The Political Economy of Labor Policy

Diego Huerta

January 20, 2022

Motivation

- Employment protection legislations (**EPLs**) $\Leftrightarrow$ Dismissal regulations.

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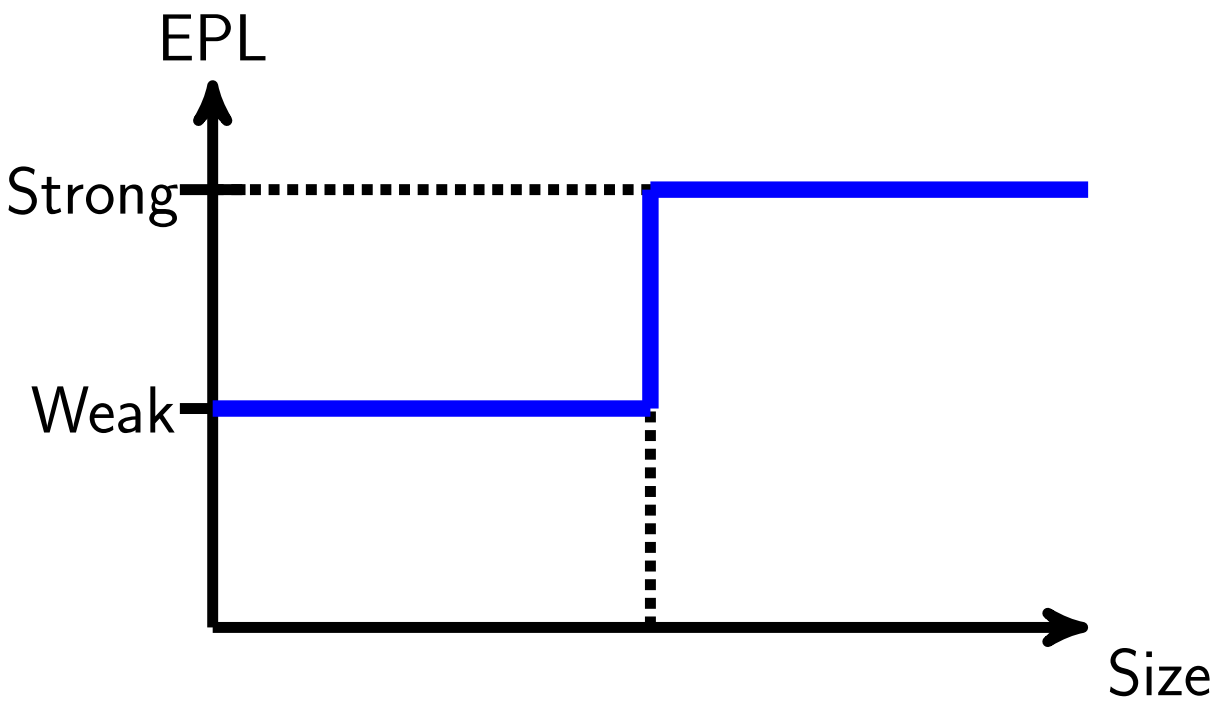
- **Observation:** Smaller firms face weaker EPLs than large firms (**S-shaped EPLs**).



Motivation

Why does EPLs design matter?

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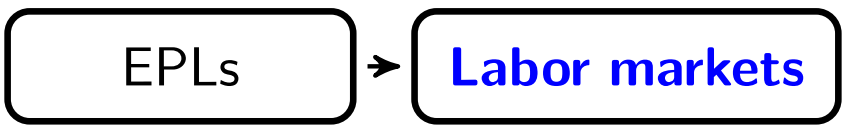


- Schivardi and Torrini (2008); Leonardi and Pica (2013); Martins (2009); Boeri and Jimeno (2005).

Motivation

Why does EPLs design matter?

- Garicano et al. (2016); Gourio and Roys (2014); Guner et al. (2008).

Motivation

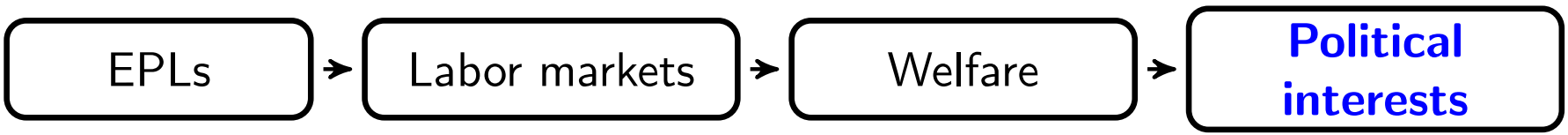
Why does EPLs design matter?

- Welfare costs of S-shaped EPLs: **3.5 %** of GDP.

Motivation

- **Main Question:**
  How do S-shaped EPLs come to exist?

Motivation



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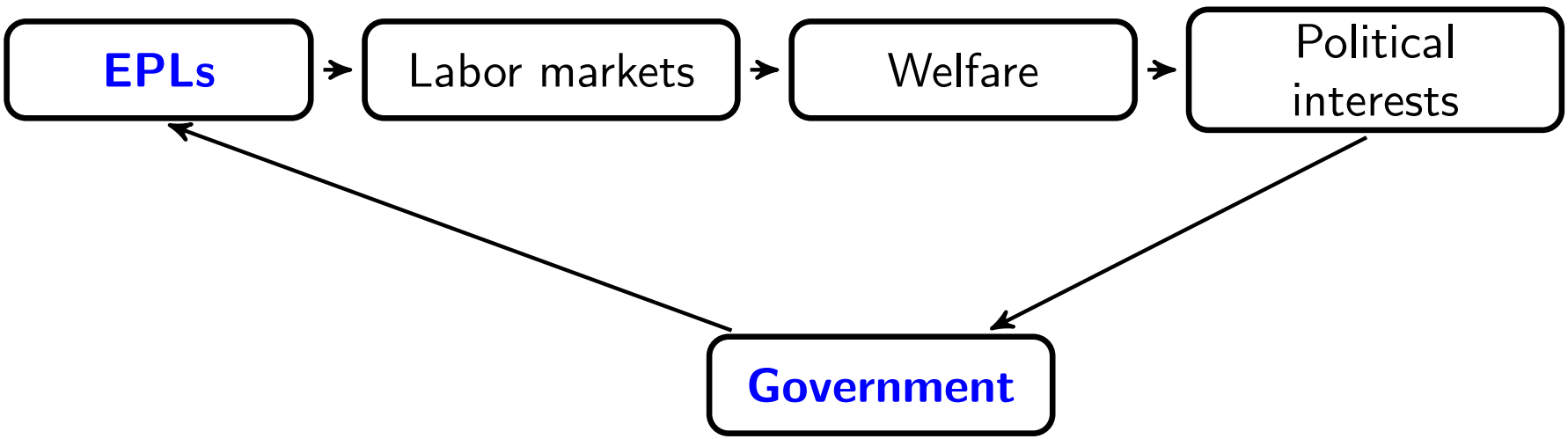
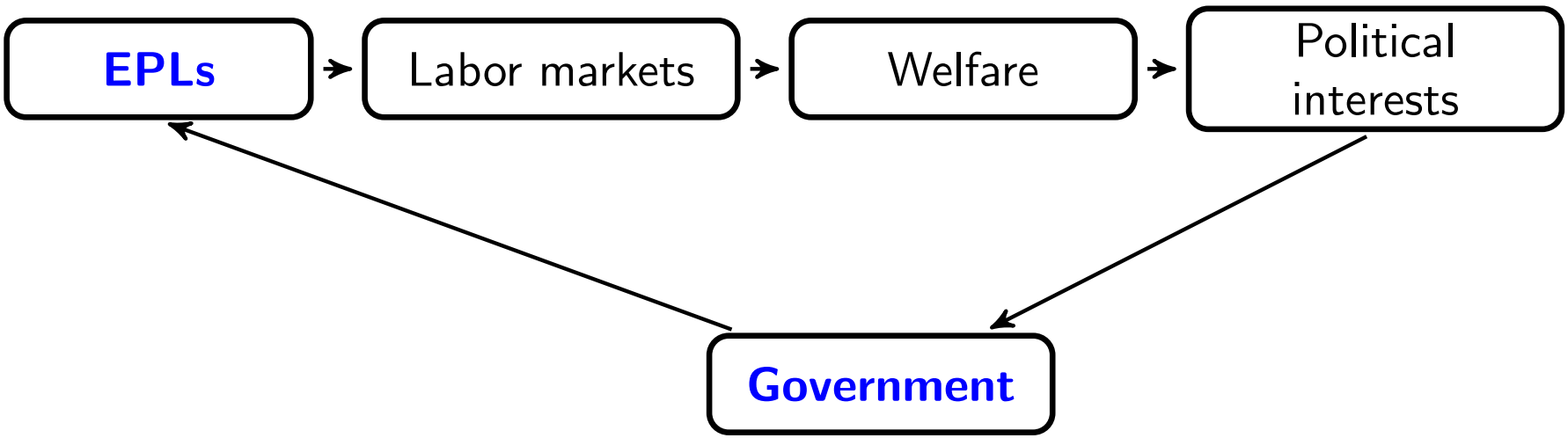
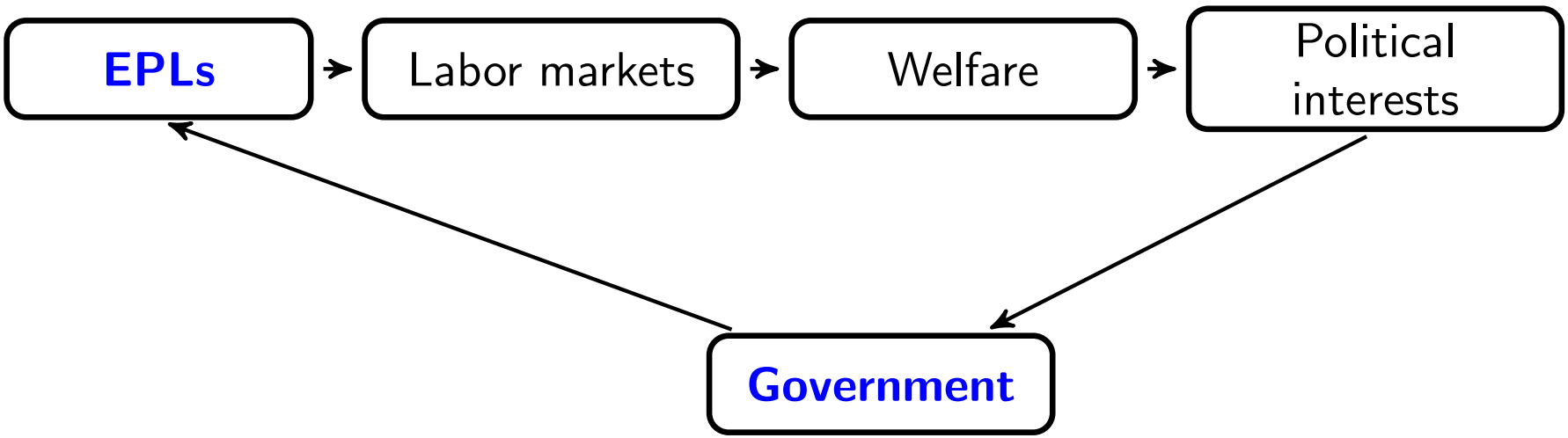

EPLs
Labor markets
Welfare
Political interests
Government

Motivation



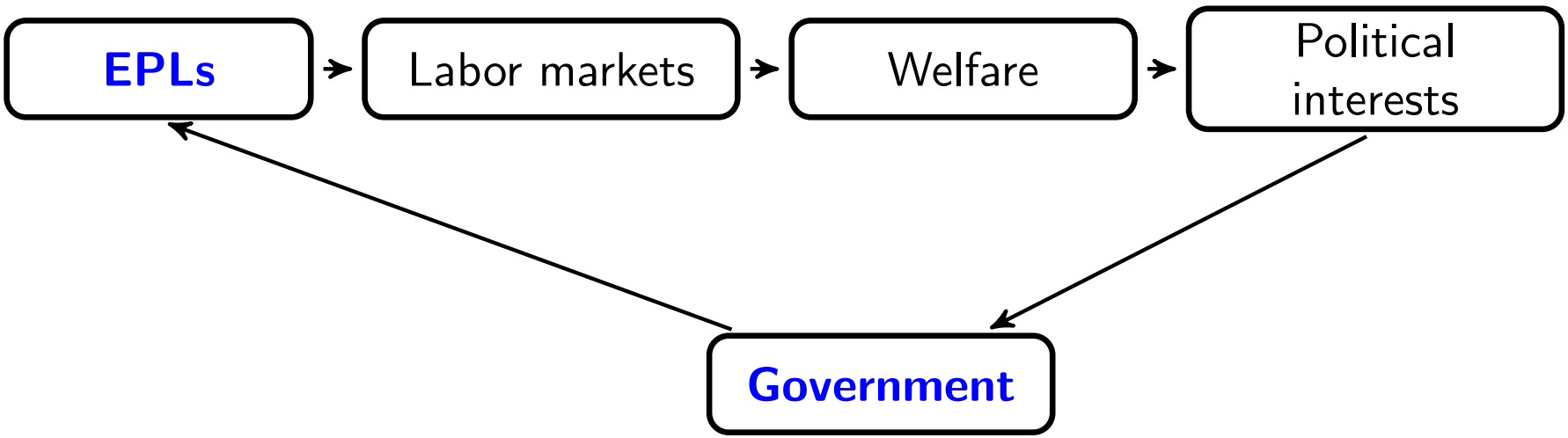
- Policy intervention works on the extensive margin.

Motivation



- Policy intervention works on the extensive margin.
- **Positive perspective**.

Motivation



- Saint-Paul (1996, 2002); Boeri and Jimeno (2005).

Contribution

1. S-shaped EPLs arise as an equilibrium outcome.

Contribution

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2. Model for the study of the scope of EPLs that links:
   - Labor.
   - Macro.
   - Political economy.

This paper

Main Question: How do S-shaped EPLs come to exist?

1. Economic interests towards EPLs?

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3. Implementation?

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Main Question: How do S-shaped EPLs come to exist?

1. Economic interests towards EPLs?
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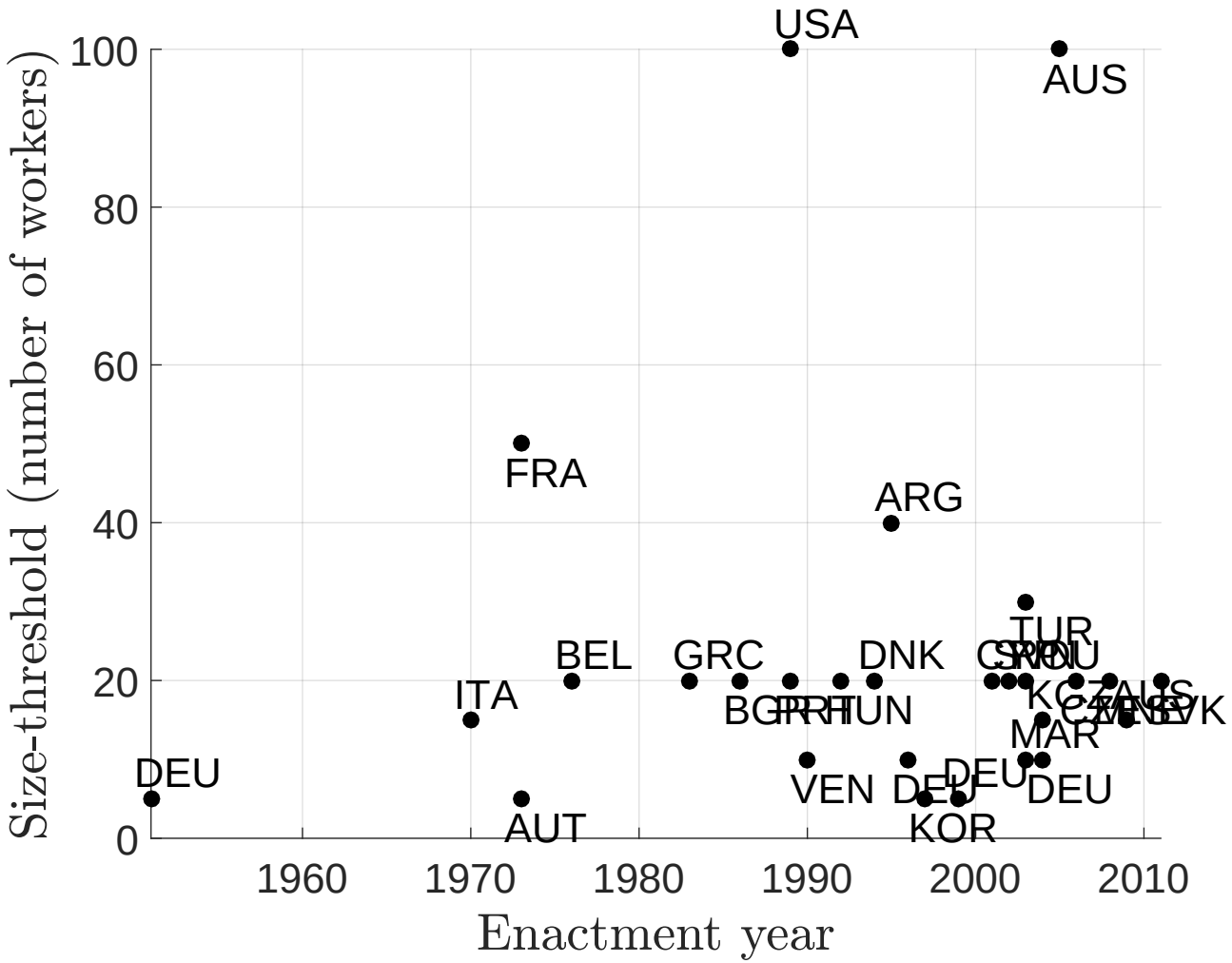
2. Equilibrium EPLs design?
   - S-shaped regardless of political orientation.
3. Implementation?
   - Decentralized bargaining between unions and entrepreneurs.

