Animal Spirits, Financial Crises and Persistent Unemployment

RES Meetings 2012

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Questions this paper addresses

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  - The boom is a non-stationary equilibrium with rising asset prices and falling unemployment
- What explains the crash that follows?
  - The crash is a switch to one of many possible stationary equilibria with high unemployment
- Why is unemployment persistent?
  - The natural rate hypothesis is false: high unemployment is a steady state equilibrium

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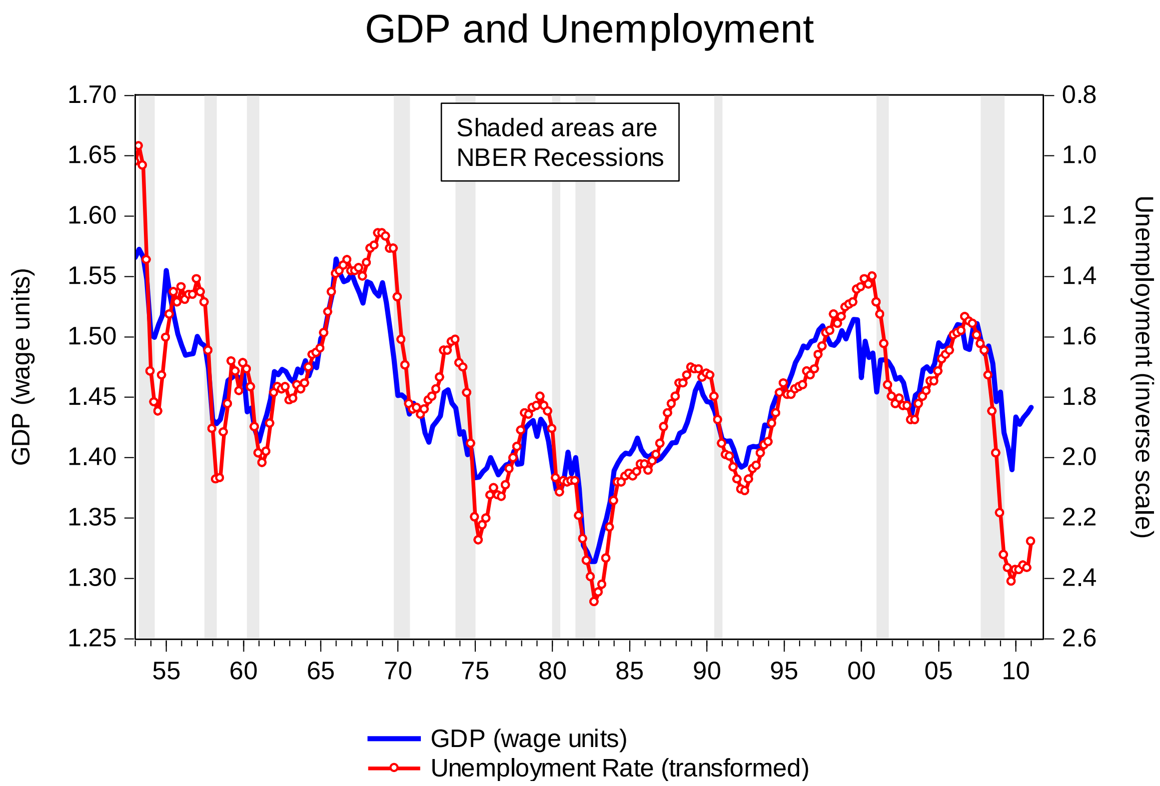
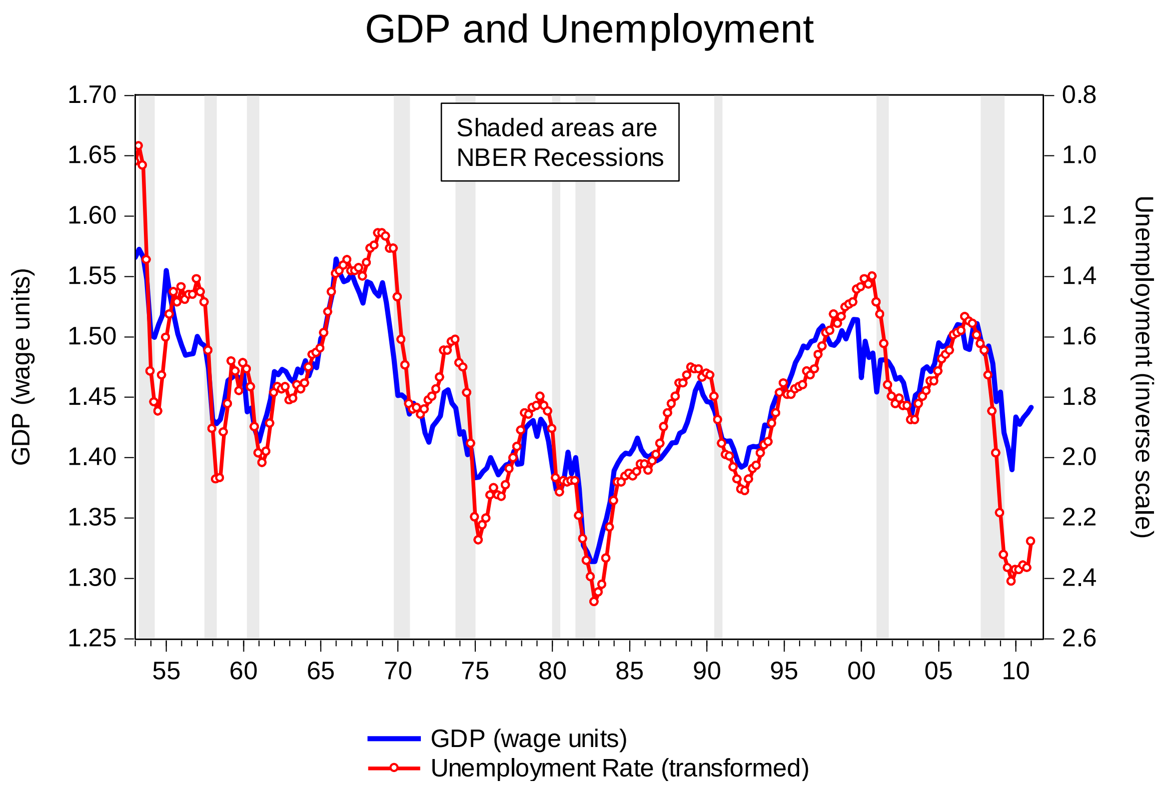
- Asset prices in wage units are unbounded above

