# Welcome to Econ 101:

# Introduction to Microeconomics

# INTRODUCTION

A Motivation

Year 2020:

- You graduate.

Year 2020:

- You graduate.

- You get a great job

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- You earn a lot of money

Year 2020:

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**What are you going to do with all that money?**

Year 2020:

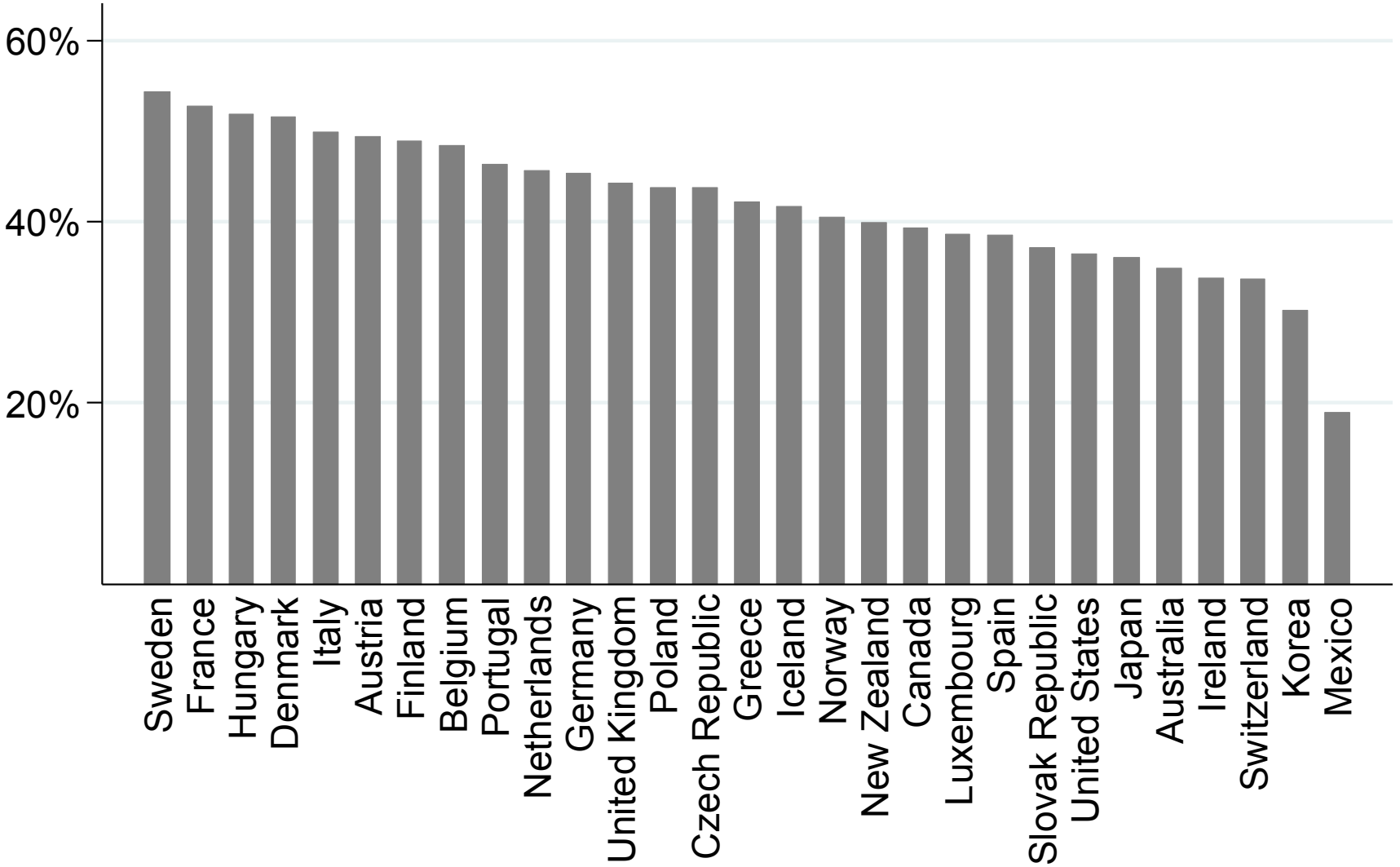
- You graduate.

- You get a great job

- You earn a lot of money

The forgotten question: **Who gets to spend that money?**

# General Government Expenditures as a Percentage of GDP




Source: OECD. Year: 2006.

