

Regional and Local Public Economics

Mengwei LIN

mengwei.lin@ub.edu

Department of Economics, Universitat de Barcelona

and

Barcelona Institute of Economics (IEB)

Zelda Brutti and Candan Erdemli also contributed to the content.

Spring 2024

Recap: Big Idea of the Course

Related Courses on your plan:

- Public Sector Economics
- Public Finance (Public Economics)
- Regional and Local Public Finance/Economics
- Tax System I
- Tax System II

ECONOMIA						
Curs: 2023-2024 Assignatures : Itinerari recomanat - Pla docent - Horaris, professorat, avaluació ...						
			Formació Bàsica	Obligatòries	Optatives	Treball fi de grau
			Pràctiques			
Itinerari	Codi	Assignatura	Crèdits	Pla docent	Horaris, avaluació, llengua...	
1r Curs		361852 HISTÒRIA ECONÒMICA D'ESPANYA	6	Pla docent	--	PRIMAVERA
		361848 MACROECONOMIA I	6	Pla docent	TARDOR	--
2n Curs		361835 ECONOMIA ESPANYOLA	6	Pla docent	--	PRIMAVERA
		361838 HISENDA PÚBLICA	6	Pla docent	--	PRIMAVERA
		361849 MACROECONOMIA II	6	Pla docent	--	PRIMAVERA
		361845 MICROECONOMIA II	6	Pla docent	--	PRIMAVERA
3r Curs		361842 ECONOMETRIA I	6	Pla docent	TARDOR	--
		361839 HISENDA AUTONÒMICA I LOCAL	6	Pla docent	--	PRIMAVERA
		361846 MICROECONOMIA III	6	Pla docent	TARDOR	--
		361834 ORGANITZACIÓ ECONÒMICA INTERNACIONAL	6	Pla docent	TARDOR	--
		361836 POLÍTICA ECONÒMICA INTERNACIONAL	6	Pla docent	TARDOR	--
		361843 ECONOMETRIA II	6	Pla docent	--	PRIMAVERA
		361850 MACROECONOMIA III	6	Pla docent	--	PRIMAVERA
		361837 POLÍTICA ECONÒMICA D'ESPANYA I DE LA UNIÓ EUROPEA	6	Pla docent	--	PRIMAVERA
		361840 SISTEMA FISCAL I	6	Pla docent	TARDOR	--
		361844 ECONOMETRIA III	6	Pla docent	TARDOR	--
4rt Curs		361853 HISTÒRIA DEL PENSAMENT ECONÒMIC	6	Pla docent	TARDOR	--
		361847 MICROECONOMIA IV	6	Pla docent	TARDOR	PRIMAVERA
		361841 SISTEMA FISCAL II	6	Pla docent	TARDOR	PRIMAVERA
		361851 MACROECONOMIA IV	6	Pla docent	TARDOR	PRIMAVERA

Recap: Big Idea of the Course

The Big Idea: Fiscal Decentralization

This course is about **centralization** vs **decentralization**, focusing on *public finance* practices, and examining the behavior and policies of *regional and local* governments.

51

You

What are centralization and decentralization in public finance?



ChatGPT

In the context of public finance, centralization and decentralization refer to the distribution and delegation of fiscal authority and financial responsibilities within different tiers of government. These concepts outline how financial decision-making, revenue collection, and expenditure allocation are structured across central, regional, and local governments. Understanding these terms helps in analyzing the efficiency, equity, and effectiveness of public service delivery and fiscal policy at various levels of governance.

Recap: Roadmap of the Course

I. Theory

1. **Income Decentralization**: taxation (7 lectures) with Andreu
 2. Government Levels and Functions & **Expenditure** Decentralization(3 lectures)
 3. **Intergovernmental** Grants (3 lectures)
-

II. Cases and Policies

4. International **Comparison** (Spain **vs** Canada, China, Germany, US, etc.; 5 lectures)
 5. Application: **Policy** Analysis (education, health, transportation, development, etc.; 5 lectures)
-

III. International Fiscal Federalism (1 lecture) with Andreu

Reminder: some house cleaning

In class: discussion notes & exercise. (PS: an interesting finding Mueller and Oppenheimer, 2014)

After class: mengwei.lin@ub.edu; andreu.arenas@ub.edu (for taxation part)

Continuous assessment: presentation (30%) and midterm (25%)

- 1) Presentation: Dates: April 8th and April 11th. Compulsory attendance on both days
- 2) Midterm: multiple choice exam. May 2nd.

Final exam: open-ended questions. June 21st, at 3 pm.

Re-evaluation exam: open-ended questions. July 12th, 3 pm.

Historical Exam Data

Academic Year	Group	Grades						Class Size	% Excel	% Pass
		H	E	N	A	S	P			
2023/24	E2							26	??	??
2022/23	E2	2	2	13	19	1	3	40	10.00%	90.00%
2021/22	E2	3	3	6	13	8	1	34	17.65%	73.53%
2020/21	E2	1	3	12	11	2	2	31	12.90%	87.10%
2019/20	E2	0	3	5	3	3	0	14	21.43%	78.57%
2018/19	E2	0	3	5	5	5	0	18	16.67%	72.22%

Do you see any patterns?

Besides, is this group also a good example of decentralization?

Decentralization of Expenditure

Lecture 1 Government: Levels and Functions

March 11, 2024

Reading for this lecture: **Chapter 1**: “Why study state and local government finance?”

State and Local Public Finance, by Ronald C. Fisher

Basics of the Unit: Expenditure Decentralization

We will spend three lectures on “**Expenditure Decentralization & Government Levels and Functions**”, discussing the following topics:

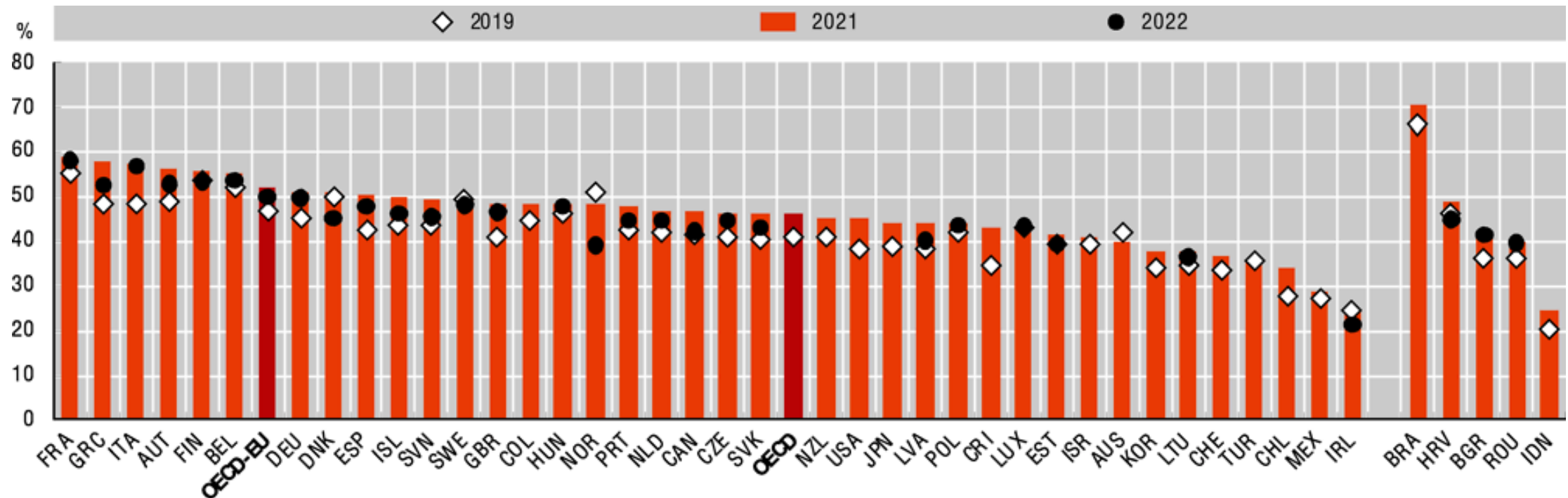
1. General (Economic and Fiscal) Introduction to Government
2. “Fiscal Federalism”—introduction to the academic branch
3. How to Think about (De)Centralization of Expenditure

Note: The way of thinking about decentralization (#3) is the highlight.