What are the Facts?



GDP in wage units moves closely with unemployment

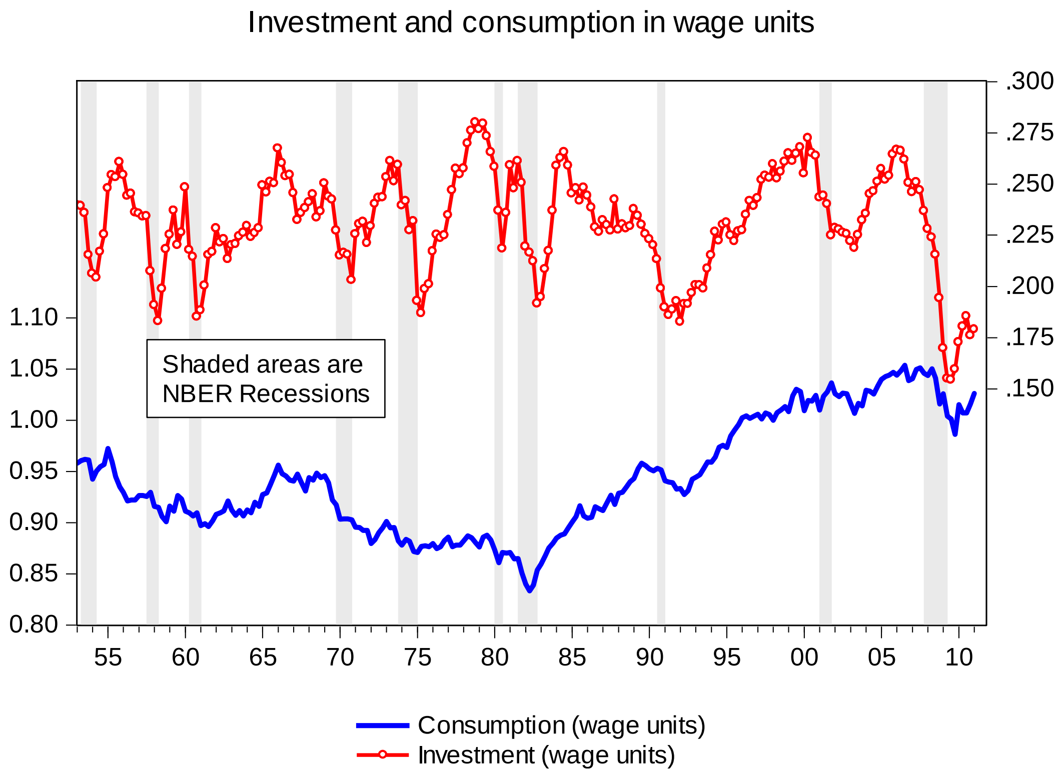
What are the Facts?