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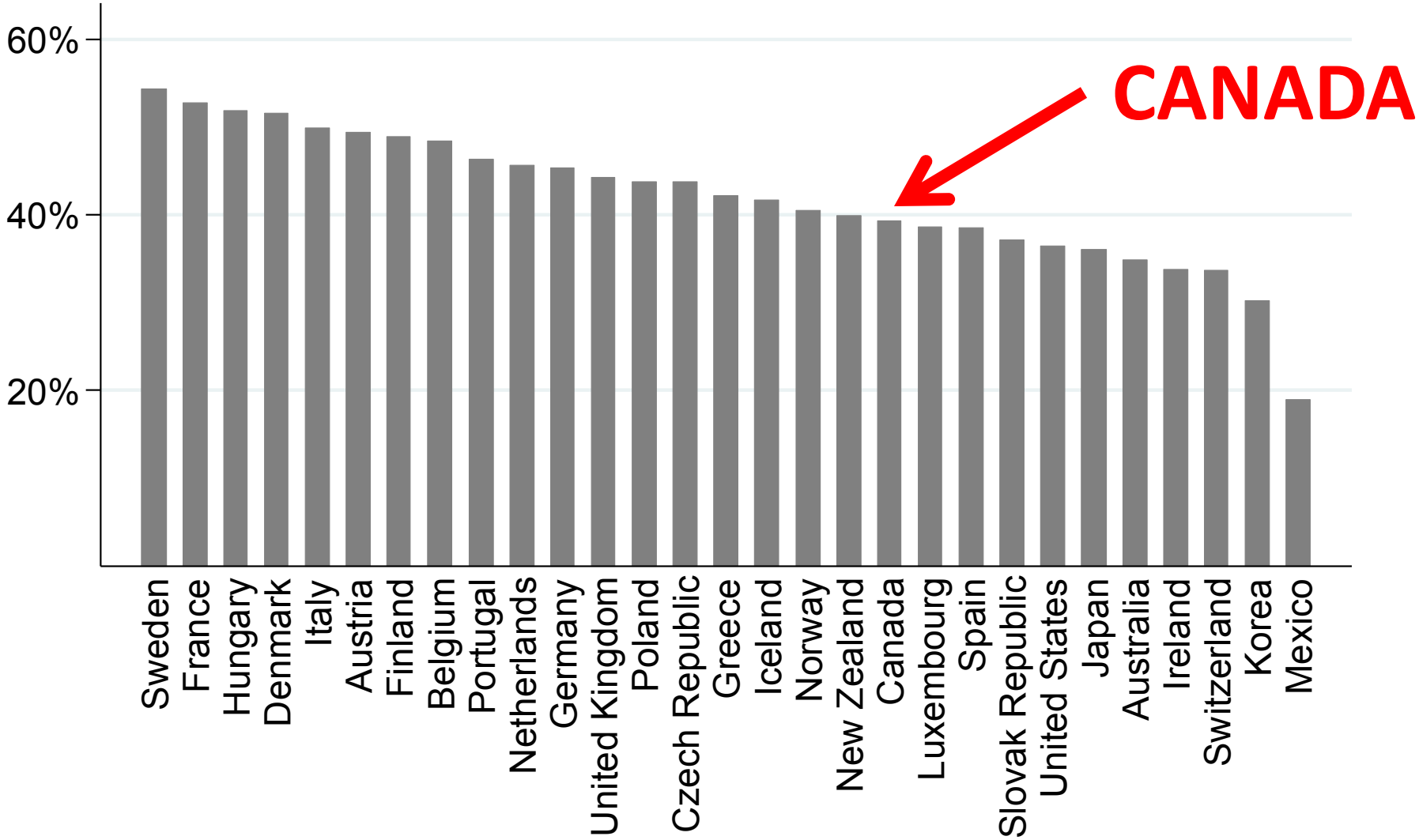


