Social Discounting

- preferences

$$v_0 = u(c_0) + \beta v_1 = u(c_0) + \beta u(c_1) \qquad \text{(parent)}$$

$$v_1 = u(c_1) \qquad \text{(child)}$$

Social Discounting

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- $$\begin{aligned} W &= v_0 + \alpha v_1 \\ &= u(c_0) + (\beta + \alpha) u(c_1) \\ &= u(c_0) + \hat{\beta} u(c_1) \end{aligned}$$

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- $\hat{\beta} \equiv \beta + \alpha$
- $T = \infty$

$$\sum_{t=0}^{\infty} \hat{\beta}^t u(c_t)$$

Impulse Response

- two groups: A and B equal size...

$$\max \sum_{t=0}^{\infty} \hat{\beta}^t \left(\tfrac{1}{2} u(c_{A,t}) + \tfrac{1}{2} u(c_{B,t}) \right)$$

$$\tfrac{1}{2} c_{At} + \tfrac{1}{2} c_{B,t} = e$$

$$v_A = \sum_{t=0}^{\infty} \beta^t u(c_{A,t}) \qquad v_B = \sum_{t=0}^{\infty} \beta^t u(c_{B,t})$$

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$$\Rightarrow \quad \frac{u'(c_{A,t})}{u'(c_{B,t})} = \frac{1 + \lambda^B (\beta/\hat{\beta})^t}{1 + \lambda^A (\beta/\hat{\beta})^t}$$

Impulse Response

- . . . initial inequality: $v_A > v_B \Rightarrow \lambda^A > \lambda^B$

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Impulse Response

- Social Discounting
- Example
- Atekson-Lucas vs. Farhi-Werning
- Key Equation
- Estate Taxation

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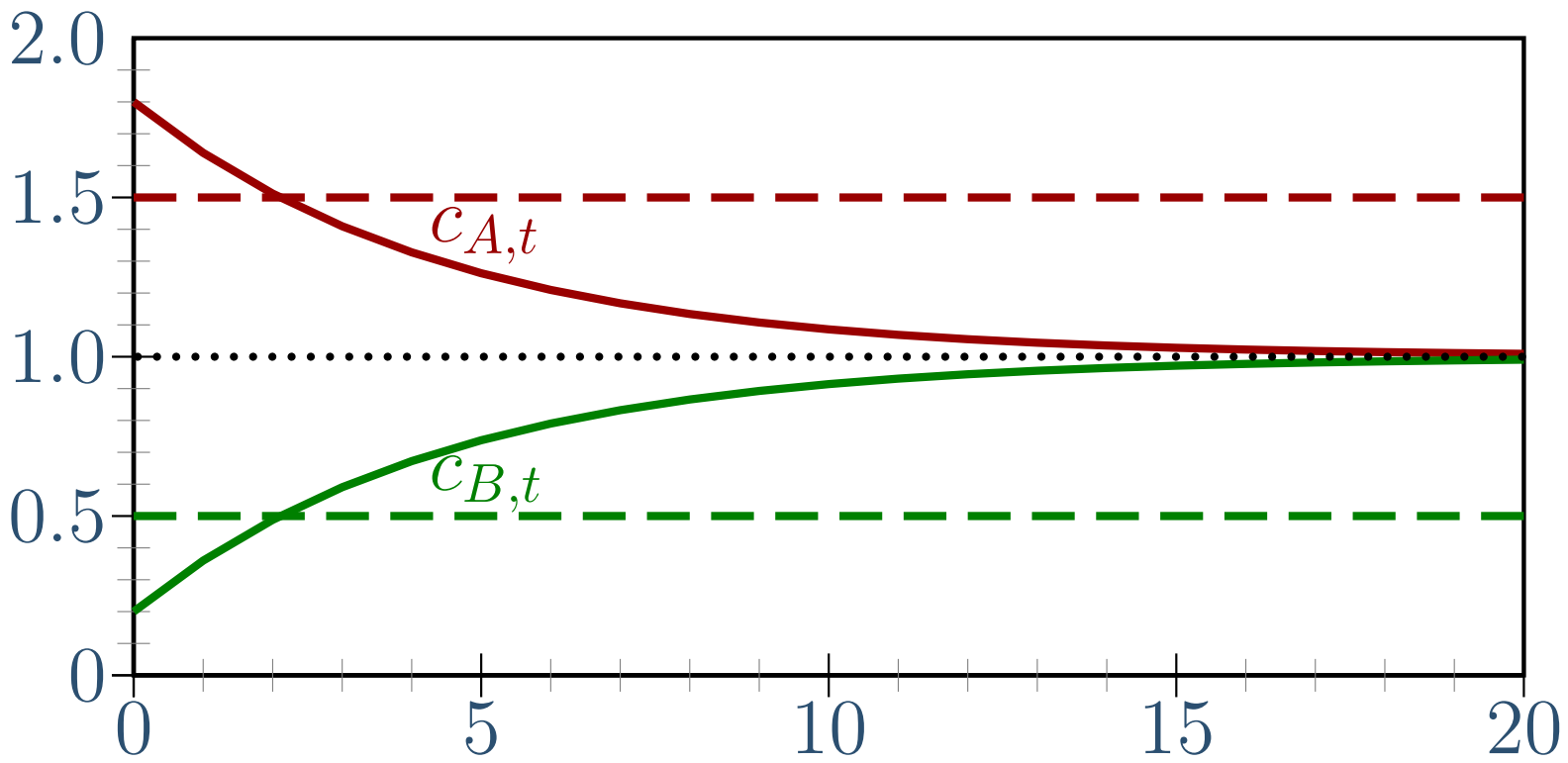
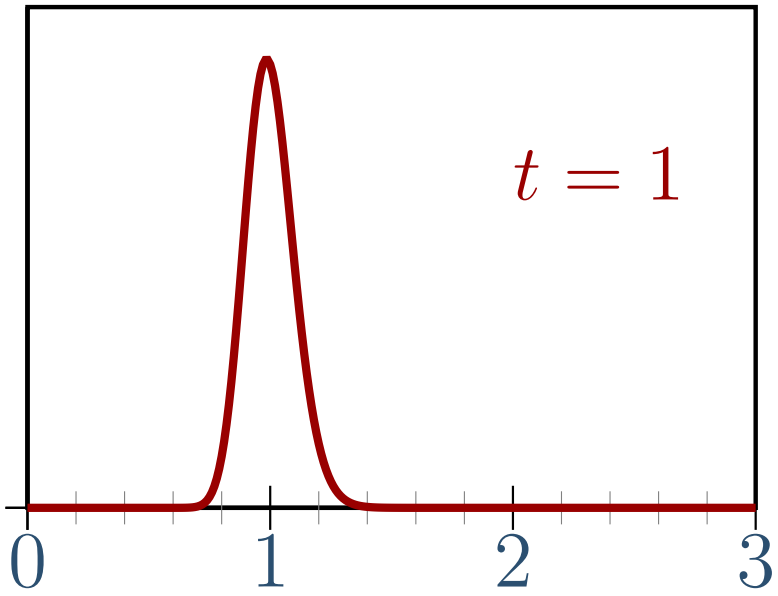
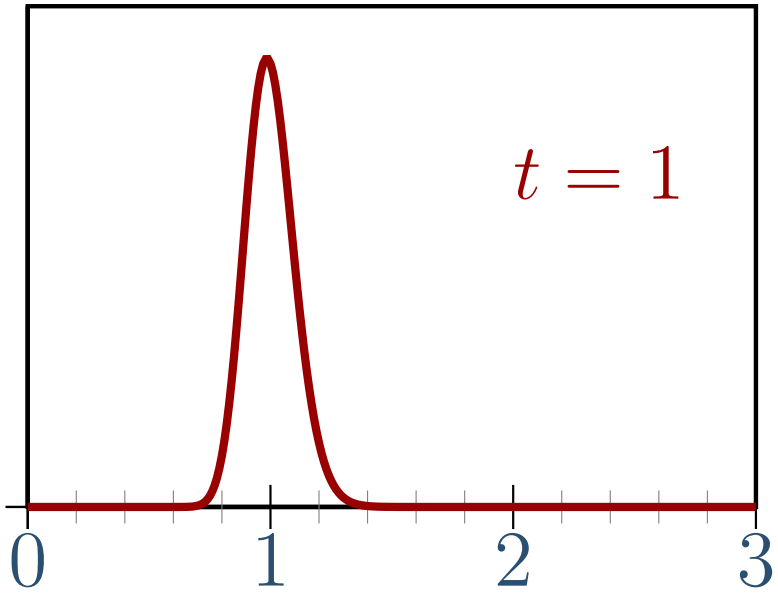