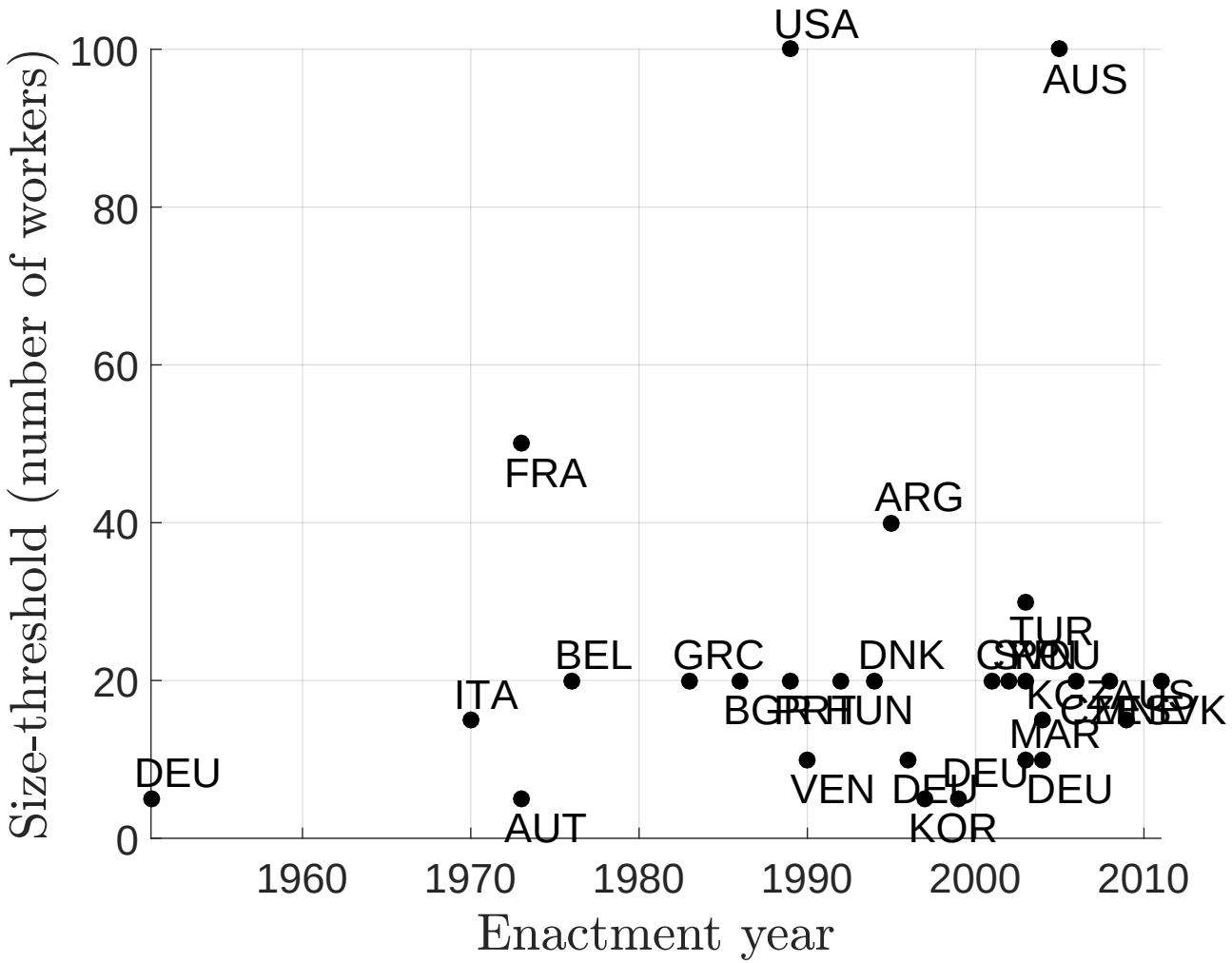
1. Motivation
2. Facts
3. Model
4. Results
   - Political Preferences
   - Equilibrium EPLs design
5. Conclusions

Dismissal regulations (EPLs)



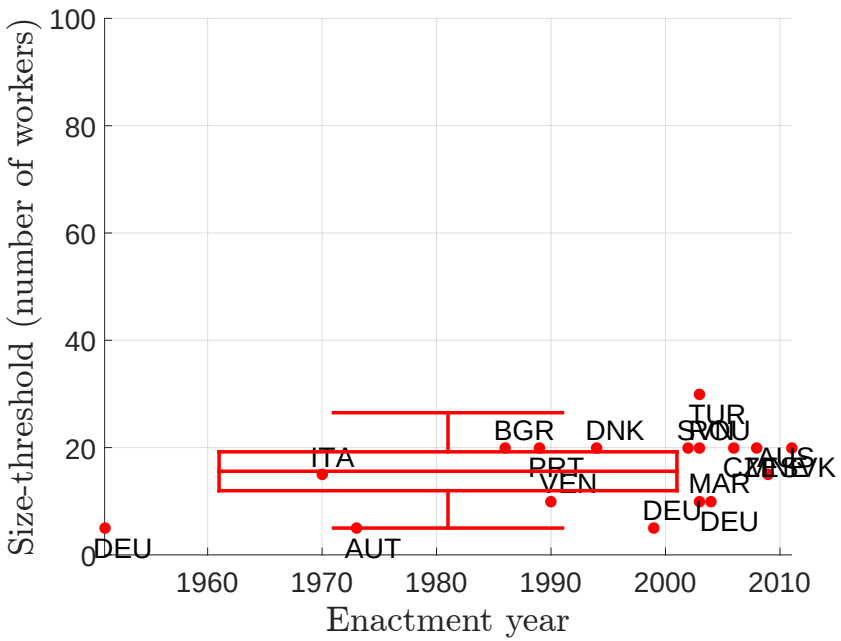
- **Fact 1:** S-shaped EPLs used in many countries.

Dismissal regulations (EPLs)

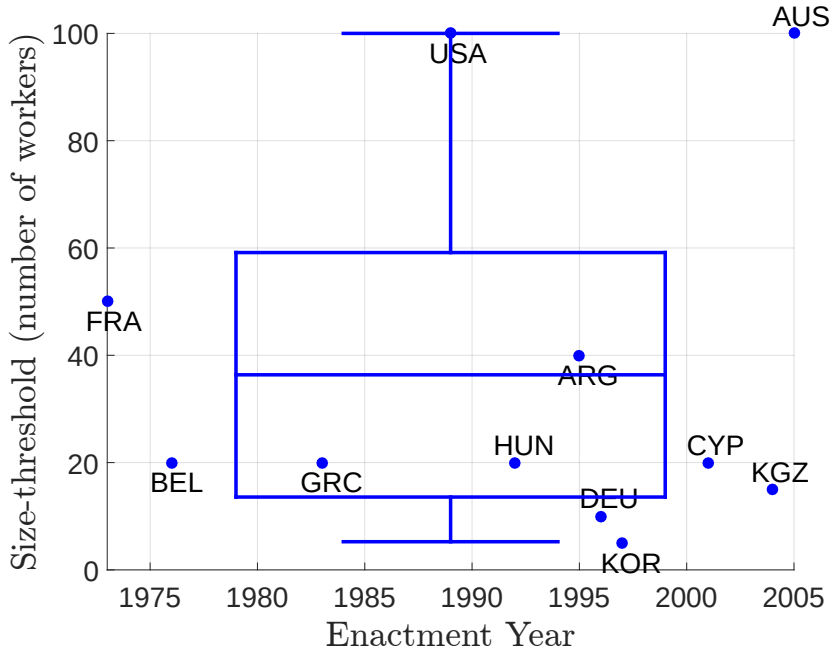


- **Fact 2:** One-time reform.

Dismissal regulations (EPLs)



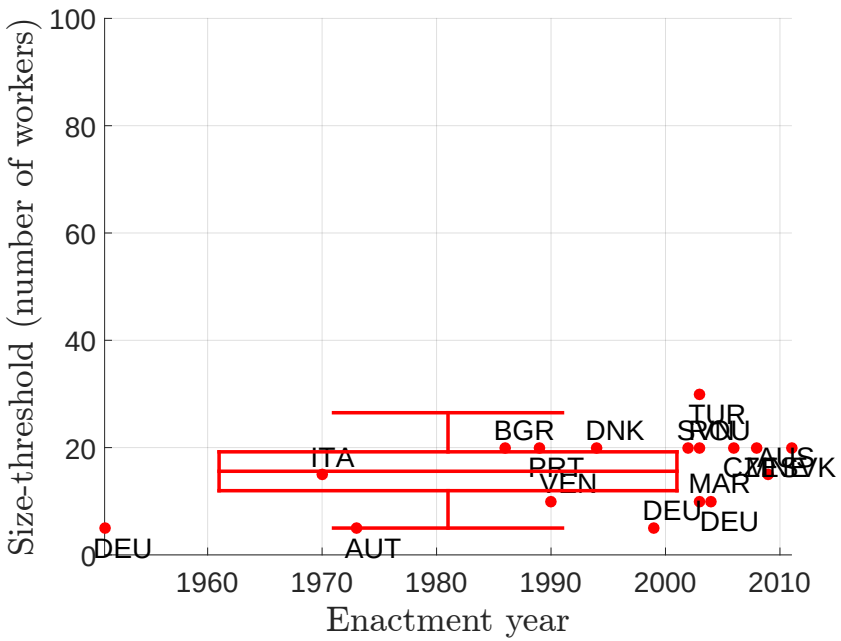
Size-threshold, left-wing.



Size-threshold, right-wing.

- **Fact 3:** Left-wing defines a lower size-threshold.

Dismissal regulations (EPLs)



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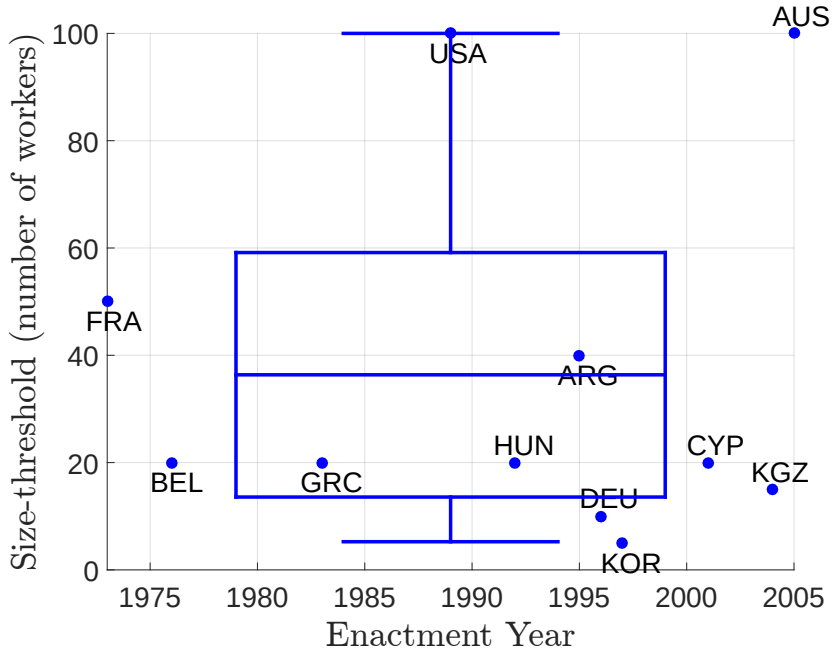


Size-threshold, right-wing.

- **Fact 4:** S-shaped EPLs used either by the left or the right.

1 Motivation

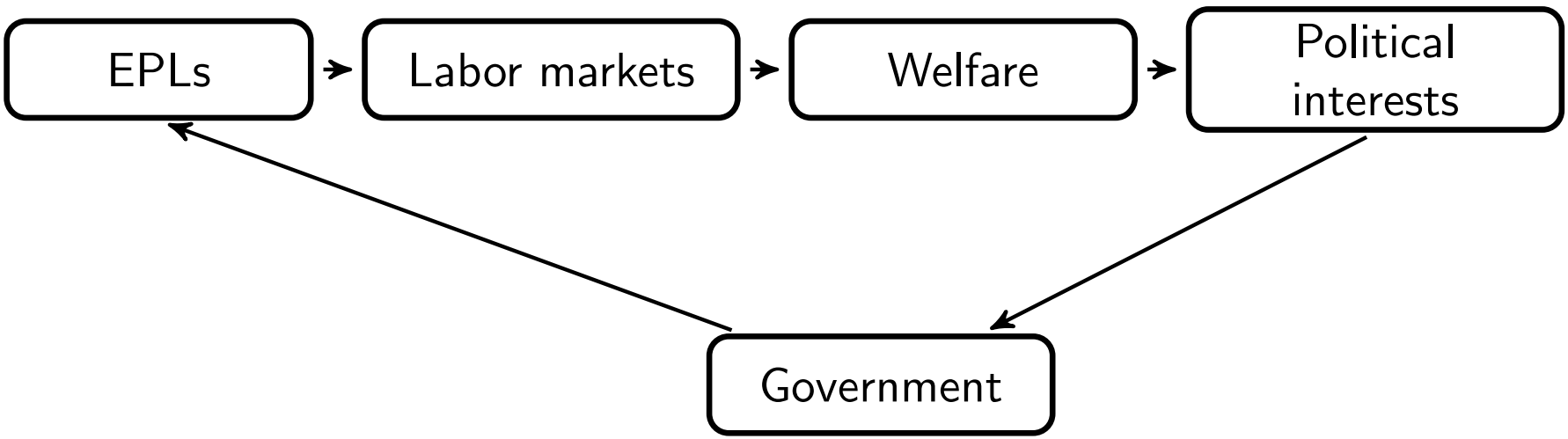
2 Facts

3 Model

4 Results
- Political Preferences
- Equilibrium EPLs design

5 Conclusions

Model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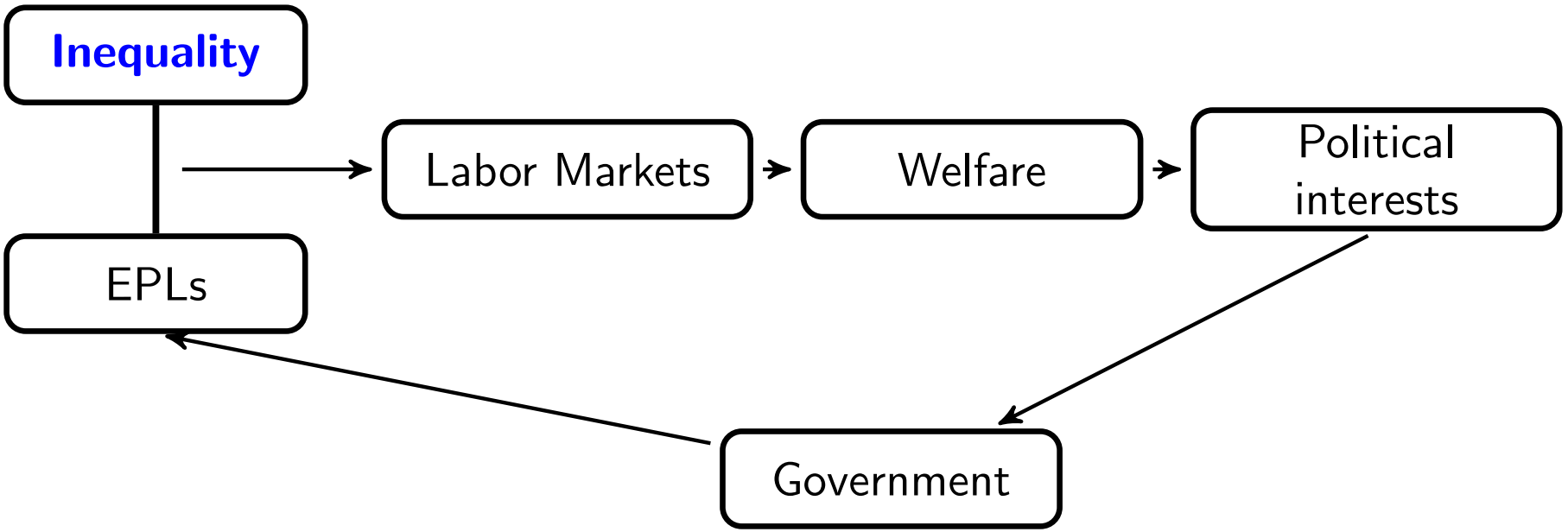
Model


Inequality
Labor Markets
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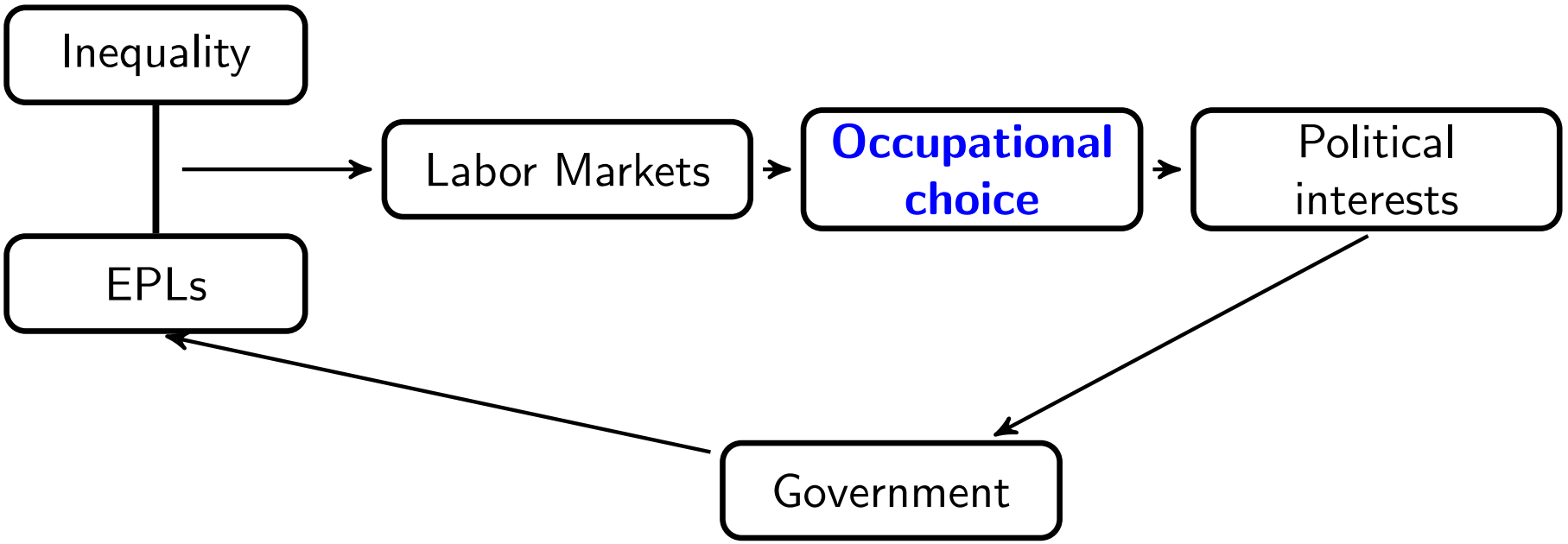
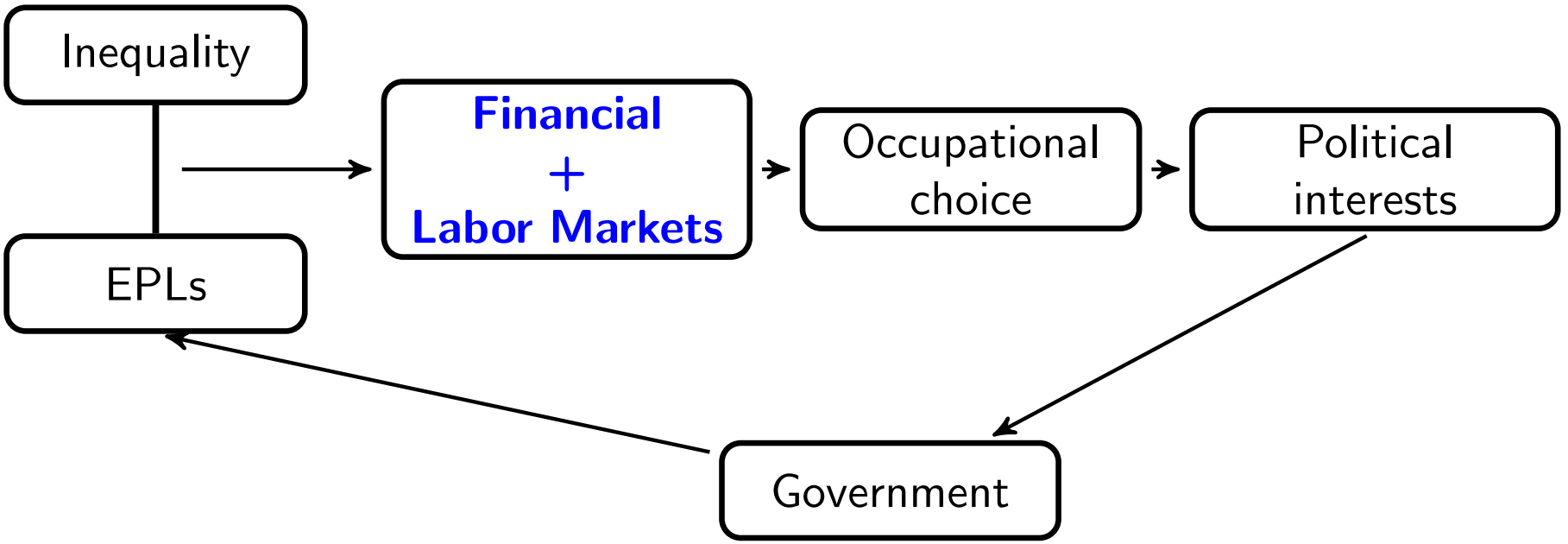
Model