GDP in wage units moves closely with unemployment...

both series are random walks

What are the Facts?



Investment in wage units is stationary

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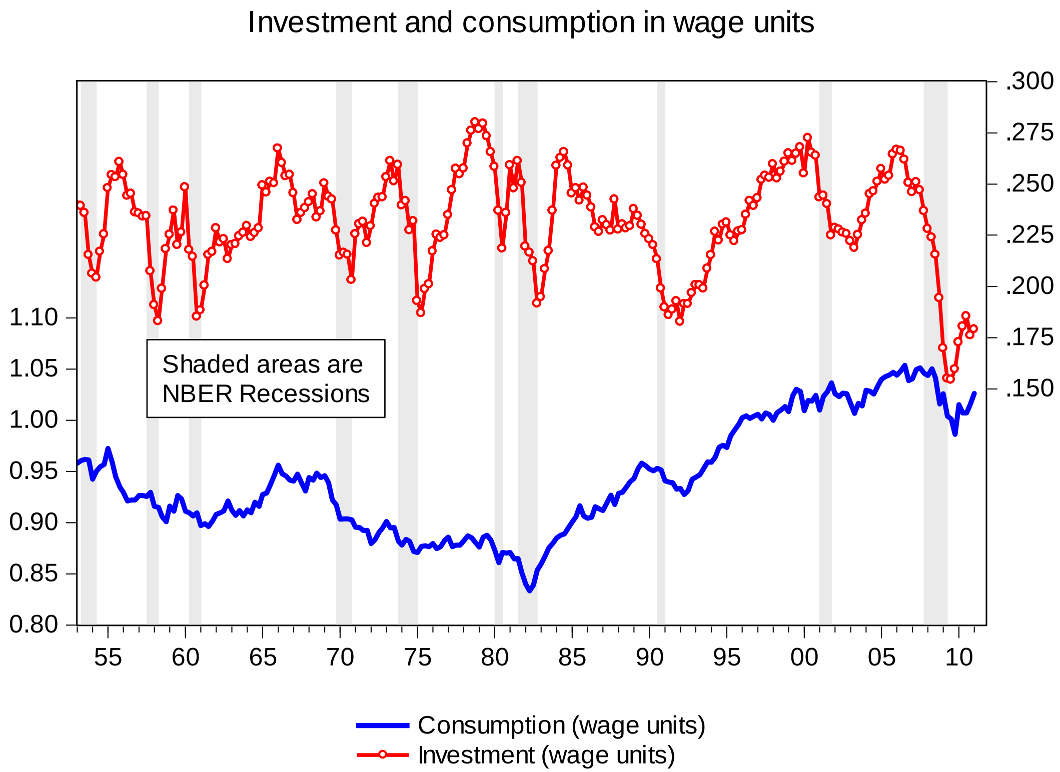
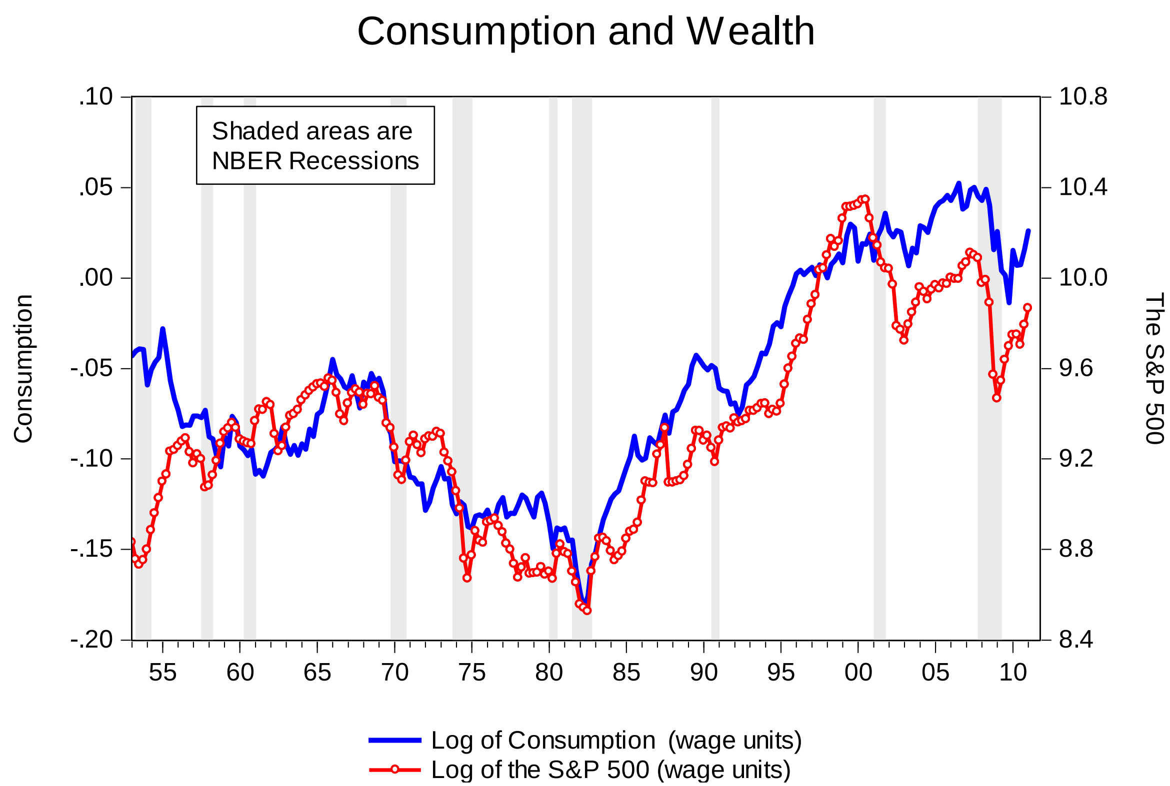