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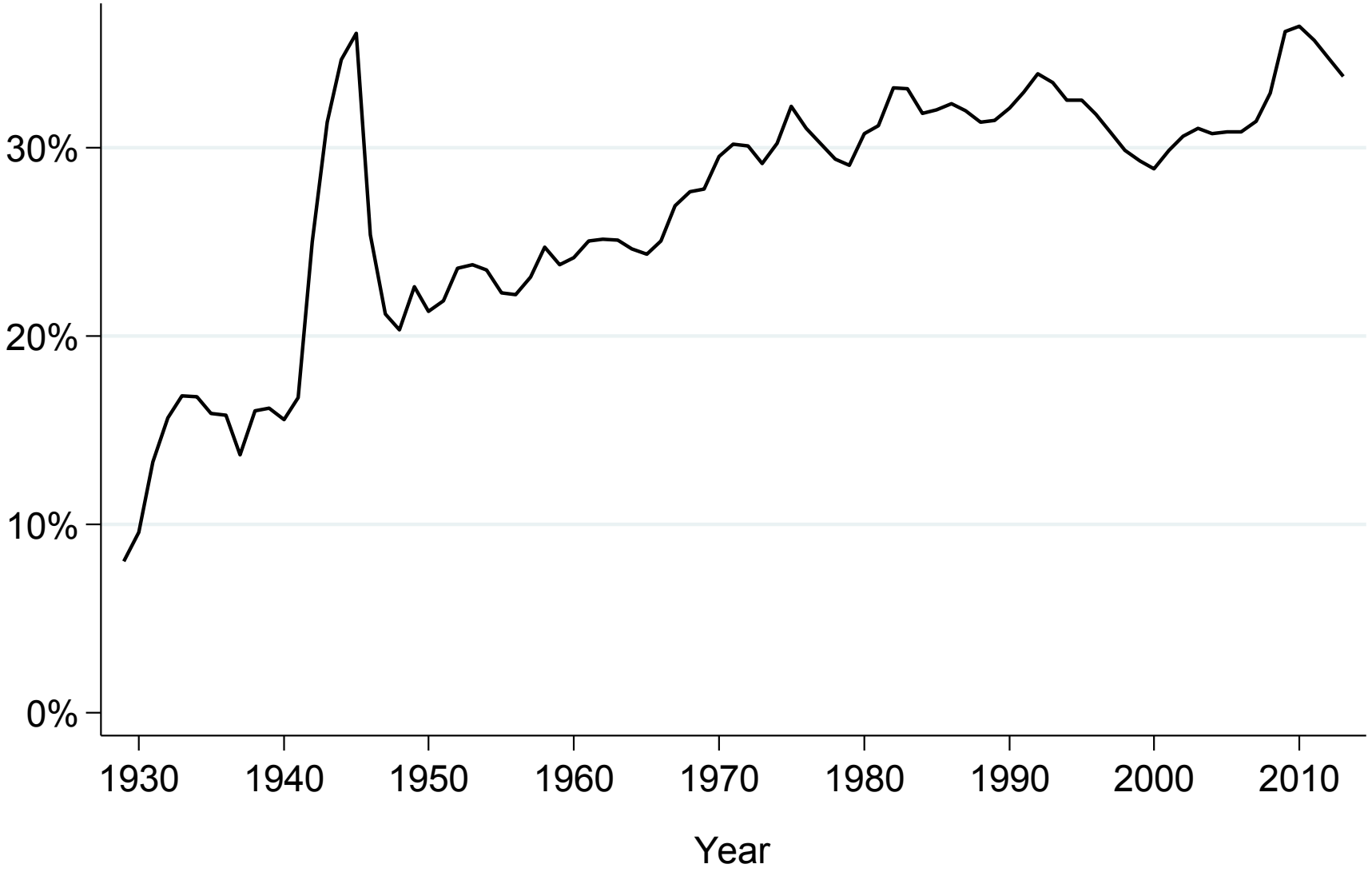
# Government Expenditures as a Share of GDP in the U.S.




