

Public Economics

Lec 7: Asymmetric information and social insurance

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- **Jonathan Gruber on Obamacare**

Today's readings

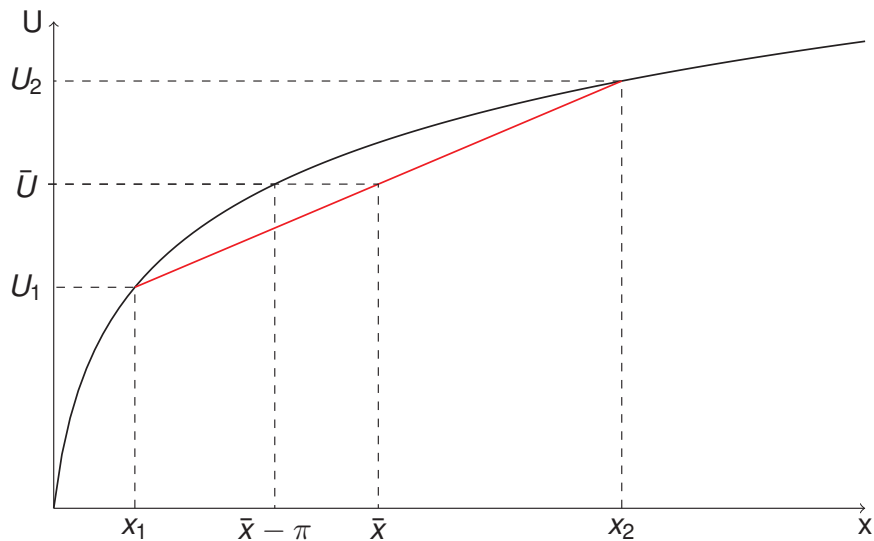
- **RG ch. 9-10**
- **Einav & Finkelstein, up to page 123 (first 9 pages)**
- **Recommended readings**
 - Akerlof (1970)

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**

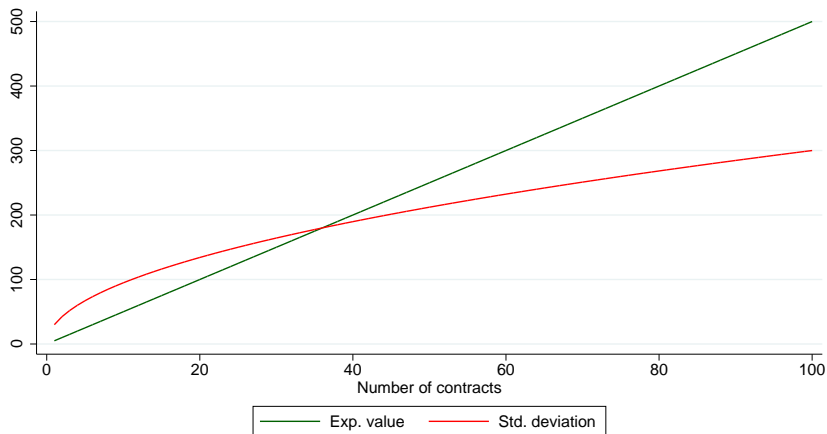
Contract type

- **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

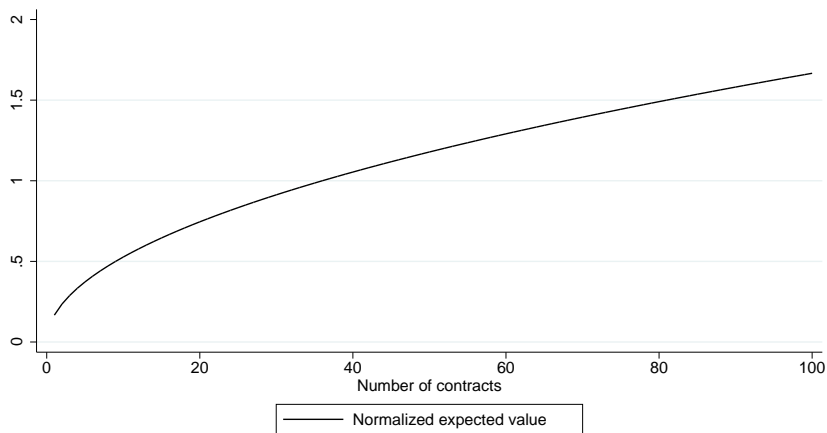
- Insure 2 people at premium π
- \implies revenues are 2π , risk $<$ doubles
- **Risk pooling** \nearrow **welfare at no cost**