Atekson-Lucas vs. Farhi-Werning



Atkeson-Lucas $\hat{\beta} = \beta$



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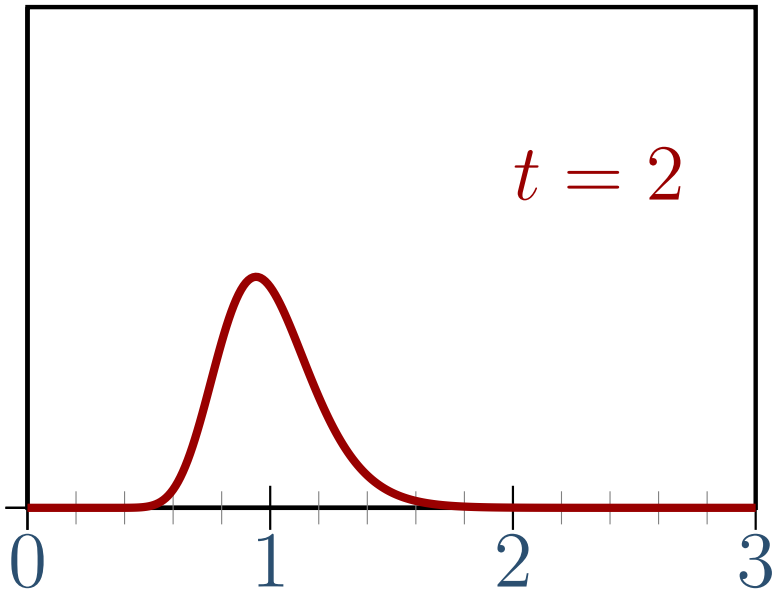

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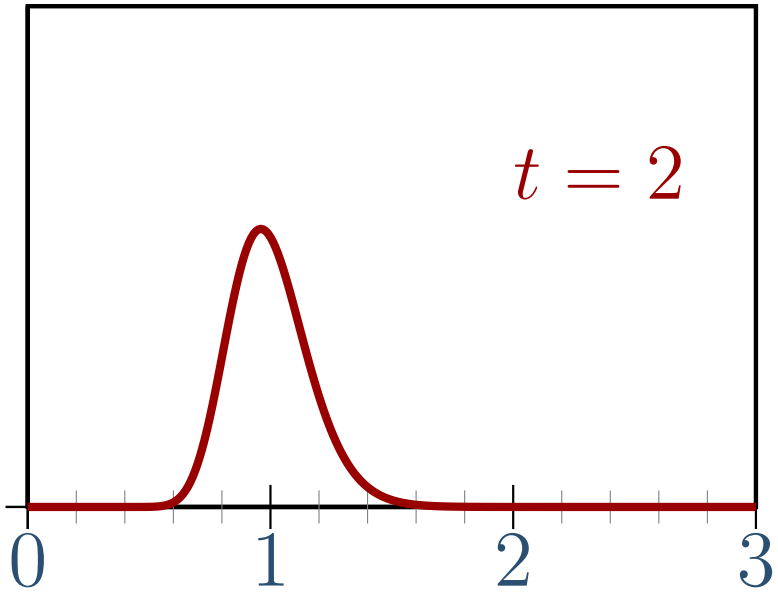

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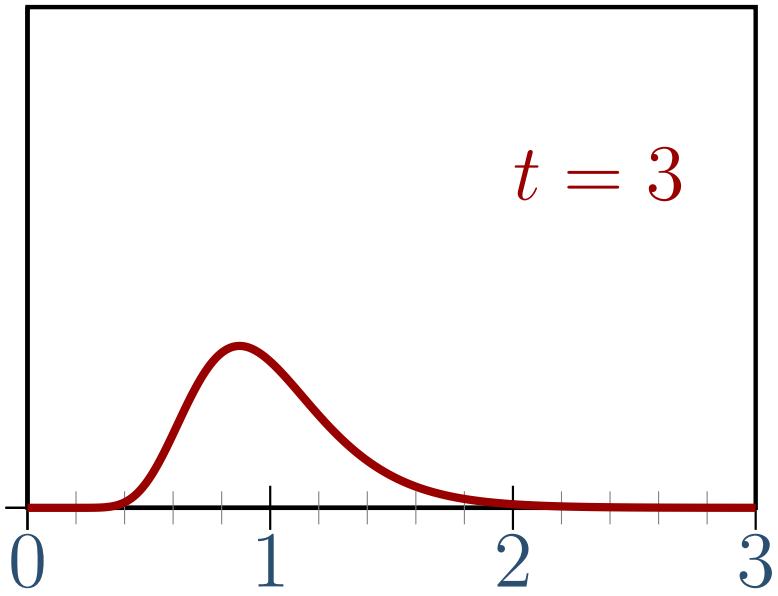

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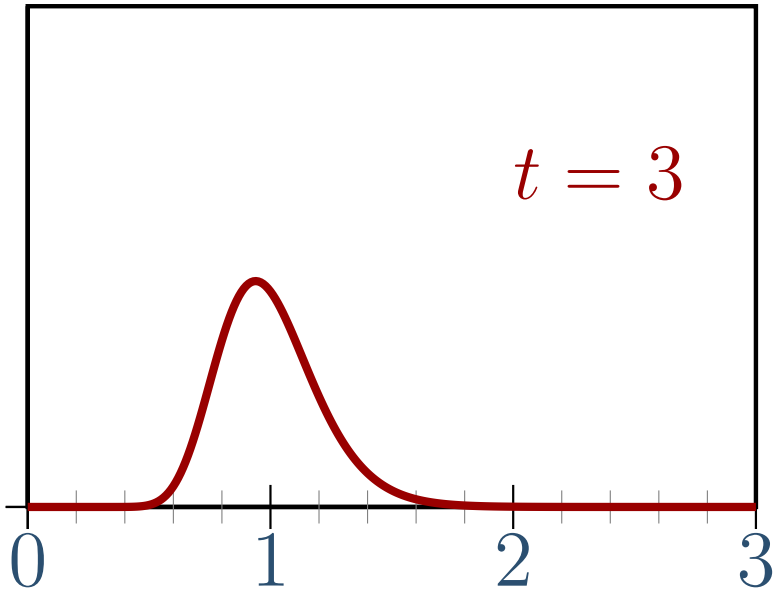

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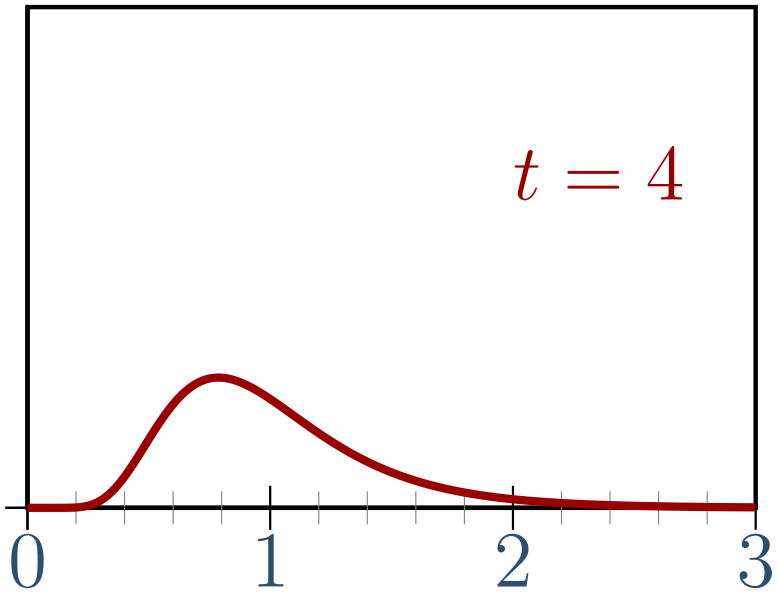

