

Rational Sentiments and Economic Cycles

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Overview

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- ▶ **Credit market frictions determine lending standards**
 - ▶ Imperfect pledgeability: bad entrepreneurs do not repay
 - ▶ Imperfect information: entrepreneur type is not observed

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- ▶ **Credit market frictions determine lending standards**
 - ▶ Imperfect pledgeability: bad entrepreneurs do not repay
 - ▶ Imperfect information: entrepreneur type is not observed
- ▶ **Trade-off:** quantity vs. quality of lending
- ▶ Lending standards \iff distribution of investor types \implies real outcomes

Stage Economy

- ▶ 2 subperiods, 1 good
- ▶ 2 types of risk neutral agents
 - ▶ Heterogeneous entrepreneurs: good & bad, transparent & opaque
 - ▶ Heterogeneous investors: skilled & unskilled
- ▶ Credit market friction: Bad entrepreneurs do not repay loans
- ▶ Information structure
 - ▶ Agent types are private information
 - ▶ Skilled investors observe the entrepreneurs' types
 - ▶ Unskilled investors can screen entrepreneurs by choosing credit standards

Credit Standards

	Good	Bad
Transparent	x x x x x	x x x x x x x x
Opaque	x x x x x x x	x x x x x x x

Credit Standards

Bold Test

	Good	Bad
Transparent	x x x x x x x	x x x x x x
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Cautious Test

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Credit Standards

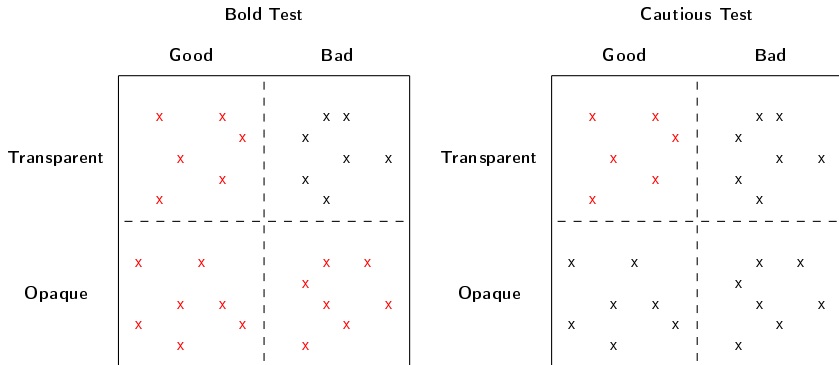
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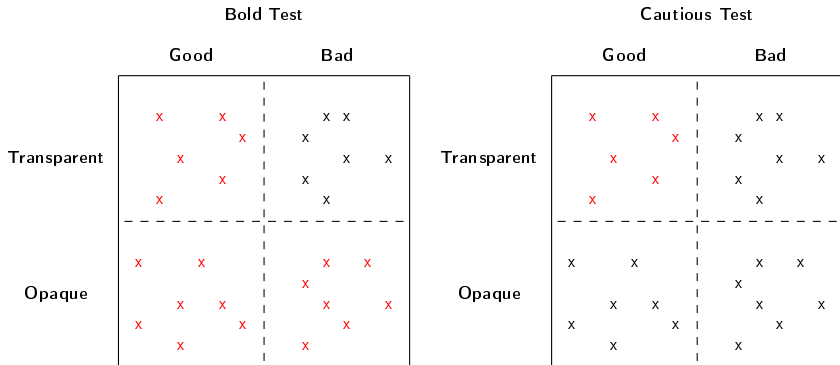
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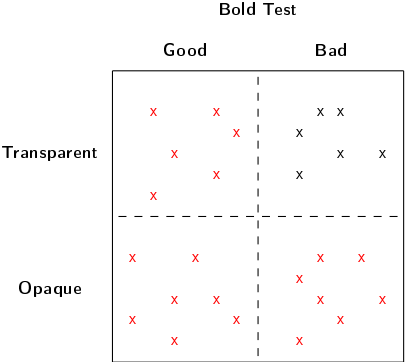


- ▶ Bold test: more lending, opaque bad entrepreneurs default
- ▶ Cautious test: less lending, no defaults
- ▶ Stage equilibrium depends on distribution of entrepreneur types!
 - ▶ few bad entrepreneurs, bold stage.

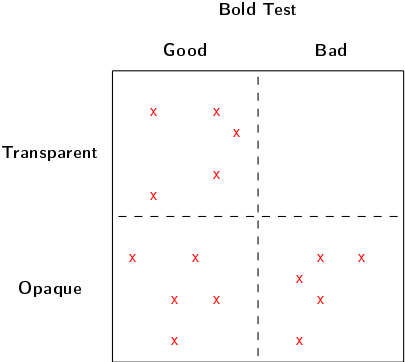
Dynamics

- ▶ Repeated stage game (no saving within periods)
- ▶ Evolution of entrepreneur types is endogenous:
 - ▶ Entrepreneurs who exit are replaced by new entrants
 - ▶ Exogenous exit rate
 - ▶ **Entrepreneurs without credit exit**
- ▶ Type of cycle depends on the evolution of entrepreneur type distribution

