

## **social insurance: applications**

social security

unemployment insurance

disability insurance

workers' compensation

poverty alleviation

health



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### Facts on Income Distribution in the United States: Relative Income Inequality

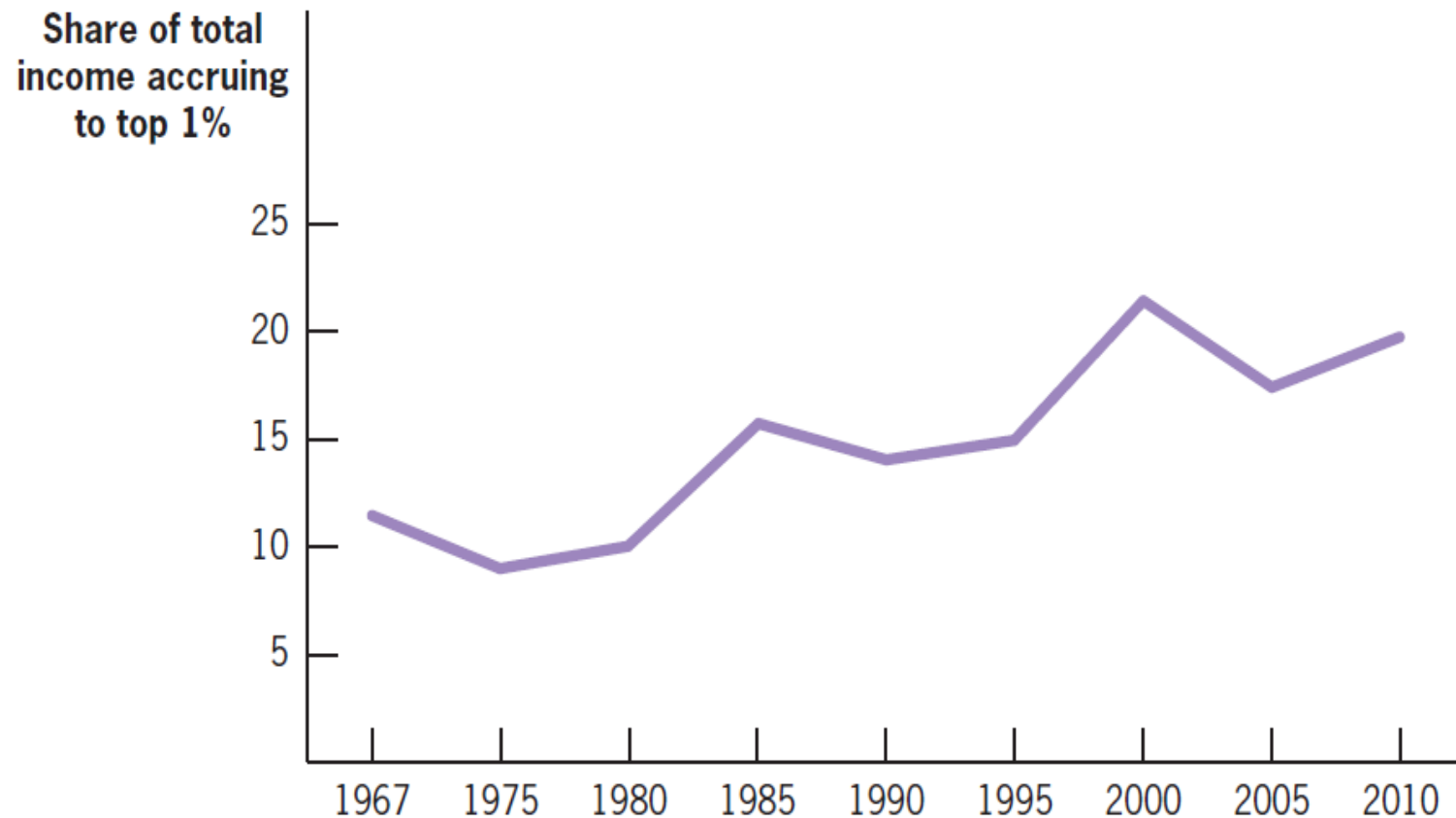
- Relative income inequality has increased in the United States.
- **Relative income inequality:** The amount of income the poor have relative to the rich.

