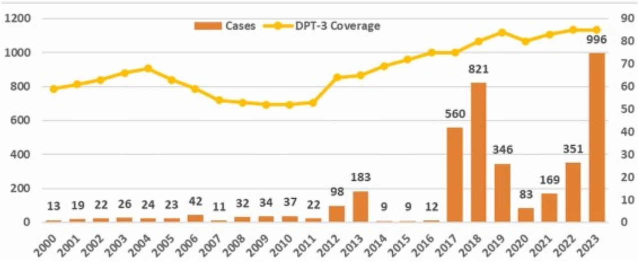


Figure: Epidemiological trends of Diphtheria cases and DPT-3 vaccination coverage in Pakistan between 2000 and 2023 (Salman, Muhammad et al., 2024)

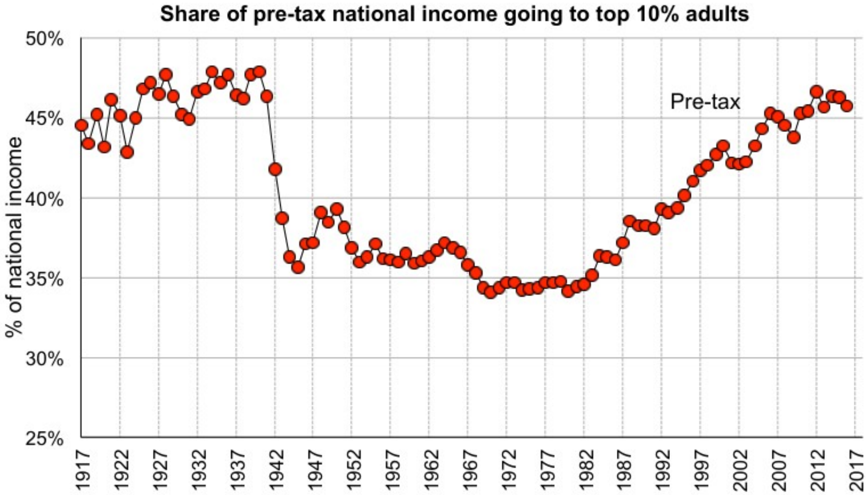
Main Market Failures

- Externalities (e.g., carbon emissions).
- Imperfect competition (monopoly power).
- Asymmetric information (insurance market failures).
- Behavioral failures (irrational decisions, under-saving).

Inequality and Redistribution

- Markets may generate efficient but unequal outcomes.
- Governments use taxes and transfers to reduce inequality.
- Trade-off: equity vs. efficiency.
- Example: rising U.S. inequality (Piketty-Saez-Zucman, 2018).

Figure: Inequality Trends in the U.S.



Source: Piketty, Saez, and Zucman (2018)

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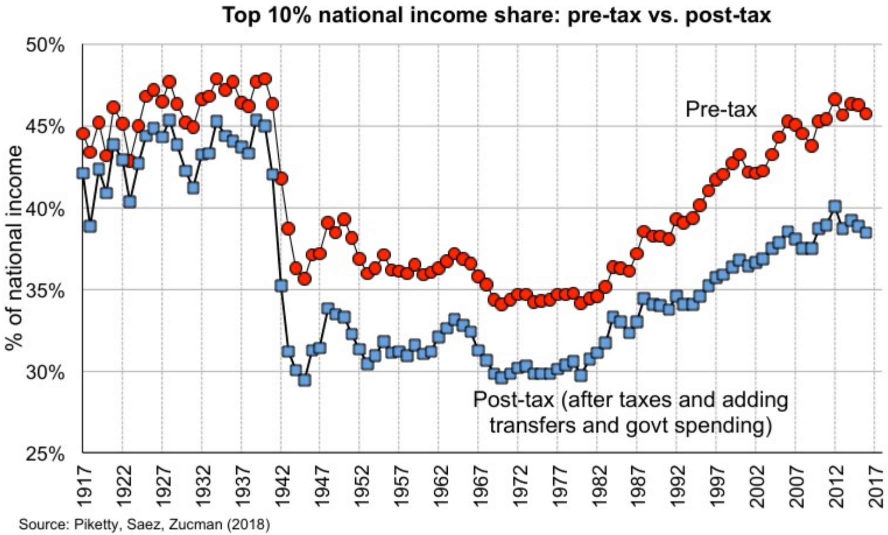

