Public Economics

Lec 8: Asymmetric information and social insurance

Alessandro Martinello

alfa 4035B

alessandro.martinello@nek.lu.se

LUND UNIVERSITY
School of Economics and Management

AM's reminders

- **New deadline for group formation: Friday 28**
- Link to group schedule
- **Jonathan Gruber on Obamacare**

Today's readings

- **RG ch. 9-10**
- **Einav & Finkelstein, up to page 123 (first 9 pages)**
- **Recommended readings**
  - Akerlof (1970)

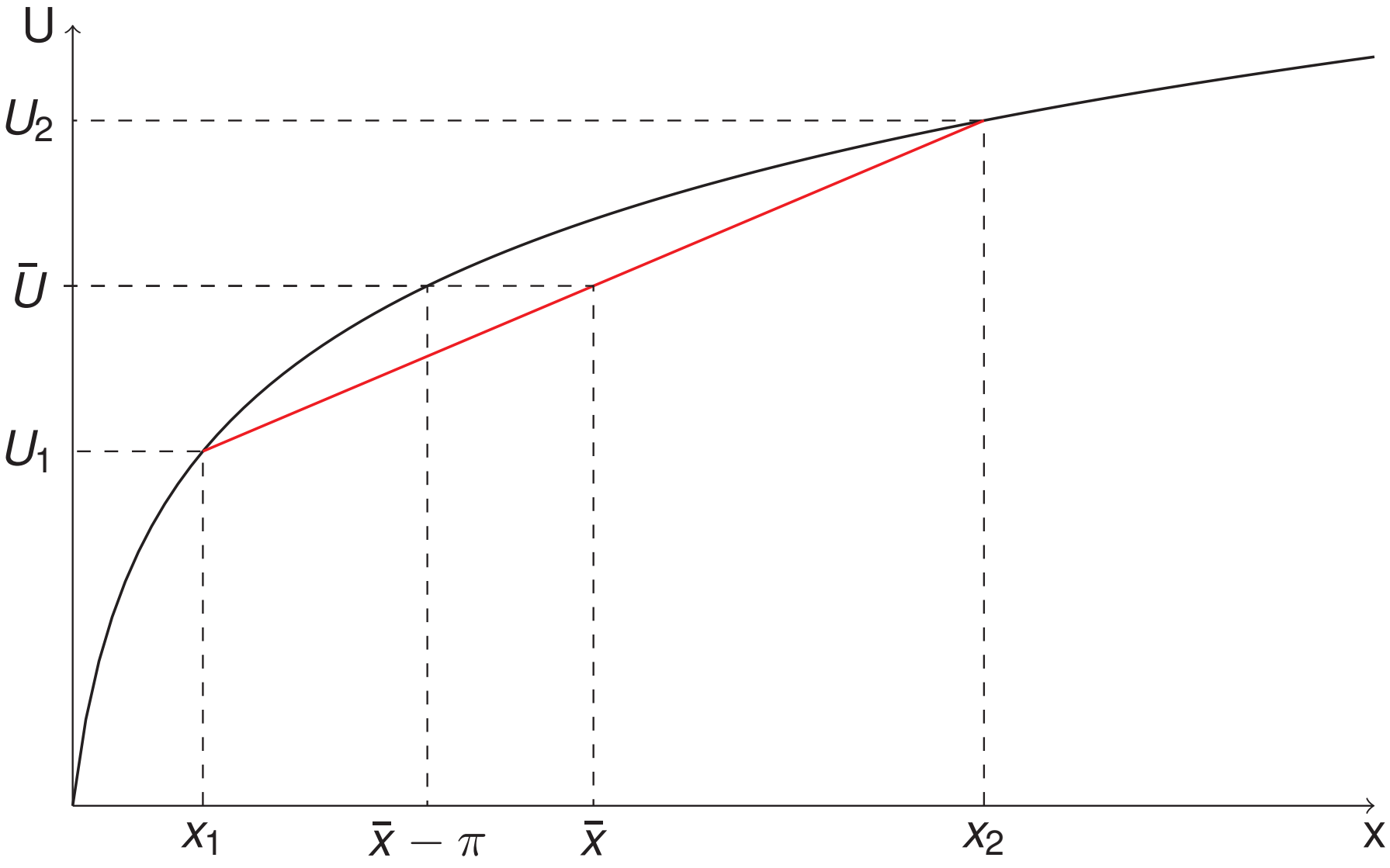
Insurance

Risky situation

$$x = \begin{cases} x_1 & \text{with probability } p \\ x_2 & \text{with probability } 1-p \end{cases}$$

- **People are risk averse**
  - Concave utility function

Insurance - a free lunch



Characterizing insurance

Provision

- **Private insurance**
  - Car, fire, apartment
  - Health, unemployment
- **Social insurance**
  - **Health, UI, public pensions**