Source: Bureau of Economic Analysis

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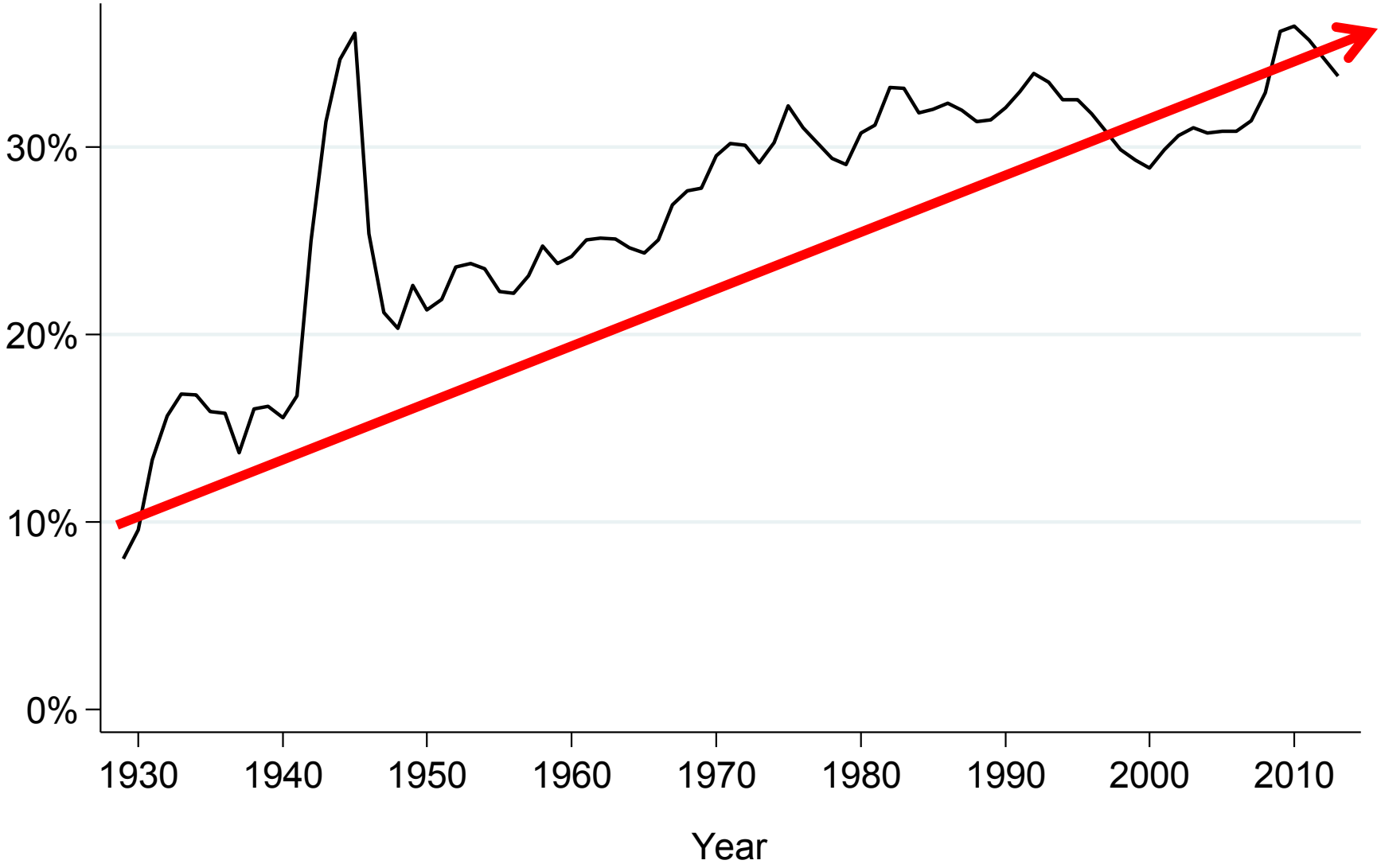


Source: Bureau of Economic Analysis

Year 2019:

- You graduate.

- You get a great job

- You earn a lot of money

**Who gets to spend that money?**


Creative Commons image by Flickr user Thorsten Hansen

Government decides how 30-60% of resources are allocated.

Is this a good thing?

Why should any resources be allocated through collective decision making?

Or should government decide how 100% of resources are allocated?

For this course, the question

**"How Big Should Government Be?"**

forms the common motivating thread.

We will compare:

**Allocations with gov't intervention**

vs.

**Allocations we get with voluntary trade.**

In the process, we will learn the

**key concepts and tools in economics**.

# What is “economics”?

Economics $\equiv$ Analysis of allocation of scarce resources.

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Why "scarce"?

Without scarcity:

Everyone gets everything.

$=>$ Everyone feels good!

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Everyone gets everything.

$=>$ Everyone feels good!

(No economists though.)

With scarcity:

The more apples you get,

the less apples others get.

and also:

The more apples we produce,

the less bananas we can produce.

and also:

The more apples we produce,

the less bananas we can produce.