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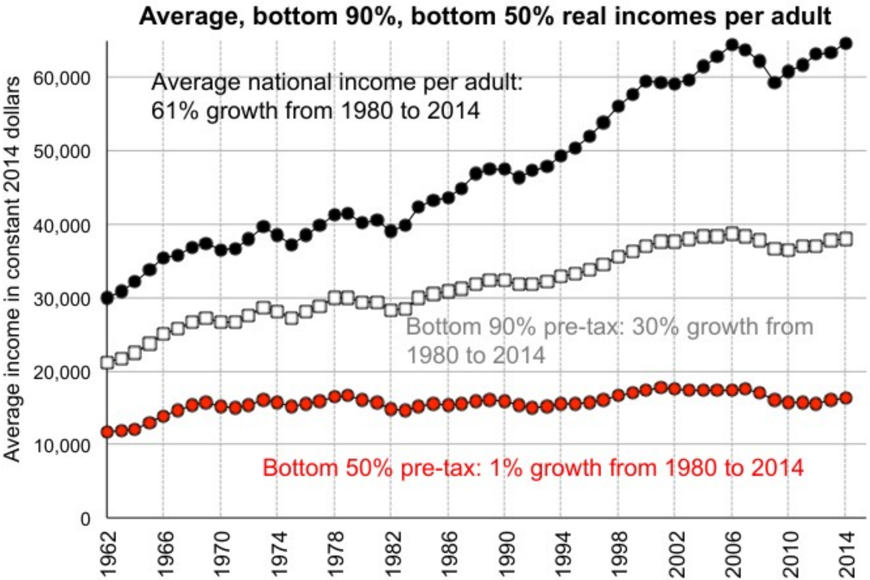


Direct vs. Indirect Effects of Policy

- **Direct effects:** expected outcomes if behavior does not change.
- **Indirect effects:** changes in behavior in response to policy.
- Example: raising top tax rates may induce tax avoidance $\rightarrow$ less revenue than expected.

Why Do Governments Act as They Do?

- Political economy: policy outcomes shaped by politics.
- Public choice: focus on government failures (capture by special interests, bureaucracy).
- Voter preferences and political systems explain tax/spending levels.

Normative vs. Positive Public Economics

- **Normative:** how things should be (e.g., optimal tax design).
- **Positive:** how things actually are (e.g., labor response to taxes).
- Normative relies on theory; positive relies on empirical analysis.

Key Facts on Government Size

- Government spending grows with development (from less than 10% in less developed economies to 30–50% of GDP).
  - Wondering about How much Pakistan spends as percentage of GDP?
  - Pakistan's Government Spending as of 2024—19.39% Ratio of government expenditure to GDP in Pakistan 1993-2030-see figure on next slide
- Stabilized in advanced economies after 1980.
- Growth driven by welfare state expansion:
  - Education, pensions, health care, social transfers.
- Most rich countries run persistent deficits.