Contract type

- **Full insurance**
- **Co-payment**
  - Insured contributes by fixed **amount**
- **Co-insurance**
  - Insured contributes by fixed **proportion**

Risk pooling

AKA why insurance companies are risk-neutral

- Insure 2 people at premium π
- $\Longrightarrow$ revenues are 2π, risk $<$ doubles
- **Risk pooling creates welfare at no cost**

Awesomeness of risk-sharing fails when

- Risks **systematic** (autocorrelated)
  - Floods, financial crises
  - More contracts $\neq$ less risk
- **Asymmetric information** - our favorite market failure
  - **Social insurance:** health and unemployment insurance

Asymmetric information

- **Adverse selection**
  - **Hidden knowledge**, **pre-contract**
  - Insurance (today), used items markets
  - Why approaching a hot girl/guy at a bar is hard
- **Moral hazard**
  - **Hidden action**, **post-contract**
  - Bailouts, CEOs incentive schemes (privatization)
  - Tenure positions

Adverse selection

Akerlof's market for lemons

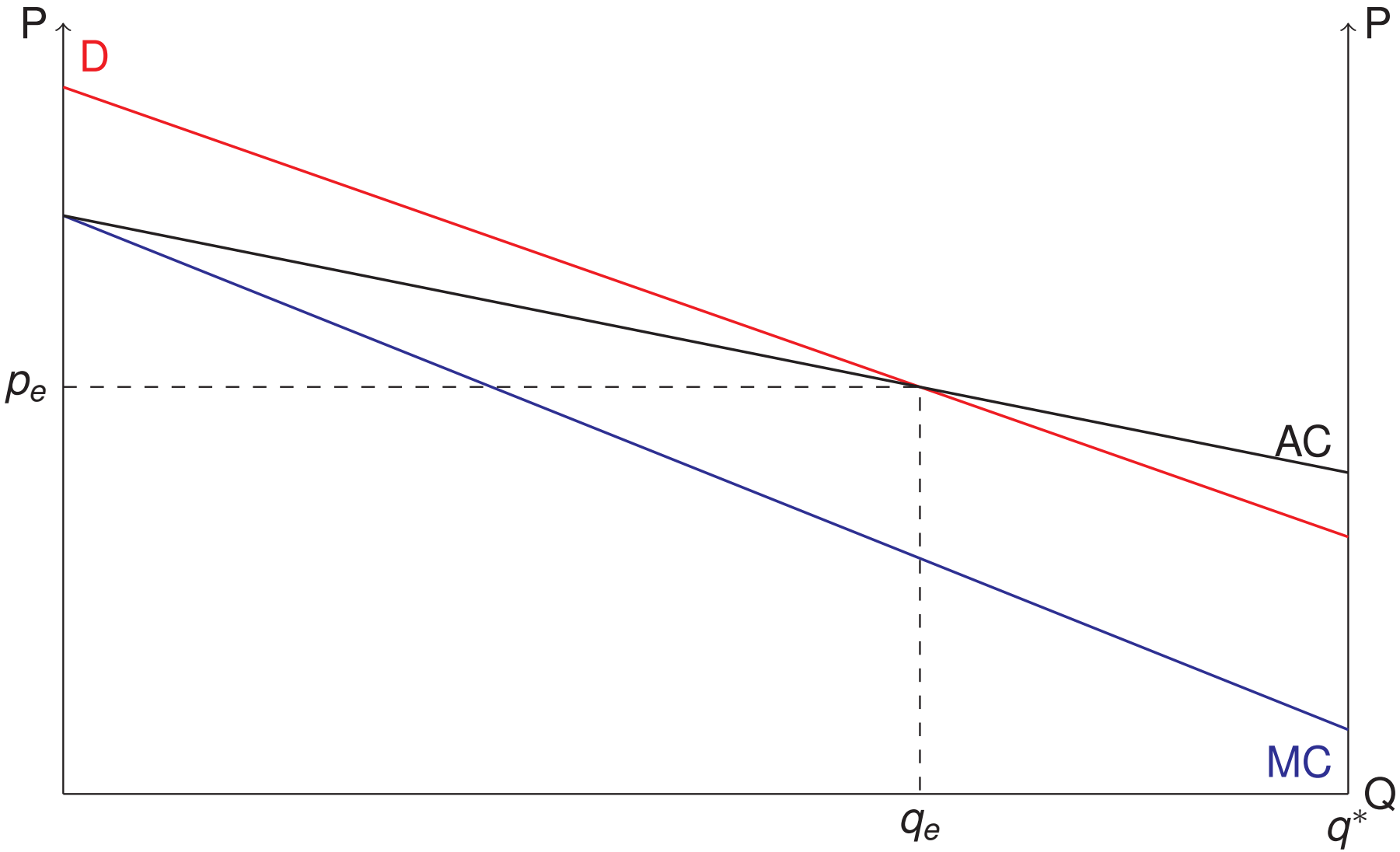
- Used cars market
  - **Peaches** (10000) & **lemons** (1000)