Risk pooling

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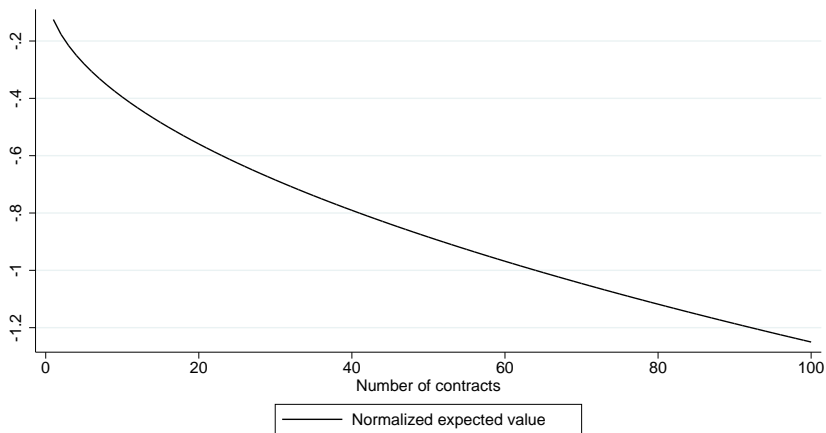
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Risk pooling

AKA why insurance companies are risk-neutral

- Insure 2 people at premium π
- \implies revenues are 2π , risk $<$ doubles
- **Risk pooling** \nearrow **welfare at no cost** (if bet is a good one)



Awesomeness of risk-sharing fails when

- Risks **systematic** (autocorrelated)
 - Floods, financial crises
 - More contracts \neq less risk (fire in single building)
- **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



Akerlof's market for lemons

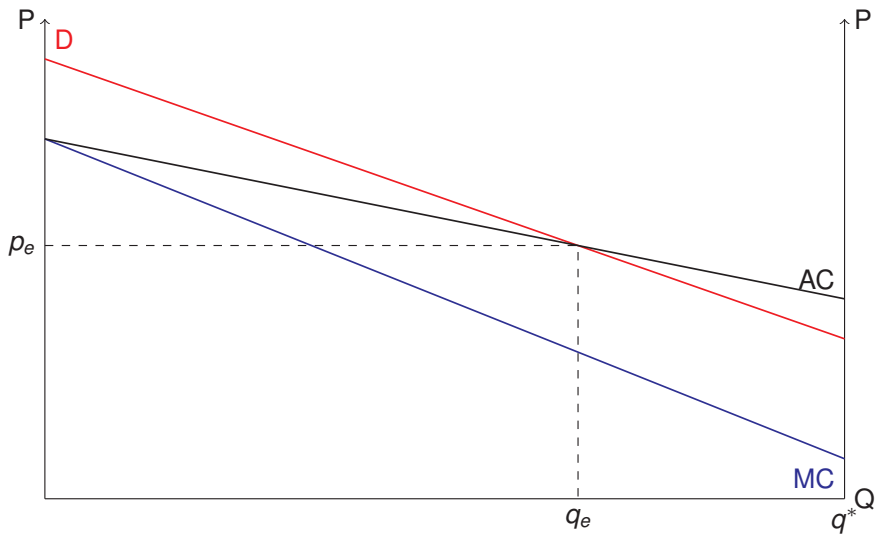
- Used cars market
 - **Peaches** (10000) & **lemons** (1000)