<i>Income share of:</i>	<b>1967</b>	<b>1980</b>	<b>1990</b>	<b>2000</b>	<b>2010</b>
<b>Lowest 20%</b>	4	4.3	3.9	3.6	3.3
<b>Second 20%</b>	10.8	10.3	9.6	8.9	8.5
<b>Third 20%</b>	17.3	16.9	15.9	14.8	14.6
<b>Fourth 20%</b>	24.2	24.9	24	23	23.4
<b>Highest 20%</b>	43.8	43.7	46.6	49.8	50.2
<b>Top 5%</b>	17.5	15.8	18.6	22.1	21.3



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### Facts on Income Distribution in the United States: Relative Income Inequality





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### Relative Income Inequality: Select OECD Countries

	Income Quintile					
	Bottom	Second	Third	Fourth	Highest	Top 10%
Sweden	10.7	14.4	17.6	21.5	35.7	10.9
Austria	8.4	12.4	16.8	22.3	40.1	13.6
France	9.4	12.9	16.3	21	40.4	15.2
UK	7.9	11.2	15	20.6	45.4	19.8
USA	3.3	8.5	14.6	23.4	50.2	21.3
Mexico	4.6	7.8	11.6	18.3	57.6	32.3
OECD Average	8.5	12.2	16	21.1	42.2	16.7



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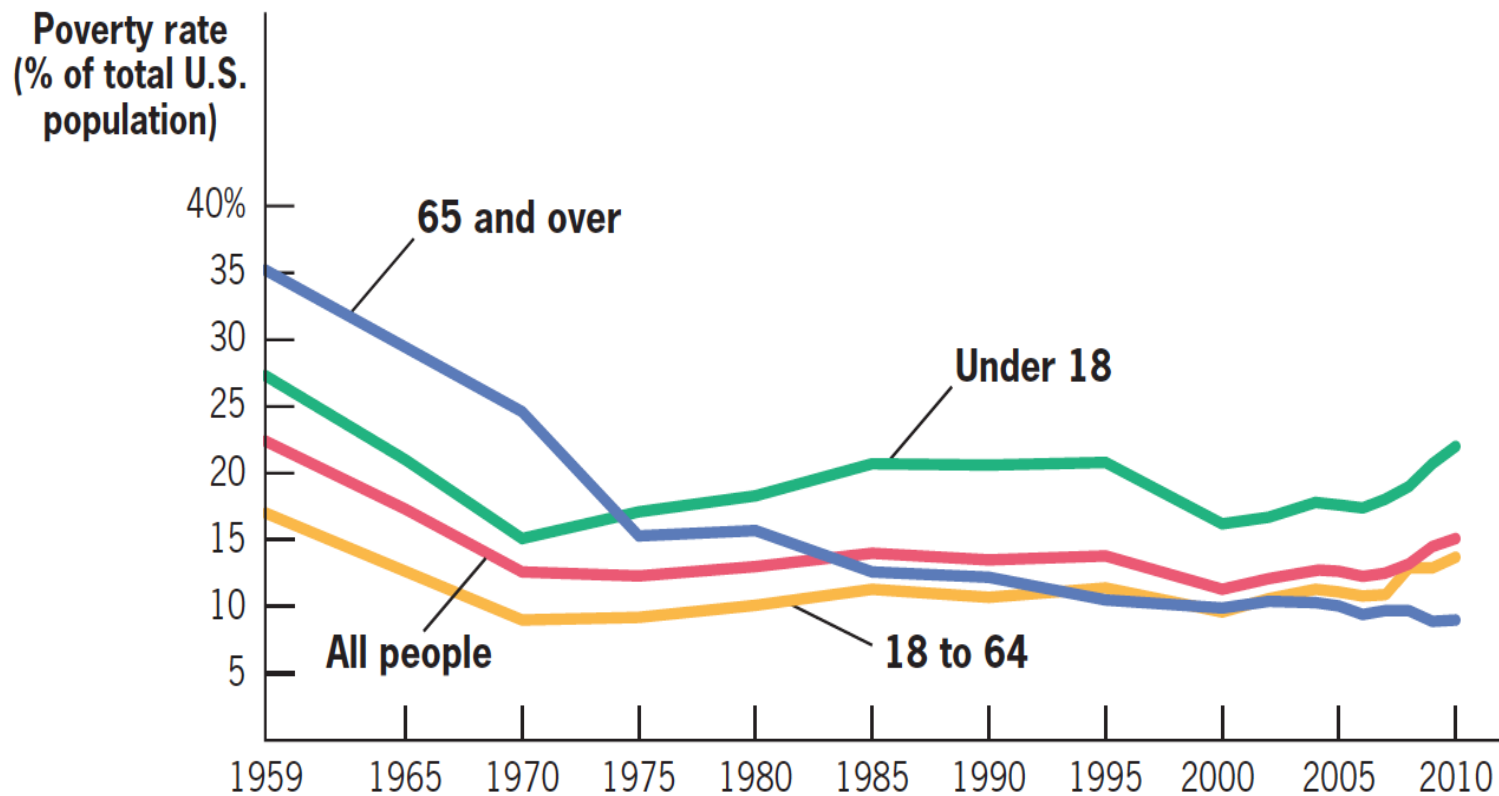
### Absolute Deprivation and Poverty Rates

- Inequality does not measure absolute deprivation.
  - **Absolute deprivation:** The amount of income the poor have relative to some measure of “minimally acceptable” income.
- Measured by the share of people below poverty line.
  - **Poverty line:** The federal government’s standard for measuring absolute deprivation.
  - Originally 3\*(cost of minimally nutritionally accepted diet).