The Public Sector is a Big Deal!

But what about the importance of governments (economically) in general?

General government expenditures as a percentage of GDP, 2019, 2021 and 2022



Source: OECD National Accounts Statistics (database).

Today's Agenda

1. **Levels of government** (structure of the government system) and the **relationship** among them.
 - some background knowledge for later discussions.

2. **Two economic questions:**
 1. What are the (economic and fiscal) functions of governments?
 2. What responsibilities are better handled by the central government or by the subnational governments, and which can be shared among them?

Part 1. Structure of the Government System

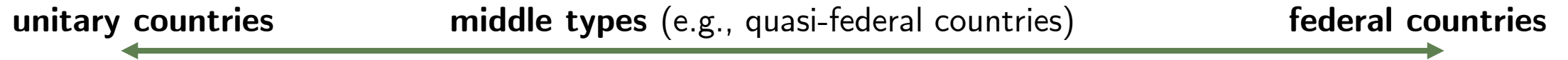
For the purpose of this course, we mainly distinguish between two levels of governments:

- **National** government
 - Usually referred to from inside as the Central Government, the Federal Government, etc.
 - And from outside as “country + government”, for example, “the Spanish government”.
- **Sub-national** governments (can have different levels, most commonly from 1 to 3)
 - State, Autonomous Community, Province, etc.
 - City, Prefecture, Municipality, etc.
 - Town, County, etc.

A useful database of country profiles: [OECD-WOFI](#)

Government Systems around the World

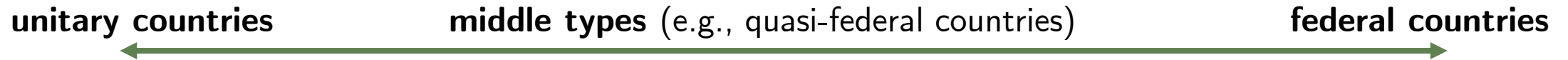
- The **relationship** between nation and subnational governments defines different types of countries.



Reference: OECD (2022), 2022 Synthesis Report World Observatory on Subnational Government Finance and Investment, OECD Publishing, Paris.

Government Systems around the World

- The **relationship** between nation and subnational governments defines different types of countries.



1. **Unitary:** The central government decides which powers and responsibilities are delegated or devolved to lower tiers of government.
 - Examples: Italy, Finland, China, France, UK, Azerbaijan, Nicaragua, Portugal, ...
2. **Federal:** Powers and responsibilities are assigned to the federal government and the federated states either by provision of a constitution or by judicial interpretation.
 - Examples: Austria, Switzerland, Germany, India, Malaysia, US, ...
3. **Quasi-federal:** Unitary but with federal characteristics: basic elements of local government functions and financing defined in national constitutions; substantial autonomy shared with the central power. (Spain)

Reference: OECD (2022), 2022 Synthesis Report World Observatory on Subnational Government Finance and Investment, OECD Publishing, Paris.

Recap: (De)Centralization

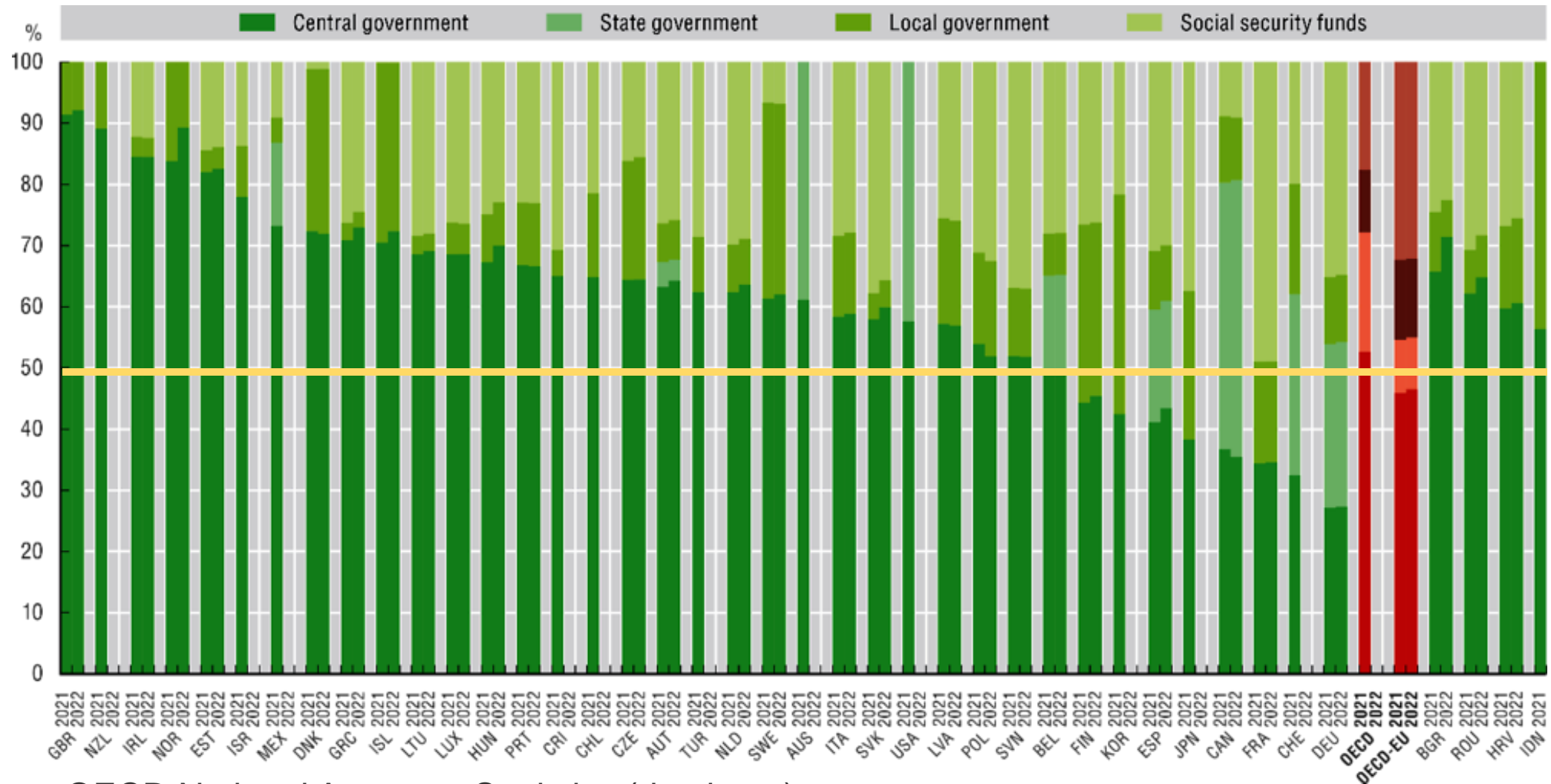
Definition: centralization and decentralization

- **Centralization:** Activities and decision-making processes are concentrated at higher level governments (central or federal).
- **Decentralization:** Activities and decision-making processes are concentrated at lower level governments (regional and local).