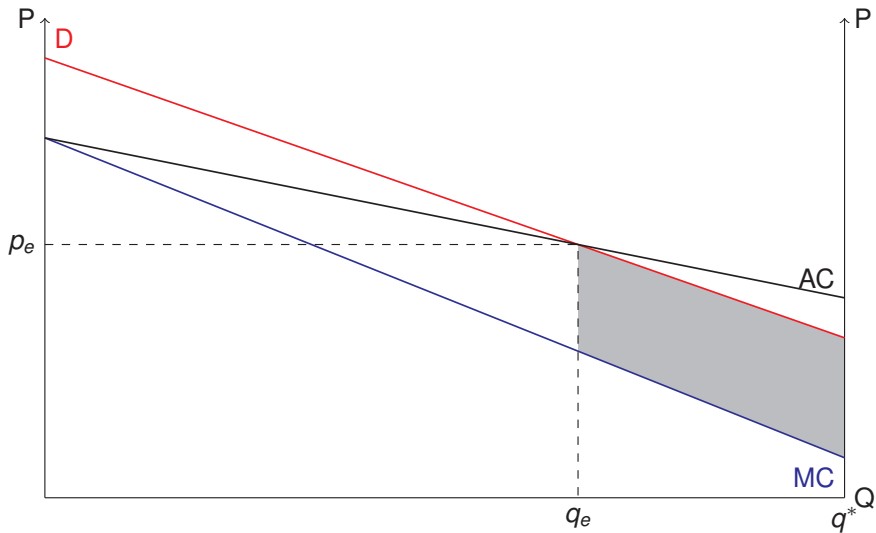
Akerlof's market for lemons

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

Adverse selection in graphs



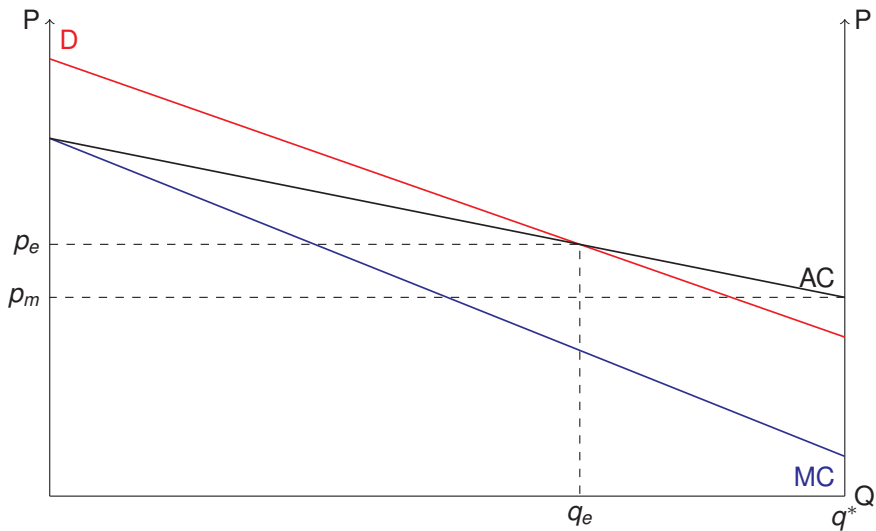
Adverse selection in graphs



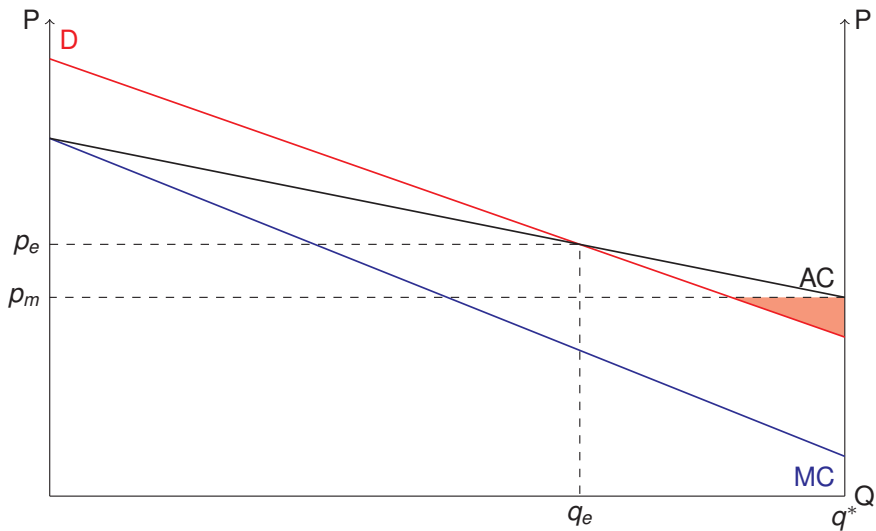
Adverse selection

- **Adverse selection: $AC > MC$**
 - **Sorting** \implies 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