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## Poverty Rates over Time in the United States





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### What Matters—Relative or Absolute Deprivation?

- Why does it matter how much money the rich have?
  - The “minimal” standard of living may be best defined relative to the standard of living of others.
  - Inequality itself may make people unhappy.



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## Welfare Policy

Welfare programs can be categorical or means-tested.

- **Categorical welfare:** Welfare programs restricted by some demographic characteristic, such as single motherhood or disability.
- **Means-tested welfare:** Welfare programs restricted only by income and asset levels.



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## Welfare Policy in the United States

They can also be cash or in-kind.

- **Cash welfare:** Welfare programs that provide cash benefits to recipients.
  - **Benefit guarantee:** The benefit for people with no other income. May be cut as income increases.
  - **Benefit reduction rate:** The rate at which welfare benefits fall per unit of other income earned.
- **In-kind welfare:** Welfare programs that deliver goods, such as medical care or housing, to recipients.



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### Moral Hazard Effects of a Means-Tested Transfer System

- Means-tested transfer systems cause moral hazard.
- Consider a simplified version of TANF, with benefits  $B$ :

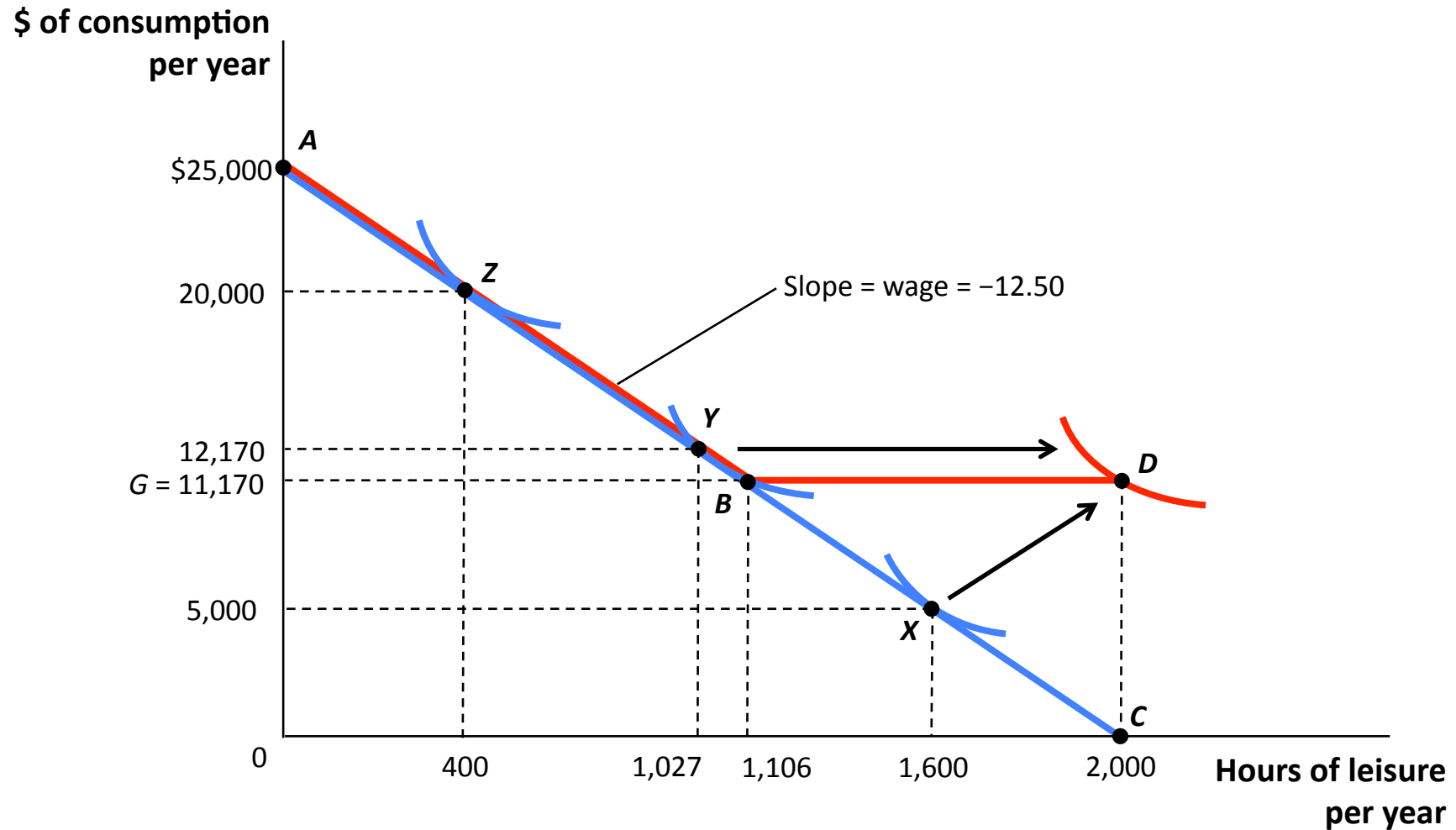
$$B = G - t \times w \times h$$

- $G$  is the guarantee,  $t$  the benefit reduction rate,  $w$  wages and  $h$  hours worked.
- Setting  $G = \$10,000$  and  $t = 1$ , it would cost \$218 billion to eliminate poverty, less than Social Security spending.



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## Moral Hazard Effects of a Means-Tested Transfer System

