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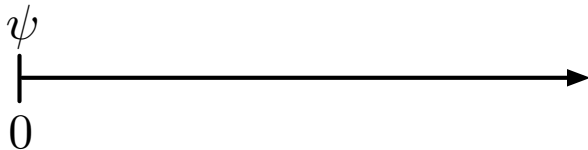
- ▶ How is vulnerability to roll-over crises affected by the ability to inflate?

In this paper

- ▶ Model limited commitment to repayment and inflation
- ▶ Ability to inflate makes
 - ▶ Countries more vulnerable if inflation costs are low
 - ▶ Opposite if inflation costs are high

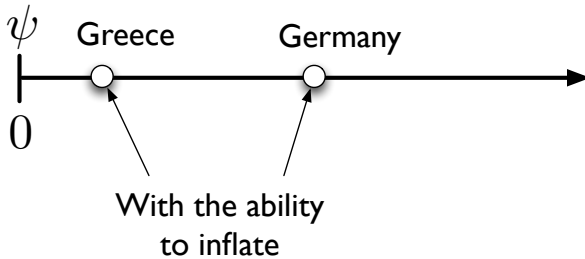
Key parameter

Cost of inflation: ψ



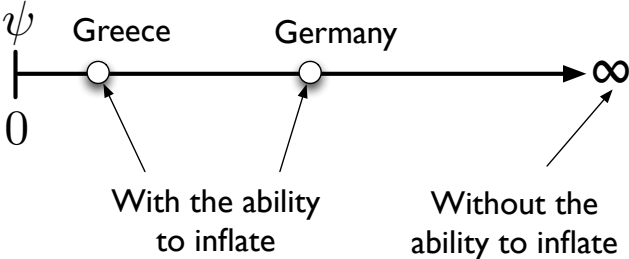
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consumption: c_t ; inflation rate: $\pi_t \in [0, \bar{\pi}]$

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- ▶ Government chooses c , π , and default taking as given an equilibrium interest rate schedule $r(b)$.

Lack of commitment

A. With the ability to inflate

- ▶ Government can default: value \underline{V}
 - ▶ loses access to international financial markets + other costs
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Which scenario (A vs. B) makes a country less vulnerable?

Equilibrium interest rate schedule of lenders

going back to that $r(b)$

$$r(b) = r^* + \pi(b) + \lambda(b)$$

- ▶ where $\pi(b)$ is the inflation strategy of the government
- ▶ and $\lambda(b)$ is the default probability (including sunspots)

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Coordination problem of the lenders

For high values of debt:

- ▶ if each lender thinks all other lenders will roll-over, no crises
- ▶ if each lender thinks all other lenders will not roll-over, then debt run

Regions of Multiplicity

Constructing debt runs

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- ▶ To avoid default, needs to repay within a grace period
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 - ▶ value of repayment depends also on debt and interest rate

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- ▶ Vulnerability cutoff level b_λ : Safe for $b \leq b_\lambda$, vulnerable $b > b_\lambda$

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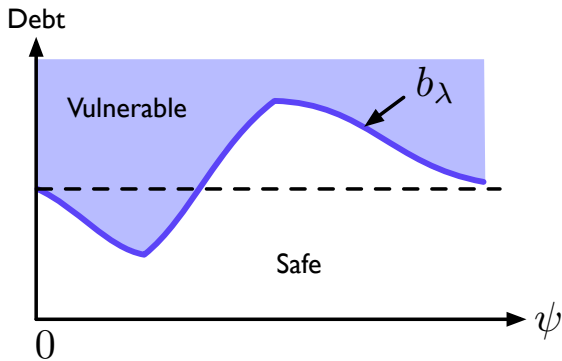
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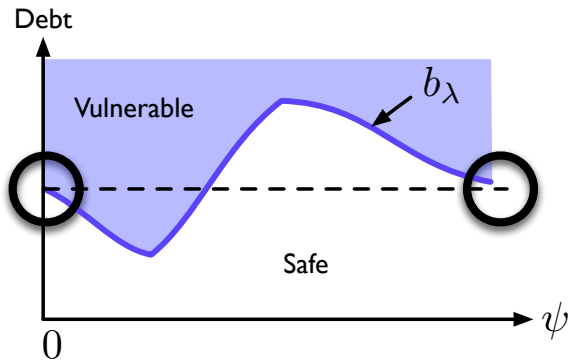
Question

- ▶ How does the vulnerability cutoff (b_λ) depend on the ability to inflate?