Investment in wage units is stationary...

the low frequency movements are associated with consumption

What are the Facts?



Consumption and wealth are non-stationary and cointegrated

How is my work different

- Existing work falls into two camps

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Vision A

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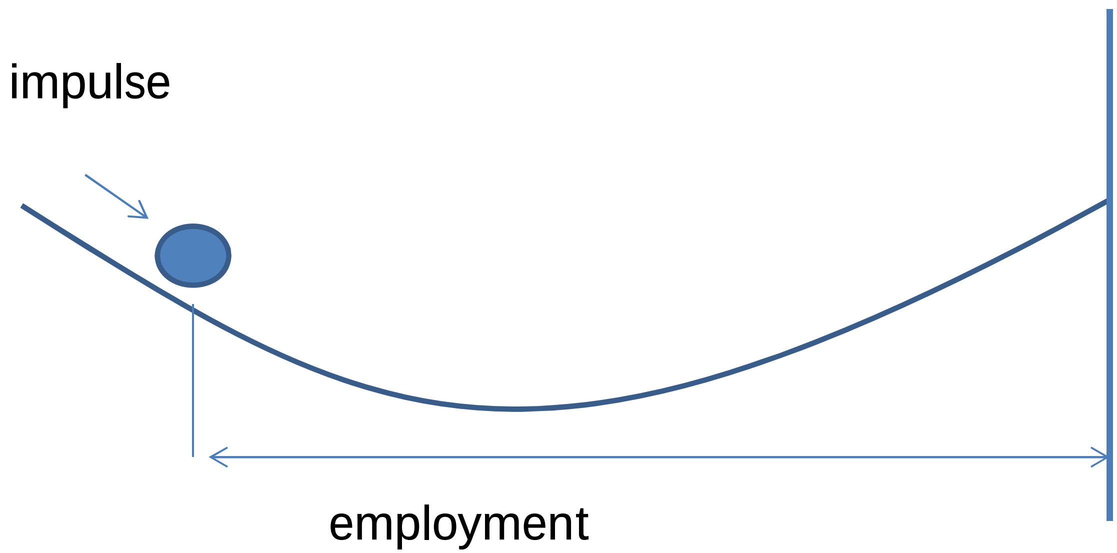
- My work is in the tradition of the Keynes of the General Theory
  - It is a model of a non-self-correcting system

Vision B

Alternative Visions: A



- Market systems are self-stabilizing
  - Classical economics
  - Neoclassical synthesis

Alternative Visions: B

- Market systems are inherently unstable
  - Keynes
  - Minsky

Two Visions: Model A

- What is the impulse?