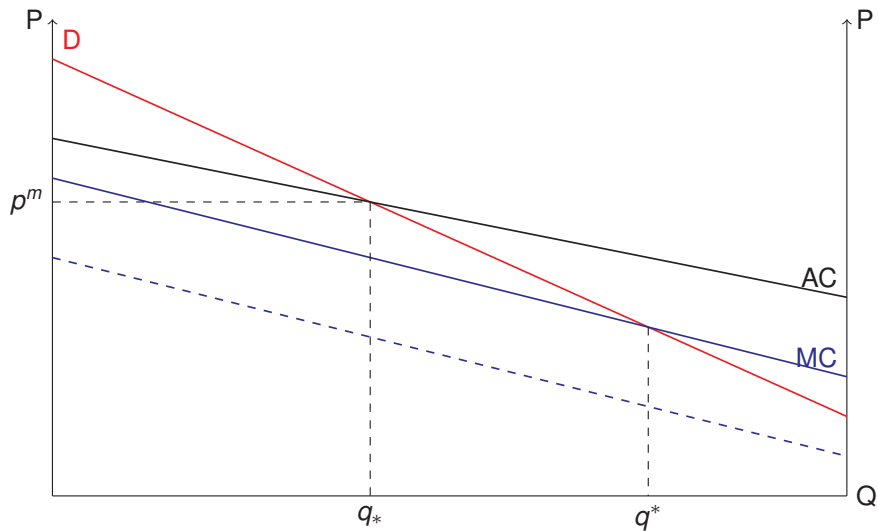
Mandates - not everyone better off



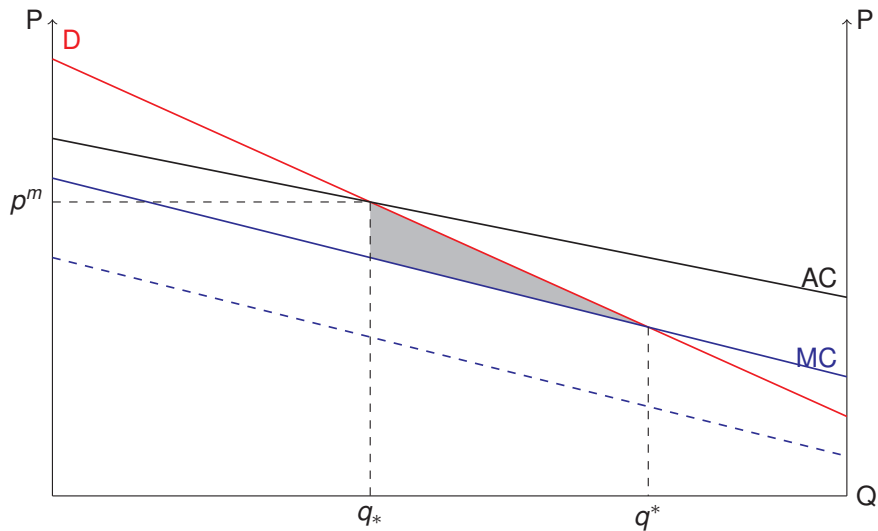
Mandates - not everyone better off



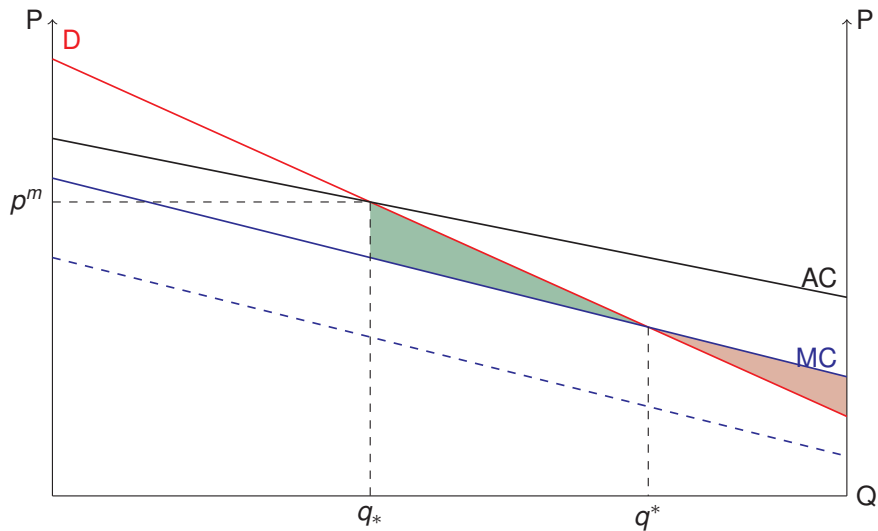
NB! Adverse selection \nrightarrow mandate optimal



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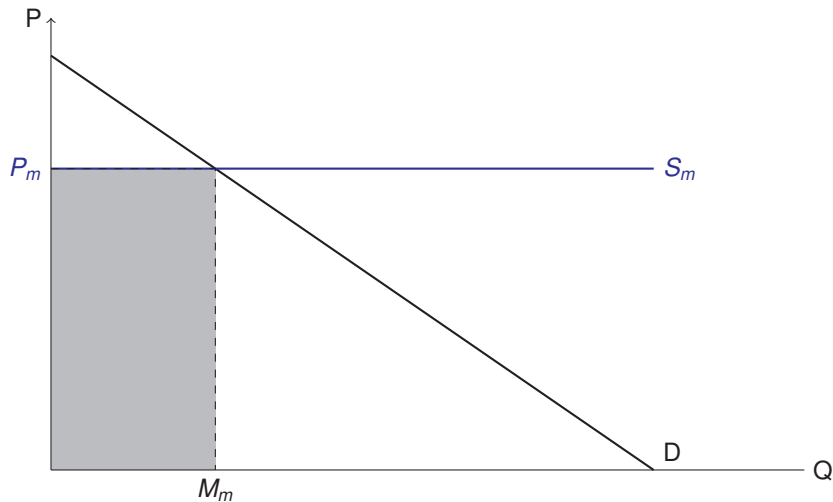
Why public insurance