**Allocation involves "trade-offs".**

Thus, with scarcity, we must decide:

- Who gets the apples?

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- How many apples vs. bananas to produce?

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**Economists examine such resource allocation.**

**How should we decide:**

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**Which allocation mechanisms exist?**

# Ways to allocate scarce resources

- Market Economy

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- Command Economy

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- Command Economy

- No-Trade Economy

Ways to allocate scarce resources

- Market Economy

- Command Economy

- No-Trade Economy

**Which system is the best?**

We will first compare a market economy and a command economy.

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**What do we need to learn to do that comparison?**

# 1. Who gets what in a market economy

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- Consumer Choice

(WEEKS 1-2)

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- Consumer Choice

  (WEEKS 1-2)

- Interaction through the Market

  (WEEK 3)

# 2. Who gets what in a command economy

(WEEK 4)

# 3. How to measure and compare well-being in the two economic systems

(WEEK 4)

$=>$ By WEEK 4 we have our first answer to the question

"How Big Should Government Be?"

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"How Big Should Government Be?"

**and** we know many key economic concepts and tools.

WEEKS 5-12: more about the factors that determine

"How Big Should Government Be?"

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"How Big Should Government Be?"

**and** we learn more key economic concepts and tools in the process.

# Why the question

"How Big Should Government Be?"

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- Key economic policy question

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- Concepts can be uninteresting

Why the question

"How Big Should Government Be?"

- Key economic policy question

- Concepts can be uninteresting

- How to allocate resources is a central question in economics.

Summary:

- Key economic tools, concepts.

- A common motivating thread:

"How Big Should Government Be?"

# Introduction to Microeconomics

## Class 1

## **"Behavior is Optimization"**

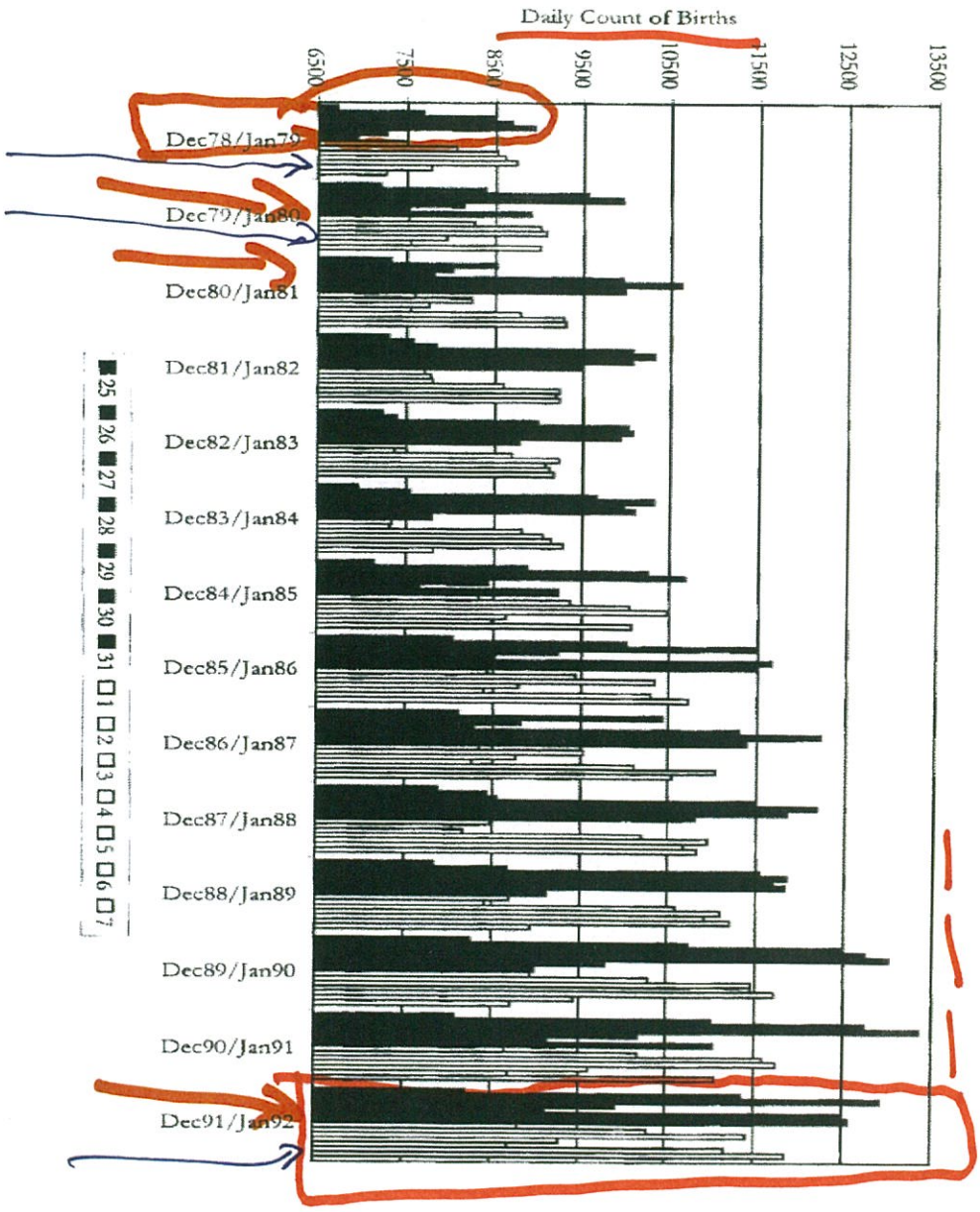
# How do economists explain behavior?