Adverse selection

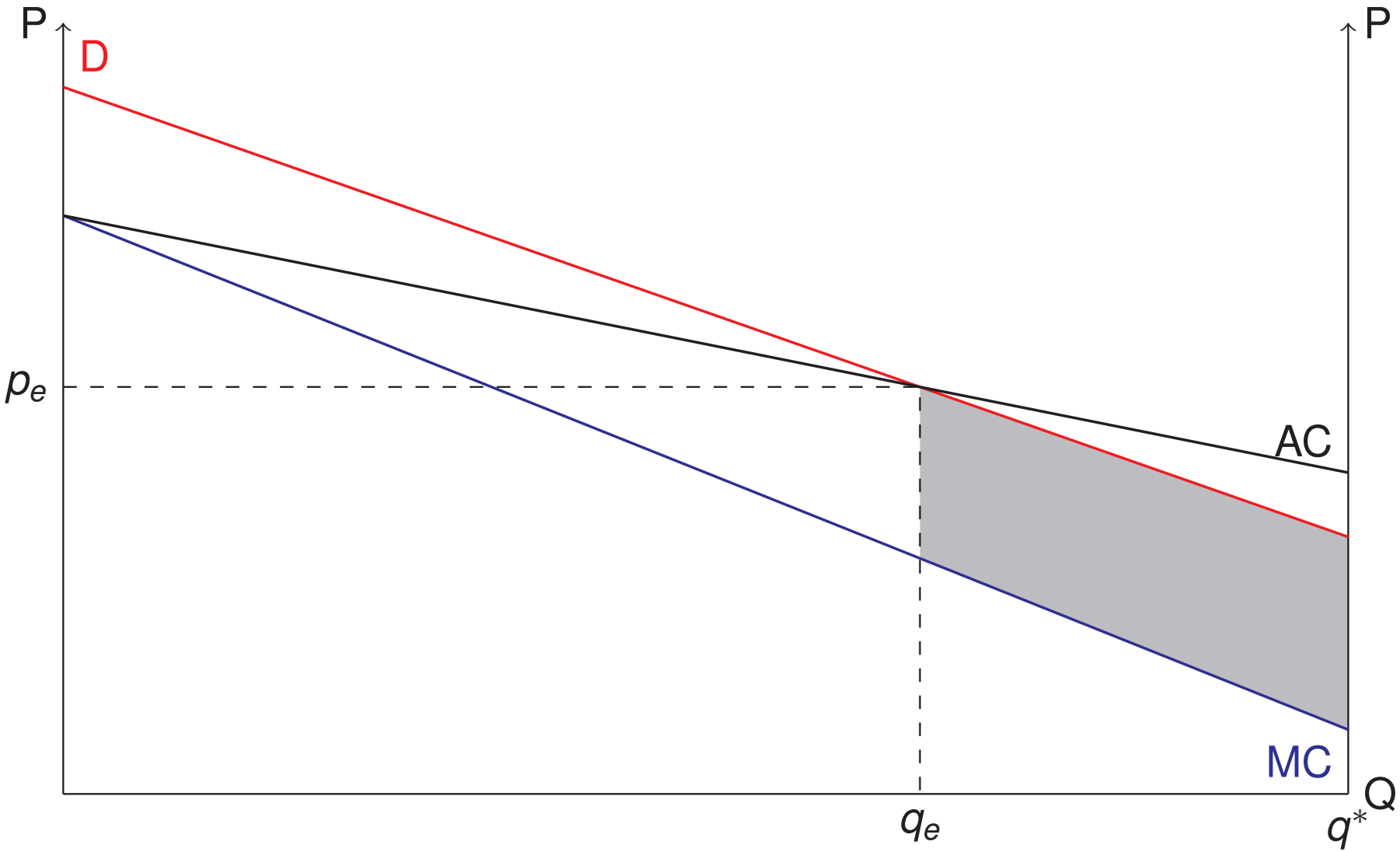
Akerlof's market for lemons

- Used cars market
  - **Peaches** (10000) & **lemons** (1000)
- Average pricing drives peaches out of the market
- **No market for used peaches**