Govt Exp. to GDP Pakistan from 1993 to 2030

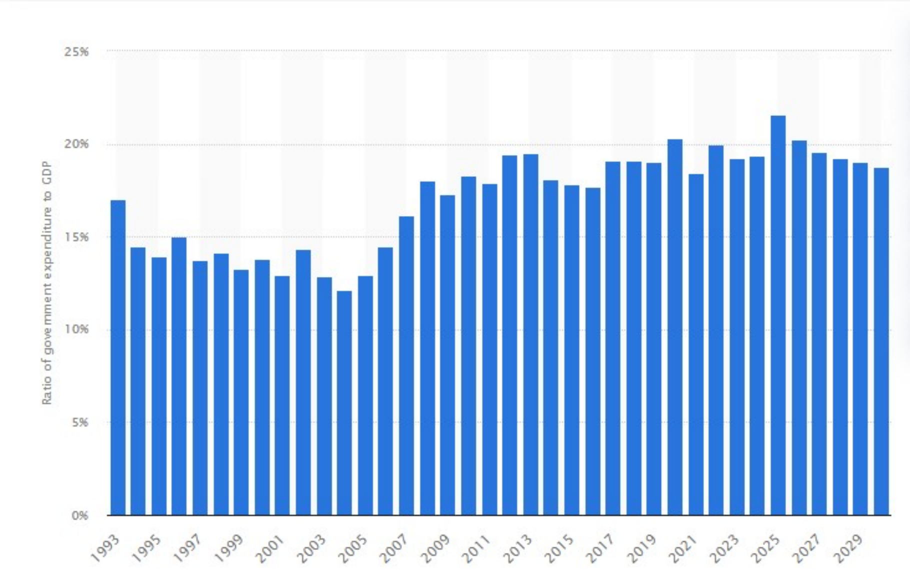
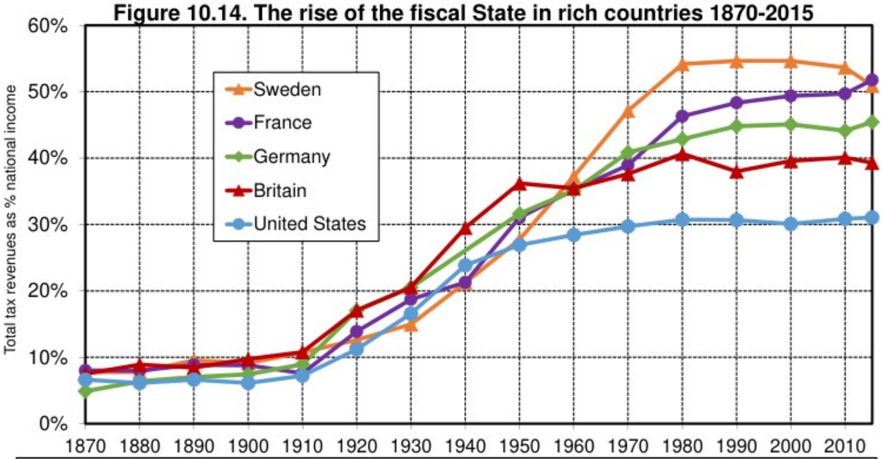
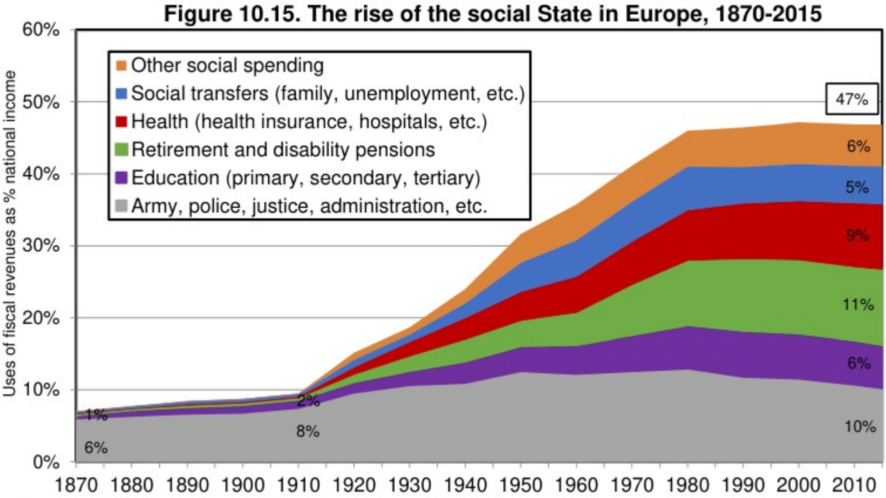


Figure: Growth of Fiscal State



Interpretation. Total fiscal revenues (all taxes and social contributions included) made less than 10% of national income in rich countries during the 19th century and until World War 1, before rising strongly from the 1910s-1920s until the 1970s-1980s and then stabilizing at different levels across countries: around 30% in the U.S., 40% in Britain and 45%-55% in Germany, France and Sweden.
Sources and series: see piketty.pse.ens.fr/ideology.