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Models where there is a unique steady state equilibrium with frictions

Two Visions: Model B

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- What is the impulse?
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Model B

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  - Confidence shock
- Why is economic terrain flat?
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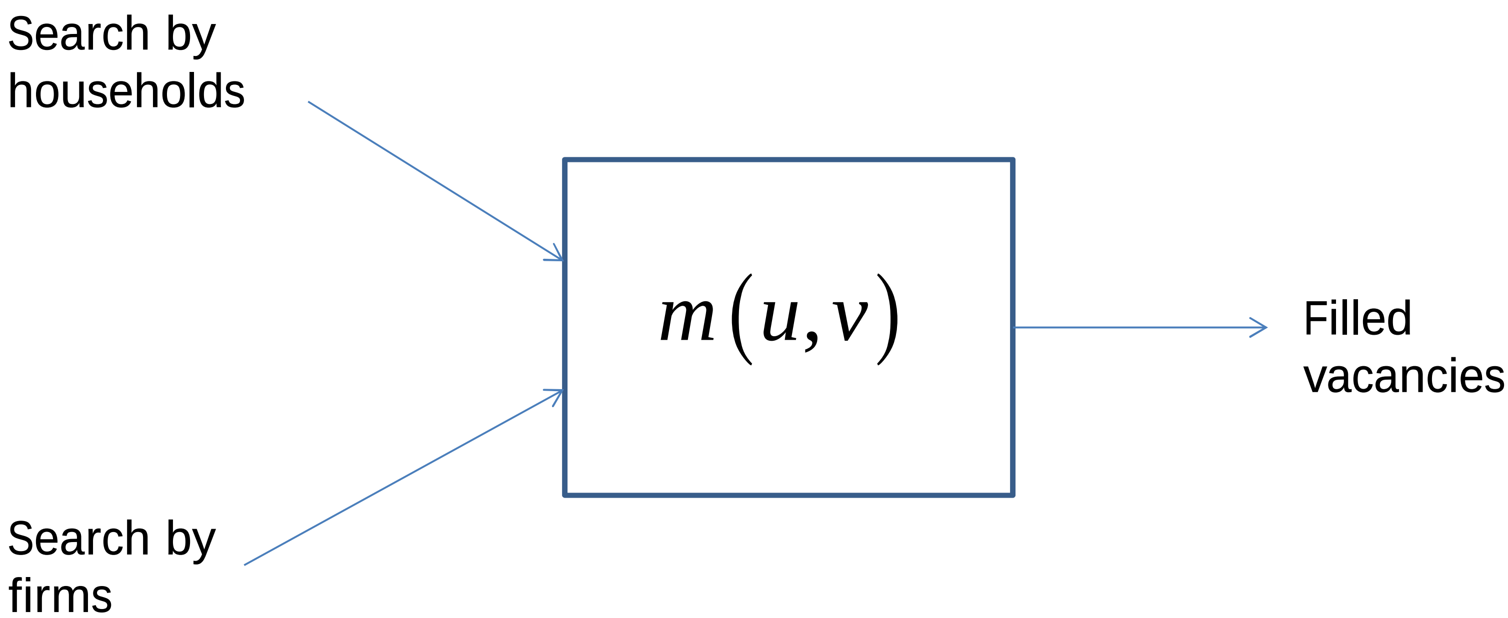
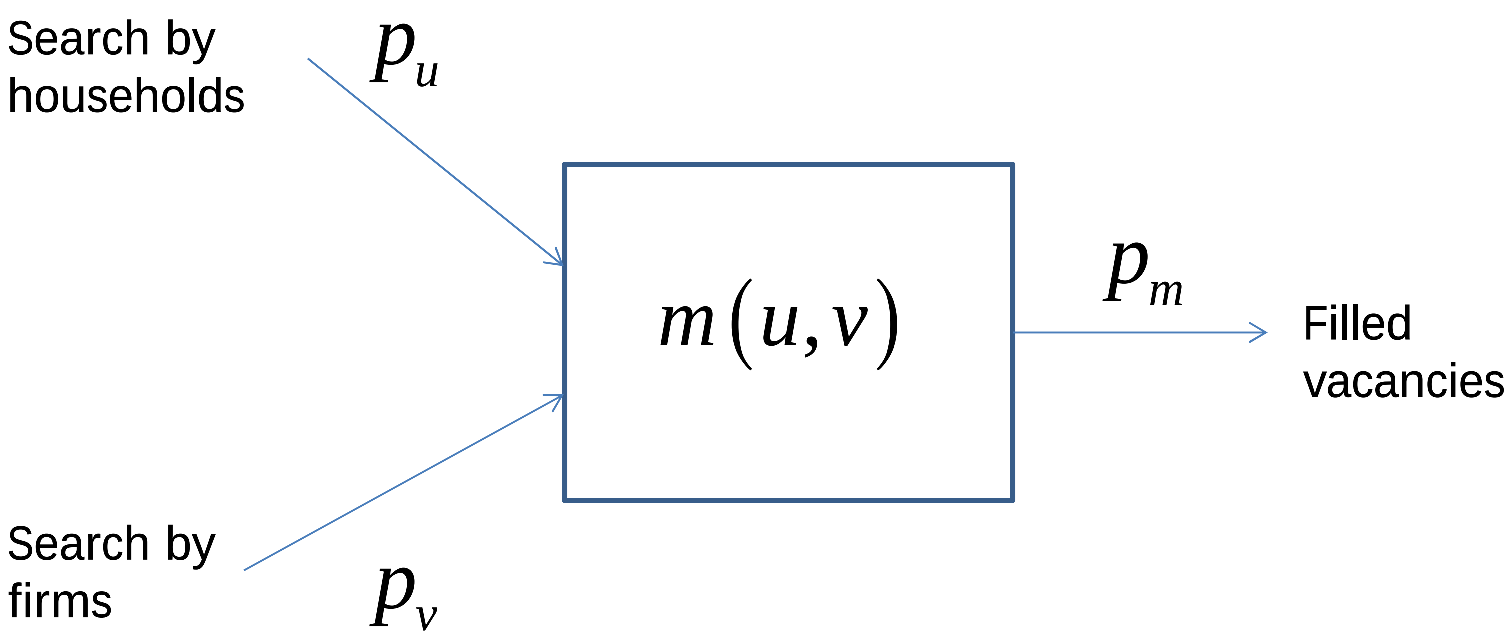
Models where there are multiple steady state equilibria driven by beliefs