Adverse selection in graphs



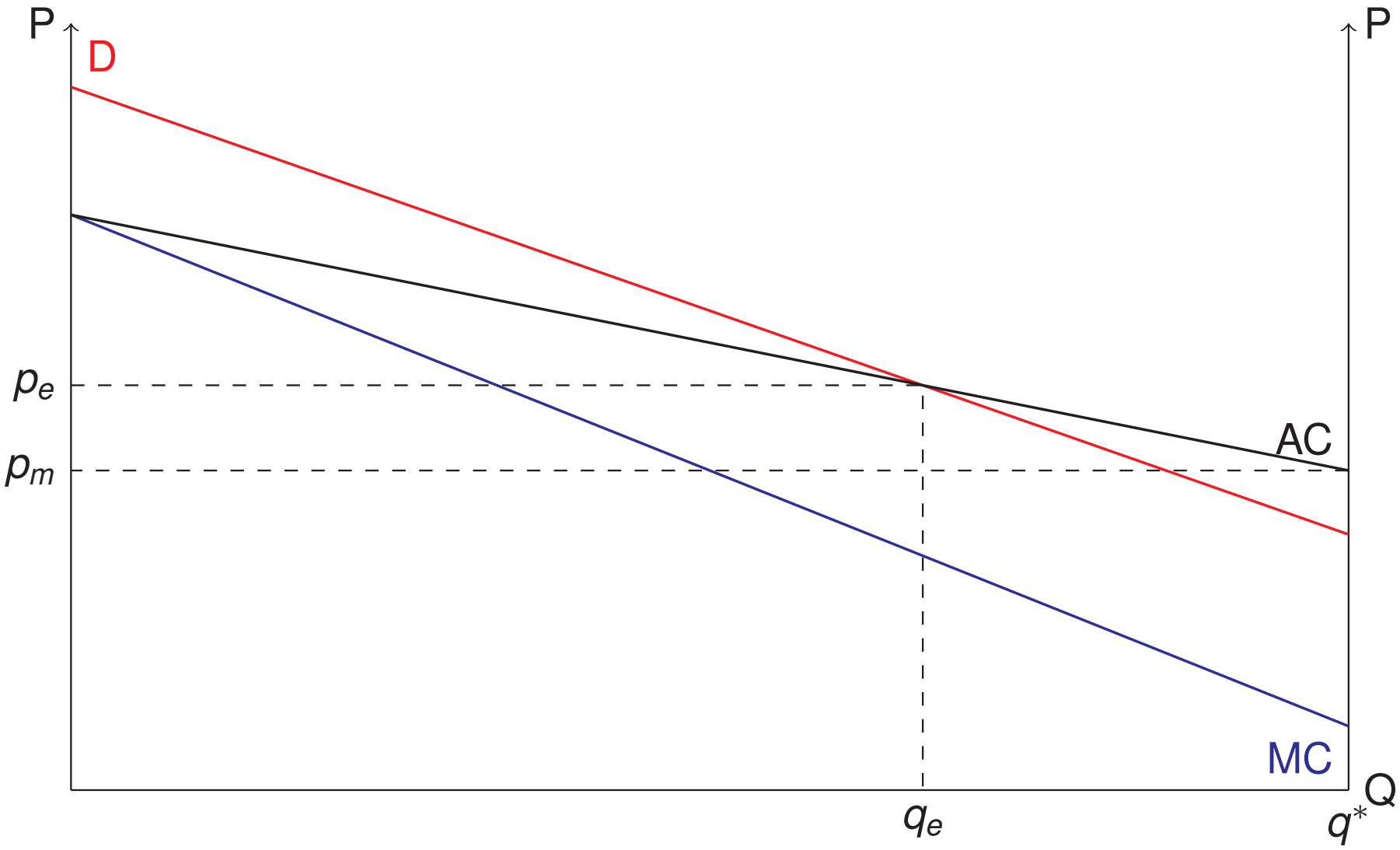
Adverse selection in graphs



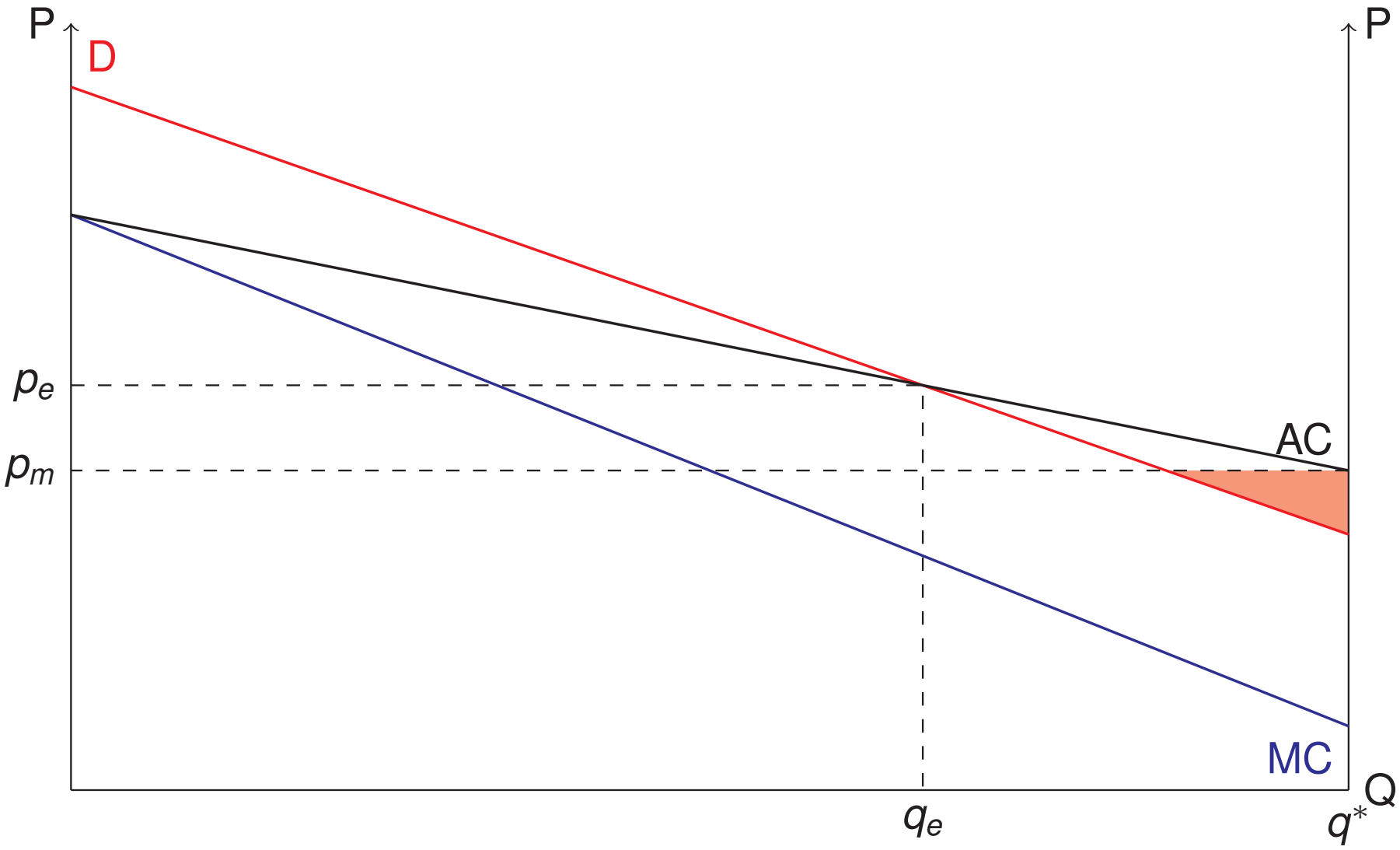
Adverse selection

- **Adverse selection: AC $>$ MC**
  - **Sorting** $\Longrightarrow$ underprovision, market failure
  - **Inefficiency**
- **Private solution:** reduce asymmetry
  - **Screening** (health insurance, loans. . .)
  - **Price customization**
- **Public intervention**
  - **Mandates:** maximize pie size, then (eventually) redistribute
  - **Subsidies:** push peaches to purchase insurance