- **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?**

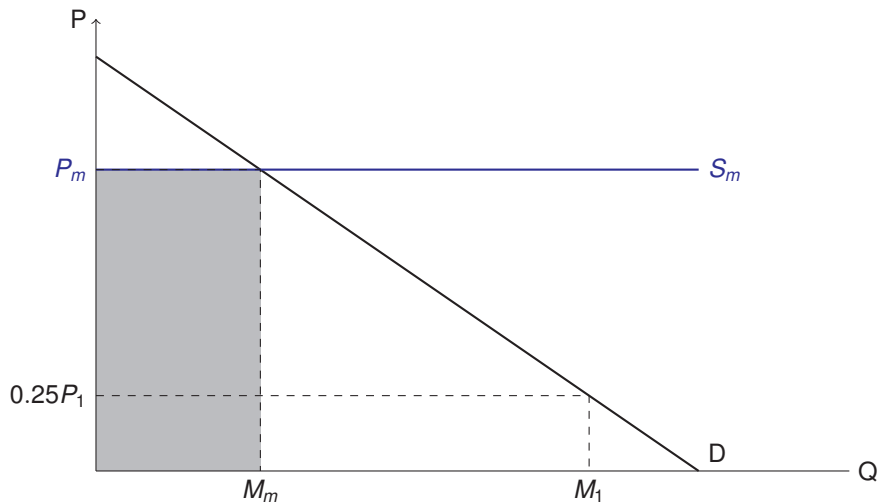
Moral hazard

- **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 (**behavioral** moral hazard)
 - Cheaper to get medicines (elastic demand for medical care)
 - **Copayment, deductibles, coinsurance**
 - **Paternalism/myopia**

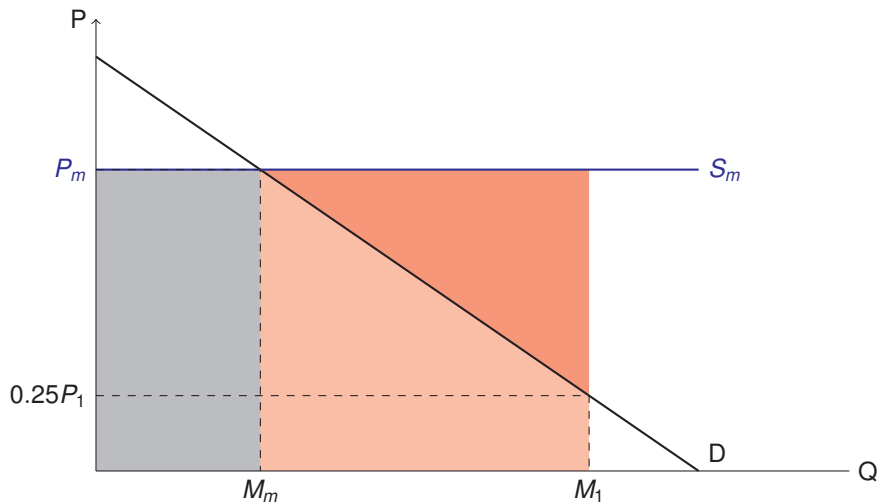
Moral hazard: overprovision



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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*

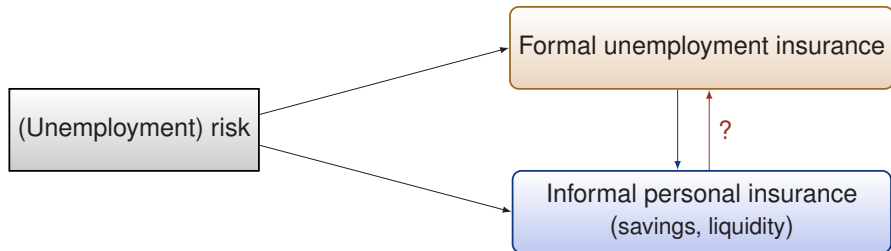
- **Health insurance**
- **Unemployment insurance**
- **Public pensions** (later)
 - **Adverse selection:** wealthy, productive people
 - **Moral hazard:** people retire earlier

- **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

For next time

- **RG, ch.9, ex 4**
- **RG, ch.10, ex 2**