Figure: Growth of Fiscal State



Interpretation. In 2015, fiscal revenues represented 47% of national income on average in Western Europe et were used as follows: 10% of national income for regalian expenditure (army, police, justice, general administration, basic infrastructure: roads, etc.); 6% for education; 11% for pensions; 9% for health; 5% for social transfers (other than pensions); 6% for other social spending (housing, etc.). Before 1914, regalian expenditure absorbed almost all fiscal revenues. **Note.** The evolution depicted here is the average of Germany, France, Britain and Sweden (see figure 10.14). **Sources and séries**: see piketty.pse.ens.fr/ideology.

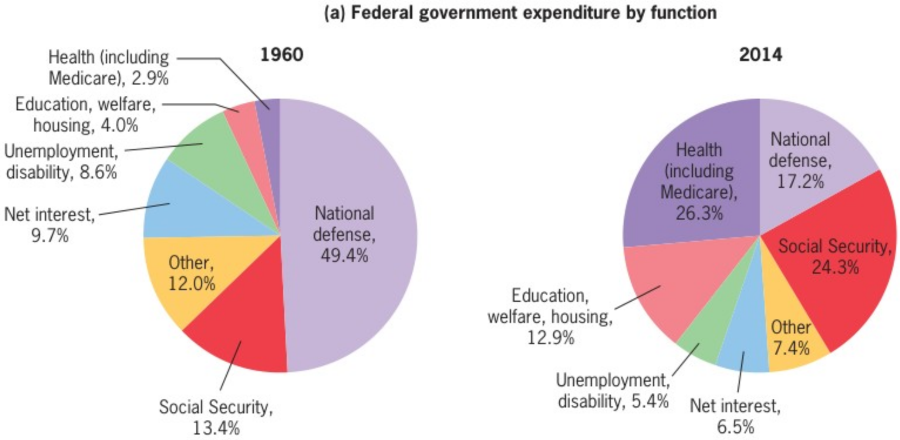
Different Levels of Government

- US Federal govt raises about 20% of GDP in taxes (and can run deficits).
- State+Local govts raise about 10% of GDP in taxes
- Decentralized govts can tailor policy but face limits on redistribution.
- Rich can migrate to avoid high local taxes → less redistribution at local level.

Distribution of Taxes

- Federal govt: income, payroll, corporate taxes.
- State/local govt: property taxes, sales/excise taxes, state income taxes.
- Key issue: tax incidence (who bears the burden?).