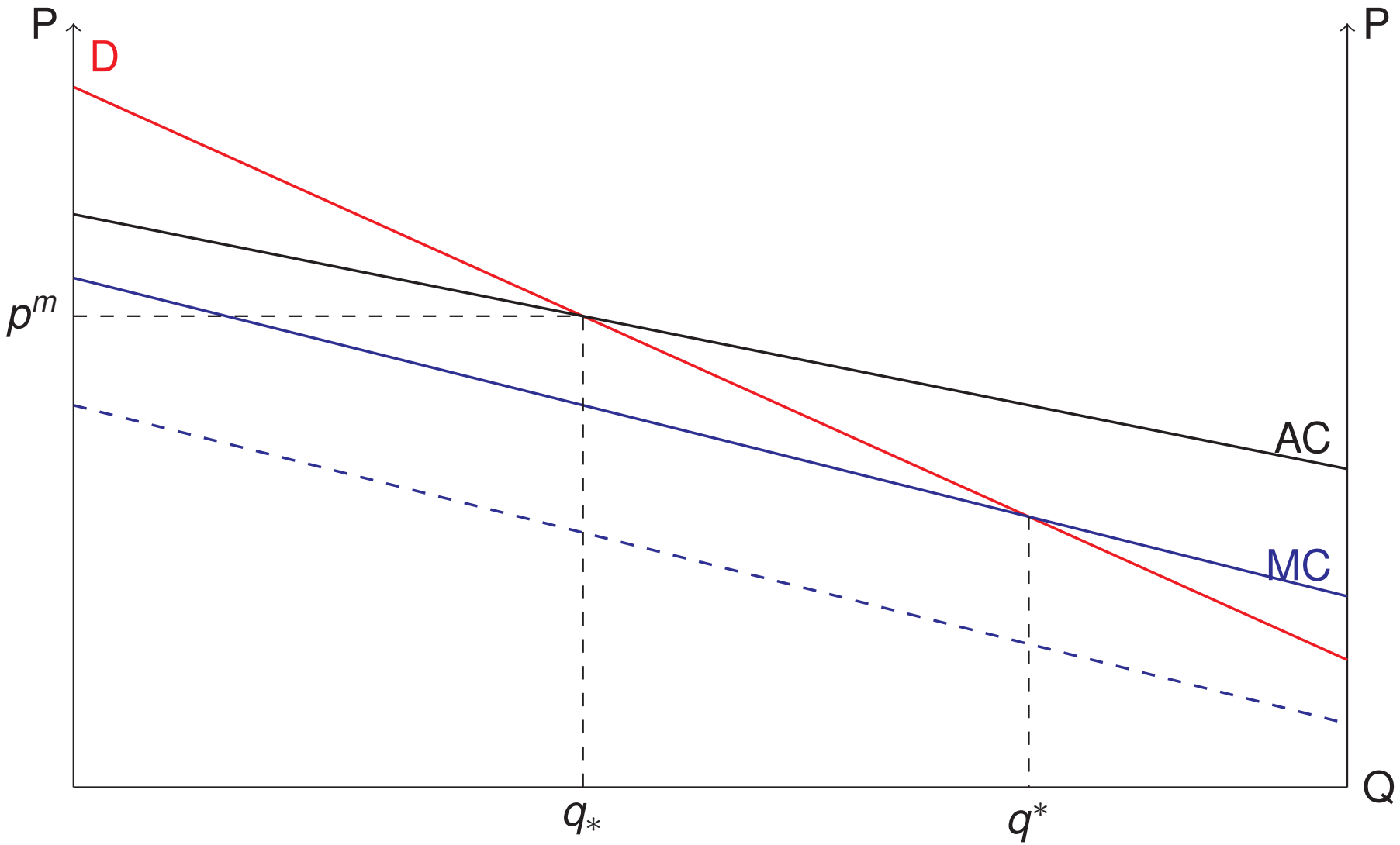
Mandates - not everyone better off



Mandates - not everyone better off



NB! Adverse selection $\not\rightarrow$ full insurance



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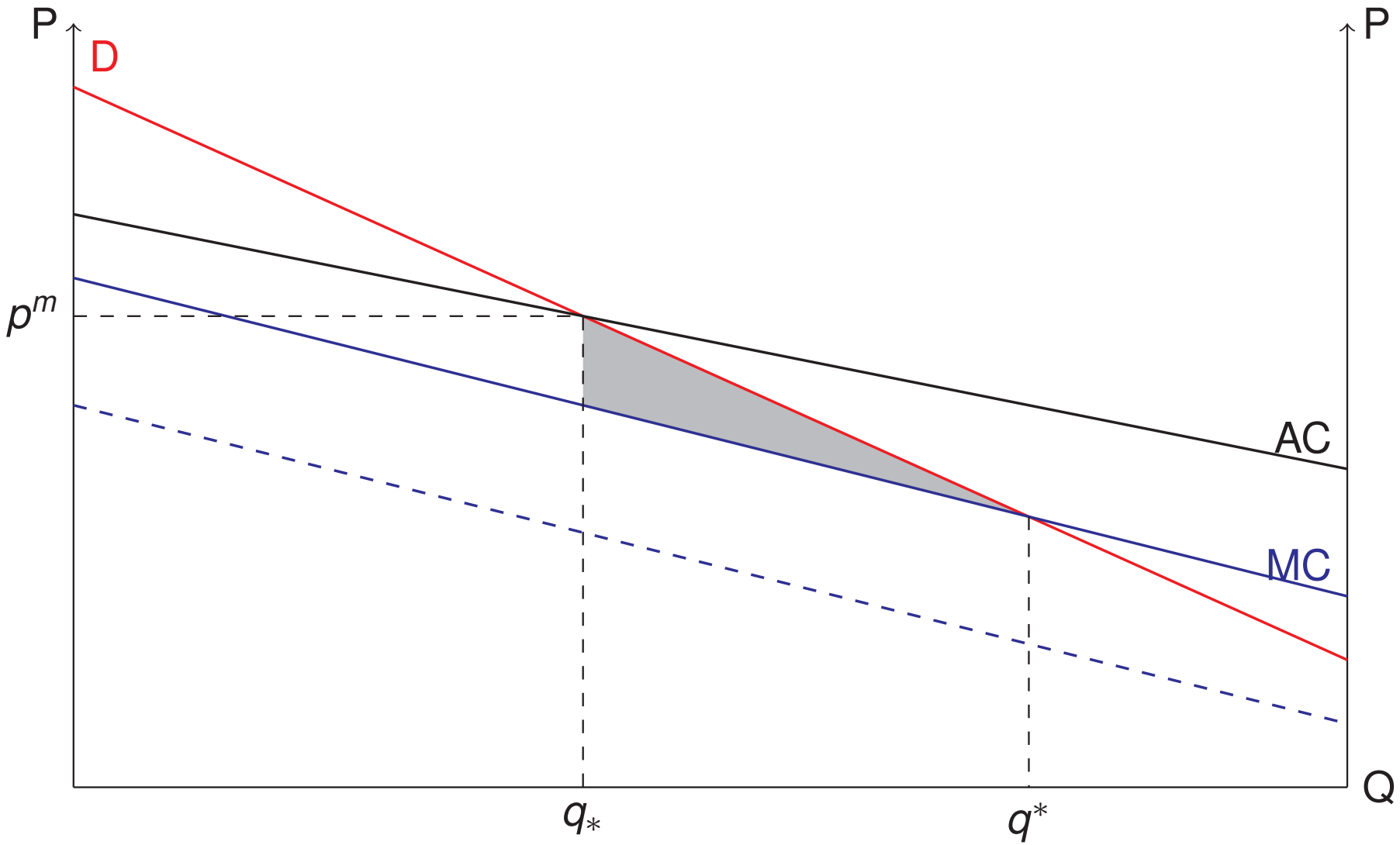