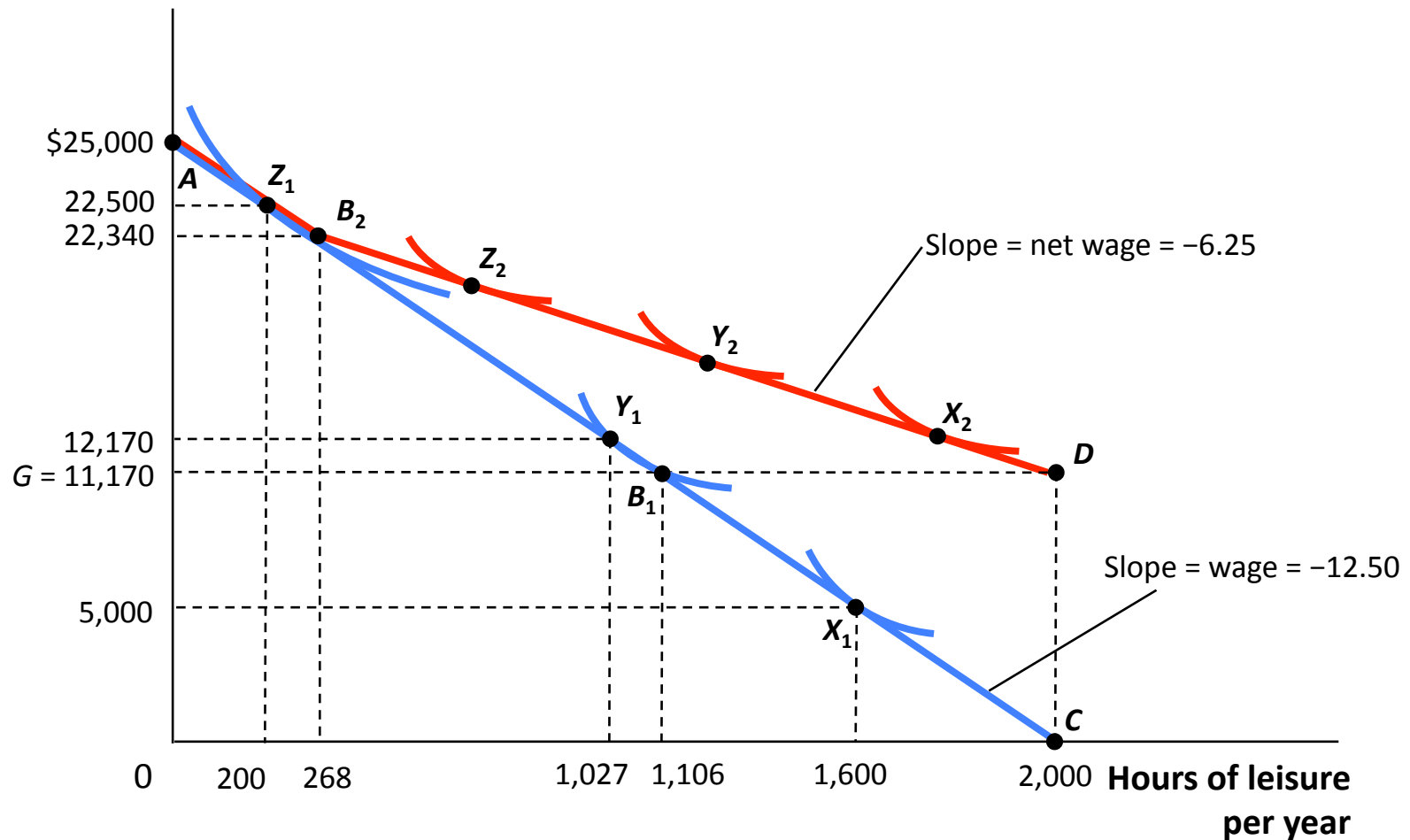




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## Solving Moral Hazard by Lowering the Benefit Reduction Rate

\$ of consumption  
per year





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### The “Iron Triangle” of Redistributive Programs

- Reducing the benefit rate ends up redistributing less.
- This illustrates the “Iron Triangle” of redistributive programs.
- **Iron triangle:** There is no way to change either the benefit reduction rate or the benefit guarantee to simultaneously encourage work, redistribute more income, and lower costs.



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## Moving to Categorical Welfare Payments

- Moral hazard arises because the government wants to redistribute to poor people, but people control their income.
- If we could target benefits to earnings capacity, there would be no moral hazard.
- People with disabilities, single mothers two targets.
- What Makes a Good Targeting Mechanism?
  - No way to change behavior in order to qualify.
  - Targets people with low earning capacity.



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## Using “Ordeal Mechanisms”

- **Ordeal mechanisms:** Features of welfare programs that make them unattractive, leading to the self-selection of only the most needy recipients.
- The Paradox of Ordeal Mechanisms
  - If the government provides a benefit that is not attractive to the non-needy but helps out the truly needy, then targeting will be more efficient.
  - The paradox of ordeal mechanisms is therefore that *apparently making the less able worse off can actually make them better off.*



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### **APPLICATION: An Example of Ordeal Mechanisms**

- In setting up a soup kitchen to support the needy, the government can:
  - Hire many workers, keeping wait times down.
  - Hire few workers, producing long lines.
- The long line might discourage high-earners from using the soup kitchen.
- The ordeal mechanism works because the target population has a relatively high value for the good (soup) and a relatively low cost for the ordeal.



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### **APPLICATION: Workfare**

- 2002 Revisions in GMI:
  - Name: Social Income for Inclusion (SII)
  - Workfare requirements for beneficiaries aged 18-30
  - Relevant earnings for eligibility: previous 12 months instead of previous 3 months
  - 50% of SII in vouchers



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### **APPLICATION: Workfare**

- 2005 Revisions in SSI:
  - Workfare requirements for all beneficiaries who are able to work
  - Relevant earnings for eligibility: previous 3 months instead of previous 12 months; disclosure of bank accounts
  - Voucher provision revoked
  - Directed instead of random monitoring