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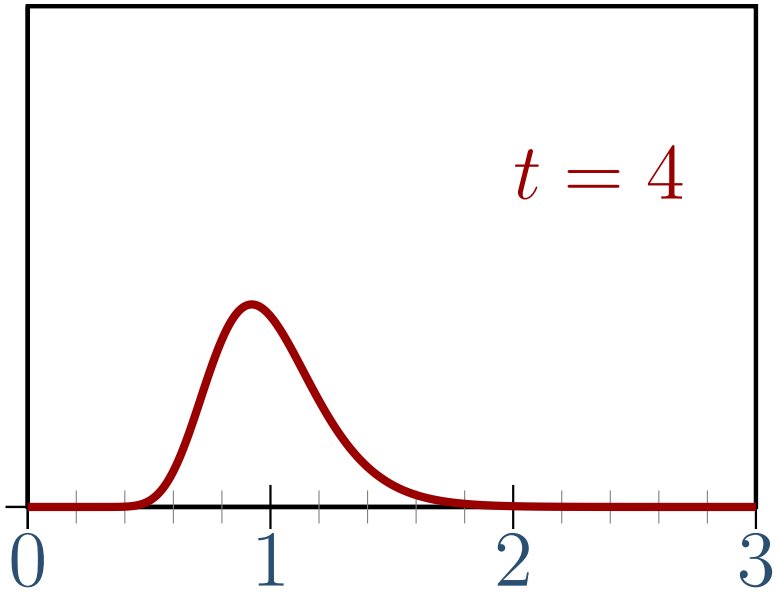

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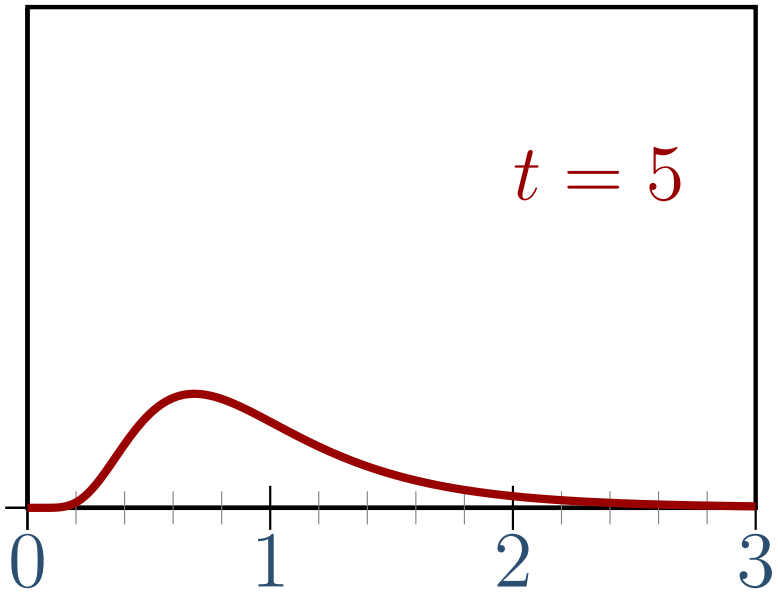

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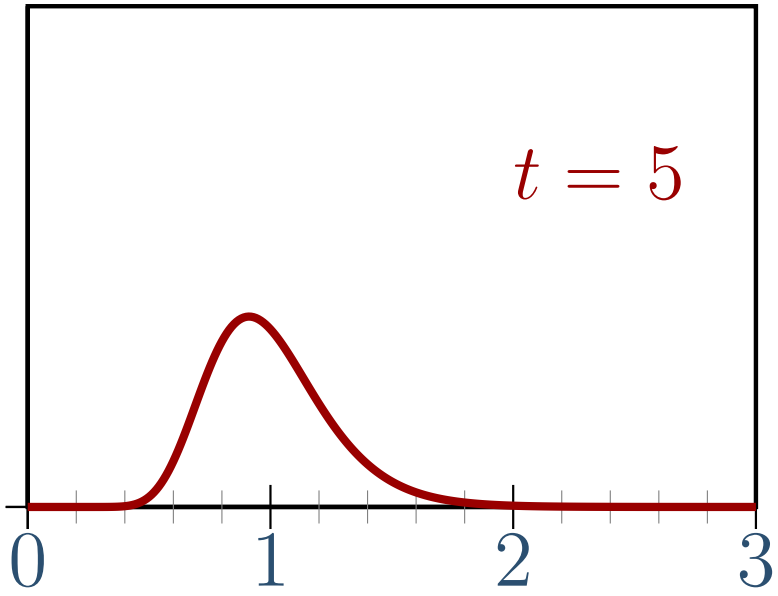

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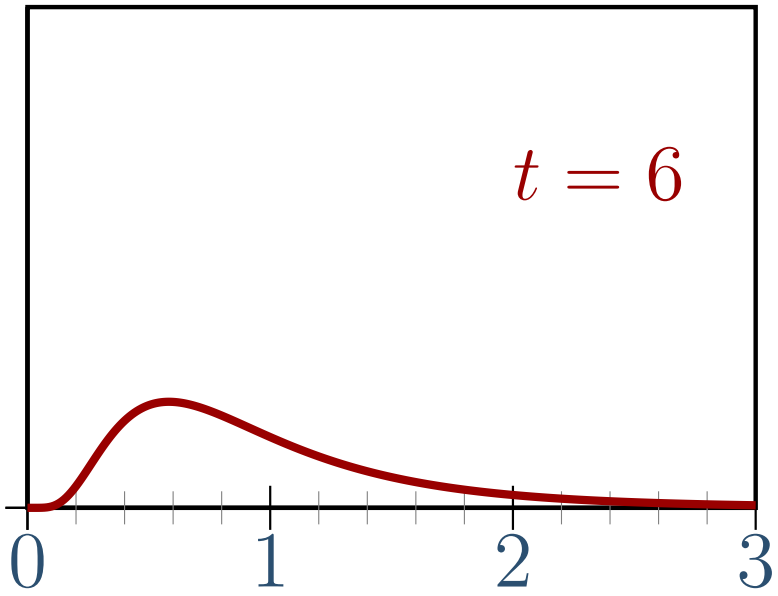

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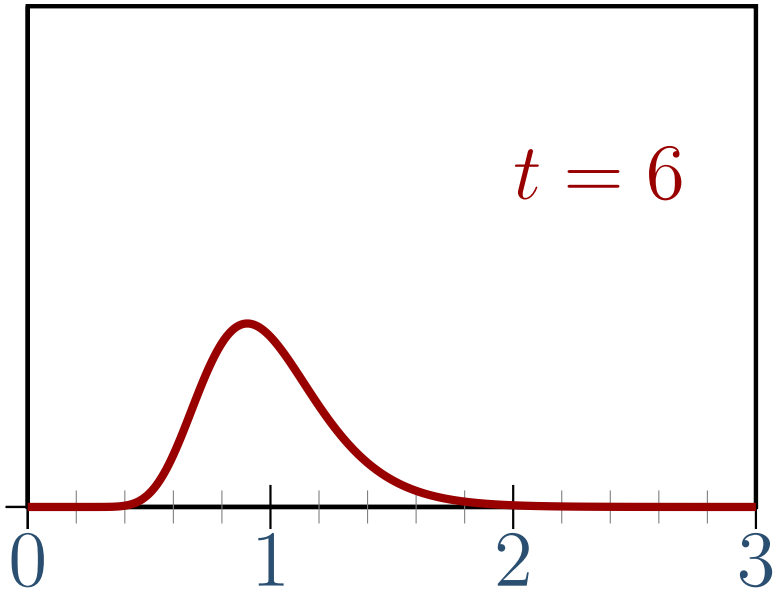