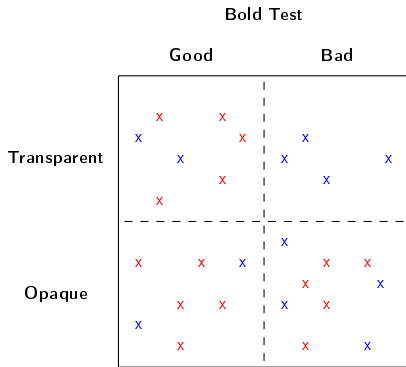
Entrepreneur Distribution



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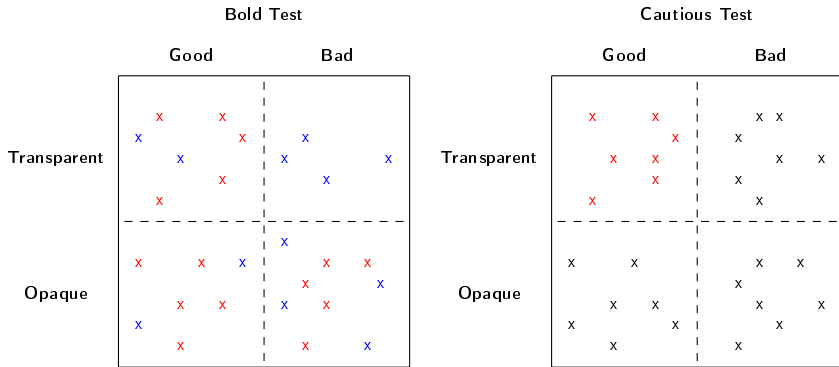


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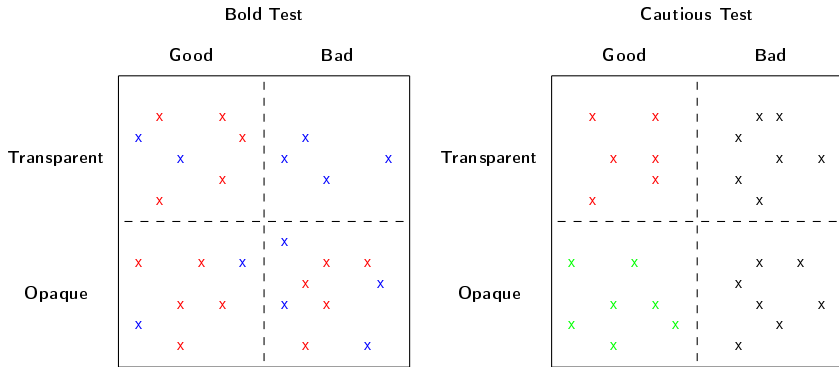
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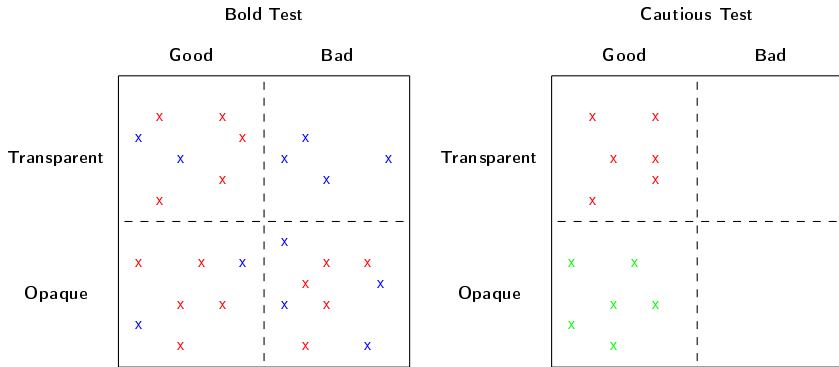
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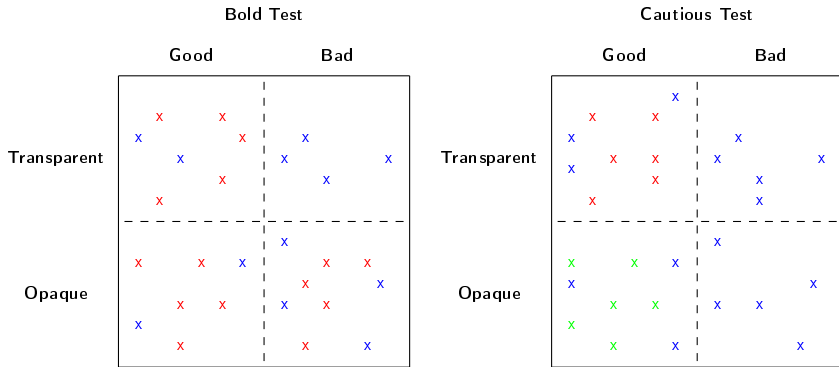
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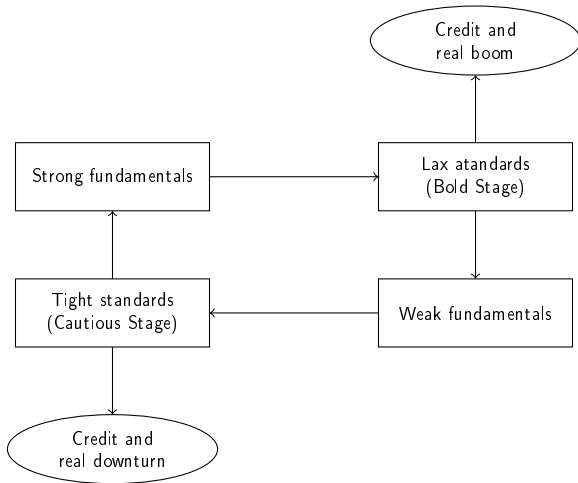
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- ▶ Bold stage: Fraction of bad opaque borrowers increases
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- ▶ Cautious stage: Fraction of bad opaque borrowers decreases
 \implies credit market conditions improve

Endogenous Credit and Real Cycles



Comments

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3. Investors may choose whether to become informed
4. Dynamics: Long-lived investors
 - ▶ Expectations over future credit conditions affect today's credit market