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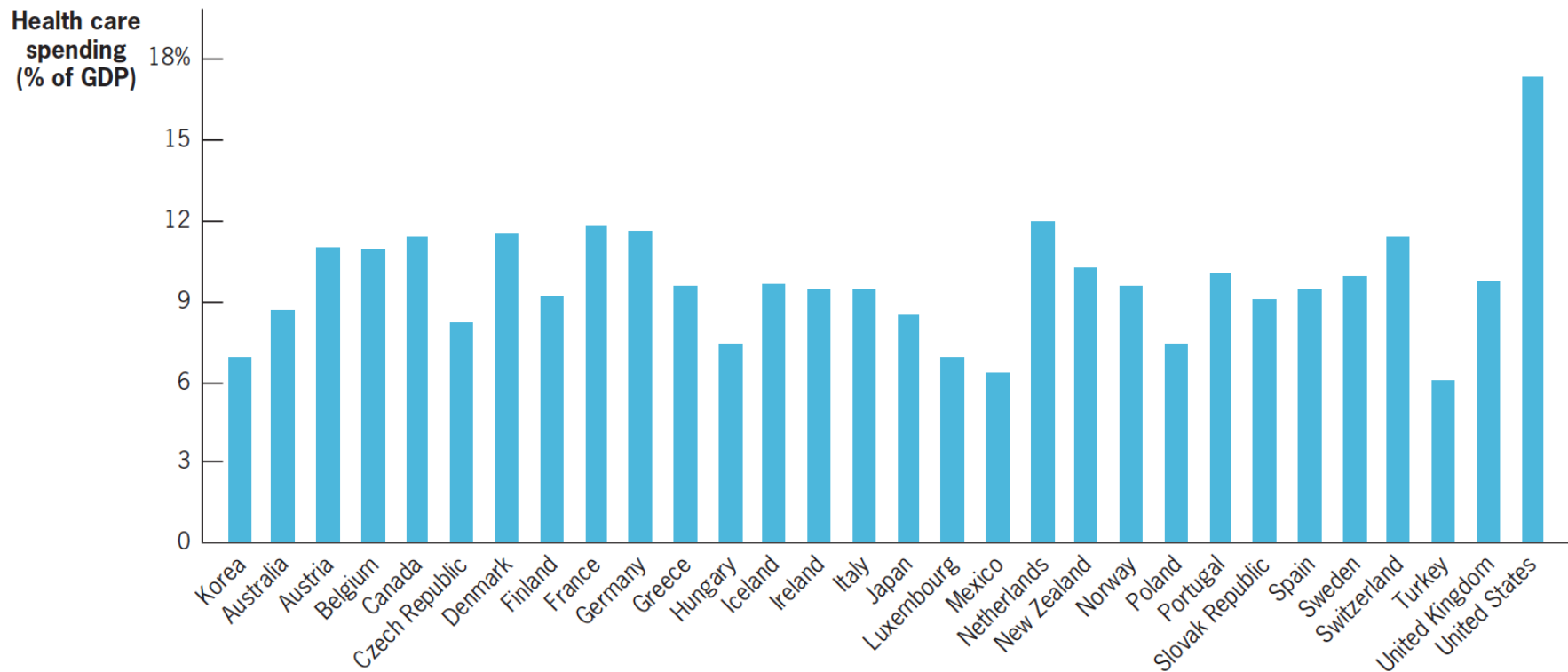
### **EVIDENCE: The Canadian Self-Sufficiency Project**

- Randomized evaluation of a work subsidy program.
- Offered large wage subsidies to a (random) group of Canadians on welfare for more than one year.
- The subsidy increased employment by 43% in the short-run, relative to control group.
- The rate of welfare enrollment fell by roughly the same amount.
- After five years, the impact on employment welfare use fell to zero.



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## Healthcare Spending in the OECD Nations





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## How Health Insurance Works: The Basics

- Individuals, or firms on their behalf, pay monthly premiums to insurance companies.
- In return, the insurance companies pay the providers of medical goods and services for most of the cost of goods and services used by the individual.
- There are three types of patient payments:
  - *Deductibles*
  - *Copayment*
  - *Coinsurance*



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## Private Insurance

- Private insurance is provided by employers and by the nongroup insurance market.
- **Nongroup insurance market:** The market through which individuals or families buy insurance directly rather than through a group, such as the workplace.



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## Why Employers Provide Private Insurance, Part I: Risk Pooling

- One reason employers provide insurance to pool risks.
  - **Risk pool:** The group of individuals who enroll in an insurance plan.
- The goal of all insurers is to create *large insurance pools with a predictable distribution of medical risk*.
- The *law of large numbers* helps achieve this goal.
- By pooling all employees, employer-provided health insurance also avoids adverse selection.



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### The Other Alternative: Nongroup Insurance