Inequality
Labor Markets
Occupational choice
Political interests
EPLs
Government

Model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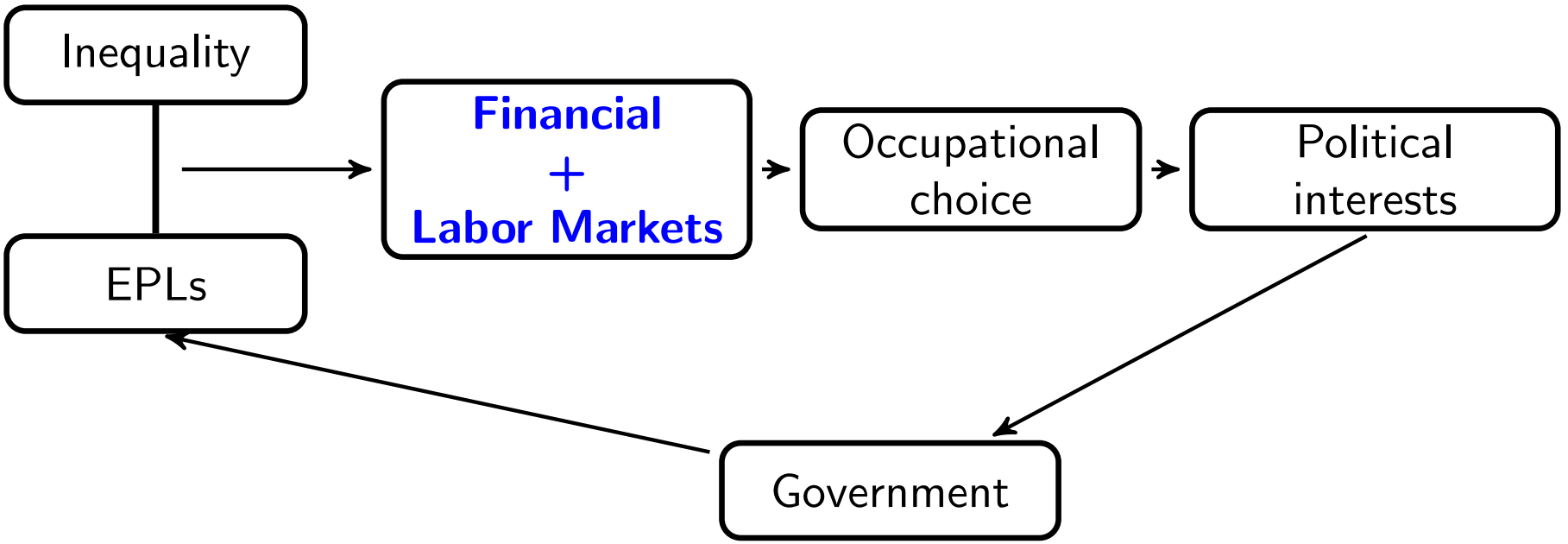

- EPLs distort firms decisions through a financial channel (Simintzi et al., 2015; Serfling, 2016; Bai et al., 2020).

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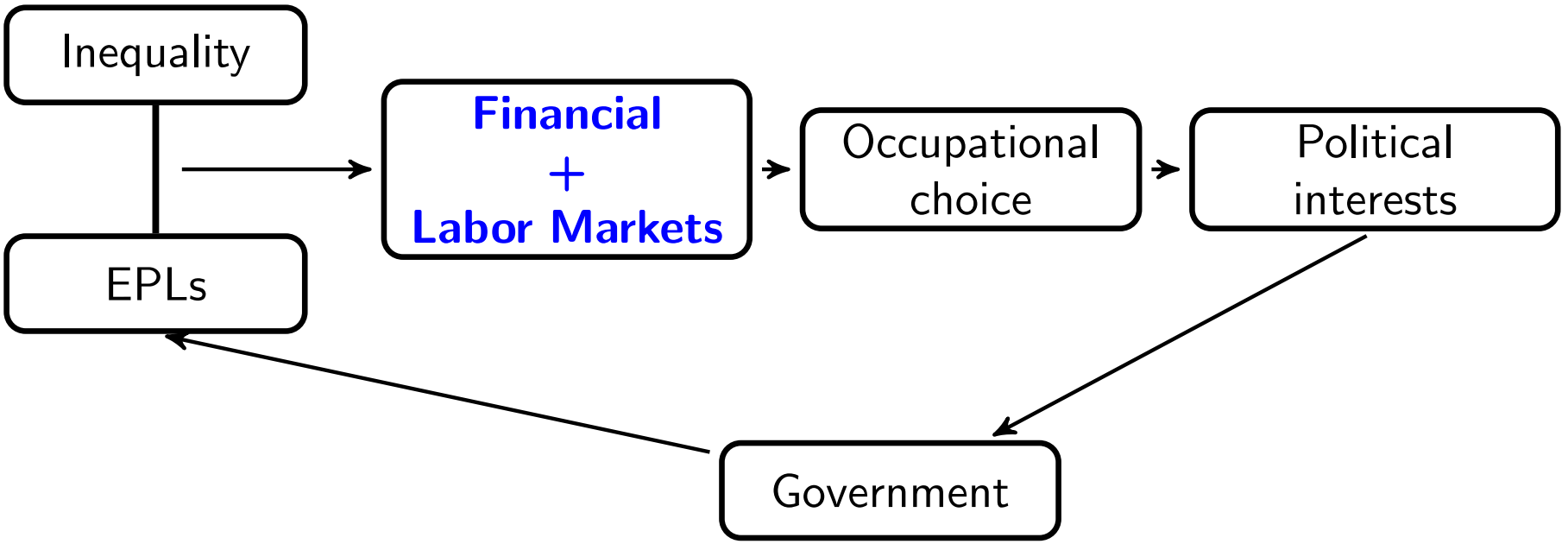

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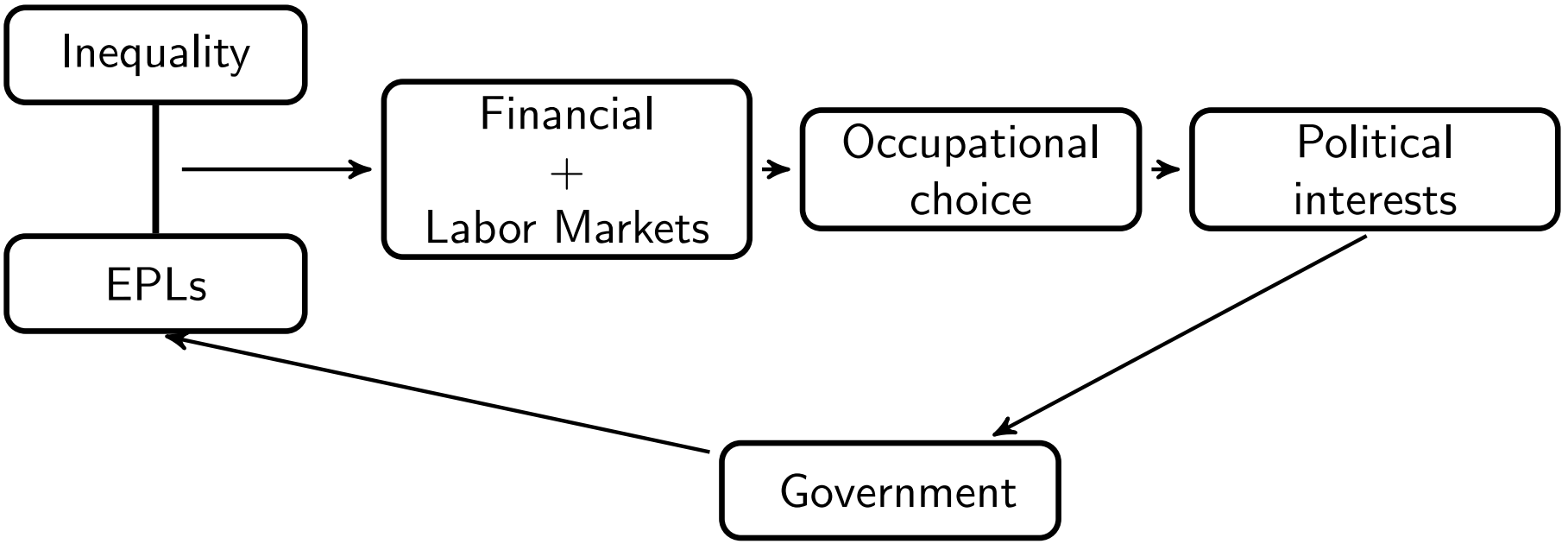
- **Financial frictions matter.**

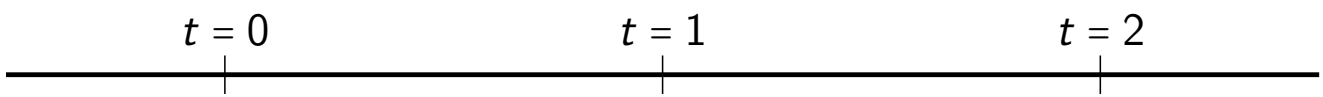
Model



- **Model:**
  builds on Fischer and Huerta (2021, *JPubE*).

Model: timing

- Dismissal regulations (EPLs): $\phi \in \{\phi_0, \phi_1\}, \quad \phi_1 > \phi_0$.
- Labor policy design, $\mathcal{P}(a) : [0, a_{max}] \to \{\phi_0, \phi_1\}$.



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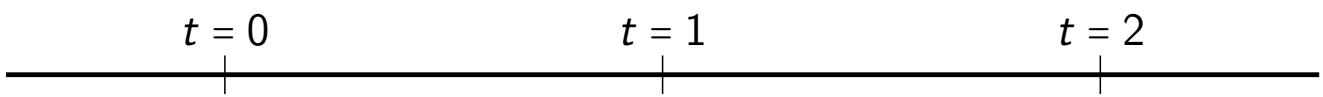

- Wealth: $a \sim g(a)$
- $f(K, L) = K^{\alpha} L^{\beta}$
- EPLs: $\mathcal{P}_0$

$$\mathcal{P}_0(a) = \phi_0$$

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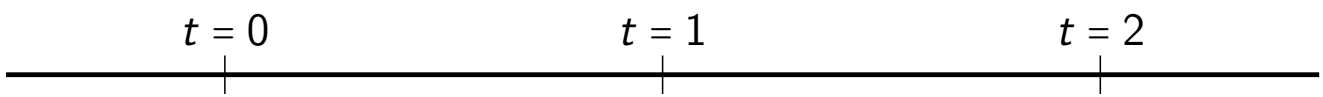

- Wealth: $a \sim g(a)$
- $f(K, L) = K^{\alpha} L^{\beta}$
- EPLs: $\mathcal{P}_0$

- Labor reform: $\mathcal{P}_0 \to \mathcal{P}$.

Government intervention: $\phi_0 \to \phi_1$

Model: timing

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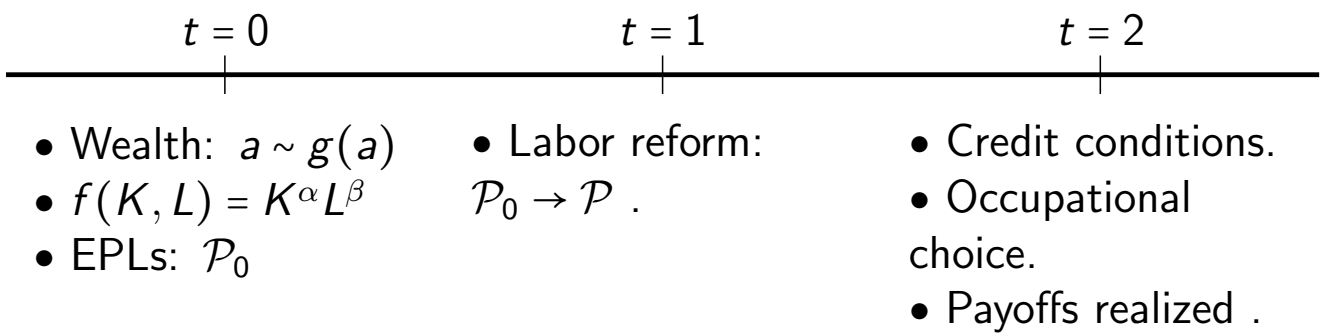
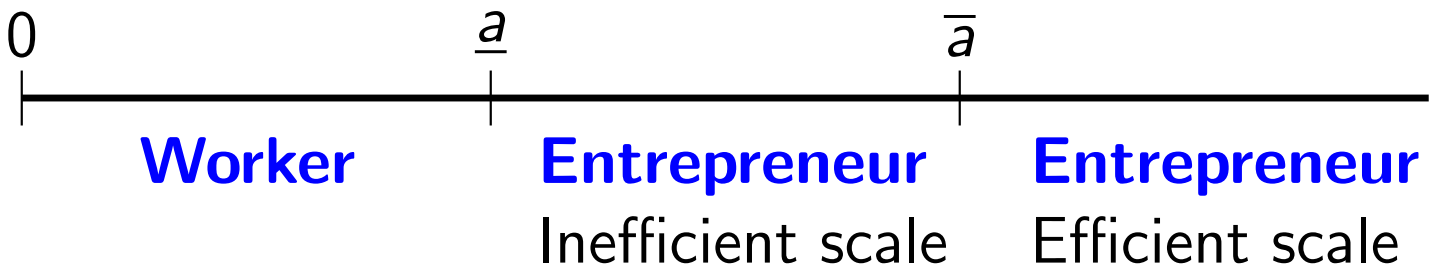


Equilibrium given $\mathcal{P}_0(a) = \phi_0$.



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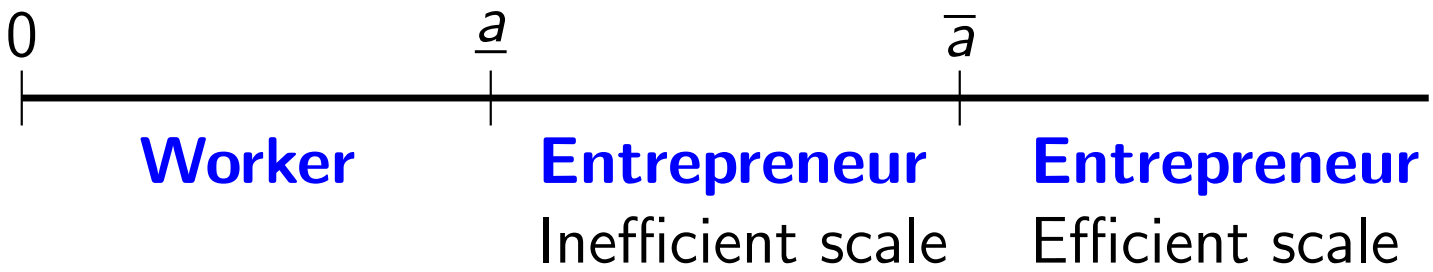

Some notation:

- $\mathbb{E}w = (1 - s)w + s\phi w$

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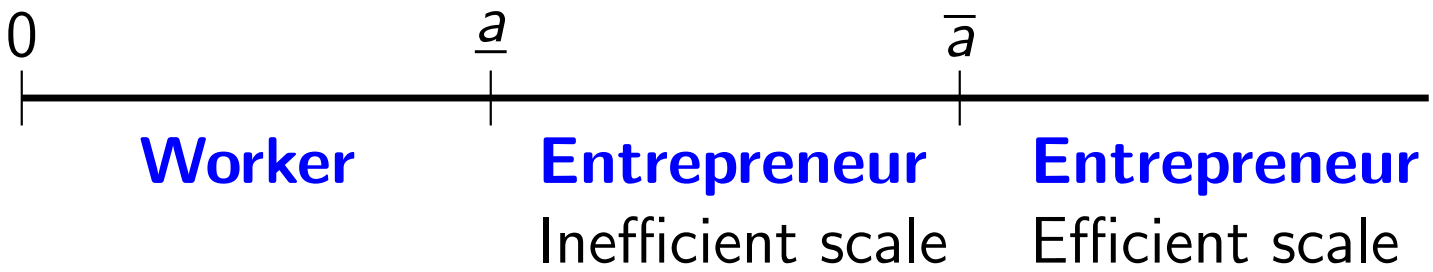

Some notation:

- $\mathbb{E}w \cdot L = [(1-s)w + s\phi w] \cdot L$

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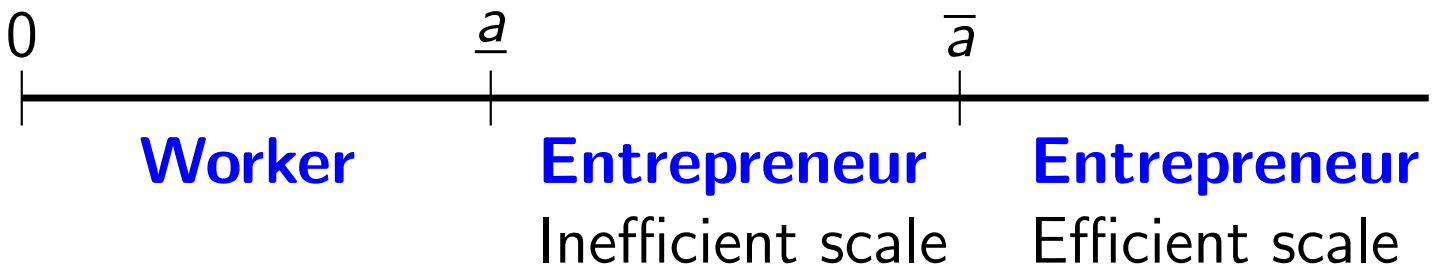

Some notation:

- $\mathbb{E}w \cdot L = \left[(1-s)w + s\phi w\right] \cdot L$
- $U^w(a|\mathcal{P}) \propto \mathbb{E}w \cdot L$

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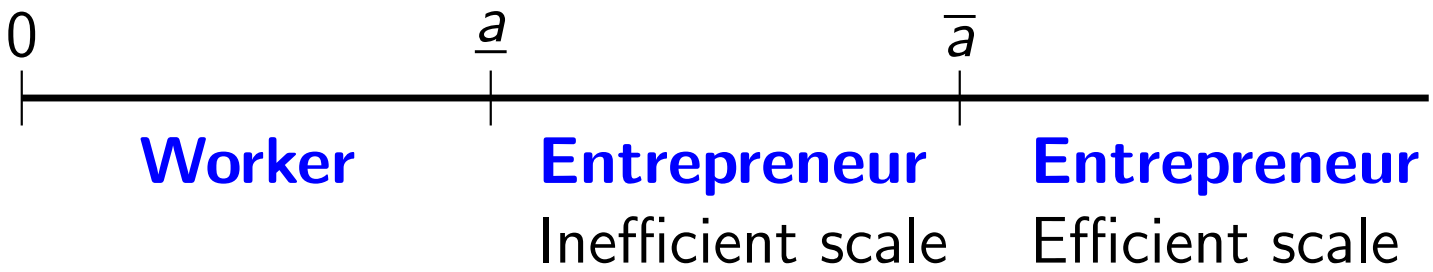

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- $U^e(a|\mathcal{P}) \propto f(K, (1-s)L) - \mathbb{E}w \cdot L$

Government's problem

- Chooses $\mathcal{P}(a) : [\underline{a}, a_{max}] \to \{\phi_0, \phi_1\}$.

$$\max_{\mathcal{P}=\{\mathcal{P}(a)\}_0^{a_{max}}} \{\bar{U}(\mathcal{P}, \lambda) \equiv \lambda \cdot \mathbb{E}_g[U^w(a|\mathcal{P})] + (1-\lambda) \cdot \mathbb{E}_g[U^e(a|\mathcal{P})]\}$$

$$s.t. \qquad \mathbb{E}_g[L_s|\mathcal{P}] = \mathbb{E}_g[L|\mathcal{P}]$$

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Political Preferences for EPLs (ϕ)

Scale sector	Worker	Entrepreneur
Small ($a < \hat{a}$)		
Large ($a > \hat{a}$)		

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- **Small:** $\uparrow \phi \Rightarrow \downarrow$ credit $\Rightarrow \downarrow$ Investment $\Rightarrow \downarrow$ efficient.