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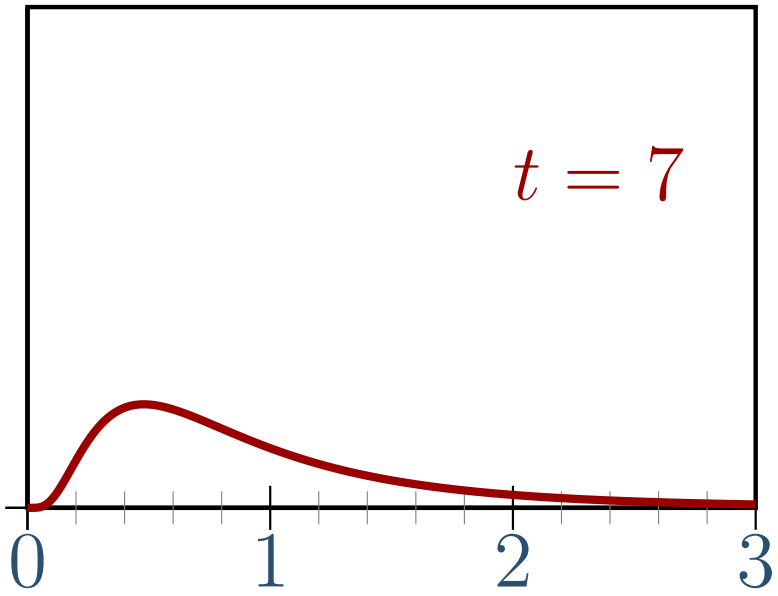

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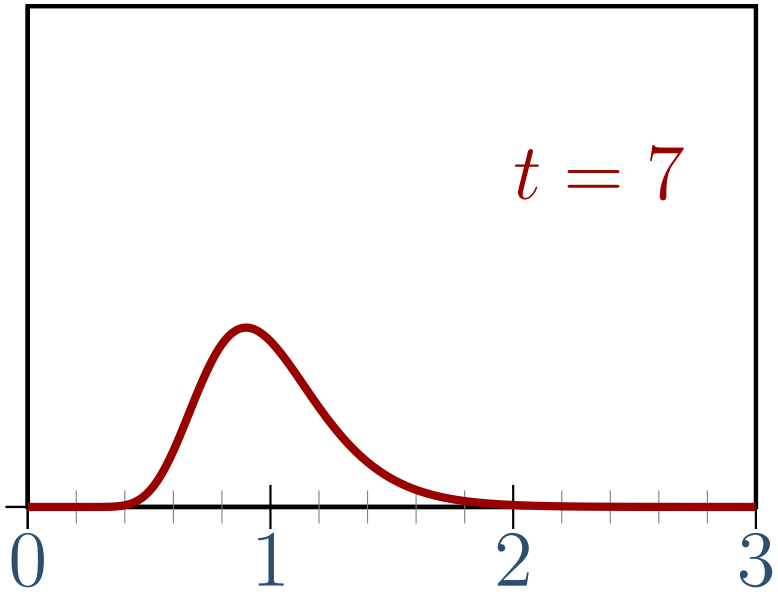

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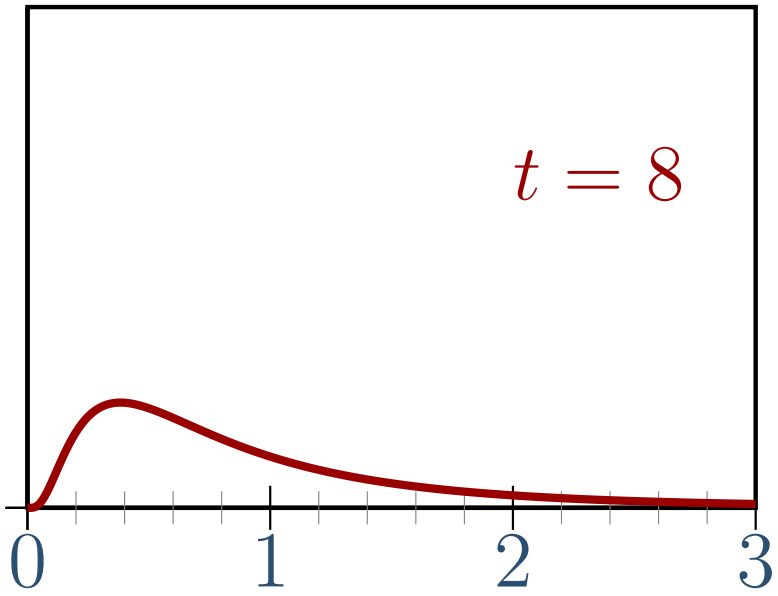

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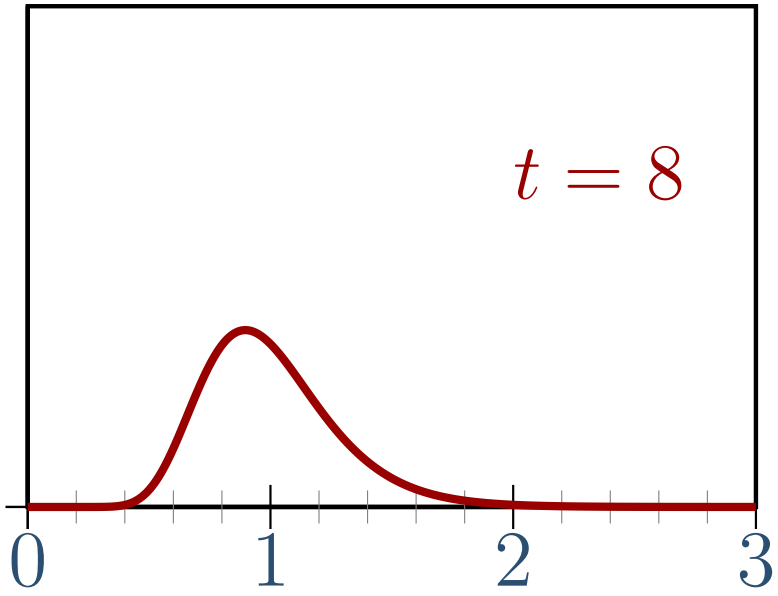

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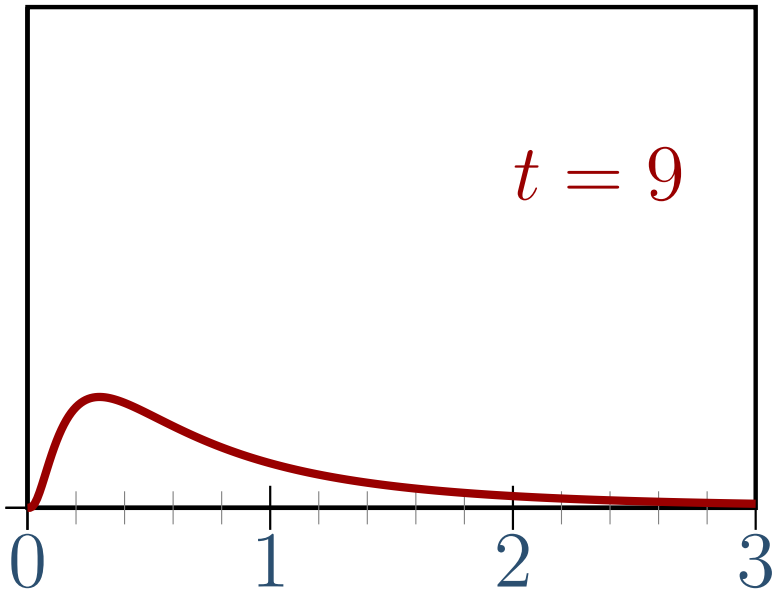