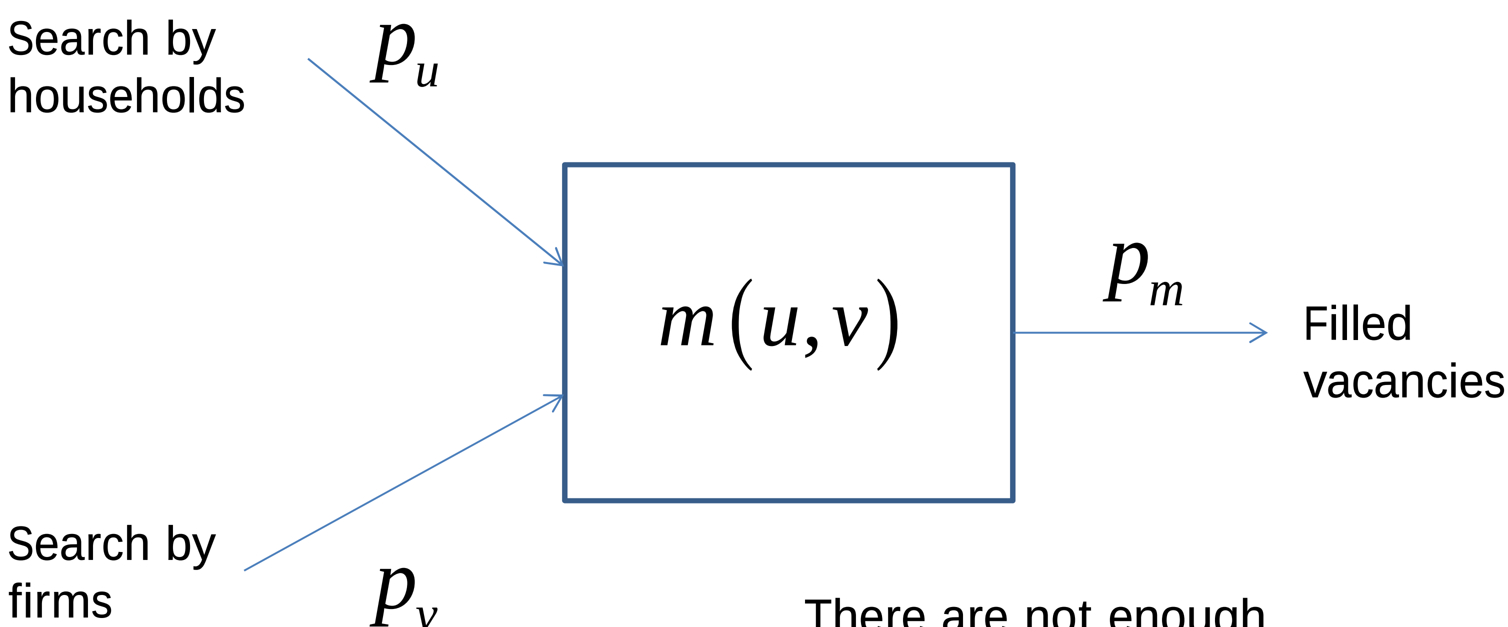
Search



Search


Search by households
p_u
$m(u,v)$
p_m
Filled vacancies
Search by firms
p_v

Search



There are not enough prices in a search market to determine *u* and *v*

Closing a search model

- Nash bargaining

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  - Add a new parameter

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Vision B

Multiple Equilibrium and Search

- Finite multiplicities
  - Diamond RE Studs (1982),
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- Finite multiplicities
  - Diamond RE Studs (1982),
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- Continuum of equilibria
  - Howitt and McAfee *IER* (1987)
  - Hall *AER* (2005)