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- **Small:** $\uparrow \phi \Rightarrow \downarrow$ credit $\Rightarrow \downarrow$ Investment $\Rightarrow \downarrow$ efficient.
- **Large:** $\uparrow \phi \Rightarrow \uparrow$ labor costs, but still efficient.

Political Preferences for EPLs (ϕ)

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- **Result:** $\mathcal{P}$ must be monotone.
- Size threshold, $a^* \in [\underline{a}, a_{max}]$:

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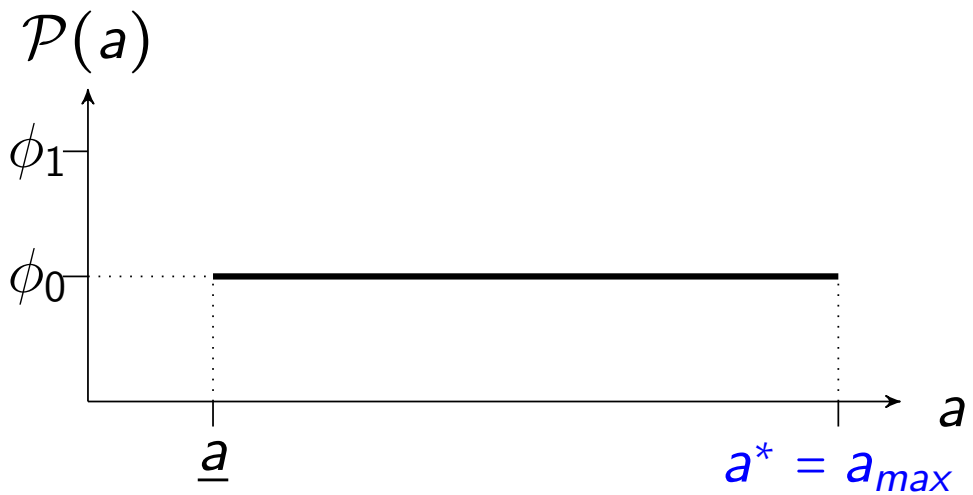

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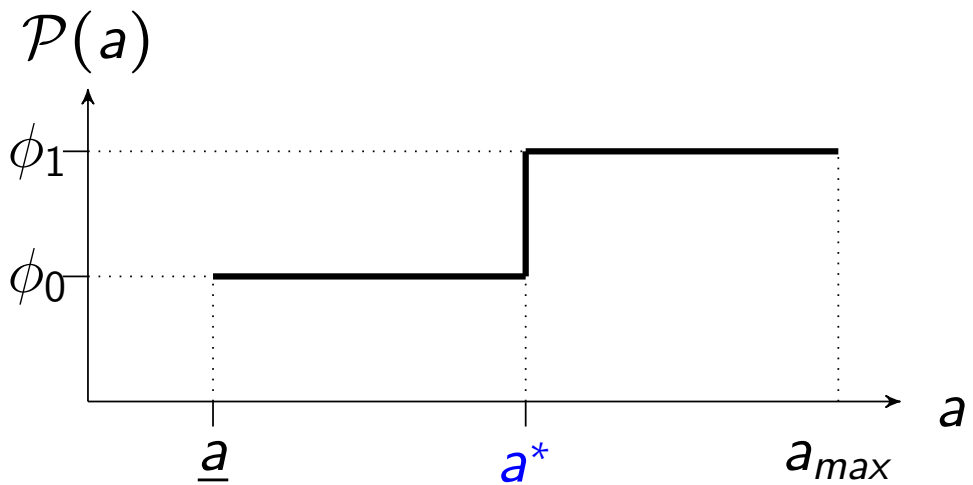

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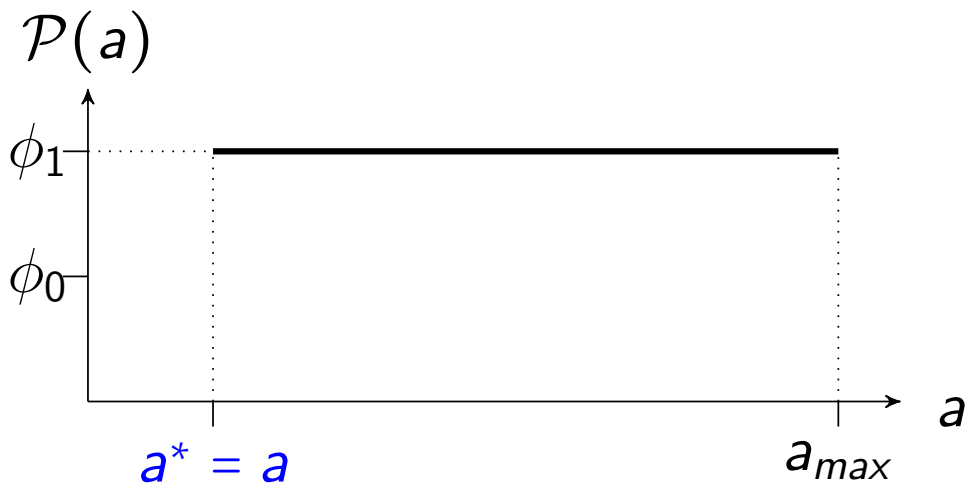

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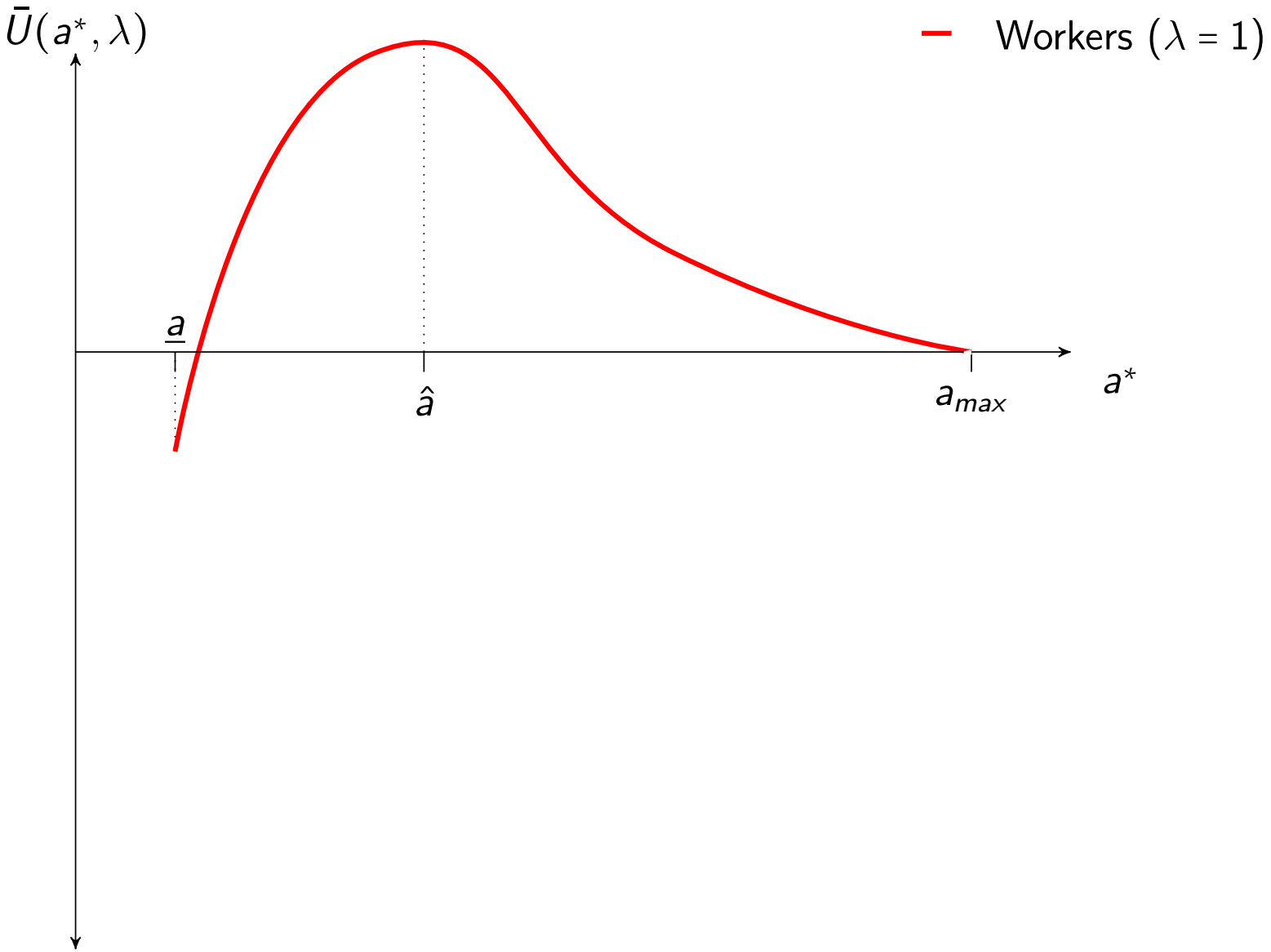
Sticky wages

$$\text{wage} = w(\mathcal{P}_0)$$

Sticky wages: government's weighted-welfare



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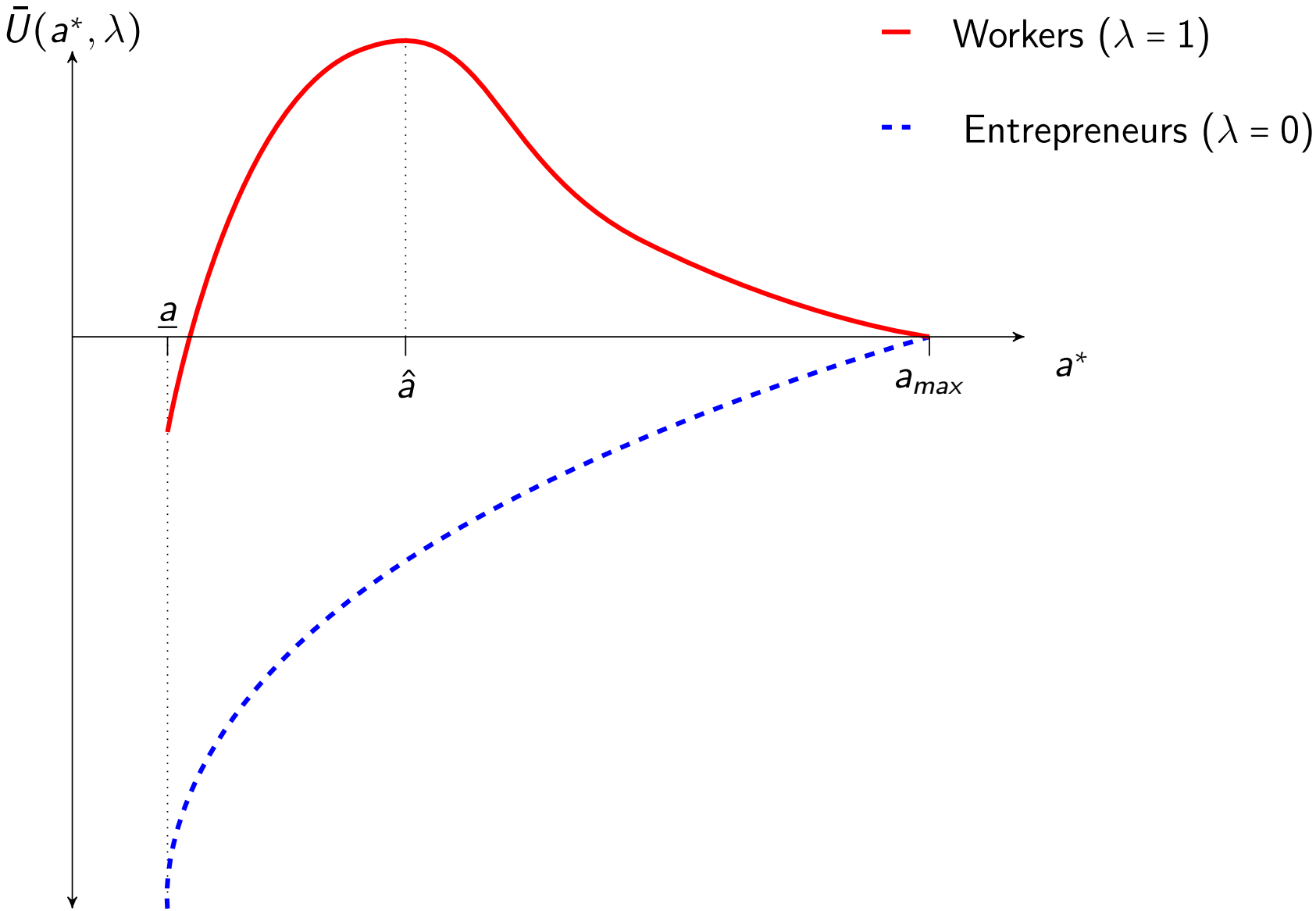

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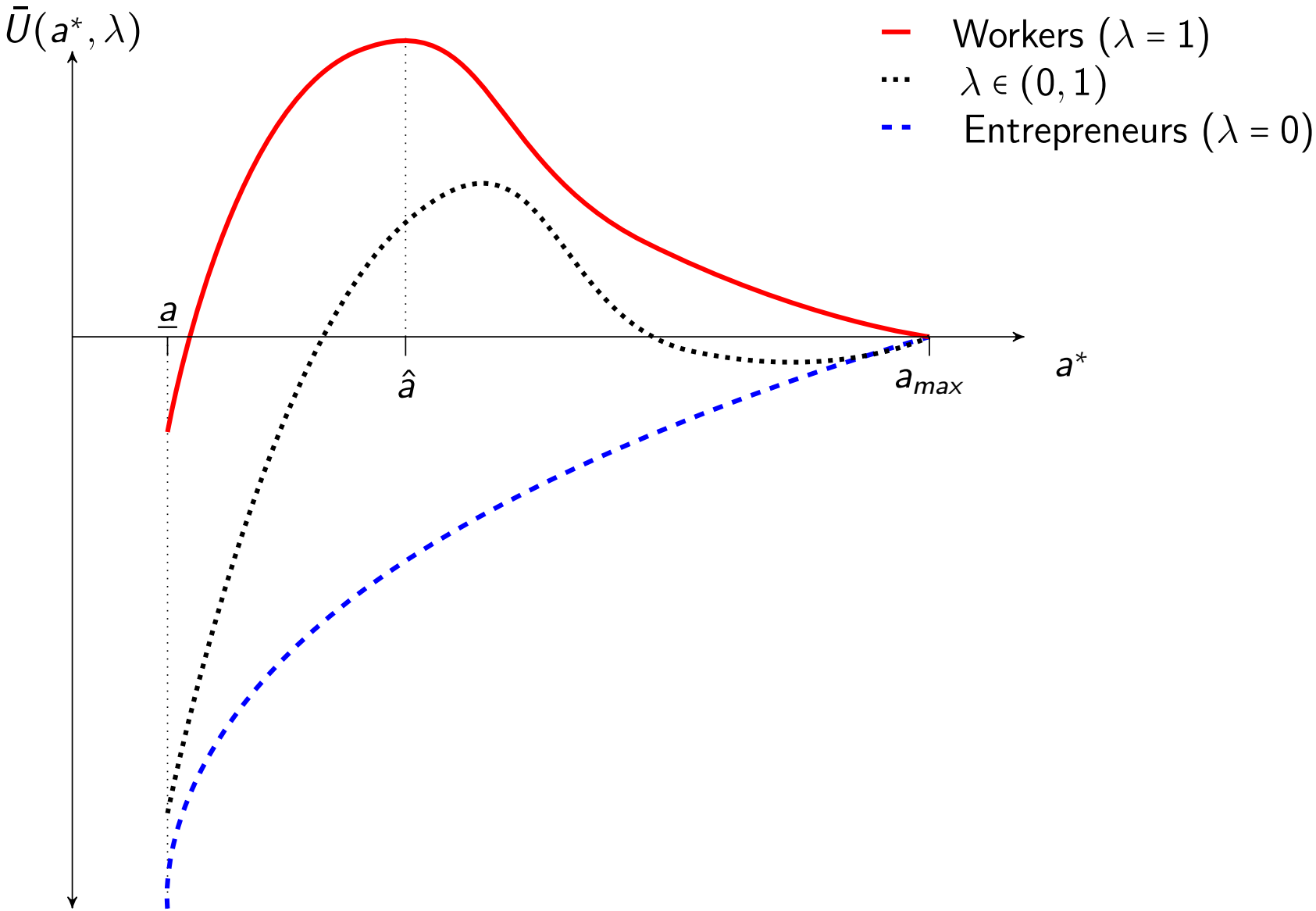
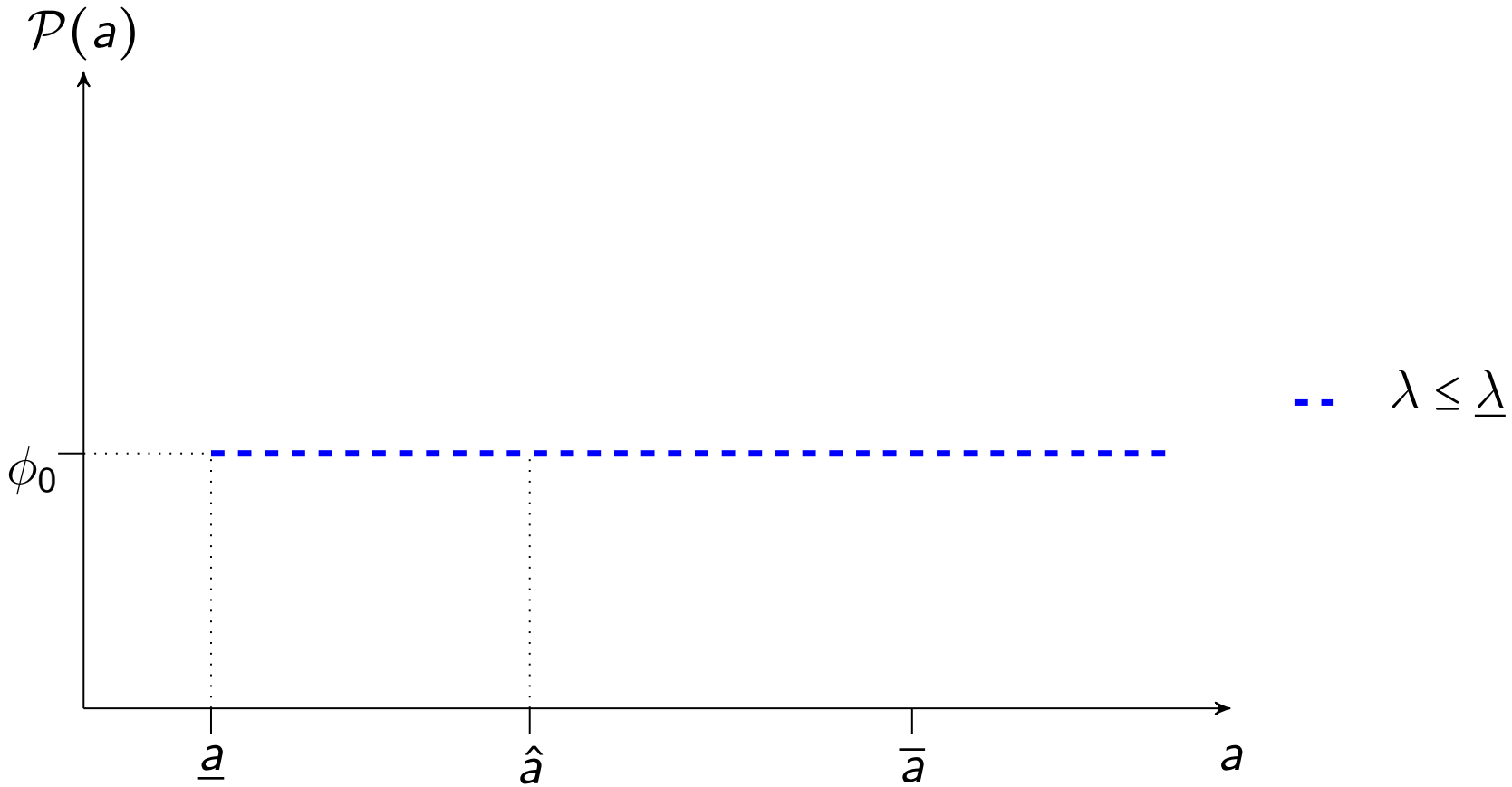