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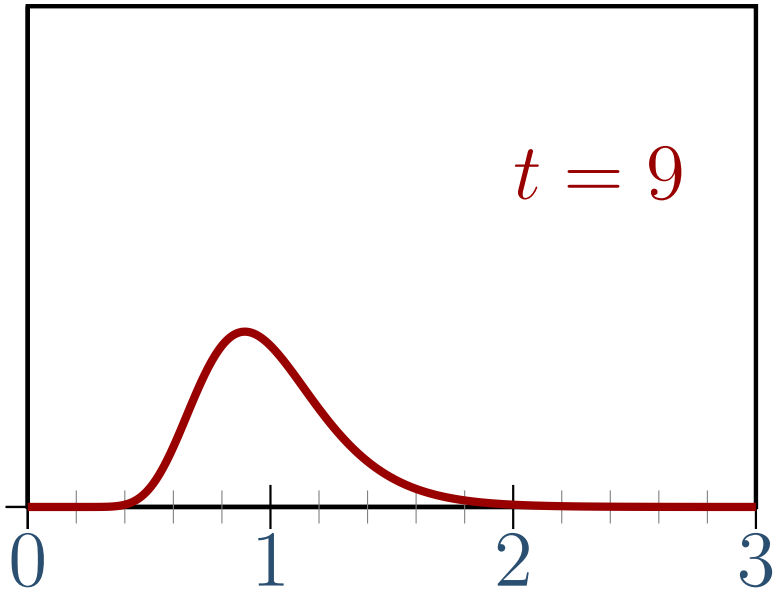

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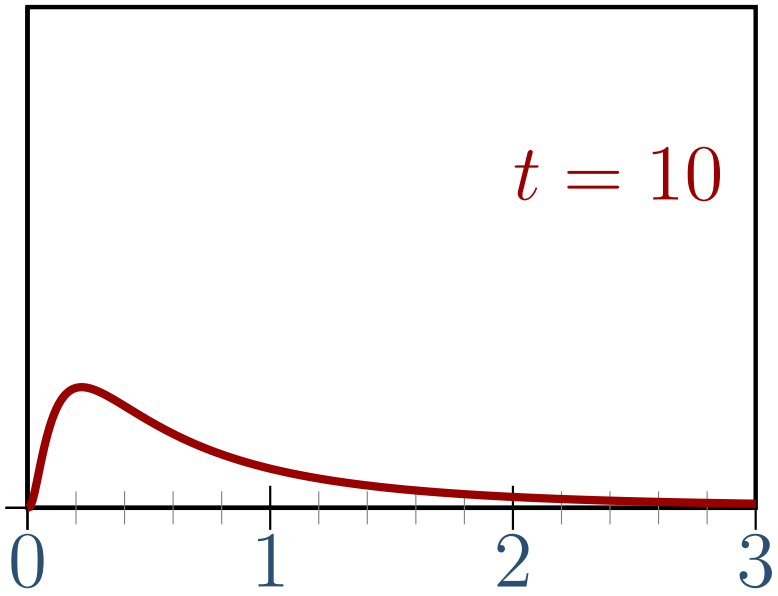

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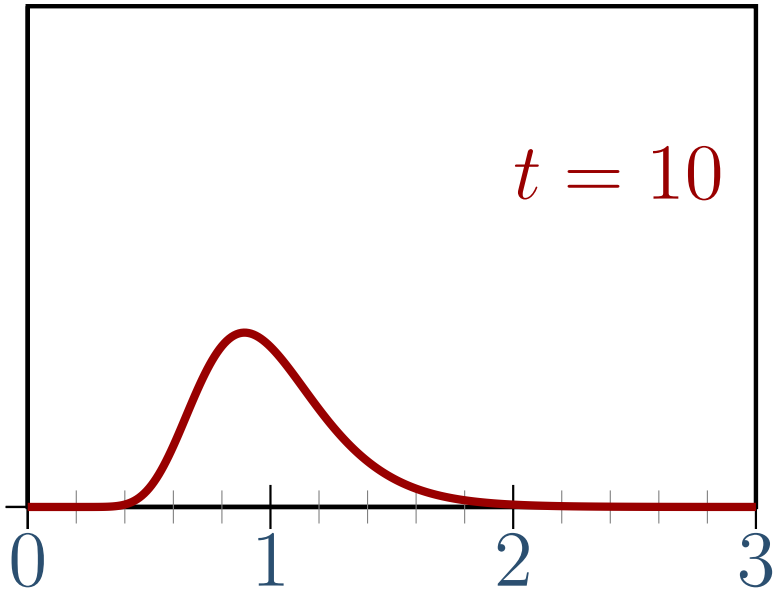

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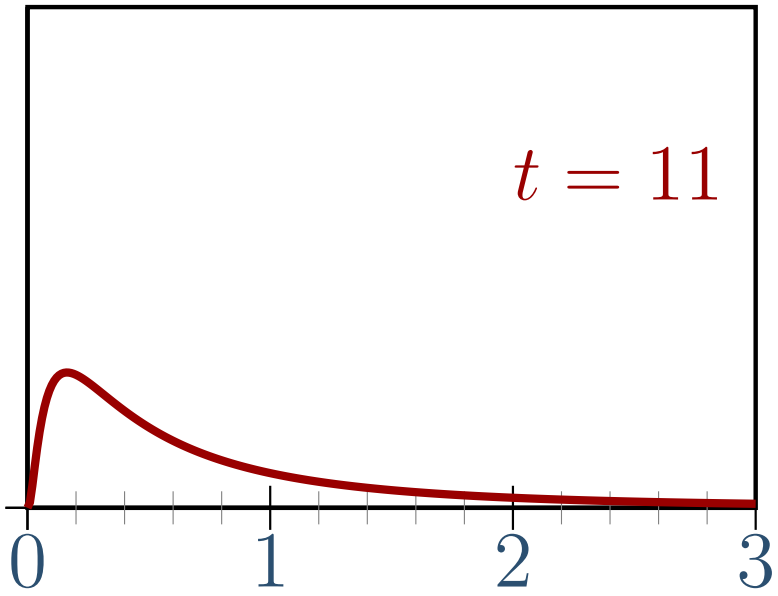

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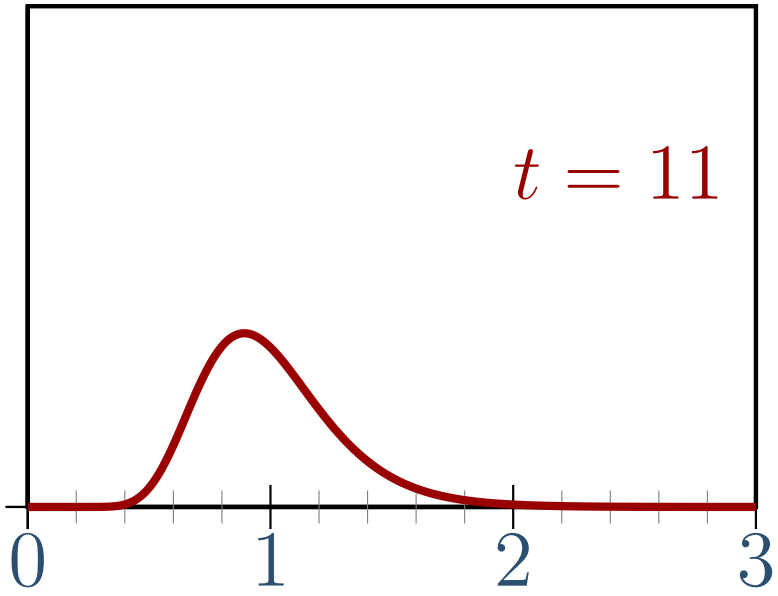

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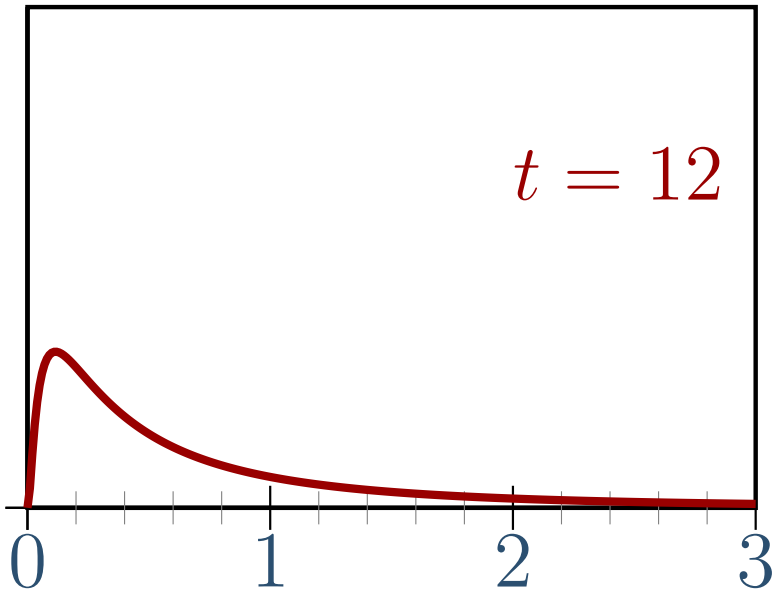