Example 1:

Why a spike in births right before new year?

D

DAILY COUNT



Example 2:

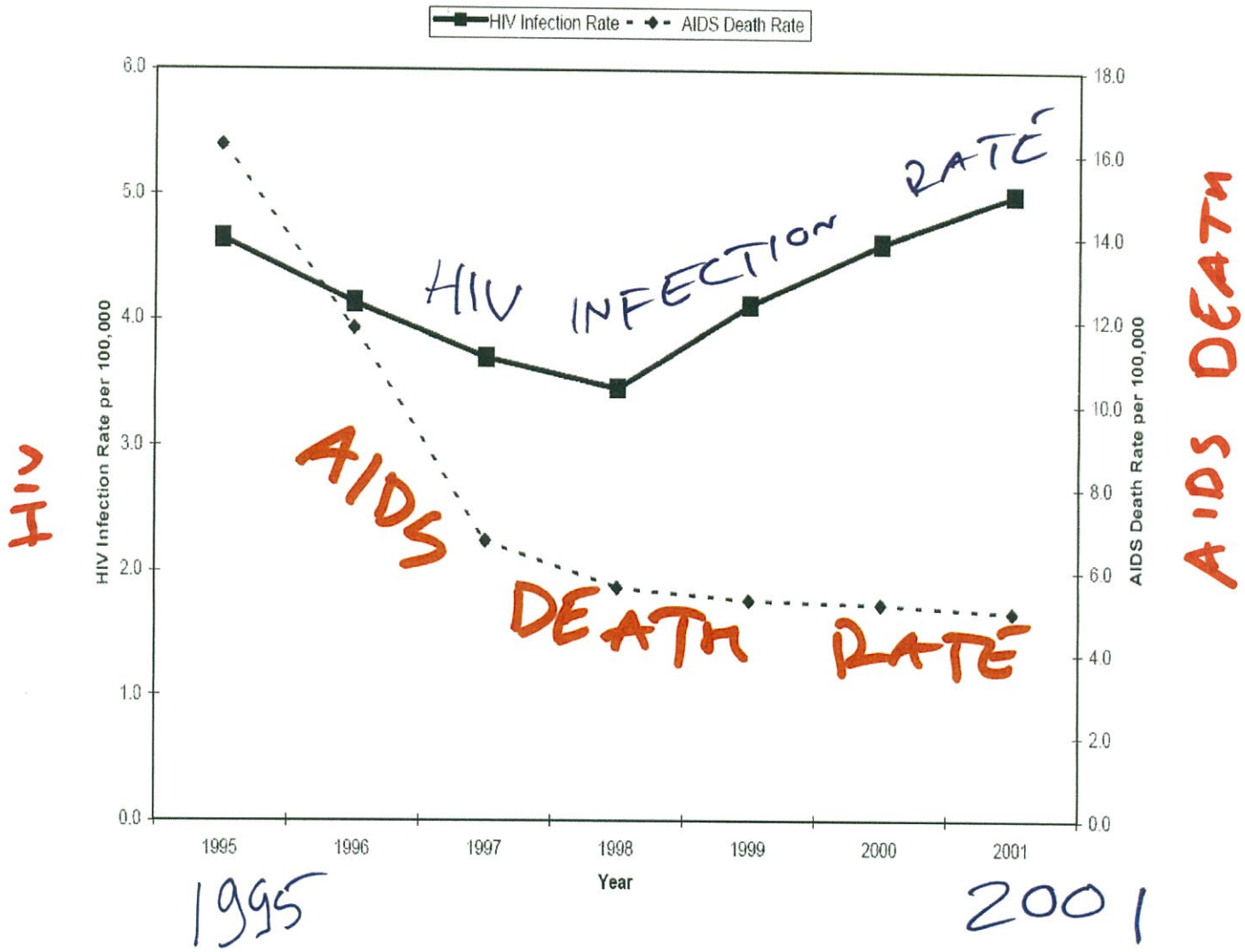
Why % of intercourse DECREASED,

and % of oral sex INCREASED?

Example 3:

Why AIDS death rate DOWN,

and HIV infection rate UP?


HIV Infection Rate
AIDS Death Rate
HIV Infection Rate per 100,000
AIDS Death Rate per 100,000
Year
0.0
1.0
2.0
3.0
4.0
5.0
6.0
0.0
2.0
4.0
6.0
8.0
10.0
12.0
14.0
16.0
18.0
1995
1996
1997
1998
1999
2000
2001
HIV INFECTION RATE
AIDS DEATH RATE
HIV
AIDS DEATH
1995
2001

Example 4:

Mandatory seat belt laws:

$=>$ What happened to the

number of accidents?

Economics: Behavior is optimization

$\sim$ comparison of costs and benefits

Economists analyze behavior of

Individuals, Families, Students, Universities, Firms, Nations, ...

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Individuals, Families, Students, Universities, Firms, Nations, ...

$\equiv$ **"Economic Agents"**

"Behavior is optimization"

=> Analysis involves "modelling"

agents' **objectives**

"Resources are scarce"

=> Analysis involves "modelling"

agents' **constraints**

To analyze the behavior of individuals and firms,

we will write and analyze "models" of their objectives and constraints.

Summary:

"Behavior is optimization"

# More about this course

An introduction to microeconomic analysis of

- **Behavior**
- **Interactions**
- **Economic policy**

# Two Course Objectives

Course Objective #1:

To learn **key concepts and tools in economics.**

Course Objective #2:

To learn **economic rationales for gov't intervention** in economic activity.

# Course Materials

- Problem Sets (LEARN)
- Lectures
- Notes (LEARN)
- Slides (LEARN)

# Problem Sets

- Weekly

- learn.uwaterloo.ca

- FRIEND or ENEMY?