Sticky wages: equilibrium policy



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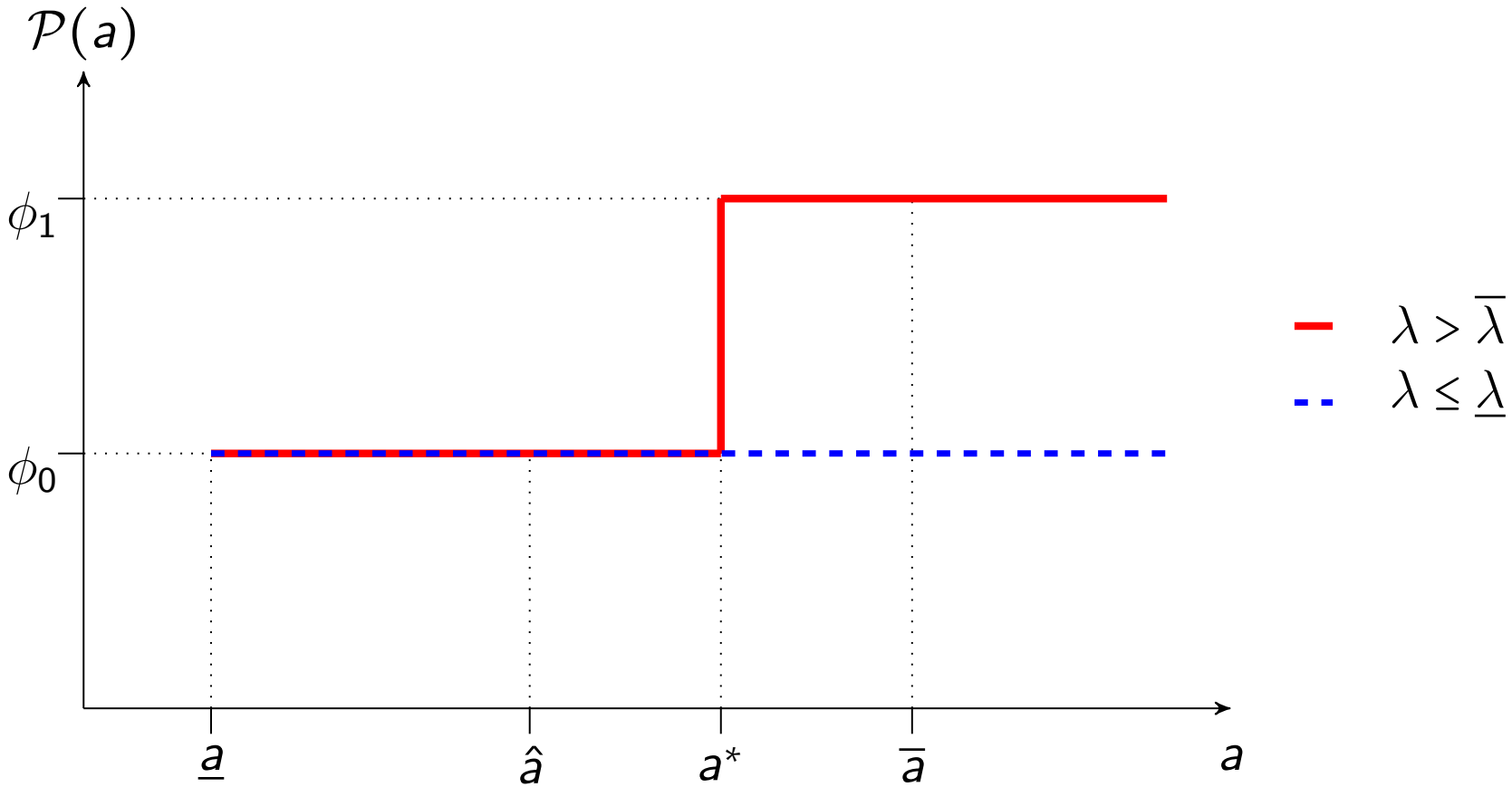

Flexible wages

$$\text{wage} = w(\mathcal{P})$$

Flexible wages

Results:

1. Equilibrium wage is increasing in a^*.
2. $\bar{U}(a^* = a_{max}, \lambda) = \bar{U}(a^* = \underline{a}, \lambda)$.

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Flexible wages

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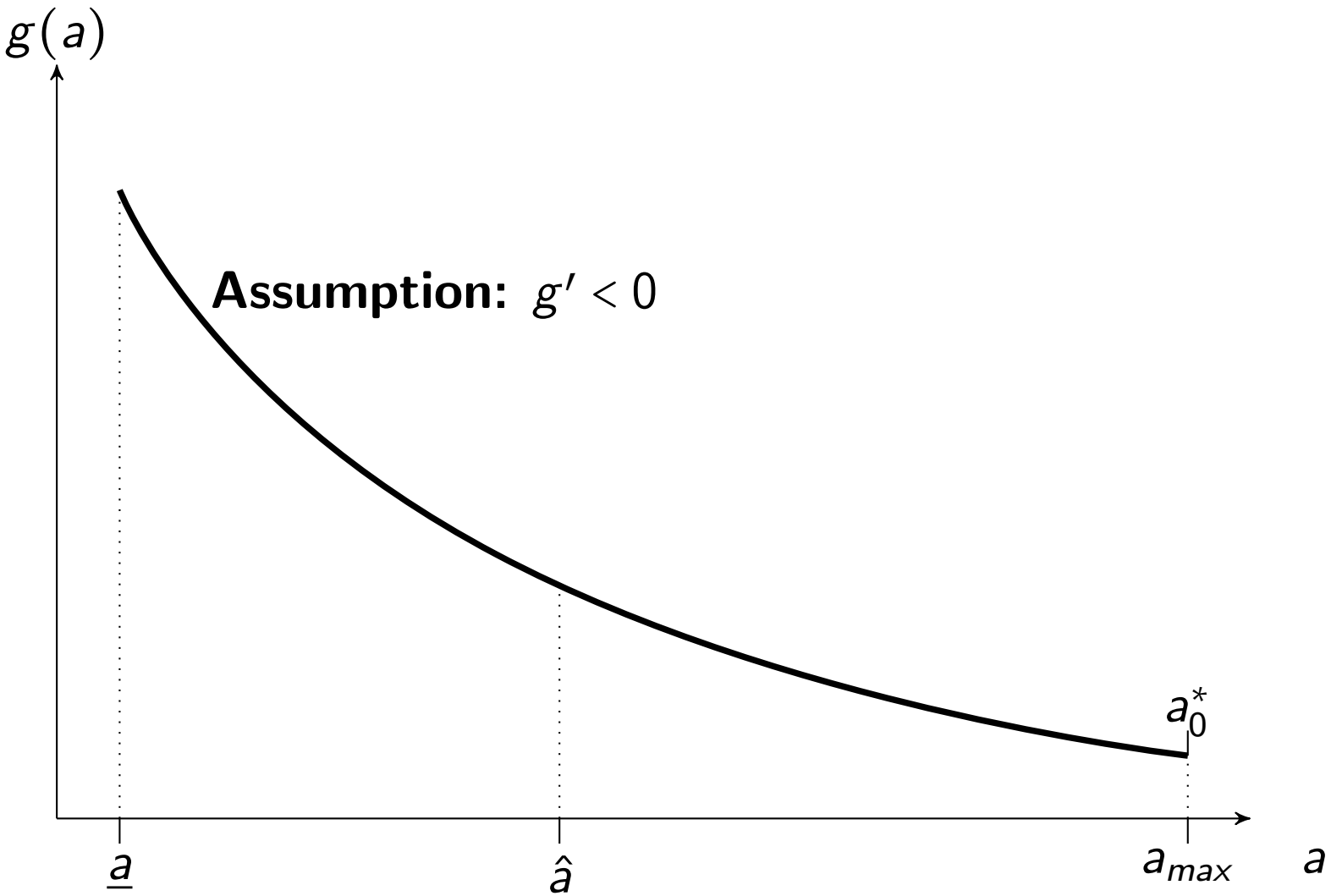
Can the government increase $\bar{U}$ by choosing $a^* \in (\underline{a}, a_{max})$?

YES! For any λ.

Flexible wages: intuition

Workers ($\lambda = 1$)



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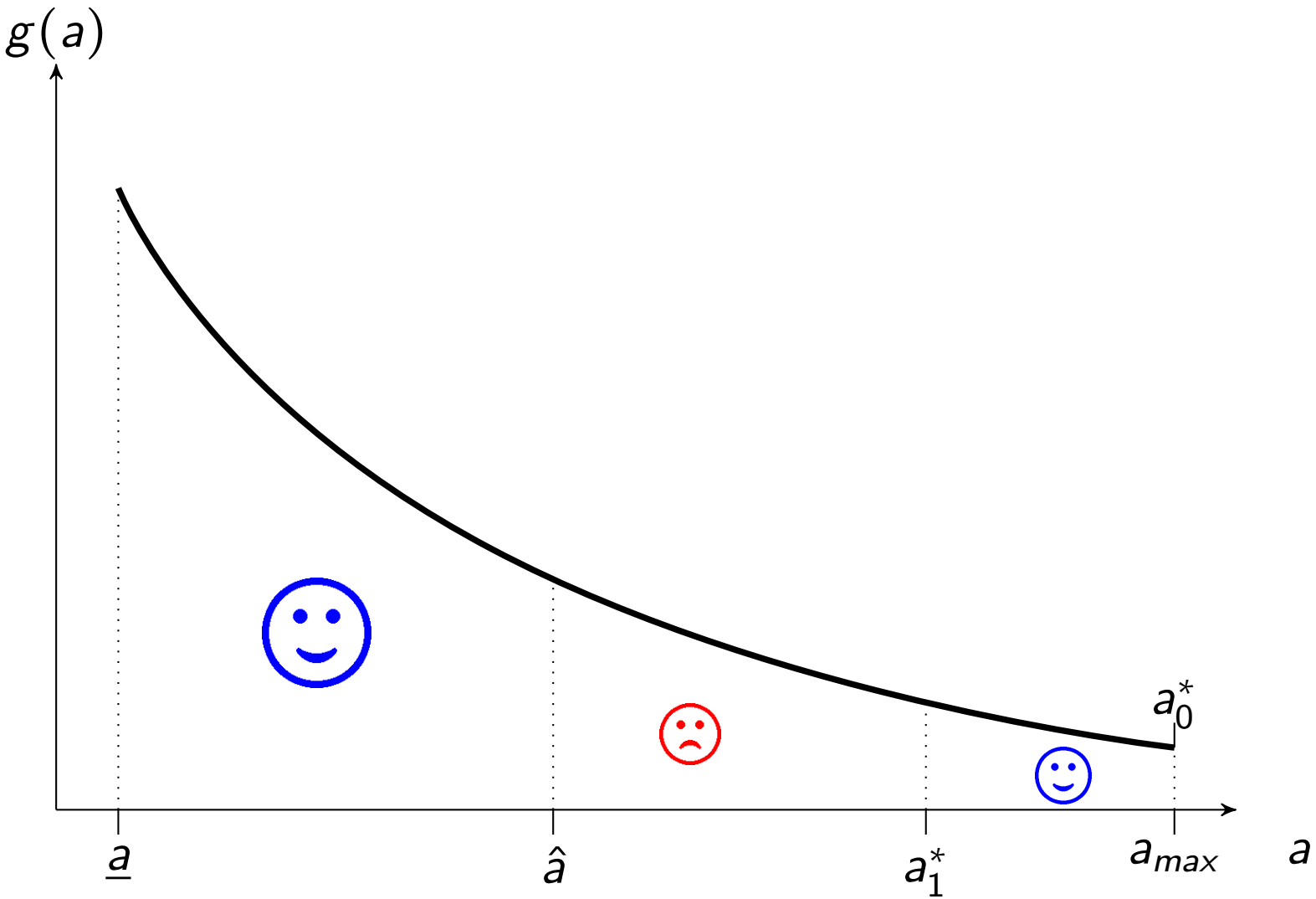