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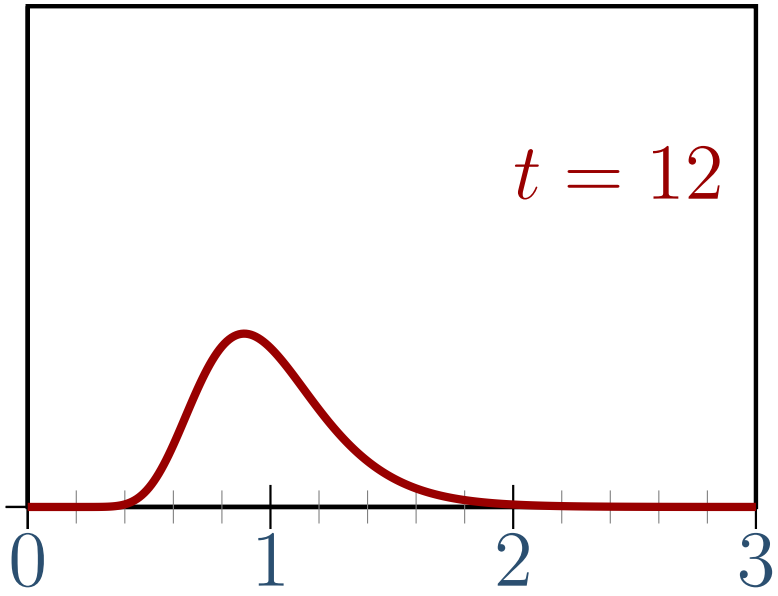

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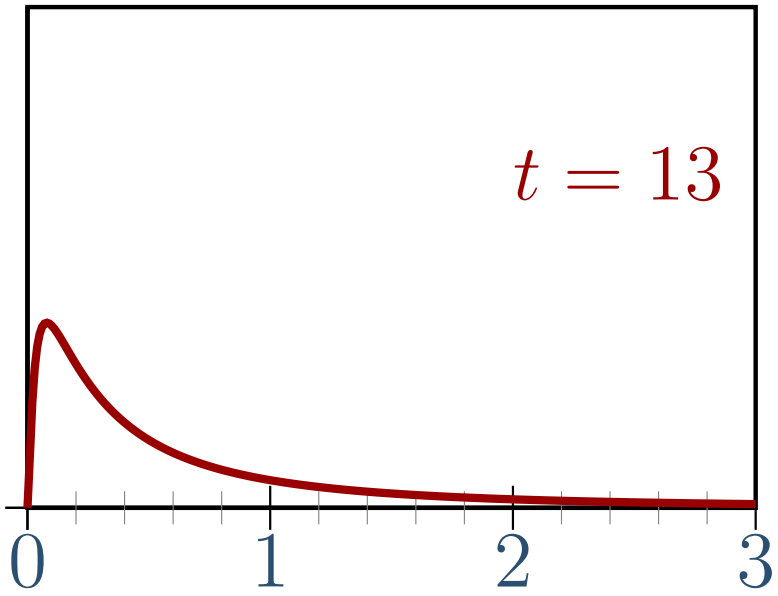

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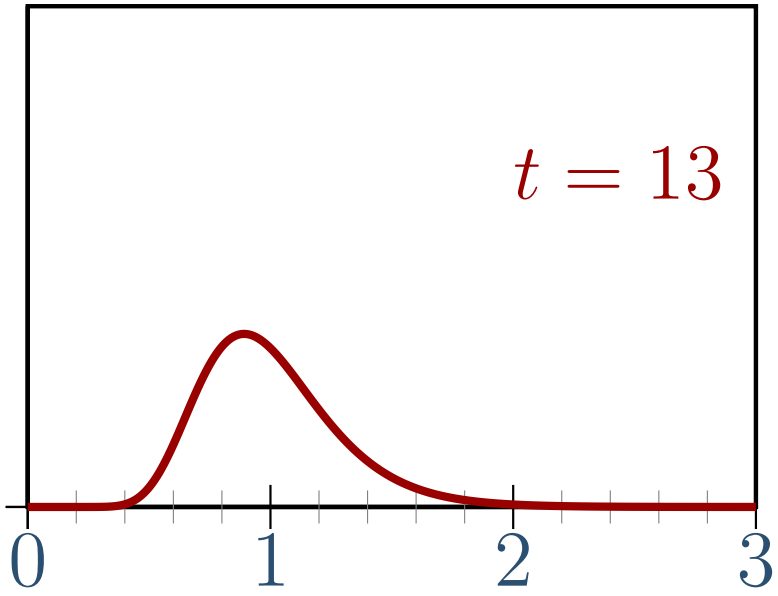

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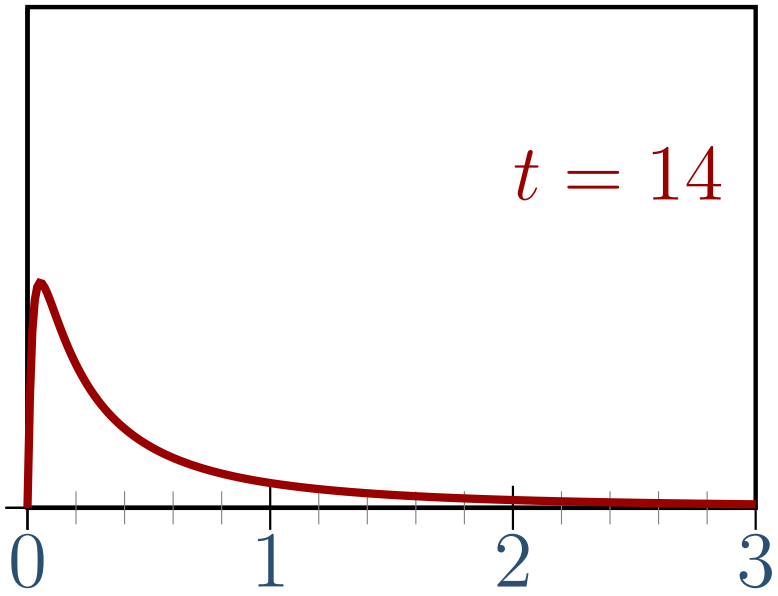

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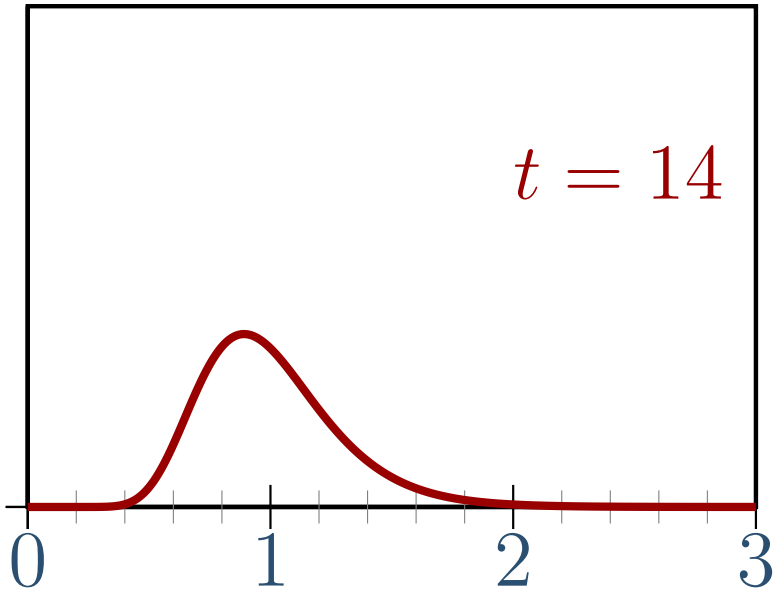