Figure: Distribution of Expenditures



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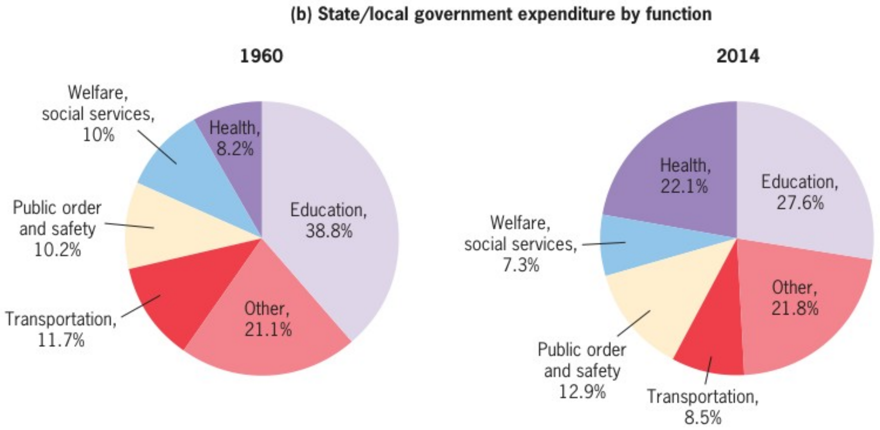
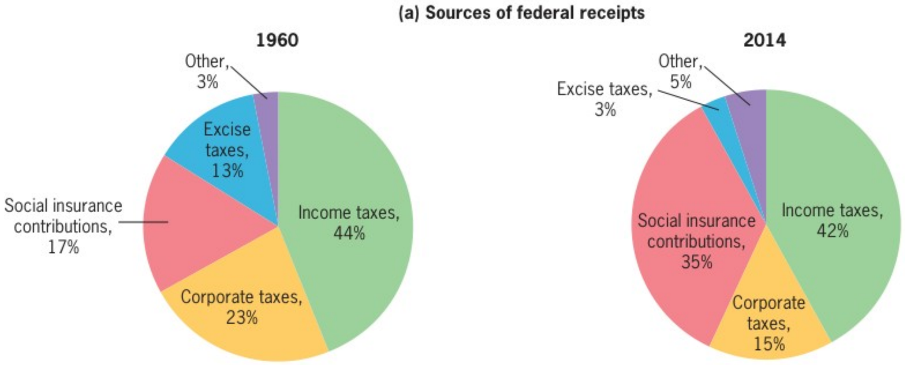


Figure: Distribution of Revenues



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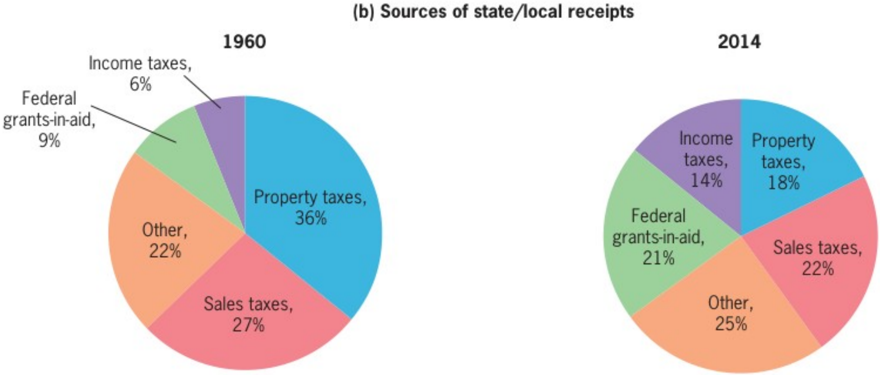

Regulatory Role of the Federal Government of Pakistan

- **Taxation and Fiscal Regulation**
  - Federal Board of Revenue (FBR) administers income tax, sales tax, customs, federal excise.
  - Regulates compliance, documentation of economy, and tax policy reforms.
- **Financial Sector Oversight**
  - State Bank of Pakistan regulates monetary policy, interest rates, and inflation.
  - Oversees banking/financial institutions ensuring fiscal stability.
- **Budgetary and Fiscal Rules**
  - Public Financial Management Act (2019) provides legal framework for fiscal discipline.
  - Adoption of Treasury Single Account (TSA) to control cash flows.
- **Expenditure Control and Procurement**
  - Public Procurement Regulatory Authority (PPRA) sets transparency rules for spending.
- **Sectoral Regulation with Fiscal Implications**
  - NEPRA (energy tariffs), OGRA (petroleum pricing), SECP (capital markets).

Class Debate: Public Financial Management in Pakistan

- Should Pakistan prioritize **debt servicing** or **development spending**?
- Do **IMF programs** help Pakistan achieve sustainability, or create long-term dependence?
- Has the **18th Amendment** improved or weakened fiscal federalism in practice?
- How can Pakistan balance **transparency and efficiency** in managing public funds?