- The nongroup insurance market is not a well-functioning market.
- Nongroup insurance is not always available.
- Those in the worst health are often unable to obtain coverage (or obtain it only at an incredibly high price).



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### Why Care About the Uninsured?

There are several reasons to care about the uninsured:

- There are physical externalities associated with communicable diseases.
- There is a significant financial externality imposed by the uninsured on the insured.
- Care is not delivered appropriately to the uninsured.
- Paternalism and equity motivations.



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### Example: 'Obamacare'

- Individual mandate (with subsidies for low-earners): address adverse selection issue
- Employer mandate (if more than 50 employees, postponed)
- Prohibits insurance companies from dropping your coverage if you get sick: moral hazard vs. redistribution (and externalities...)
- Guaranteed access regardless of pre-existing conditions and without gender discrimination: risk pooling, redistribution



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### How Generous Should Insurance Be to Patients?

- The generosity of health insurance is measured along two dimensions:
  - Generosity to *patients*
  - Generosity to *providers*
- Most generous plans (to patients) provide first-dollar (or first-Euro) coverage.
  - **First-dollar coverage:** Insurance plans that cover all medical spending, with little or no patient payment.



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### Consumption-Smoothing Benefits of Health Insurance for Patients

- The consumption-smoothing benefit from first-dollar coverage of minor and predictable medical events is small for two reasons:
  - Risk-averse individuals gain little utility from insuring a small risk.
  - Individuals are much more able to self-insure such spending than to self-insure large and unpredictable medical events.
- On the other hand, the moral hazard costs are large.