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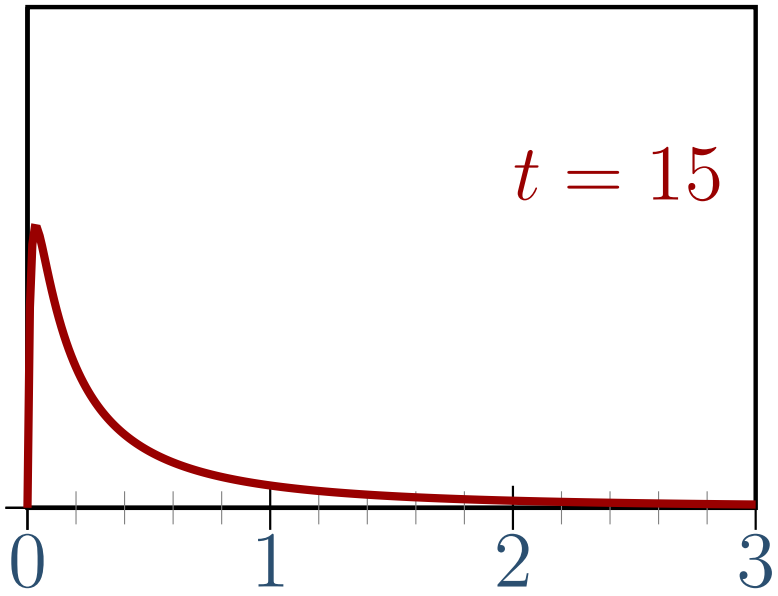

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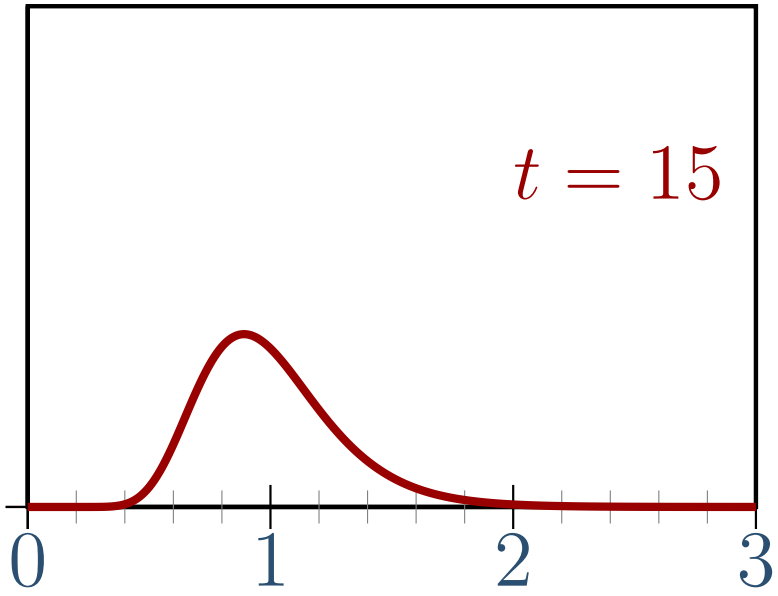

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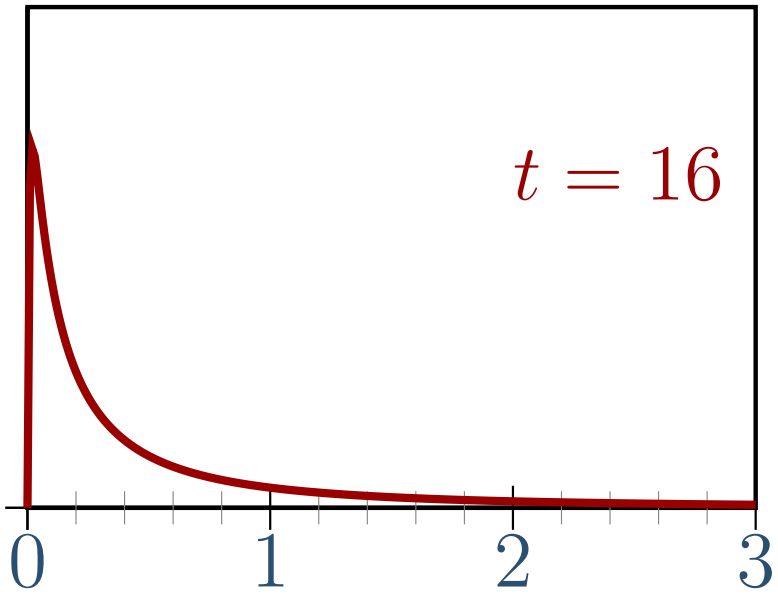

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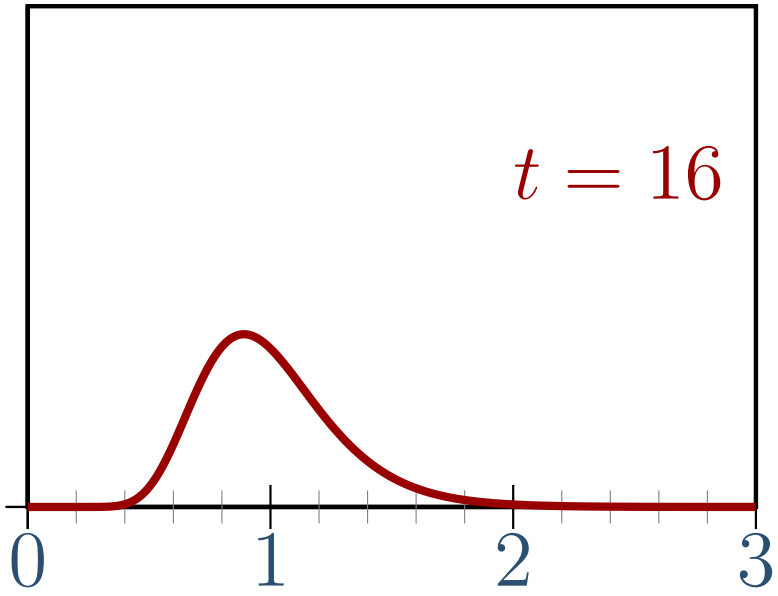

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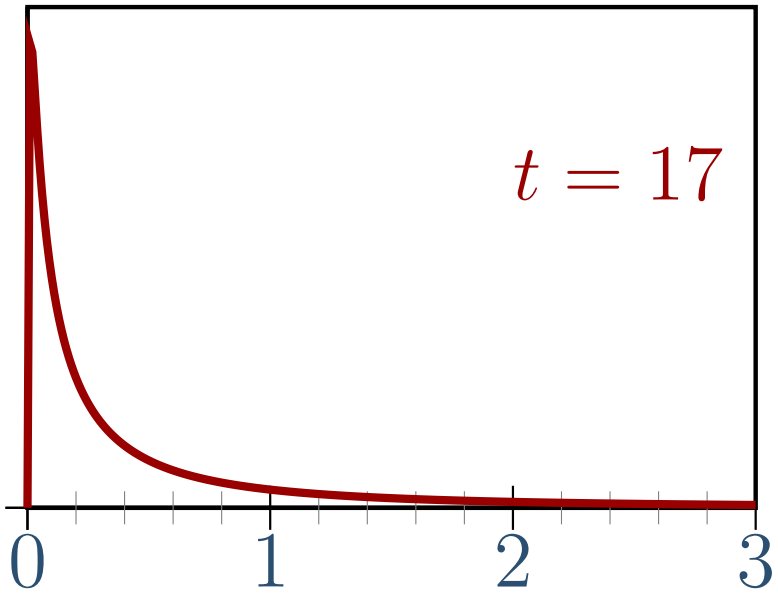