Homework Aim #1:

Improve the Opportunity

to Master the Material

# Homework Aim #2:

Provide Incentives to Study

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Provide Incentives to Study

$=>$ Some exam questions similar

Homework Aim #3:

Challenge Students

"If it's not challenging,

it's not worth your time."

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Challenge Students

"If it's not challenging,

it's not worth your time."

=> Include very difficult questions

Conclusion:

Problem Sets are your **FRIEND**

Note: As an economist, **I assume that you optimize**.

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$=>$ **Homeworks are NOT handed in**.

Note: Material is highly cumulative

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$=>$ WEEKLY effort recommended

# Notes and Slides

- Complement lectures

- on LEARN

No textbook; Optional textbooks include

Microeconomics by "Parkin and Baden" **$$$**

Microeconomics by "Mankiw" **$$$**

Microeconomics by "Krugman" **$$$**

"The Economy" e-book by various authors, www.core-econ.org/the-economy, **FREE**

No textbook is necessary, but (if you have a lot of time in your hands), you can buy one to study on your own.

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But I doubt that is the best use of your time during the course.

Kahoot

- Possible to get “bonus points” that count toward final grade (see course outline)

Course Outline has more detail

- When are the exams?

- What is the weight of each exam?

- Are the exams cumulative?

- What if I miss an exam?

# Summary 1: Economists:

"Behavior is optimization"

Summary 2: This course:

- Self-interest alone vs. econ policy

- Key econ concepts and tools

# Summary 3: Problem Sets

- FRIEND

- WEEKLY effort