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### Example: Medicare and 'Obamacare'

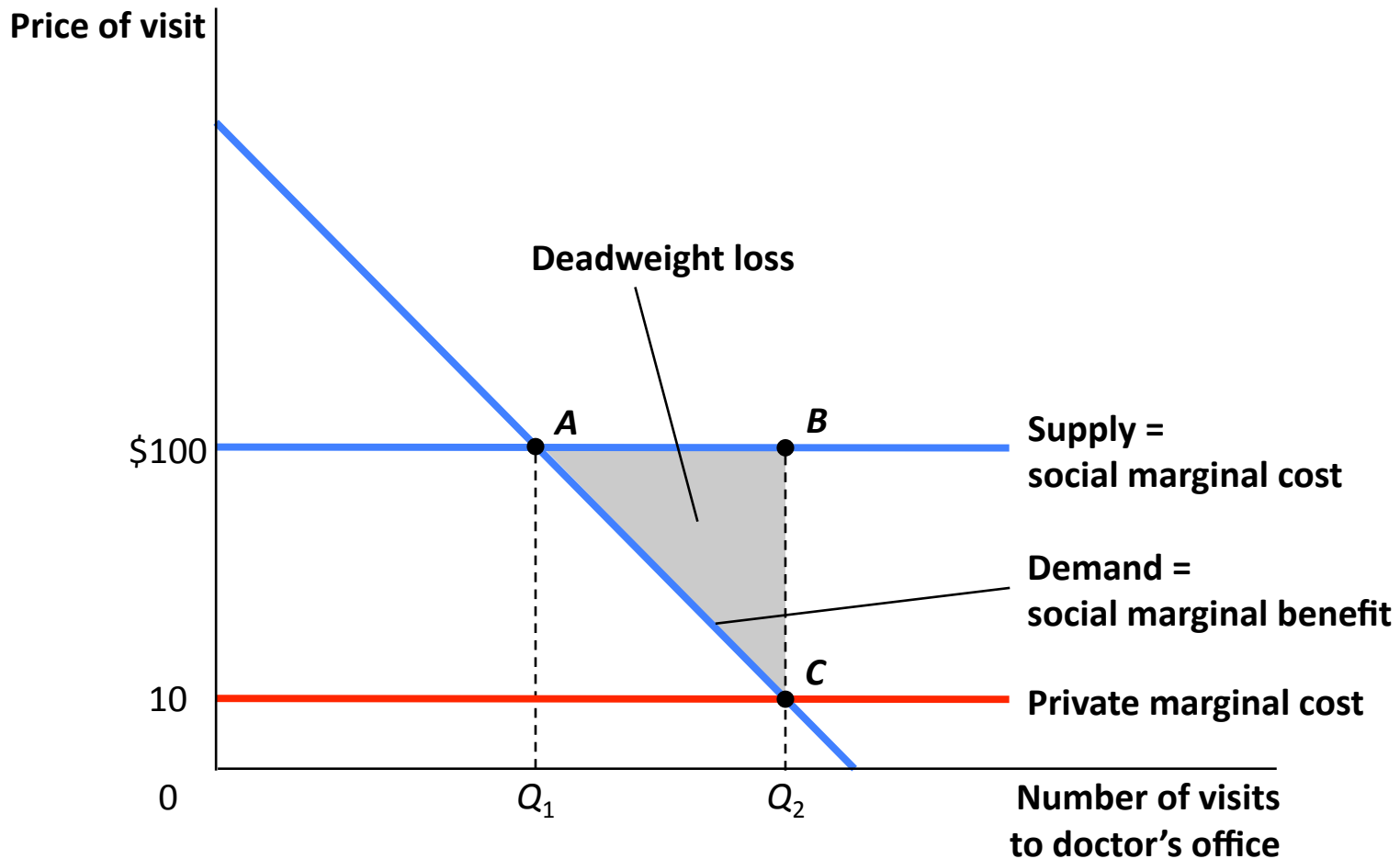
Total drug spend	Out-of-pocket cost	Portion covered by Medicare
\$0–\$295	Deductible is out-of-pocket	No Medicare coverage of costs
\$295–\$2,700	25% out-of-pocket	75% covered by Medicare
\$2,700–\$6,154	All costs are out-of-pocket	No Medicare coverage of costs
over \$6,154	5% out-of-pocket	95% covered by Medicare

- 'donut hole' gradually eliminated until 2020.