Big Question: Is there an **optimal level** of centralization or decentralization in government activity? If so, how to find it and what is it? If not, why?

Public Economic Structure by Level of Government: revenues

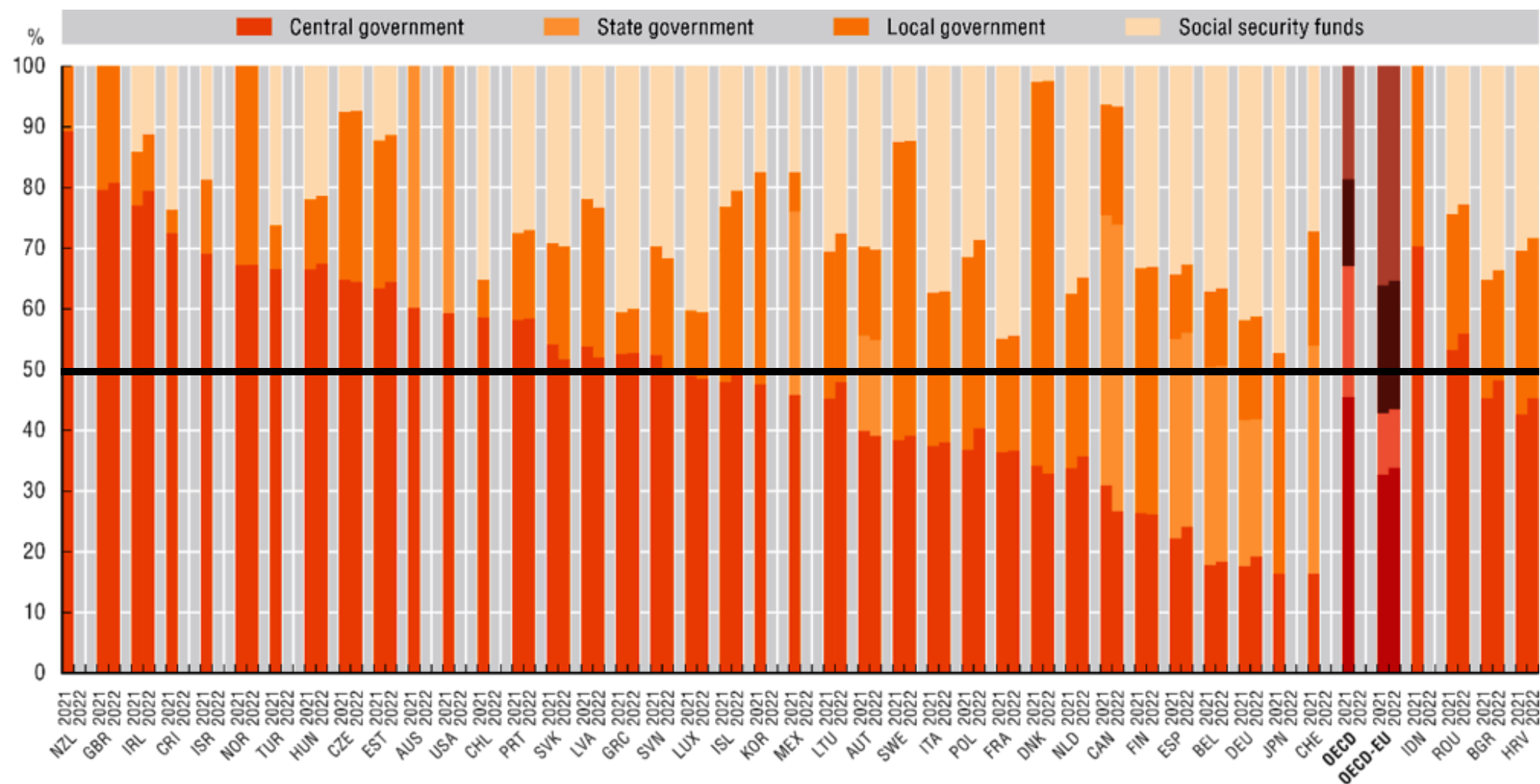
General Government Revenues across Levels of Government, 2021 and 2022



Source: OECD National Accounts Statistics (database).

Public Economic Structure by Level of Government: expenditure

General Government **Expenditure** across Levels of Government, 2021 and 2022



Source: OECD National Accounts Statistics (database).

Today's Agenda

1. **Levels of government** (structure of the government system) and the **relationship** among them.
 - This is to provide some basic background knowledge for later discussions.
2. **Two economic questions:**
 1. What are the (economic and fiscal) functions of governments?
 2. What responsibilities are better handled by the central government or by the subnational governments, and which can be shared among them?

Part 2. Economic Functions of the Government

In general, governments have **three economic functions** (Musgrave, 1959):

1. adjusting the *allocation* of production resources
2. adjusting the *distribution* of income and wealth
3. maintaining economic *stabilization*

Accordingly, we will look at **three types of policies**:

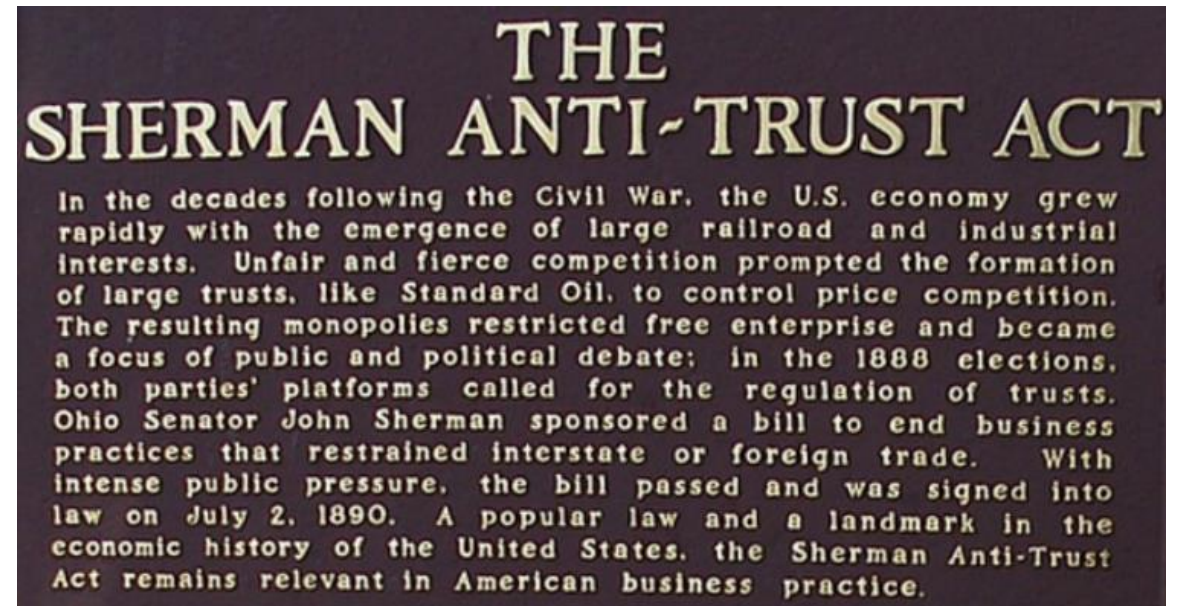
1. Allocation Policy
2. (Re)Distribution Policy
3. Stabilization Policy

“The visible hand”

1) Allocation Policy

Goal: Intervening in the market to **achieve the desired allocation** of *production* resources—that is, for specific goods and services to be produced in the desired quantities. (Recalling from *Microeconomics I*, when the market is not perfect...)