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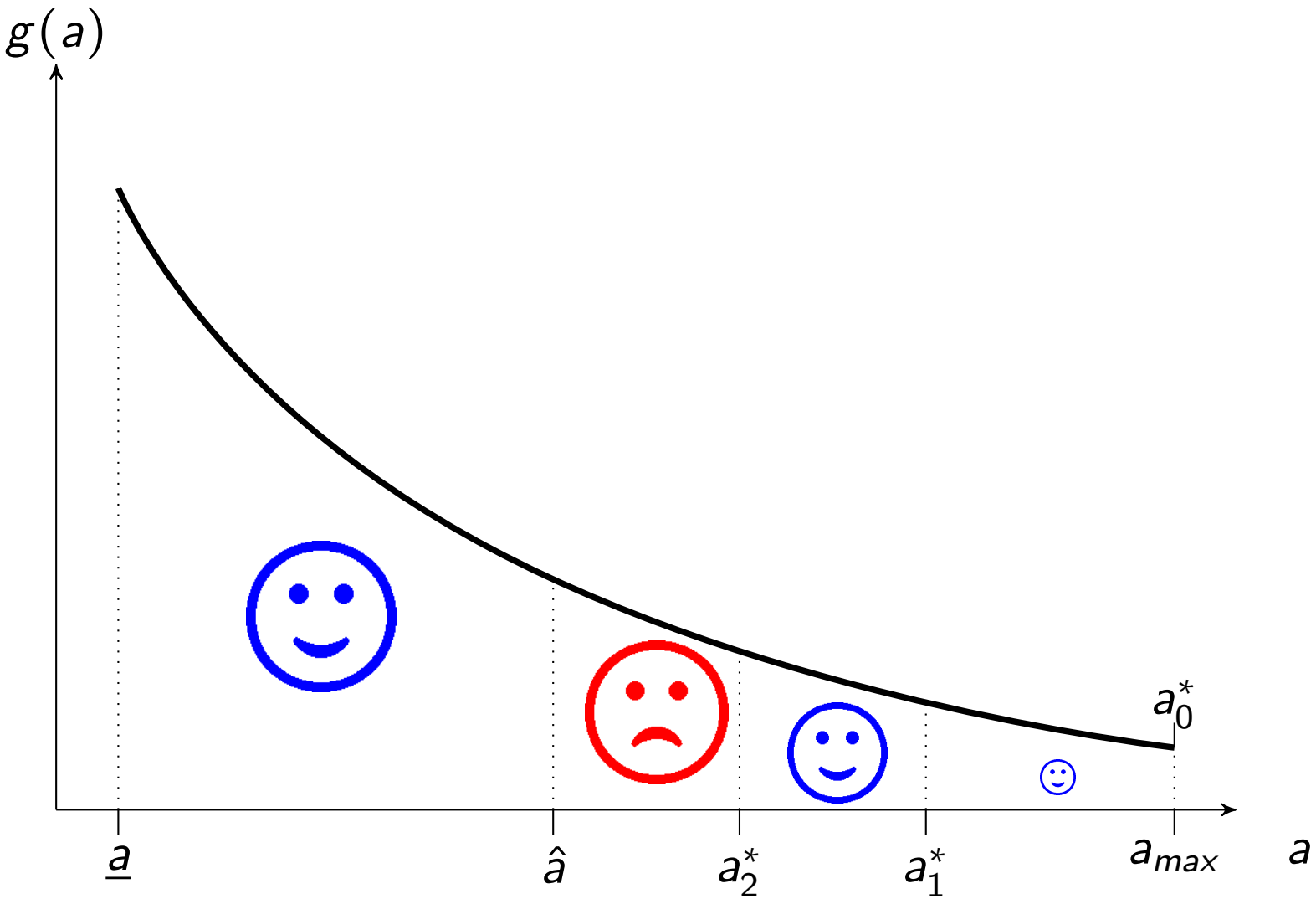
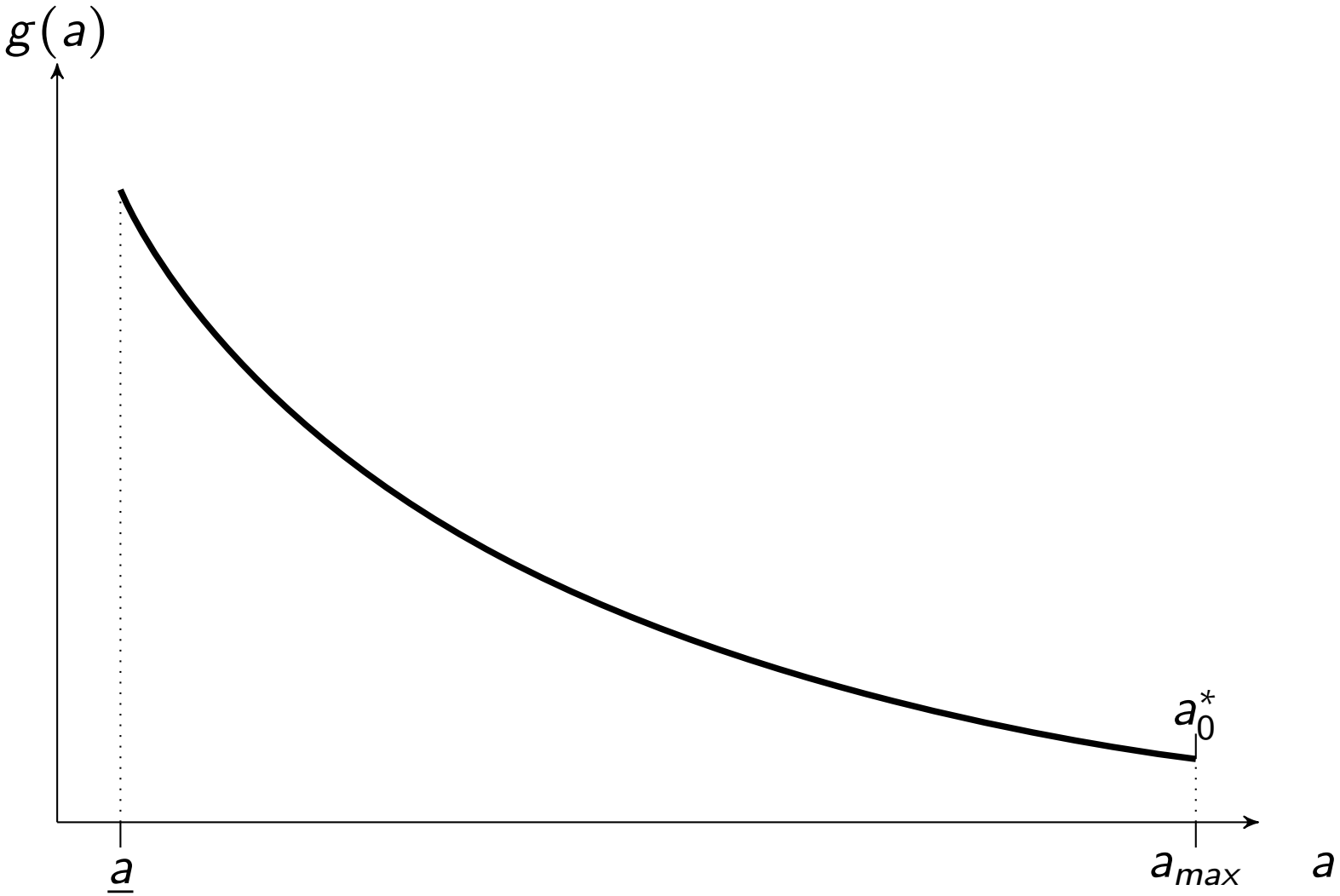


Flexible wages: intuition

Entrepreneurs ($\lambda = 0$)



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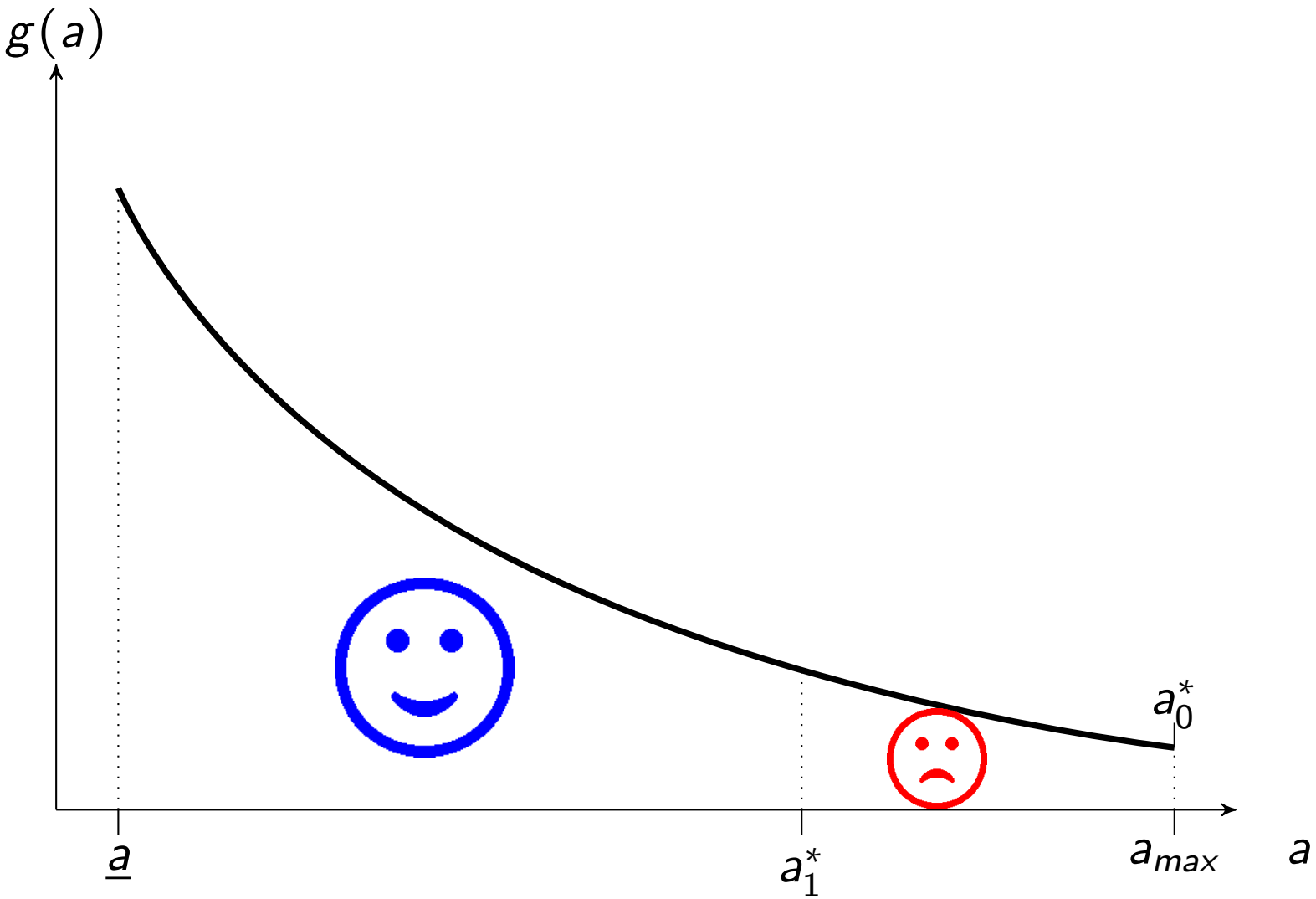

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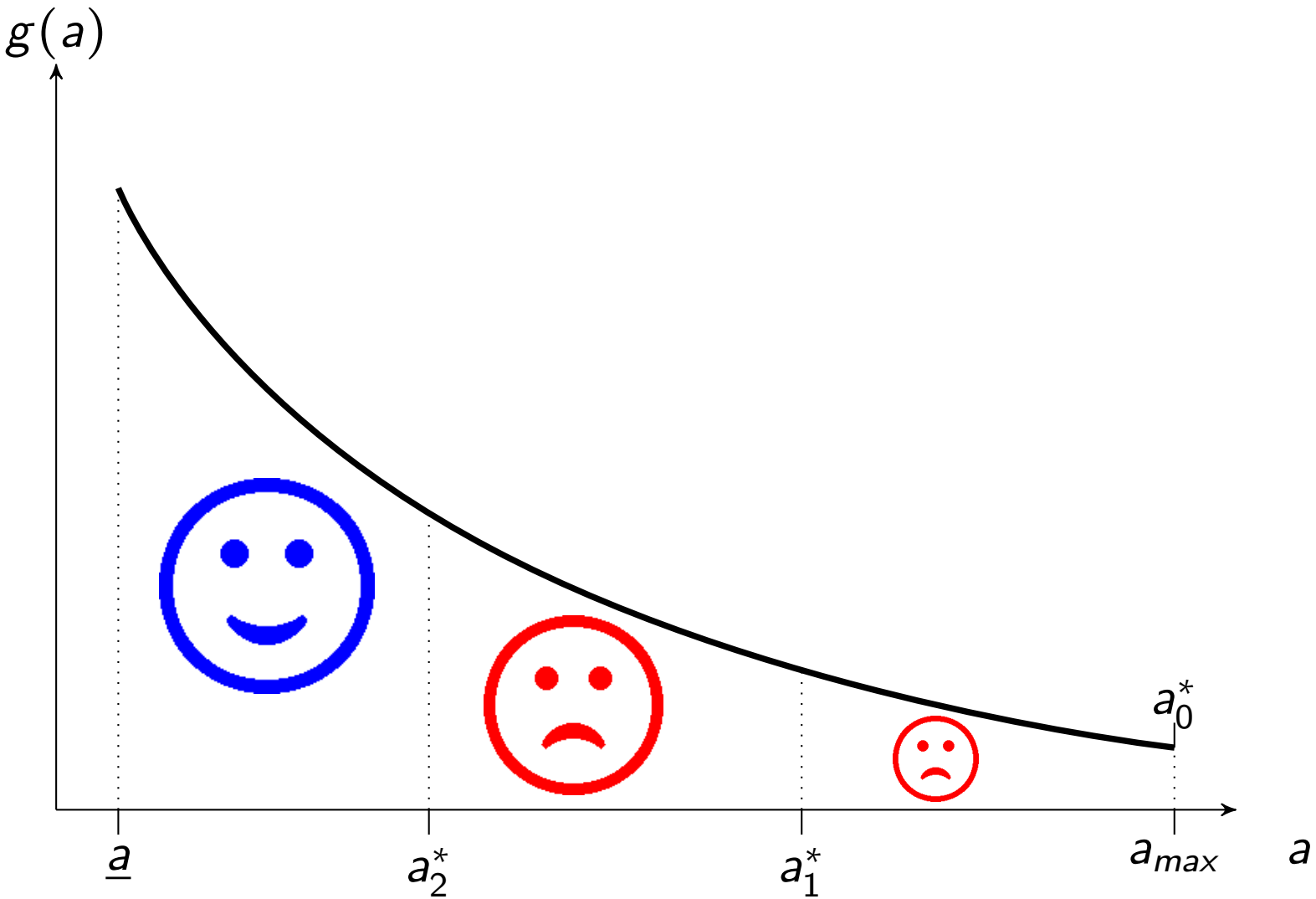
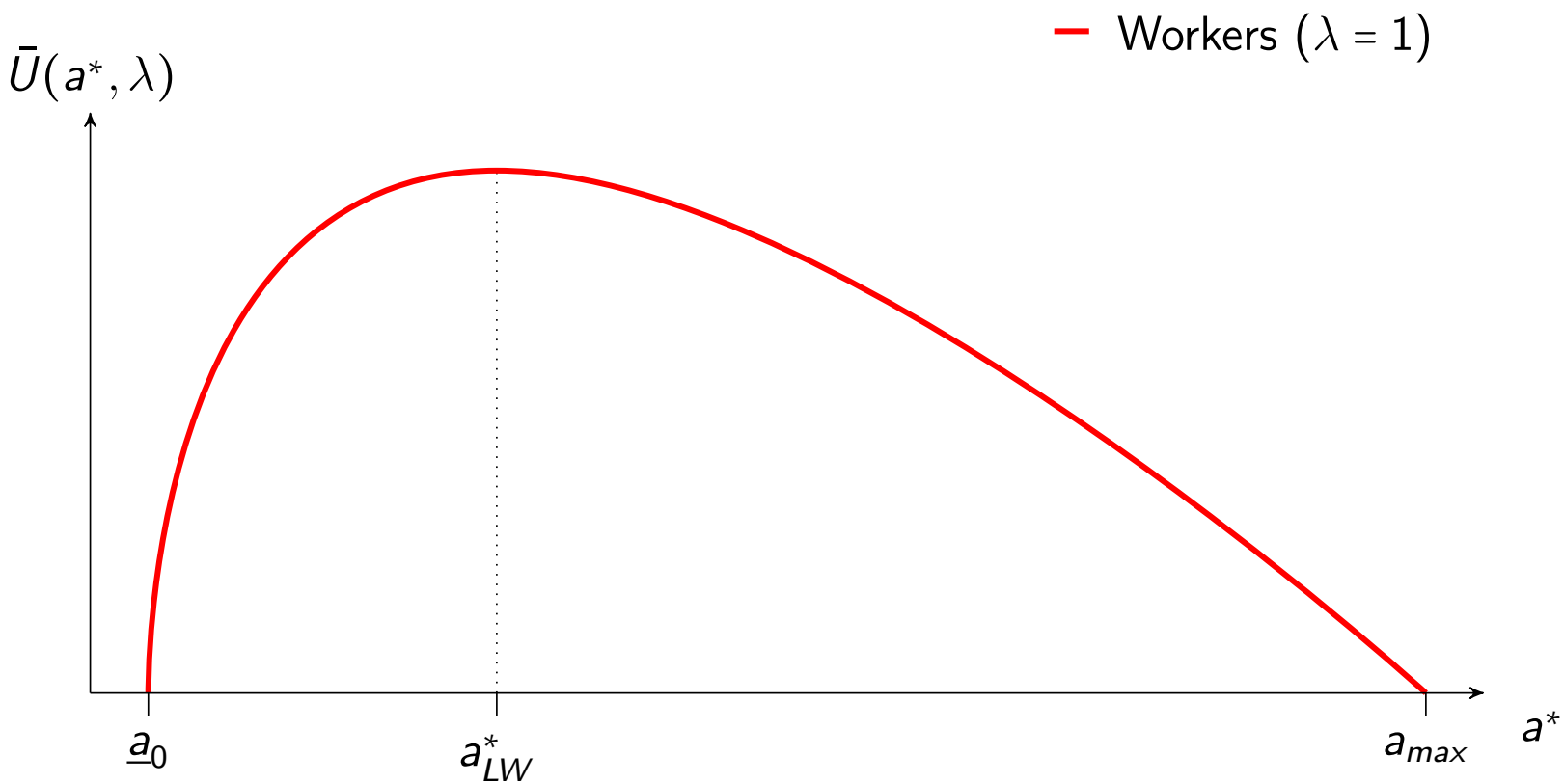


Flexible wages: government's weighted-welfare



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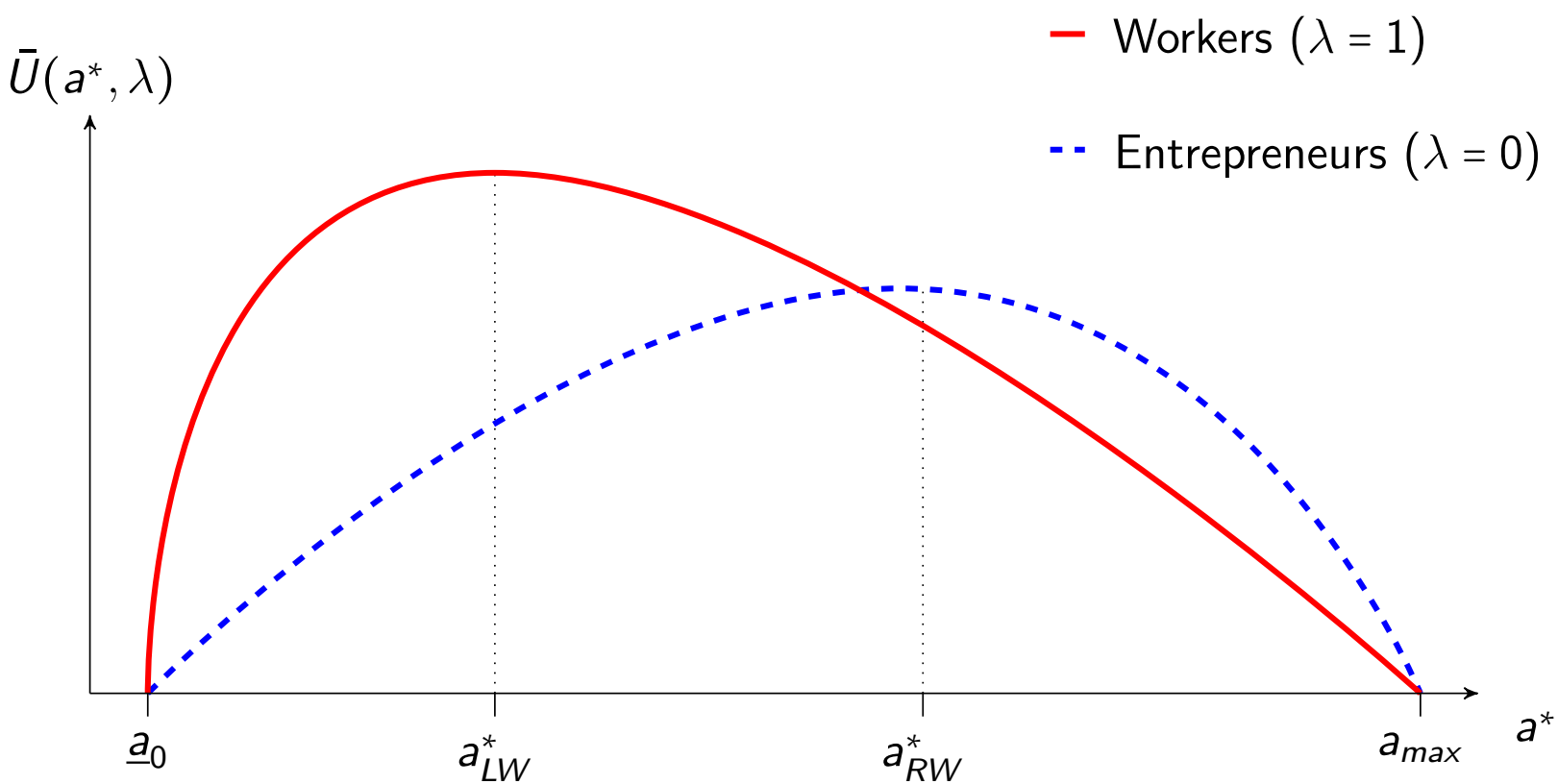