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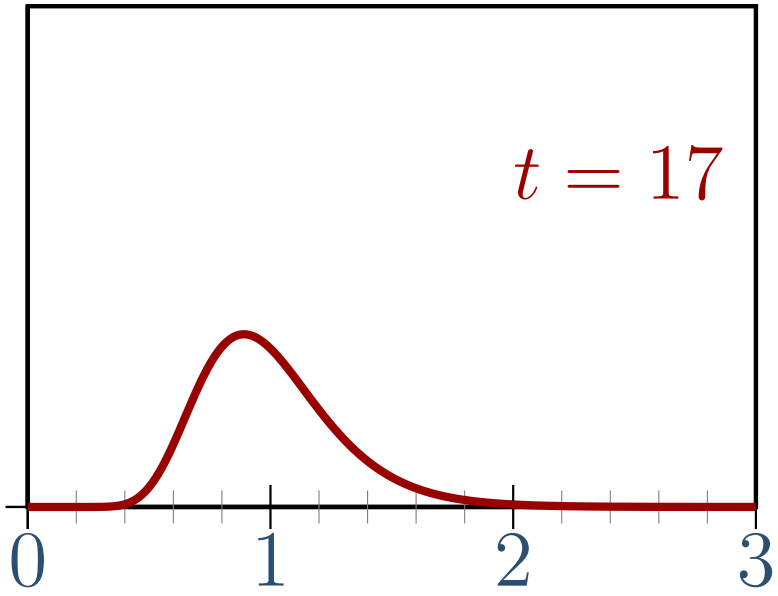

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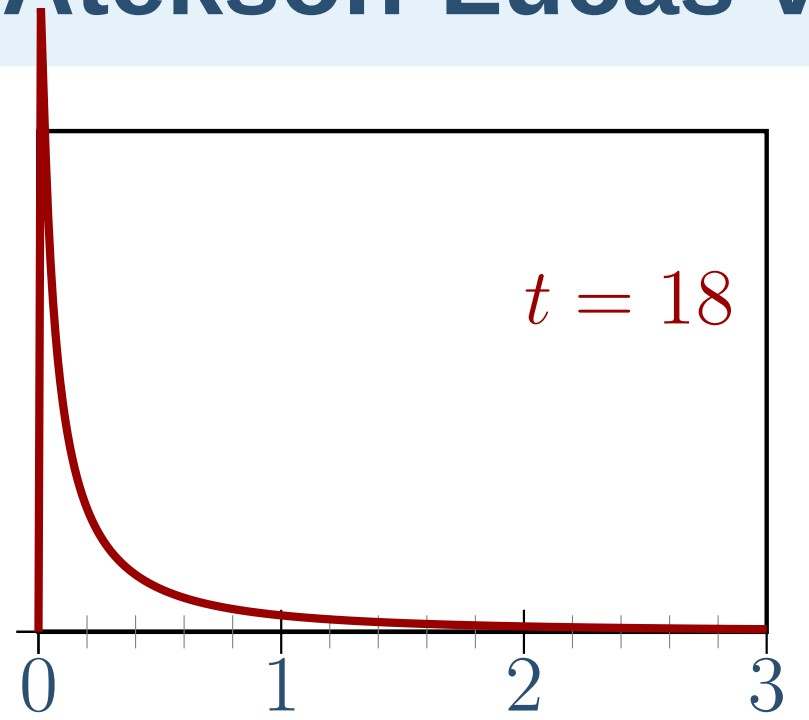

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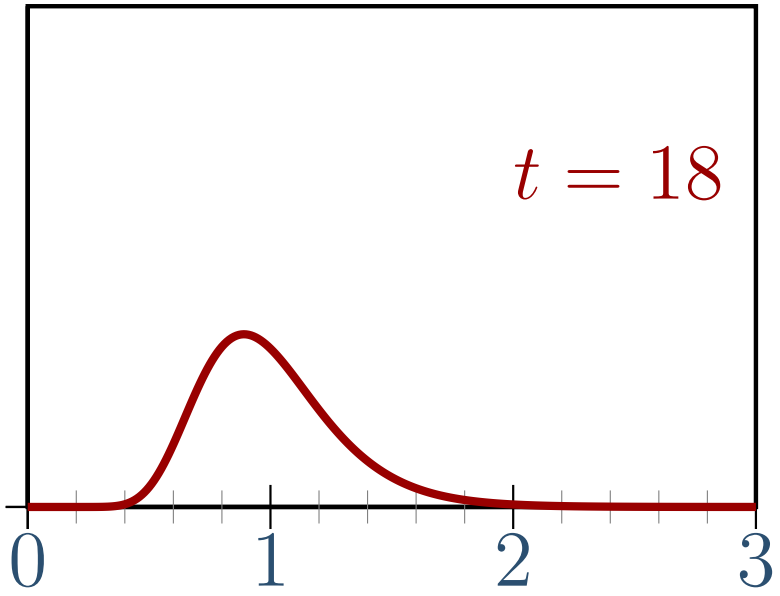
$\Downarrow$

No Steady State
Immiseration



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$\Downarrow$

Steady State Exists
Bounded Inequality

Key Equation

$$\mathbb{E}_t\left[k'(v_{t+1})\right] = \frac{\beta}{\hat{\beta}}\, k'(v_t)$$

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- value function

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  s.t. delivering v and incentive constraints

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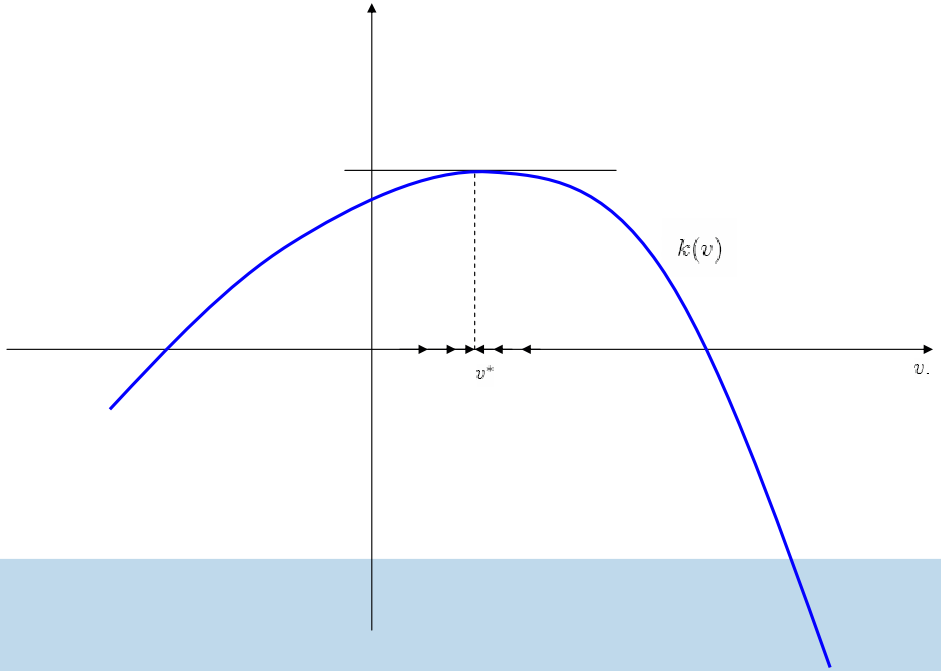

Estate Taxation: Mirrleesian model

- preferences

$$v_0 = u(c_0) - h(n_0) + \beta v_1 \quad \text{(parent)}$$

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- $y = w \cdot n$ and $w \sim F(w)$ private info

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- Taxes: Income $T(y)$ and Estate $\tau(b)$

Estate Taxation: Mirrleesian model

- preferences

$$v_0 = u(c_0) - h(n_0) + \beta v_1 \quad \text{(parent)}$$

$$v_1 = u(c_1) \quad \text{(child)}$$

- $y = w \cdot n$ and $w \sim F(w)$ private info

$$W \equiv v_0 + \alpha v_1 = u(c_0) - h(n_0) + \hat{\beta} u(c_1)$$

- Taxes: Income $T(y)$ and Estate $\tau(b)$
  - $\hat{\beta} = \beta \rightarrow \tau(b) = 0$

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