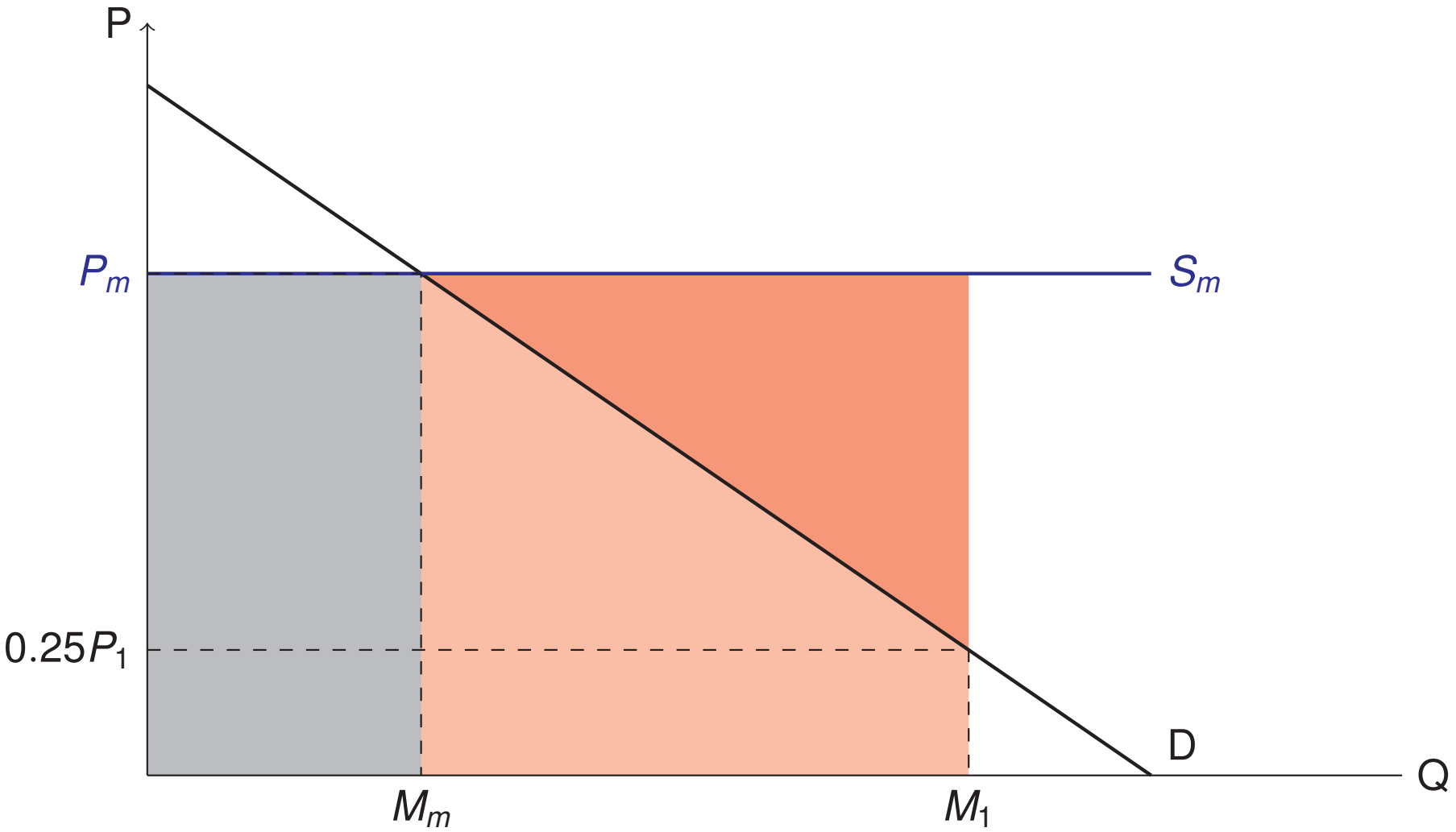
Why public insurance

- **PI increases efficiency more than it harms peaches**
  - **Empirical question**
  - Redistribution?
- **Redistribution** from peaches to lemons
  - **PI crowds out private insurances**
  - Savings!
- **Paternalism:** myopia, flawed risk-assessment
  - *Tonight, we are young*
    So let's set the world on fire
    We can burn brighter than the sun
  - **Demand distorted**
- **Who are the uninsured:**
  - **Liquidity constraints?**

Moral hazard

- **Hidden action**
  - Contract in place,
  - Then change behavior **because** of the contract
  - **Bailouts:** if banks know they are going to be bailed out, they'll take more risks
  - **Tenure:** if professors can't get fired, they'll stop doing research
    - . . . if we followed incentives, we wouldn't be in academia
- **Issue:** monitoring not perfect
  - Unobservables (effort), counterfactuals
  - **Government does not have comparative advantage**
- **Health economics:**
  - Enjoy your McDonald (**real** moral hazard)
  - Cheaper to get medicines (elastic demand for medical care)
    - **Copayment, deductibles, coinsurance**