Vulnerability Region as a function of ψ



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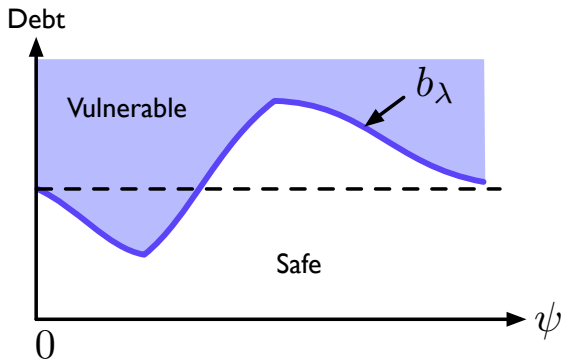
Two extremes cases: $\psi = 0$ and $\psi = \infty$

In the first: inflate all the time

In the second: never inflate

Same vulnerability: inflation is not state contingent

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More generally two **opposite** effects when ψ increases

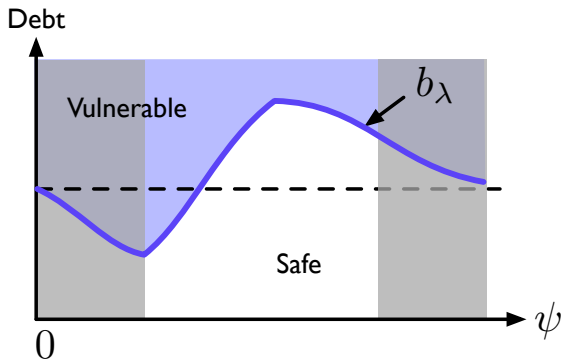
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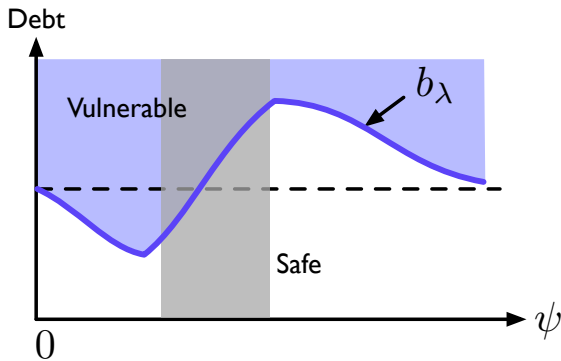


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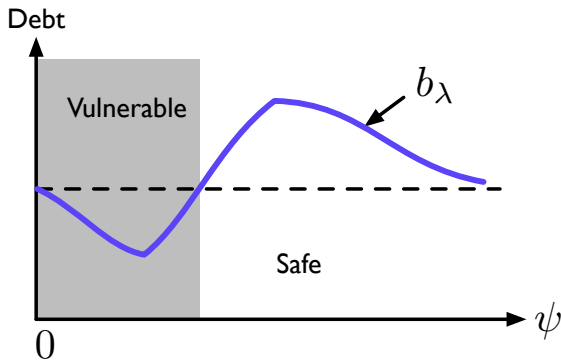


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Vulnerability Region as a function of ψ



A government with low cost of inflation (shaded area) better served without the option to inflate

- It reduces vulnerability region
- Lowers the temptation for inflation
- (And raises the borrowing limit)

Conclusion

A country with low inflation costs

- ▶ is not made less vulnerable to sovereign debt crises by abandoning a monetary union

Inflation is indeed a tool that grants flexibility

- ▶ But can be misused ex-ante
- ▶ Rendering powerless ex-post