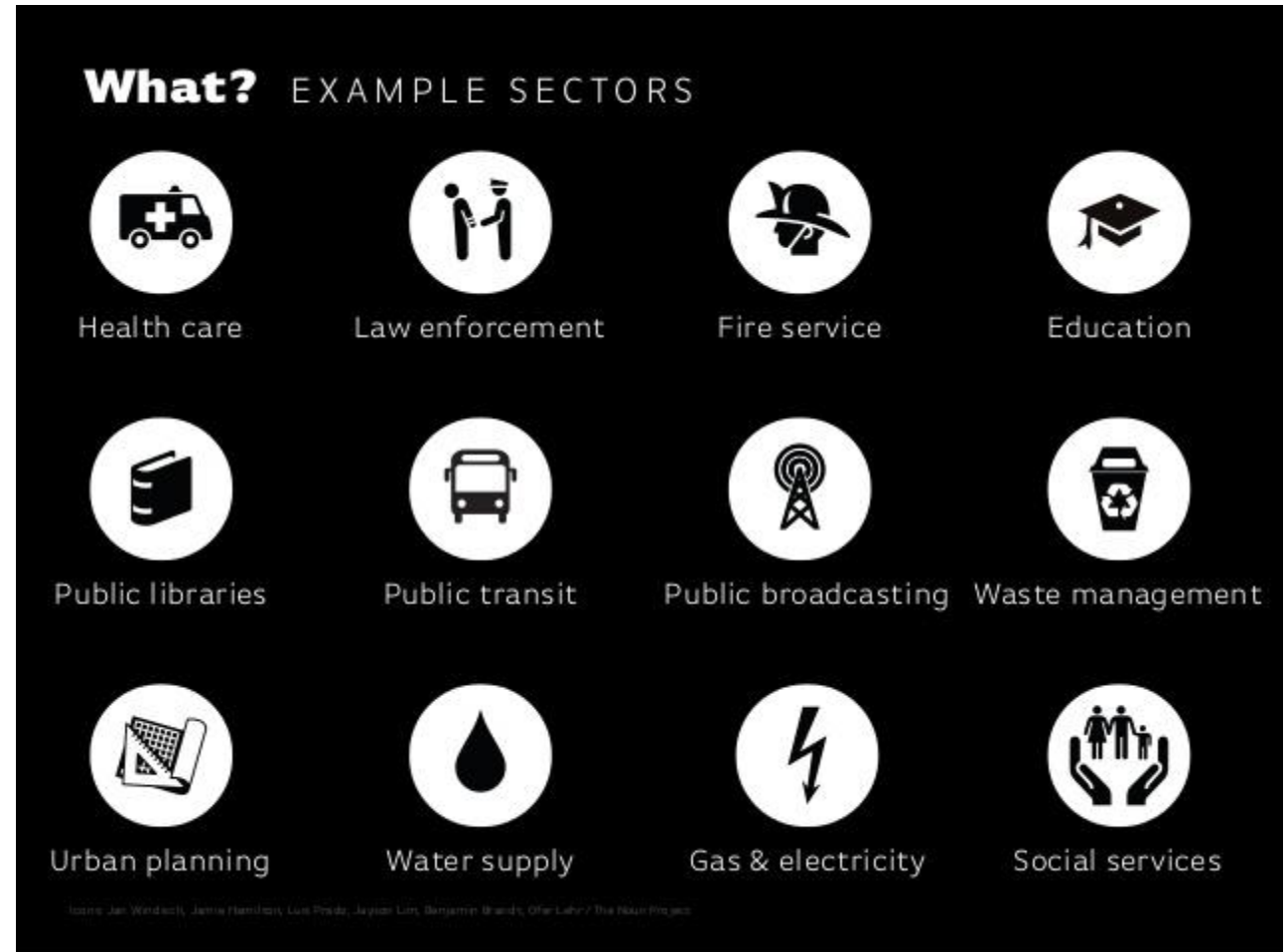
- Maintain market competition (against monopolies, cartels, etc.)
- Directly provide specific goods and services if the market fails to do so efficiently
- Subsidize certain productions



Example: provide specific goods and services

Big Part of “Income Decentralization”

Also to be covered in “Policy Analysis”



2) (Re)Distribution Policy

Goal: Obtaining and maintaining the socially preferred distribution of *resources or income*. (Recall: primary/pre-distribution, redistribution, further distribution.)

In most cases **redistributing from the rich to the poor**, tools include:

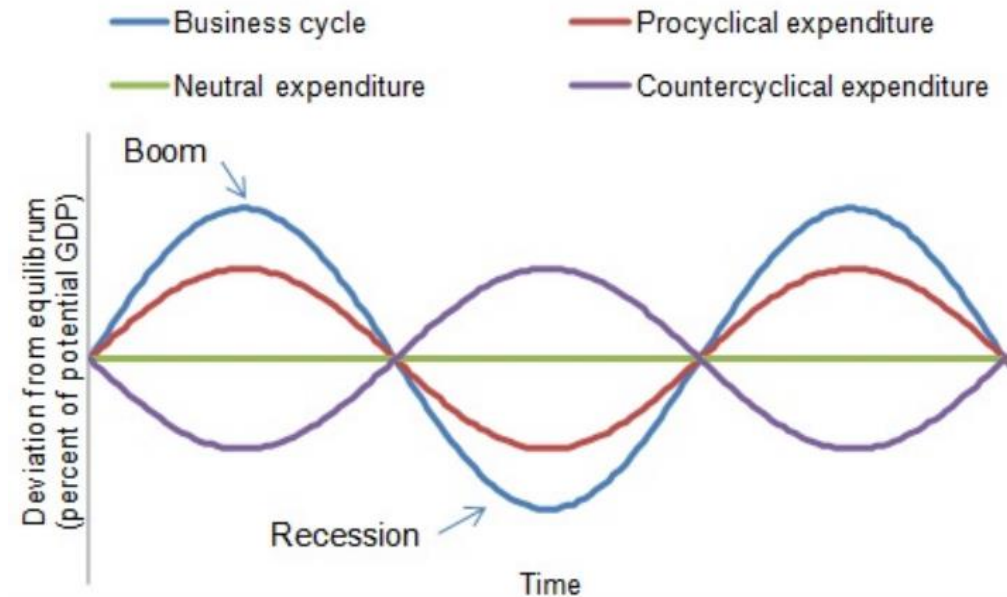
- Taxes and subsidies
- progressive fees (poor pay less, rich pay more)
- fee-exemption (e.g. large families)
- ...

Columns to read: On (p)redistribution in the US and France; on the “Third Distribution” in China.