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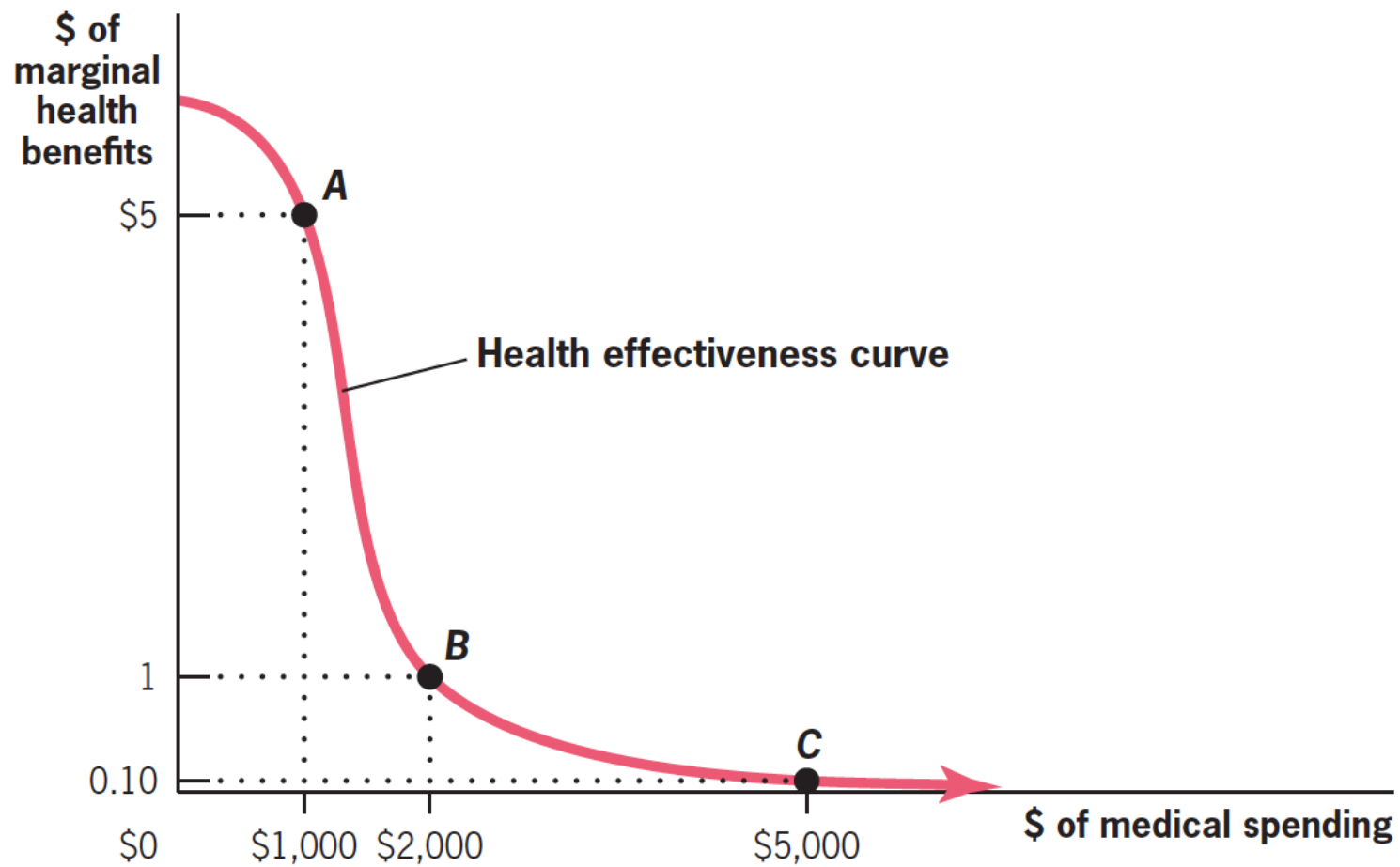
## Moral Hazard Costs of Health Insurance for Patients





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## The “Flat of the Curve”





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## Optimal Health Insurance

Optimal health insurance:

- Trades off moral hazard against risk protection.
- First dollar coverage bad for moral hazard, not very valuable risk protection.
- Therefore, optimal health insurance policy:
  - Individuals bear a large share of medical costs within some affordable range
  - Only fully insured against very large costs.



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## Conclusion

- Most individuals have private health insurance, for large firms this is a well-functioning insurance market.
- For small firms and individuals, there are more failures, contributing to many uninsured.
- Risk-averse individuals greatly value the consumption-smoothing benefits of having their medical bills paid.
- There are clear moral hazard costs as well, both on the patient and provider side.
- Cost sharing has been used to address moral hazard on the patient side.