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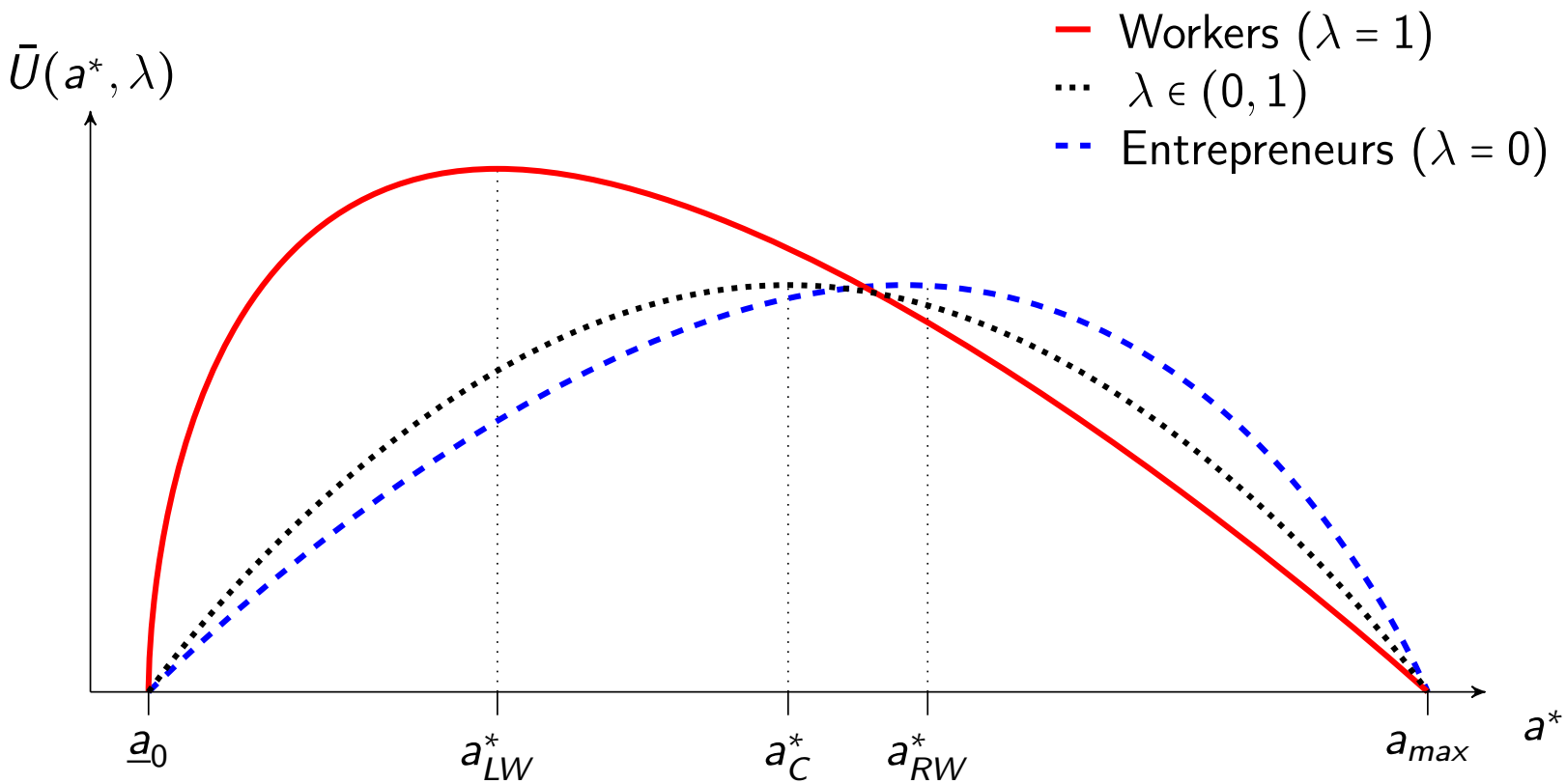

Equilibrium policy: takeaways

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1. **Sticky wages:** only the left chooses S-shaped EPLs.
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    - Right-wing: *'regulate large businesses to foster small businesses growth'*.
    - Left-wing: *'do not regulate small businesses to protect their workers'*.
3. Left-wing sets a lower size-threshold.

Conclusions

Main message:

- S-shaped EPLs are consistent with aggregation of heterogeneous political interests.

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Extensions:

- Individual and collective dismissal regulations.
- Other size-contingent regulations
  - Special tax treatments.
  - Credit subsidies.
  - Size restrictions in retail sector.
- Political process (probabilistic voting).

THANKS!

Entrepreneurs' utility

$$U^e(a, D, L|\mathcal{P}) = f(K, (1-s)L) - (1-s)wL - s\phi wL - (1+\rho)D - F$$

Entrepreneurs' problem

$$\max_{D,L} U^e(a, D, L|\mathcal{P})$$

$$s.t. \quad U^e(a, D, L|\mathcal{P}) \geq u^w(\mathcal{P}) + (1+\rho)a, \qquad (PC)$$

$$U^e(a, D, L|\mathcal{P}) \geq \phi K \qquad (IC),$$

Back to main

Workers' utility

Individual worker

$$u^w(\mathcal{P}) = [(1-s) + s\phi]wL_s - \varsigma(L_s)$$

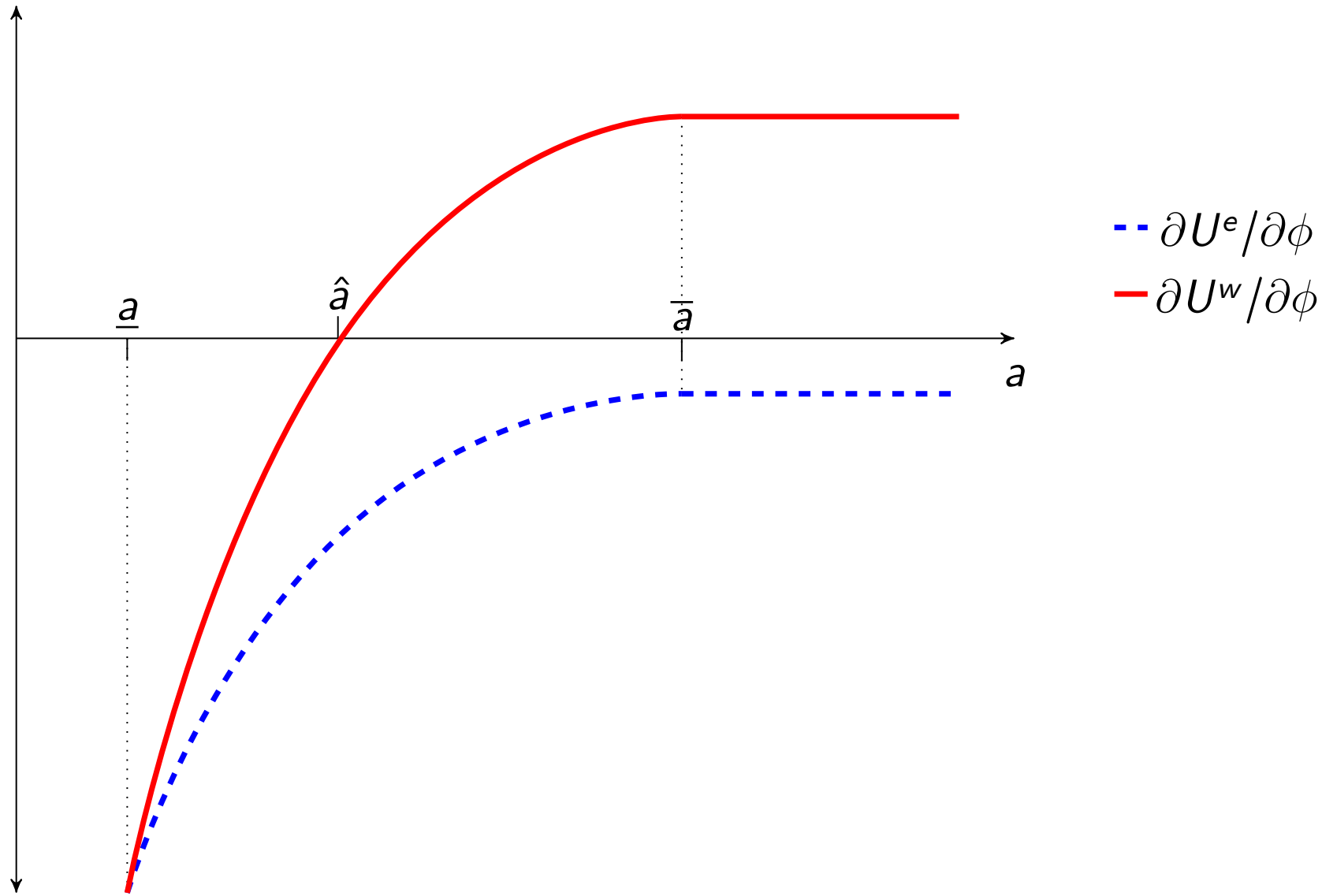
with $\varsigma(L_s) = L_s^\gamma$ and $\gamma > 2$.

Group of workers in firm a

$$U^w(a|\mathcal{P}) = \frac{L}{L_s} \cdot u^w(\mathcal{P})$$

Back to main

Political Preferences



Back to main

Worker's welfare under S-shaped EPLs

- Individual expected utility:

$$\mathbb{E}u^w = \frac{m^0}{m^0 + m^1} u_0^w + \frac{m^1}{m^0 + m^1} u_1^w$$

- Aggregate workers' welfare:

$$\bar{U}^w = \left[\frac{m^0}{m^0 + m^1} u_0^w + \frac{m^1}{m^0 + m^1} u_1^w \right] \cdot G(\underline{a}) = m_0 u_0^w + m_1 u_1^w$$

- Welfare equivalence:

$$m_0 u_0^w + m_1 u_1^w = \int_{\underline{a}}^{a^*} U^w(a|\phi_0) dG + \int_{a^*}^{a_{max}} U^w(a|\phi_1) dG$$

Back to main

Government's problem with S-shaped EPLs

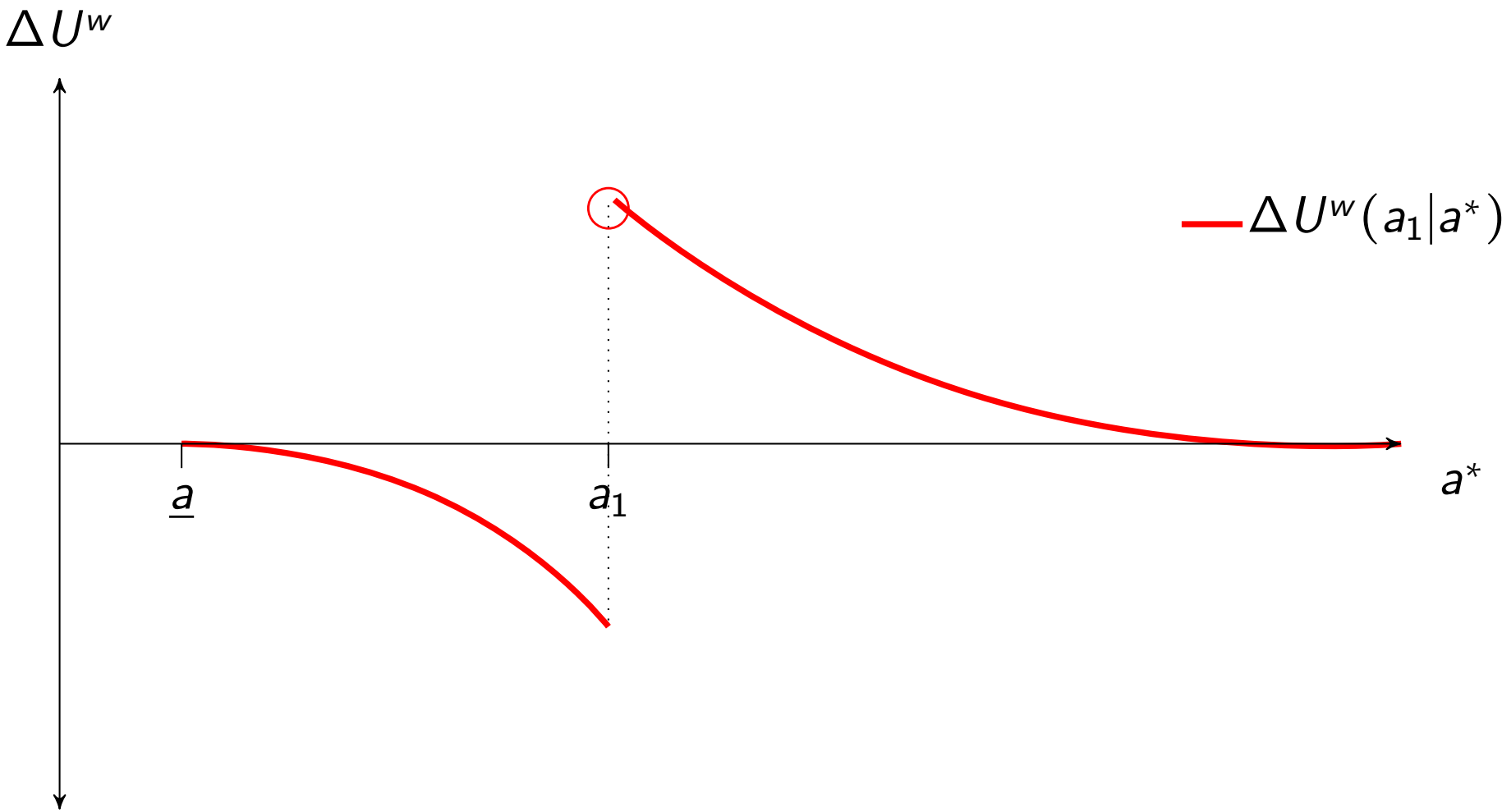
$$\max_{a^* \in [\underline{a}, a_{max}]} \left\{ \bar{U}(a^*, \lambda) \equiv \lambda \left(\int_{\underline{a}}^{a^*} U^w(a|\phi_0) dG + \int_{a^*}^{a_{max}} U^w(a|\phi_1) dG \right) \right.$$
$$\left. + (1-\lambda) \left(\int_{\underline{a}}^{a^*} U^e(a|\phi_0) dG + \int_{a^*}^{a_{max}} U^e(a|\phi_1) dG \right) \right\}$$

$$s.t \quad m^0 \cdot L_s(\phi_0) = \int_{\underline{a}}^{a^*} L(a|\phi_0) dG,$$
$$m^1 \cdot L_s(\phi_1) = \int_{a^*}^{a_{max}} L(a|\phi_1) dG,$$
$$m^0 + m^1 = G(\underline{a}).$$

Back to main

Flexible wages: political preferences

Workers, case: $a < \hat{a}$



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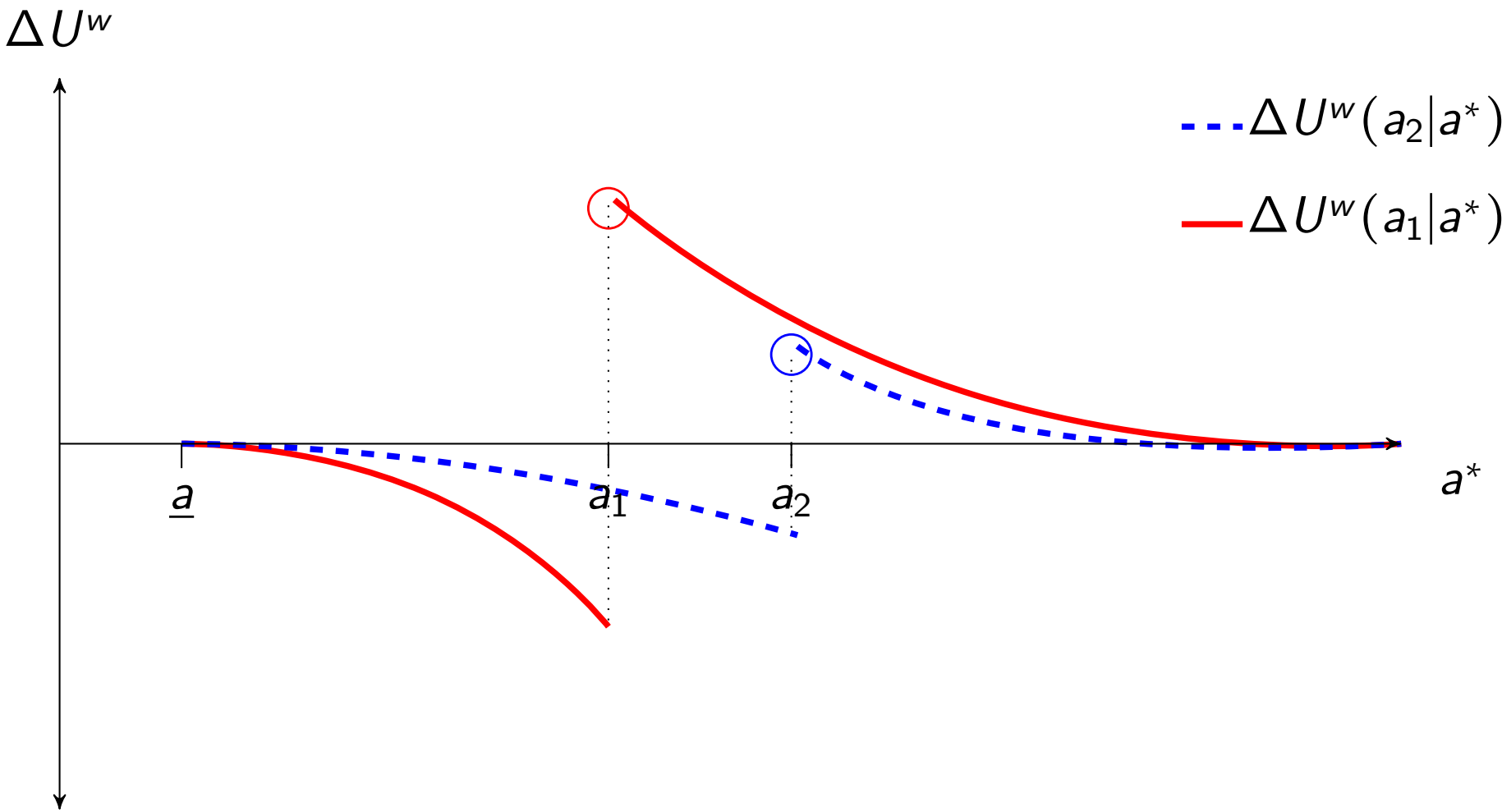