3) Stabilization Policy

Goal: Using macroeconomic policies to maintain (recalling from *Macroeconomics I*)

- employment,
- price stability, and
- economic growth



The tools (“stabilization policies”), are:

1. **fiscal policy**
2. **monetary policy**

Today's Agenda

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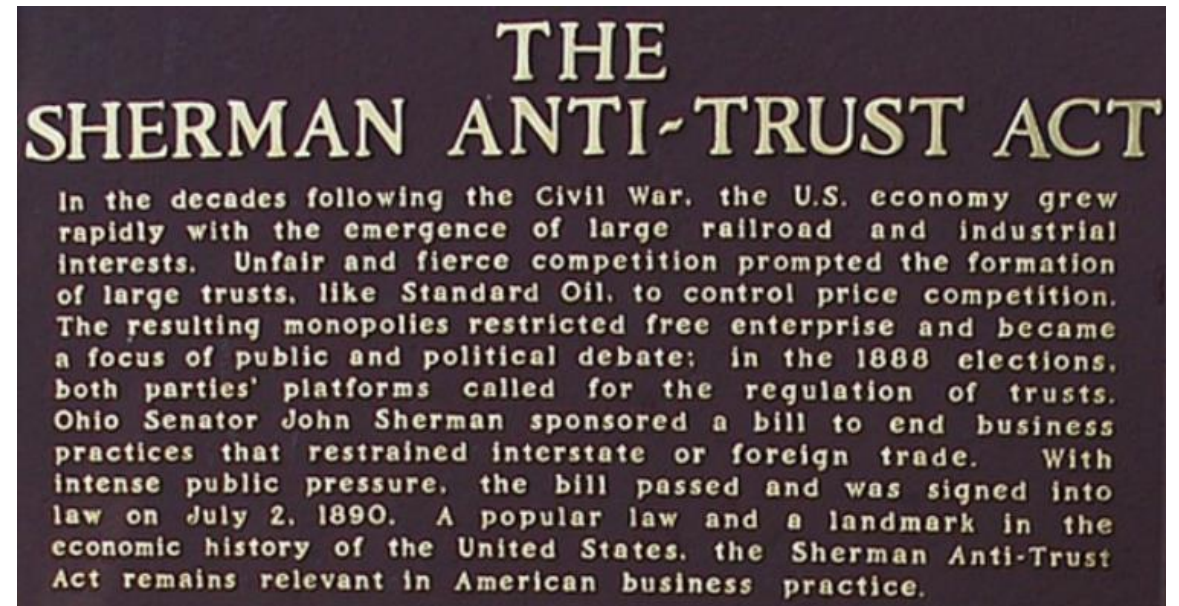
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1. What are the (economic and fiscal) functions of governments?
2. What responsibilities are better handled by the central government or by the subnational governments, and which can be shared among them?

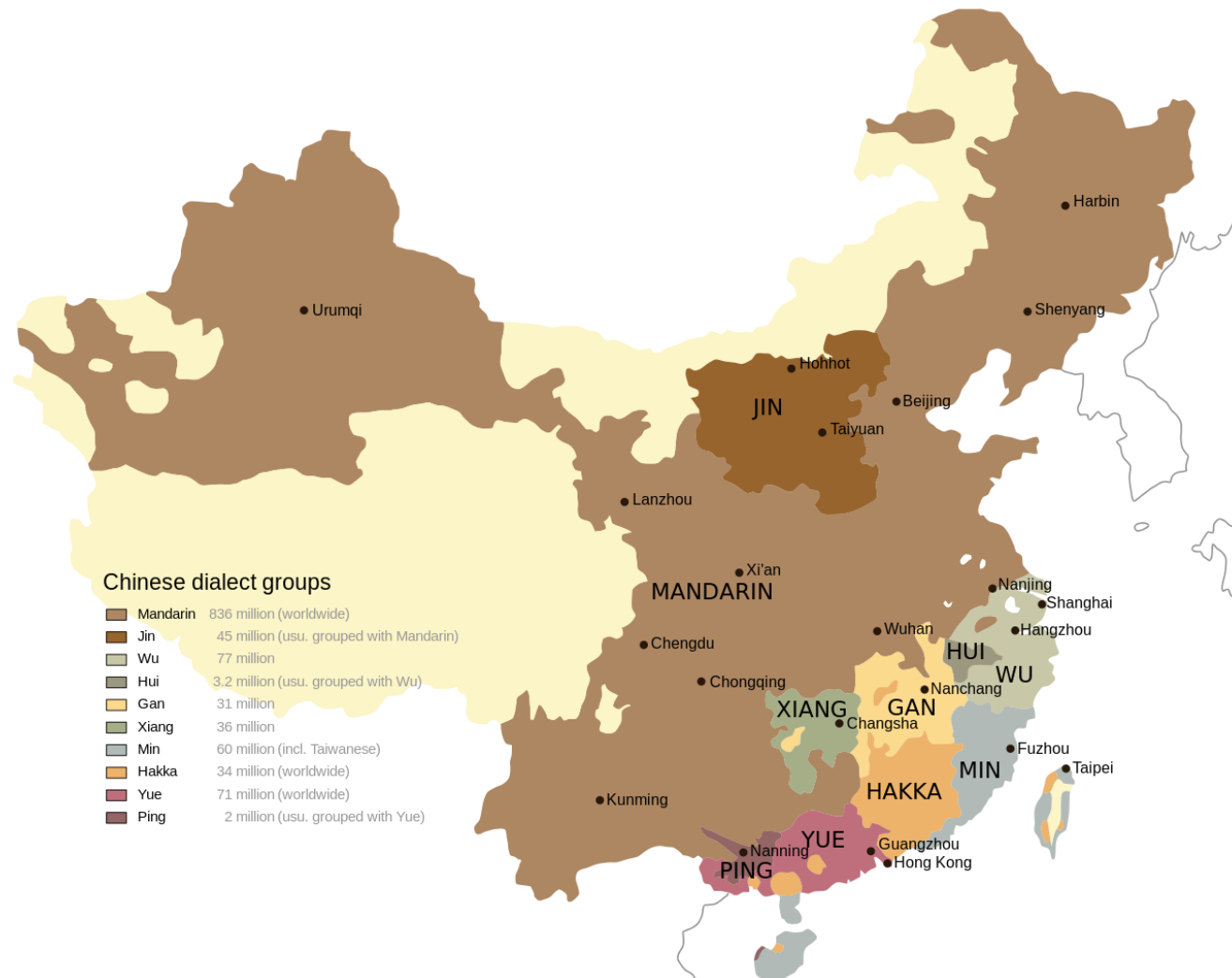
1) Allocation Policy

Goal: Intervening in the market to **achieve the desired allocation** of *production* resources—that is, for specific goods and services to be produced in the desired quantities. (Recalling from *Microeconomics I*, when the market is not perfect...)

- Maintain market competition (against monopolies, cartels, etc.)
- Directly provide specific goods and services if the market fails to do so efficiently
- Subsidize certain productions



1) Allocation Policy: Public Language Training Programs



1) Centralization OR Decentralization? —Allocation Policy

*“Believing that state and **local governments are inherently limited in carrying out stabilization and distribution policy**, the focus of economic analysis and research has been on the allocative role of subnational governments – their role, methods, and effectiveness in directly providing goods and services.”*

(Fisher, 2023)

Do you agree?

2) (Re)Distribution Policy

Goal: Obtaining and maintaining the socially preferred distribution of *resources or income*. (Recall: primary/pre-distribution, redistribution, further distribution.)

In most cases **redistributing from the rich to the poor**, tools include:

- Taxes and subsidies
- progressive fees (poor pay less, rich pay more)
- fee-exemption (e.g. large families)
- ...

Columns to read: On (p)redistribution in the US and France; on the “Third Distribution” in China.