Moral hazard: overprovision



Government intervention = social insurance

Krugman: *Loosely speaking, the post-cold-war federal gvmt is a big pension fund that also happens to have an army*

- **Health insurance**
- **Unemployment insurance**
- **Public pensions** (later)
  - **Adverse selection:** wealthy, productive people
  - **Moral hazard:** people retire earlier

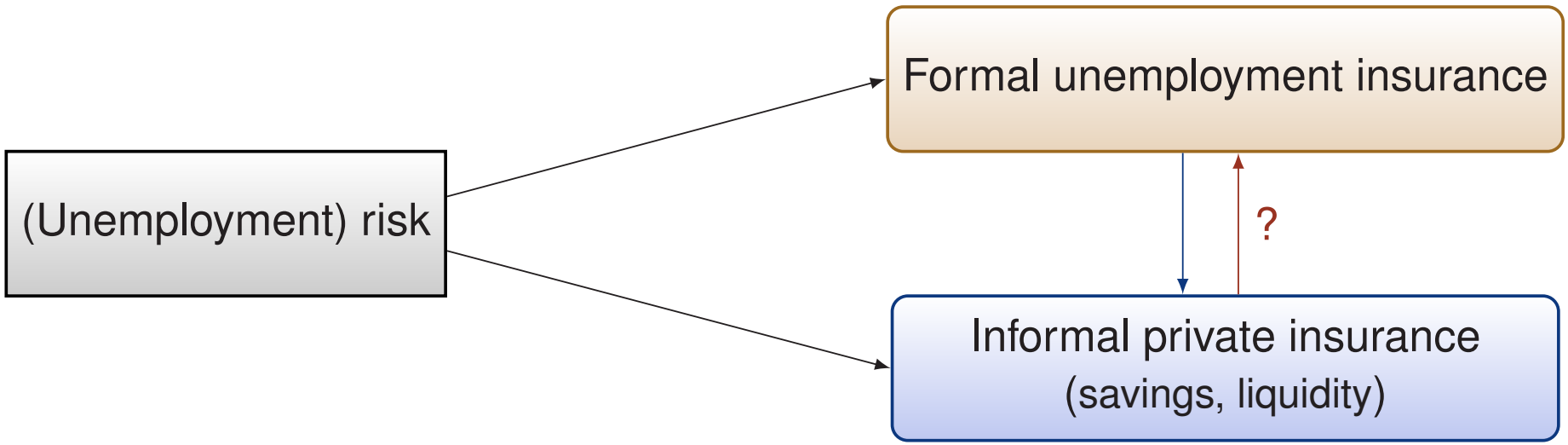
Health insurance

- **Potential market failure**
  - **Adverse selection:** government has comparative advantage
  - **Moral hazard:** government has no comparative advantage
- **EU:** tends to be public
  - Sometimes substantial copayment/coinsurance rates
- **US:** tends to be private
  - **Medicare/medicaid** exceptions
  - **Obamacare**

Unemployment insurance

- **Risk pooling?**
- **Potential market failure**
  1. Sorting by unemployment rate
  2. Unemployment not necessarily endogenous
- **Mandate in most OECD countries**
  - Scandinavia is exception
- **Externalities/crowd-outs**

Liquidity and unemployment insurance



Losses

1. ↗ adverse selection
2. More costly (more taxes)

Gains

1. ↘ moral hazard
2. Loads in UI funds