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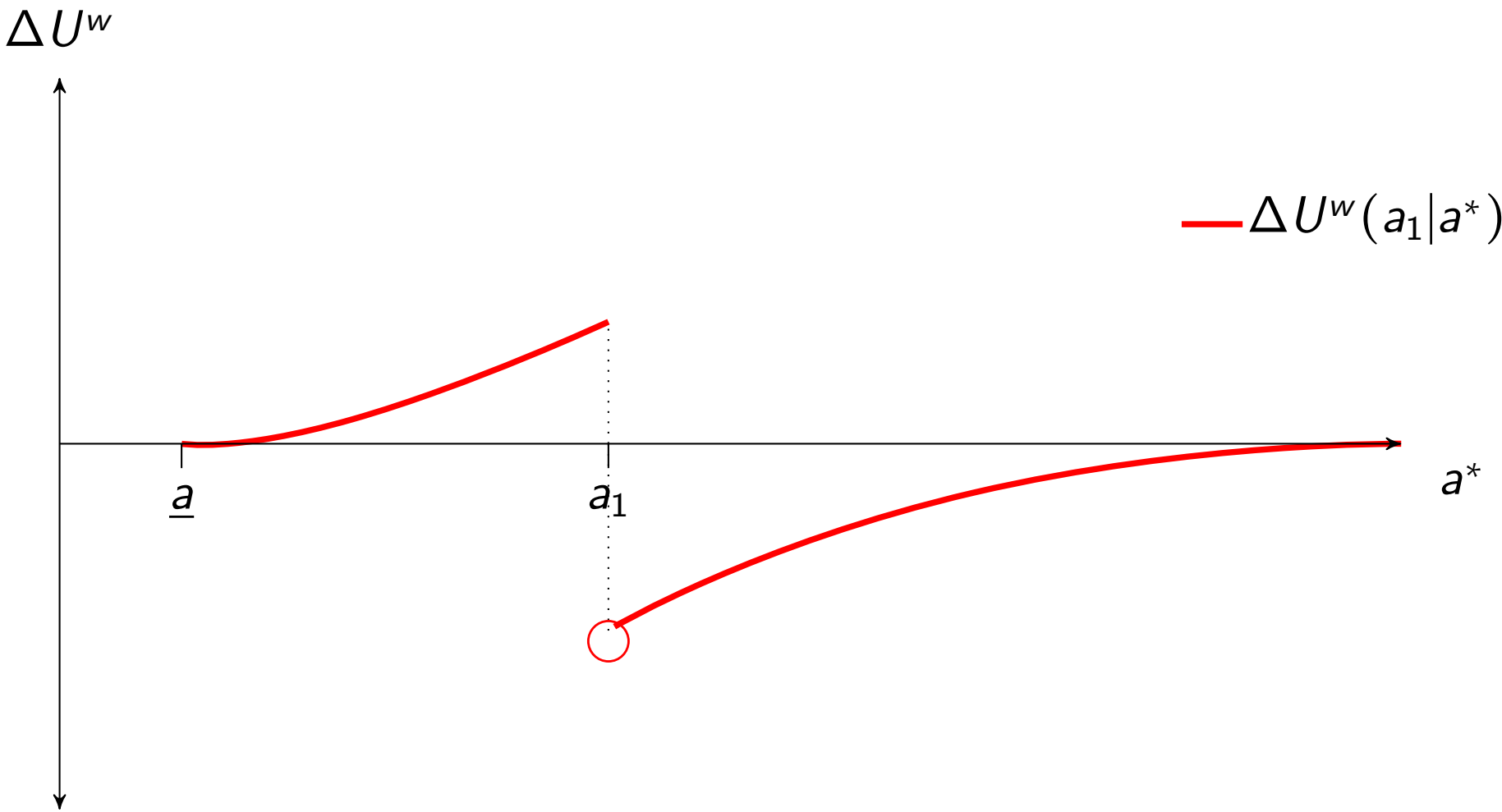

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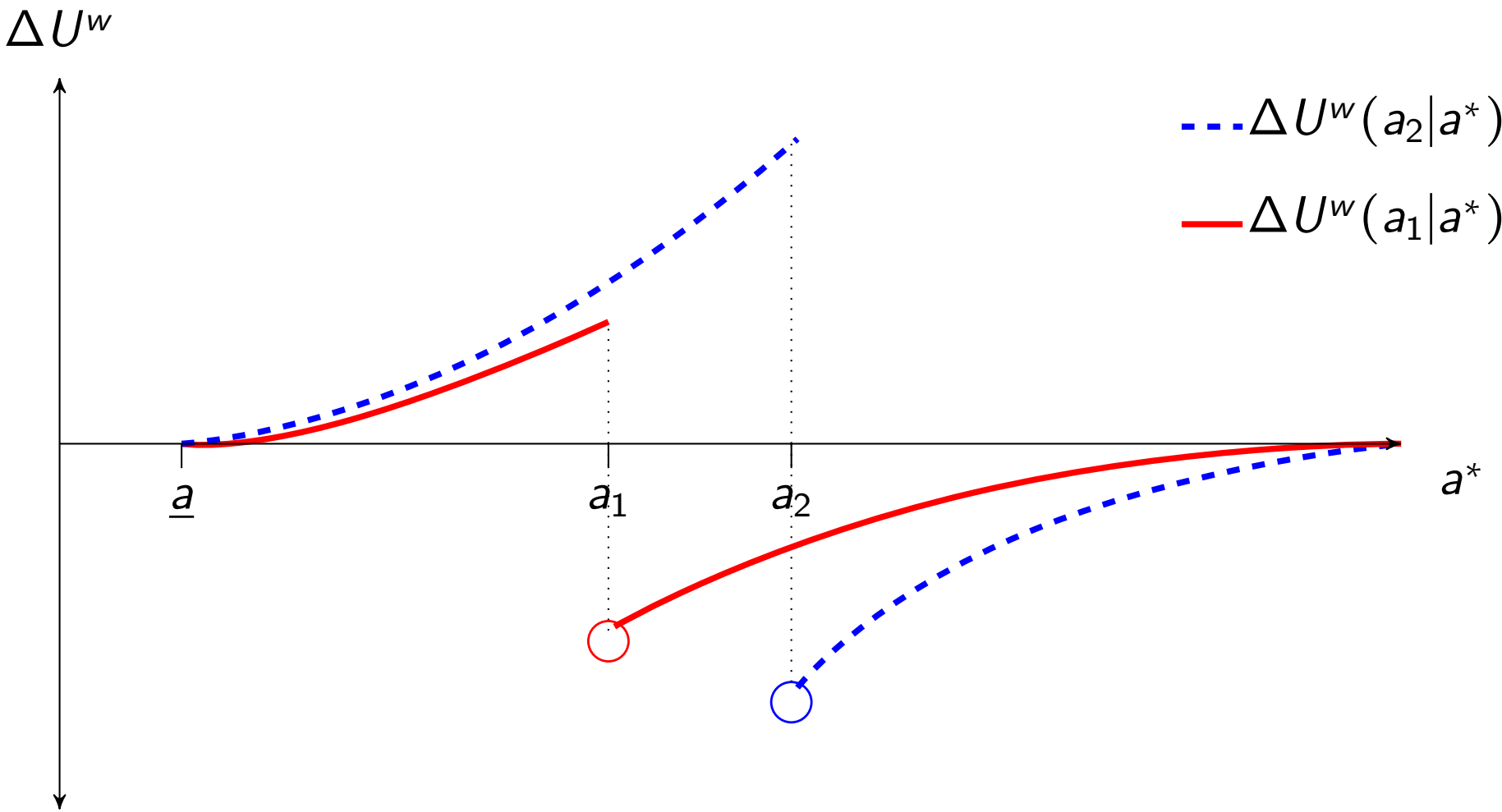

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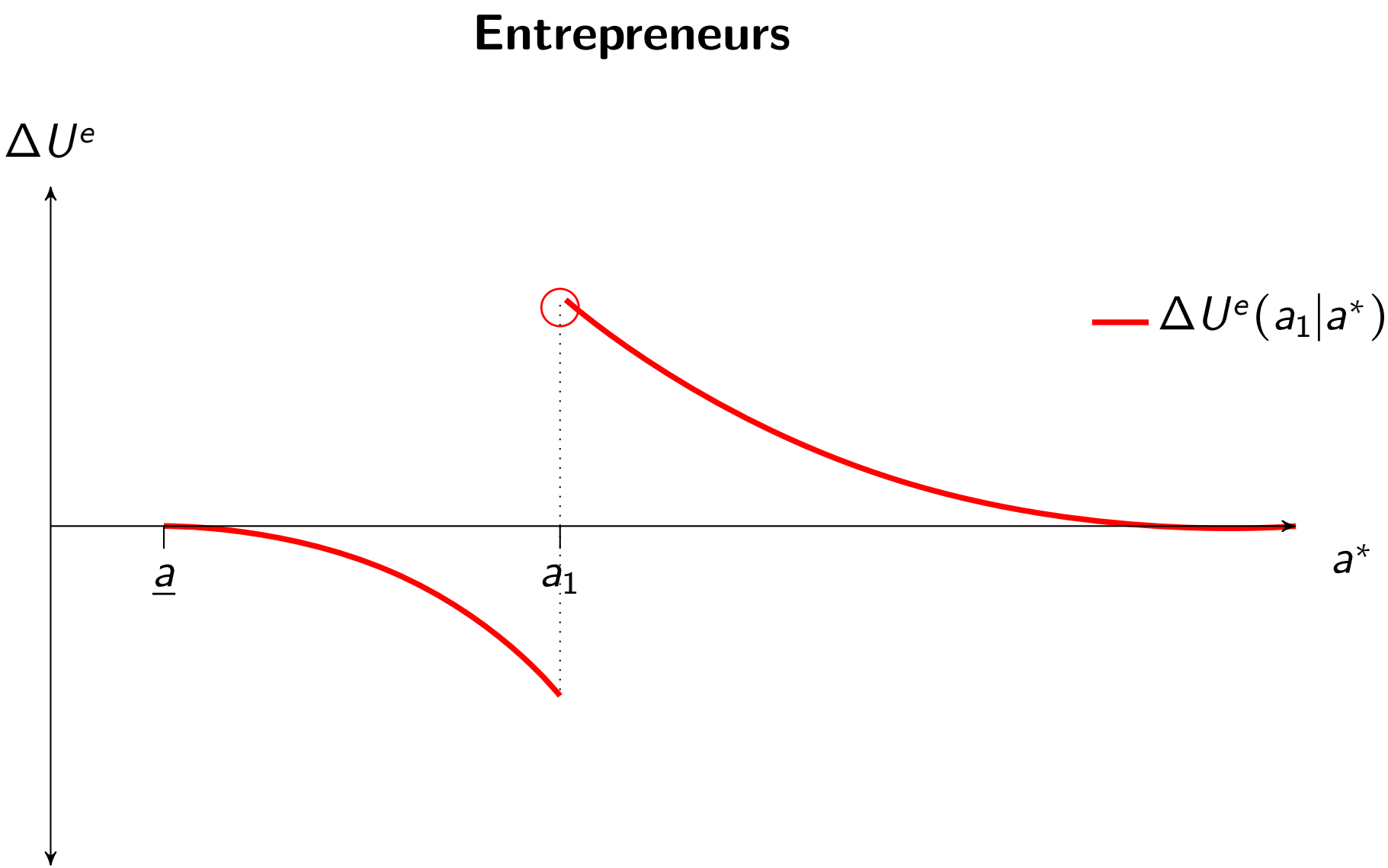

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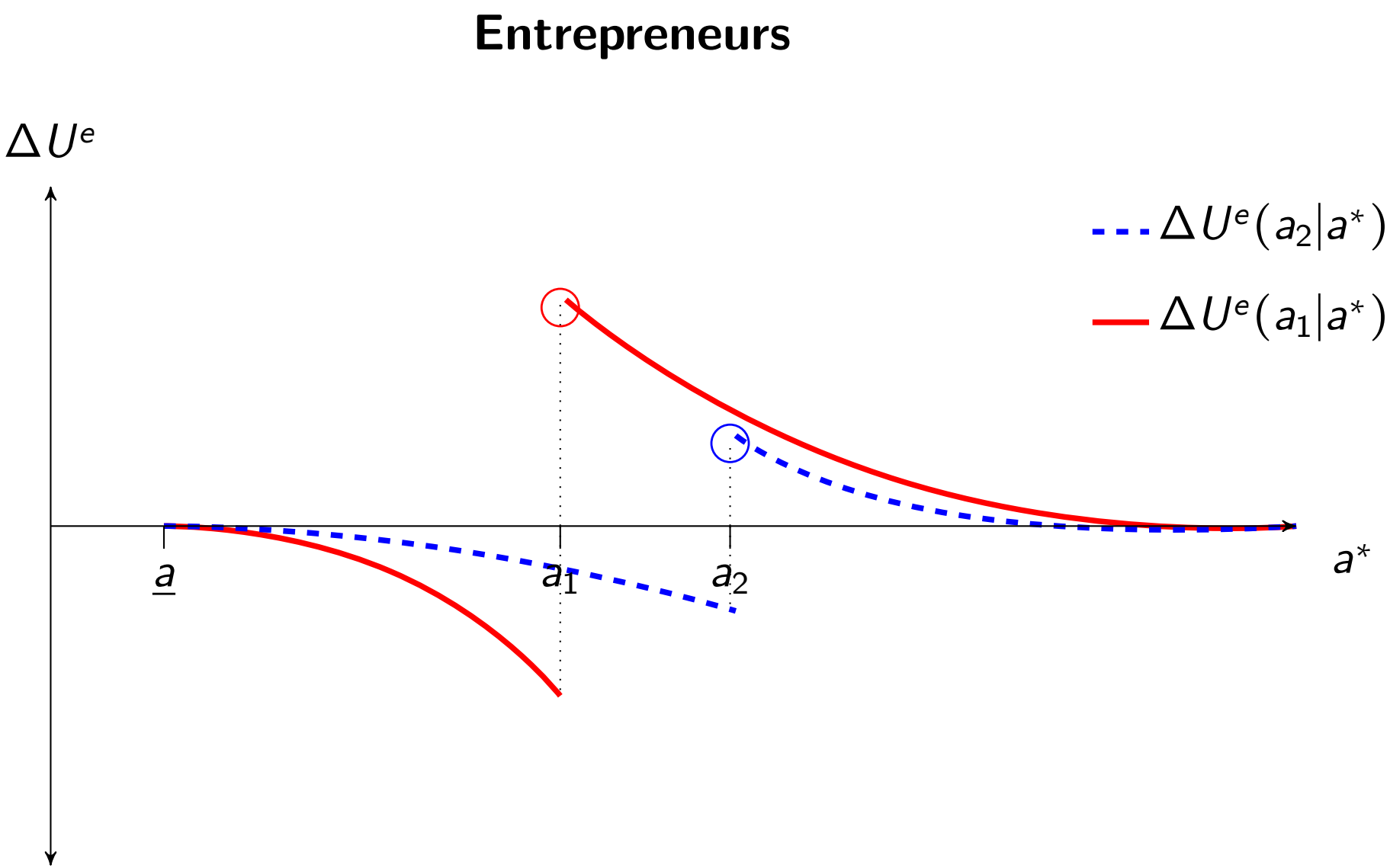


Implementation

- Firms strategically adjust their size:
  - Under-invest.
  - Under-report.

- **Alternative mechanism:**
  - Decentralized bargaining between unions and entrepreneurs.
  - Policy instrument: bargaining power of unions, $\mu \in [0, 1]$.

Implementation: bargaining

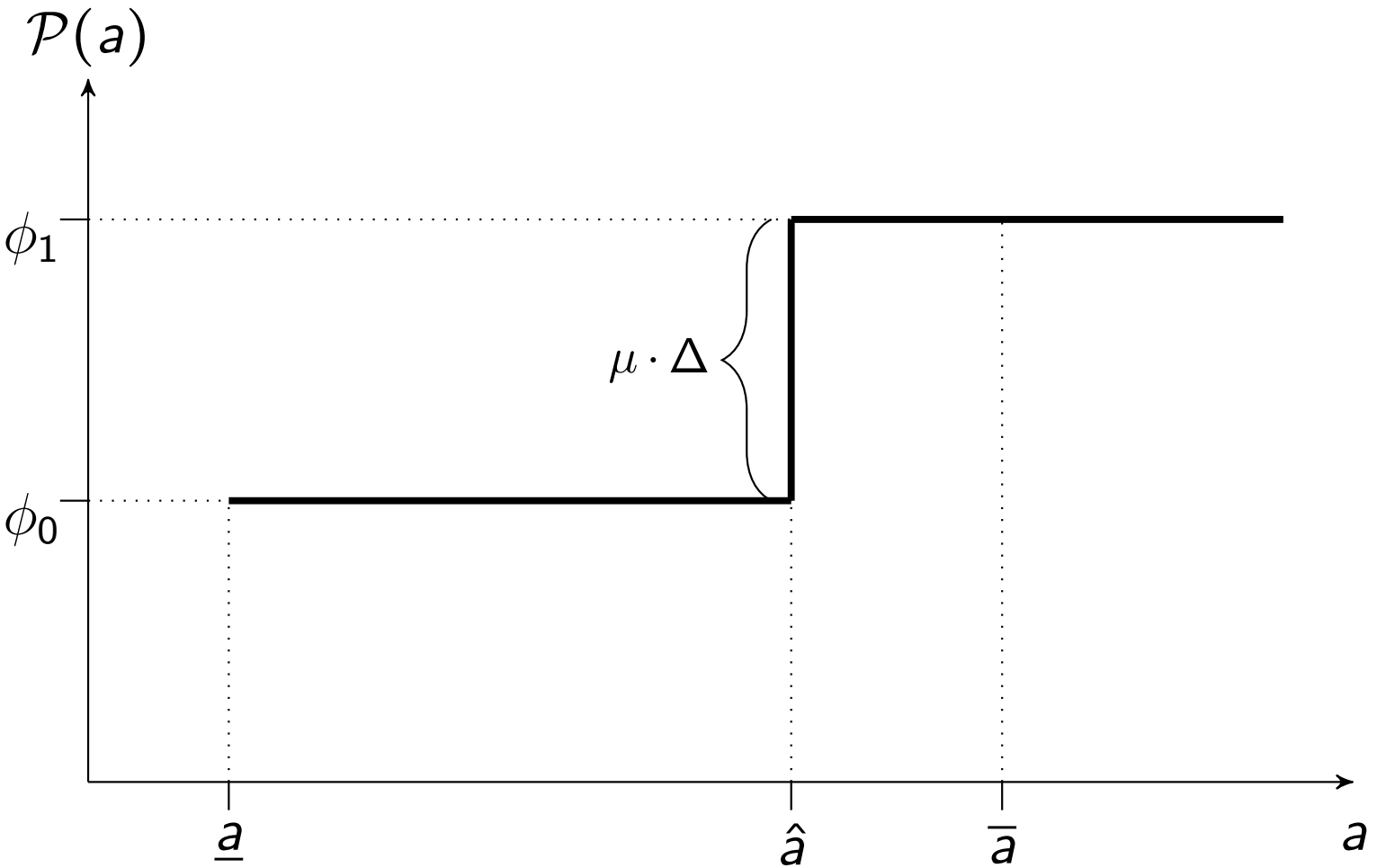
Can the government choose μ to achieve $\bar{U}(a^*, \lambda)$?

Implementation: bargaining

Can the government choose μ to achieve $\bar{U}(a^*, \lambda)$?

YES! For a set of λ's.

Implementation: bargaining



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