2) Centralization OR Decentralization? —(Re)Distribution Policy

DEBATES

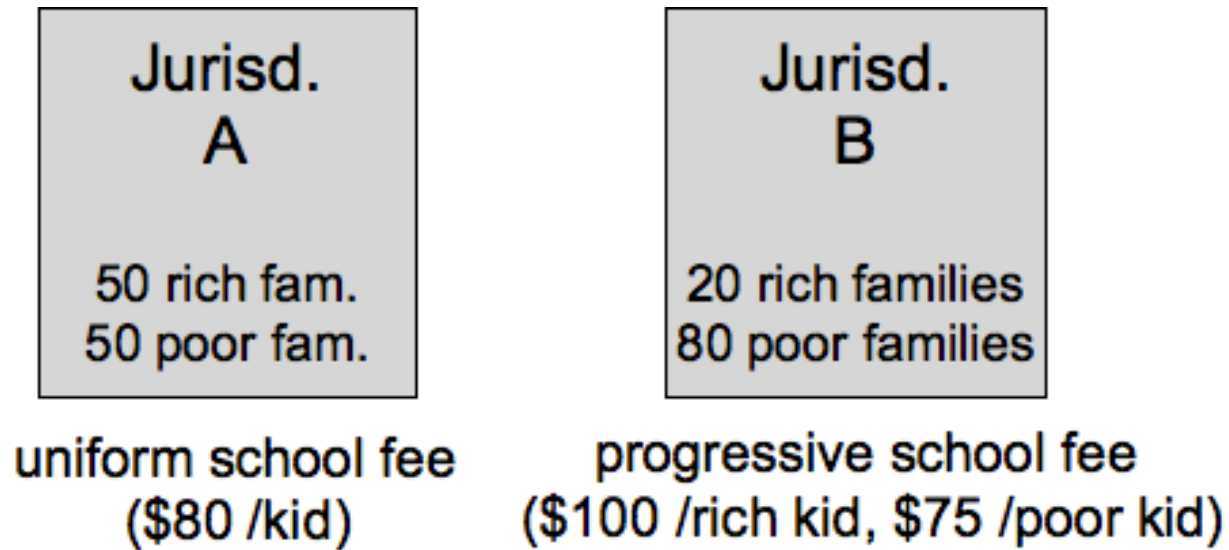
Decentralization: Local governments are better able to identify and satisfy **local needs and preferences**.

Centralization: But we need nationwide coordination, as local policies create **subnational inequality and unfairness** (horizontal equality concept).

Centralization: Whenever different localities choose different forms/amounts of redistribution, citizens and firms will **move to other locations and make the policies ineffective** (or less so).

Decentralization: People mostly care about the welfare of their neighbors, not so much about other localities; incentives to move are low (**little mobility**).

2) (Re)Distribution Policy: A simple example



2) (Re)Distribution Policy: Real World Situation

In most countries, **local governments** are indeed handling redistributive functions

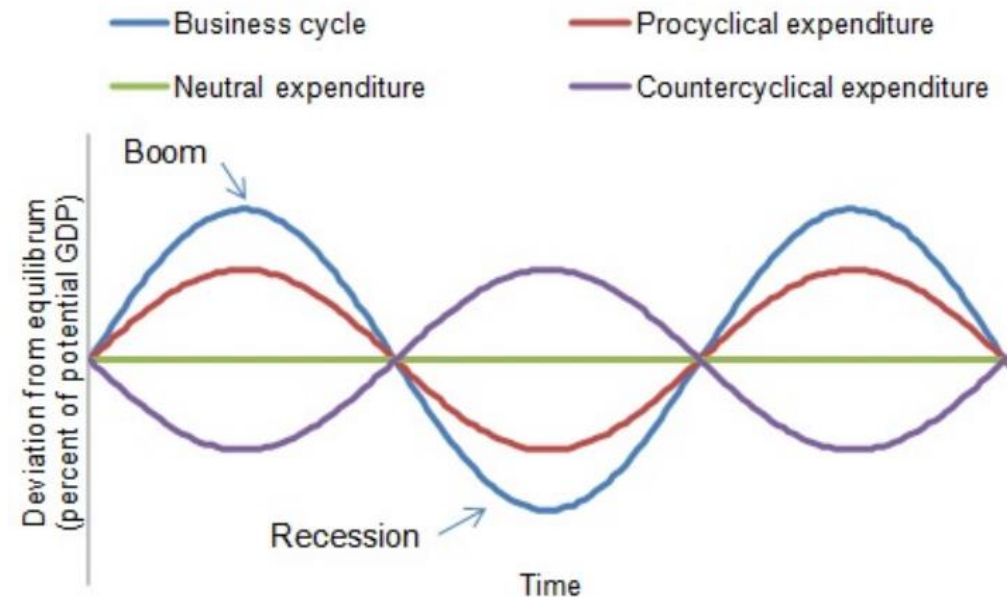
- welfare programs, education, health, local taxes
- Empirical evidence shows that few transfer recipients (2%) actually move to other States in order to receive higher benefits in the US (Gramlich, 1985)—**what about now? what about Europe?**

Central governments are involved in redistribution decisions of subnational governments through central/federal grants and transfers to subsidize such local programs

3) Stabilization Policy

Goal: Using macroeconomic policies to maintain (recalling from *Macroeconomics I*)

- employment,
- price stability, and
- economic growth



The tools (“stabilization policies”), are:

1. **fiscal policy** by the government (e.g., ministry of treasury/finance)
2. **monetary policy** by the central bank (e.g., Central banks, Federal Reserve System, ...)

3) Centralization OR Decentralization? —Stabilization Policy

In-class practice: **5-min** quick thoughts!

Topic: Centralization vs Decentralization of Stabilization Policies

Do you think **Stabilization Policies** should be centralized (implemented by the central government) or decentralized (handled by sub-national governments)? Or should they be shared among the two?

- Within 5 minutes, state **your position**, list possible **factors** and (briefly) their possible impacts
- After listing your reasons, please select the strongest one or two as your “**main points**”.

*To have a sharp mind,
and know how to provide support for your positions/ideas.*

Discussion in small groups (10 min)

Topic: Centralization vs Decentralization of Stabilization Policies

Do you think **Stabilization Policies** should be centralized (implemented by the central government) or decentralized (handled by sub-national governments)? Or should they be shared among the two?

- Now **discuss** in groups of two or three. Present your idea and explain the reasons
- **Be open!** It's about sharing ideas and understanding each other, **not about persuasion.**
- After the discussion, some of you will repeat the positions and ideas of you and your partner.

*To have an open mind,
be willing to discuss with others, and admit our own bounded rationality.*

Real World Situation: A (Supra-national) Analogy in Europe

Monetary policy: ECB & NCBs

Fiscal Policy: Argument for centralized arrangements

- The EU framework for fiscal policies?
- A quick read: [“The EU’s New Fiscal Rules”](#)
- What would you say (based on the previous discussions)?

How was your first try?

Have you considered:

1. Heterogeneous Demands (+2)
2. Effectiveness varying across localities (+2)
3. Economies of scale (+2)
4. Externalities and Mobility (+2)
5. Other factors: e.g., political pressure, information asymmetry, market segregation, managerial costs, etc. (+2)

Difficult? Easy? Clear? Messy?

3) Centralization OR Decentralization? —Stabilization Policy

DEBATES

Centralization: Local economies are open to each other; any attempt by a single locality to use fiscal policies would **spill over** the benefits to other localities.

Decentralization: Local economies are not that open: Citizens and firms do not move much among localities; to provide services, local governments are buying increasingly locally. (few spillover)

Decentralization: Ability to change prices might be desirable when a country faces high **subnational diversity** (in resources, in needs, in preferences...).

Centralization: Giving subnational governments monetary authority would increase **transaction costs** over local boundaries, and each locality would **expand its own money supply** too much (to pay for trade with other localities).

A quick *preview* for the formal analysis

Core elements for thinking about **(de)centralization** :

1. Diversity of demands within the national community
2. Economies of scale
3. Inter-jurisdictional externalities (and mobility)
4. Managerial costs

And:

5. Information structure (imperfection and asymmetries of information)
6. Cost of collective decision-making, political pressure

Takeaways

1. Government structures → public finance
2. The three functions
3. Your first analysis: Centralization vs decentralization

Some useful sources: *Government at a Glance*; OECD-WOFI database, ...

Decentralization of Expenditure

Lecture 2 Optimal level of decentralization

March 14, 2024

Reading for this lecture: *State and Local Public Finance*, by Ronald C. Fisher

Chapter 6 Organization of subnational government

Recap: Government levels and functions

First, we briefly looked at the structure of the government system (various **levels of governments**) .

Second, we tried to answer these **two economic questions**:

1. What are the (economic and fiscal) functions of governments?
 - Three functions & three types of policy
2. What responsibilities are better handled by the central government or by the subnational governments, and which can be shared among them?

Goal for Today

- We will **formalize** our previous thoughts on whether sub-national governments should take on certain functions (certain policies).
- Relevant questions have been discussed in academia so often that such discussions have formed a **research area** called "*fiscal federalism*".

Fiscal Federalism

The study of the division of fiscal tasks among different levels of government.

Agenda

1. A brief recap of the concept “Fiscal Federalism” and some classical theories
 - The Decentralization Theorem (Oates, 1972)
 - Optimal Jurisdiction Size: Oates (1972) and Buchanan (1965)
2. The formal analysis of the **optimal** level of decentralization

Sidenote: microeconomic tools to analyze decentralization

Part 1 Fiscal Federalism: a recap of lecture 1 (with Andreu)

“Understanding which functions and instruments are best centralized and which are best placed in the sphere of decentralized levels of government” (Oates, 1999)

Fiscal federalism: the study of the problem of assigning fiscal tasks to different levels of government

Key questions of fiscal federalism:

- 1) What is the optimal degree of fiscal decentralization?
- 2) Is there a universal rule, or does it vary depending on society's characteristics? Does it differ between countries?

Part 1 Fiscal Federalism: a recap

We will introduce several classical and **representative theories** proposed by economists decades before.

These ideas have laid the foundation for our discussions today!

Let's start by summarizing the **intuitions** behind these theories.

Part 1 Fiscal Federalism: a recap

1. The Decentralization Theorem (Oates, 1972):

Assumption 1: **no significant economies of scale** when providing these services

Assumption 2: the benefits of these services **do not spill over significantly** to other jurisdictions

Conclusion: **Local governments**, better informed about the preferences and needs of their constituents, **can tailor public services more effectively** than a central government.

That is, under certain conditions, we should decentralize!

BUT WAIT...

- What exactly do we mean by optimal “**level**” of decentralization in economic analysis?

Part 1 Fiscal Federalism: a recap

2. Optimal **Jurisdiction Size**: Buchanan (1965) & Oates (1972)

What is the ideal size of a jurisdiction for the efficient provision of public goods and services?

Buchanan (1965): smaller & more homogenous groups = easily agree on public goods provision. [1986]

- optimal jurisdiction size—minimizing the costs of reaching a consensus; preferences **of the community members homogenous enough** to facilitate collective action.

Oates (1972): Smaller jurisdictions may fail to capture economies of scale or to internalize externalities (i.e., spillover benefits or costs to neighboring jurisdictions).

- extends his decentralization theorem: The optimal sizes should balance these two.

Optimal Jurisdiction Size

Balancing

- 1) the benefits of local decision-making (tailoring services to local needs and preferences)
- 2) the costs/loss of benefits associated with decentralization (economies of scale; spillovers to other jurisdictions).

Determining jurisdiction size (n) is an optimization problem:

$$\max_n \text{Benefits}(n) - \text{Costs}(n)$$

The optimization problem

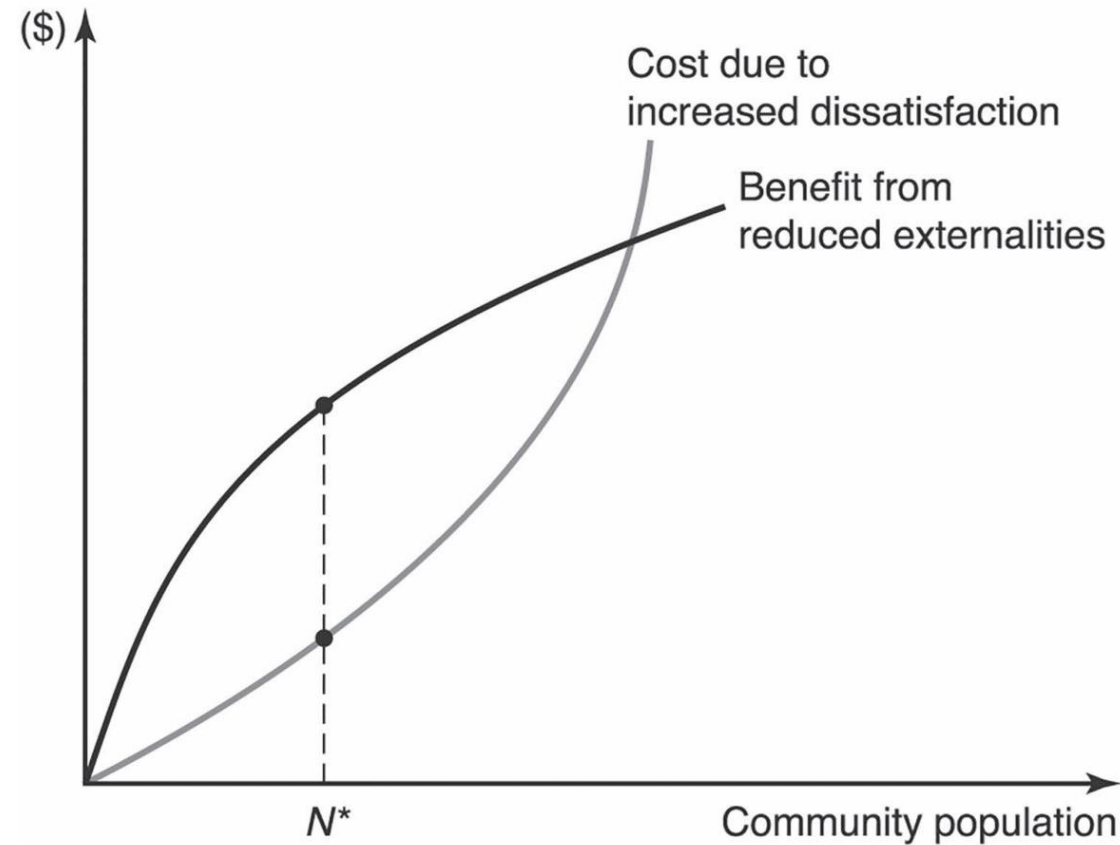


Figure 6.1 Optimal jurisdiction size for a service

Opening the Blackbox

Determining jurisdiction size (n) is an optimization problem:

$$\max_n \text{Benefits}(n) - \text{Costs}(n)$$

Benefits? Costs?

What goes inside these functions? How?

Opening the Blackbox

Core elements for thinking about **(de)centralization**:

1. Diversity of demands
2. Economies of scale
3. (Inter-jurisdictional) Externalities/Spill-over effects
4. ...

Next, we will use these elements to elaborate on the previous ideas, but in a more **formal** way:

1. Analyze the **problems** with decentralization (to be minimized)
2. Discuss the **motivations** for decentralization (to be maximized).

Heterogeneous demand

Economies of scale

Interjurisdictional externalities

Administrative costs

Opening the Blackbox

Determining jurisdiction size (n) is an optimization problem:

$$\max_n \text{Benefits}(n) - \text{Costs}(n)$$

Are these functions identical for different public goods and services? Or should they be different, like:

$$\max_n \text{Benefits}_1(n) - \text{Costs}_1(n)$$

$$\max_n \text{Benefits}_2(n) - \text{Costs}_2(n)$$

...

The optimization problem: clustering of jurisdictions

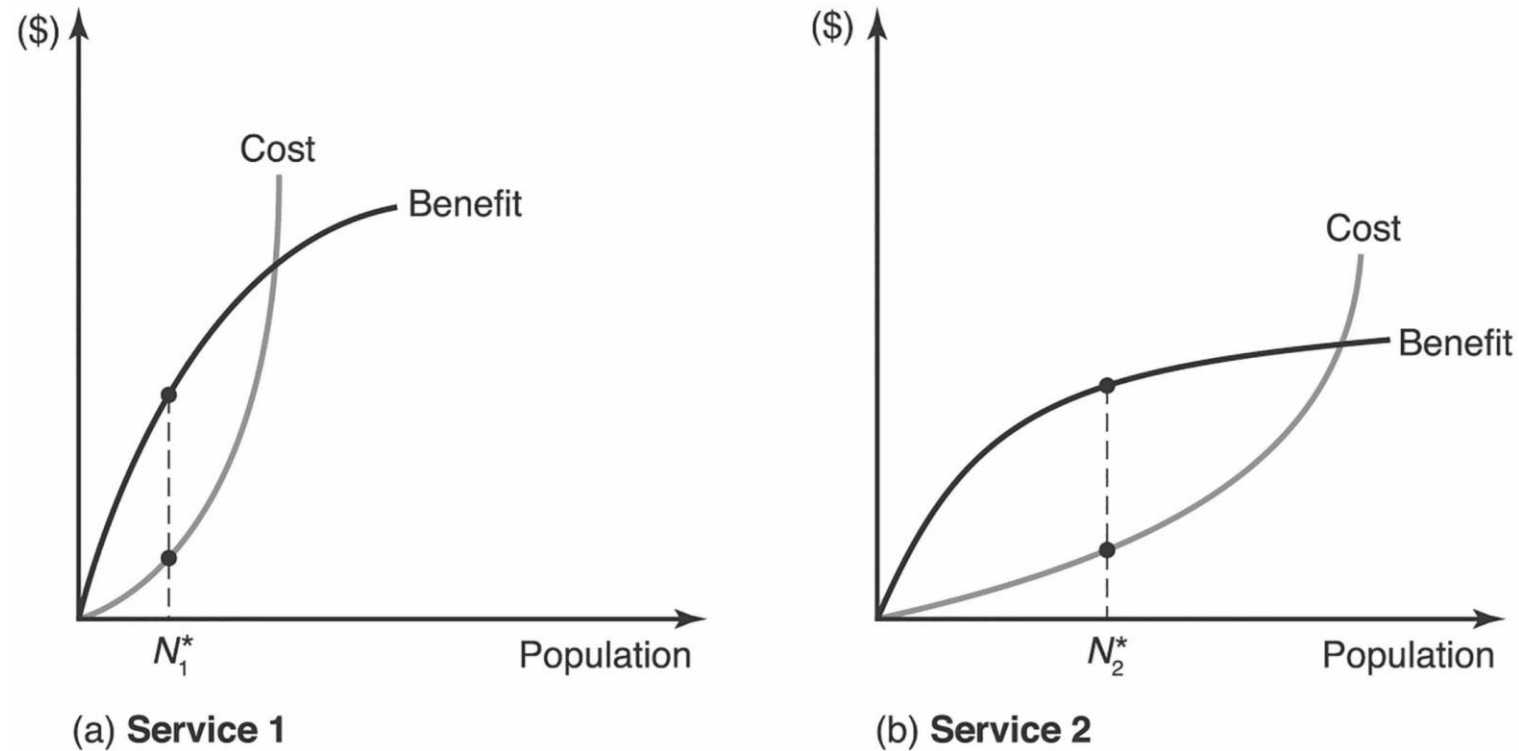


Figure 6.2 Optimal jurisdiction size for different services

The optimization problem: clustering of jurisdictions

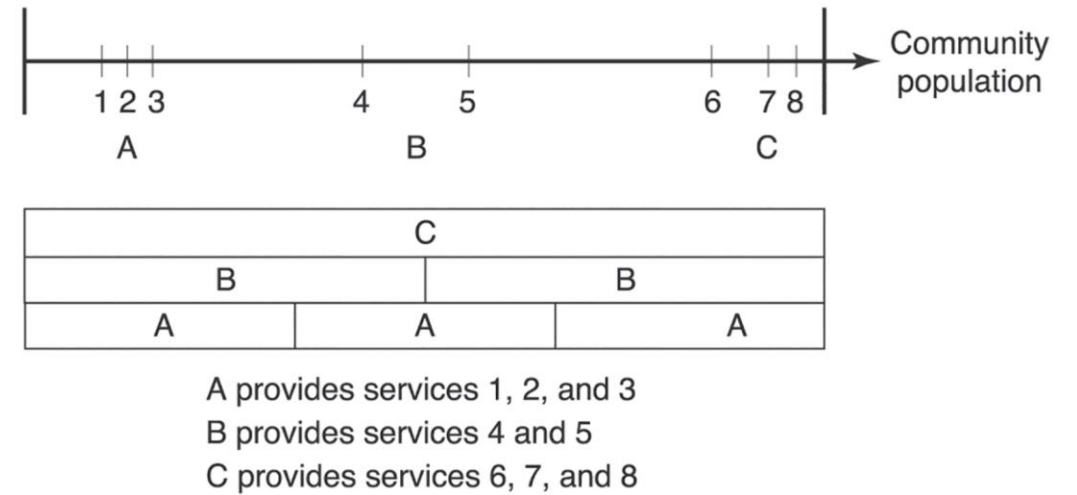


Figure 6.3 Clustering of jurisdictions by size

Formal Analysis 1: issues with decentralization

Formal Analysis 2: motivations for decentralization

Sidenotes: Microeconomic Concepts and Tools

Core Elements in Fiscal Federalism

Core elements for thinking about **(de)centralization** :

1. Diversity of demands within the national community
2. Economies of scale
3. Inter-jurisdictional externalities (and mobility)
4. Managerial costs

And:

5. Information structure (imperfection and asymmetries of information)
6. Cost of collective decision-making, political pressure

Decentralization of Expenditure

Lecture 3 Mobility and Tiebout Theory

March, 2024

Reading for this lecture: *State and Local Public Finance*, by Ronald C. Fisher

Chapter 5 Public choice through mobility

Recap: Government functions and decentralization

- Government functions and policies: stabilization, distribution, allocation
- Fiscal Federalism: the formal analysis of *optimal* level of decentralization
 - The Decentralization Theorem (Oates, 1972)
 - Optimal Jurisdiction Size: Oates (1972) and Buchanan (1965)

Today's Agenda

- We will add “complicate” our previous analysis by adding “**inter-jurisdictional externalities**”.
- In doing this, our analysis will be more realistic—this is how economic reasoning works:
 - We start from simple (but core) ideas (**abstract**), and add in other elements as we forward the analysis (**more realistic**).

Main Takeaways Today

Summary of the Unit

A quiz to help you learn

Regional and Local Public Finance, Unit 2

Government: Levels and Functions

Mengwei LIN

mengwei.lin@ub.edu

Department of Economics, Universitat de Barcelona
and
Public Policies, Barcelona Institute of Economics (IEB)

Spring 2024