Search and Asset Markets: Vision A

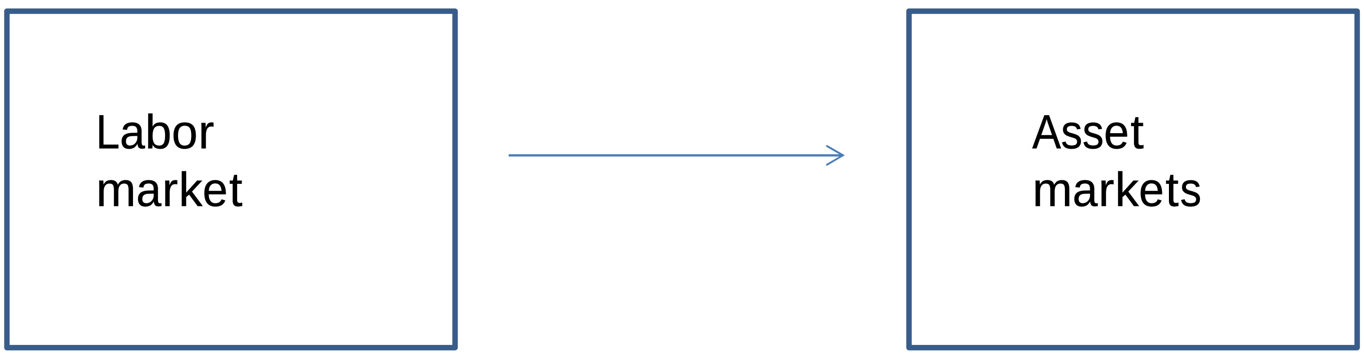
Unique steady
state equilibrium

Labor
market

Search and Asset Markets: Vision A

Unique steady state equilibrium

Fundamentals pin down asset prices



Search and Asset Markets: Vision A

Unique steady state equilibrium

Fundamentals pin down asset prices

Labor market → Asset markets

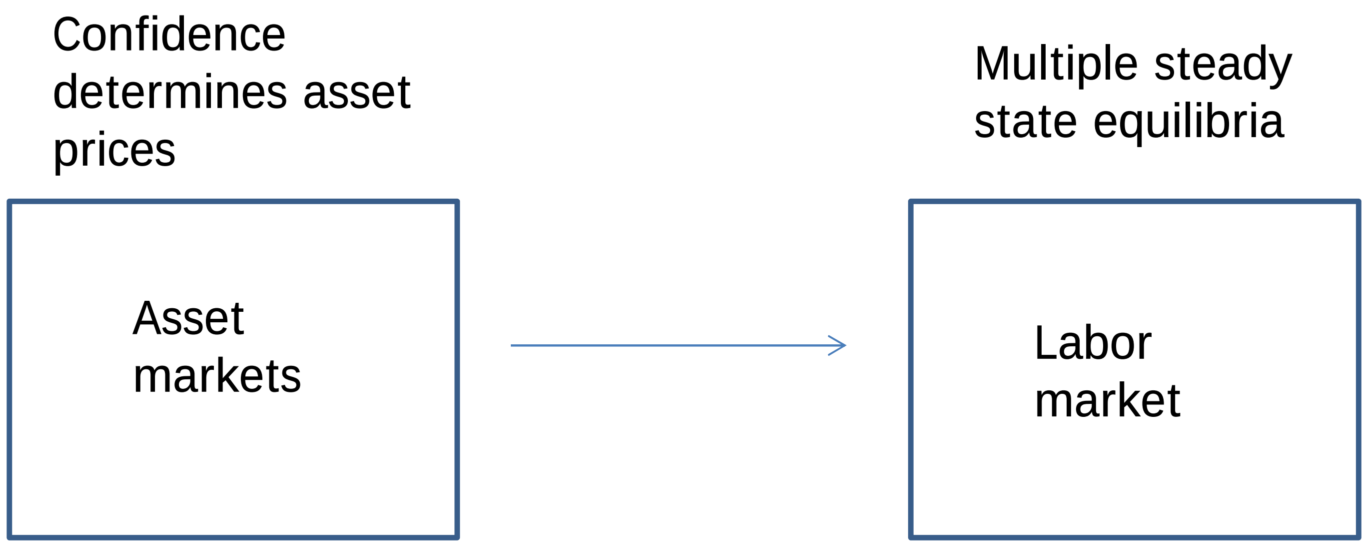
What's happening in the labor market is reflected in asset prices

Search and Asset Markets: Vision B

Confidence determines asset prices

Asset markets

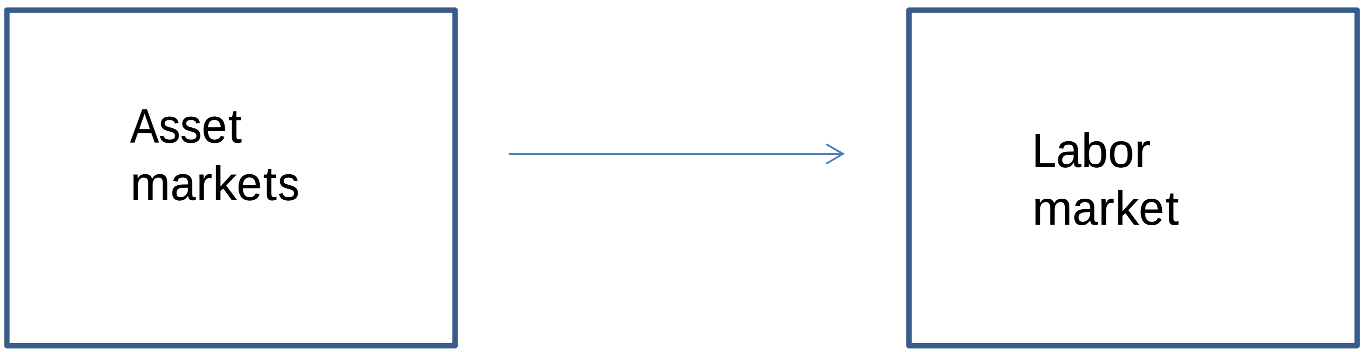
Search and Asset Markets: Vision B



Search and Asset Markets: Vision B

Confidence determines asset prices

Multiple steady state equilibria



What's happening in the asset markets CAUSES permanent movements in unemployment

Questions Raised by Vision A

- What was the trigger to the Great Recession?

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- Why are asset prices so volatile

Questions Raised by Vision A

- What was the trigger?
  - The increased financial friction is not explained.
  - There was no big change in fundamentals so why did the market crash
- Why are asset prices so volatile
  - Why don’t asset market participants buy when prices are low and sell when they are high?

Explanations Given By Vision B

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  - – The trigger was a shift from one equilibrium to another.

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Explanations Given By Vision B

- What was the trigger?
  - The trigger was a shift from one equilibrium to another.
- Why are asset prices so volatile
  - Any asset price is an equilibrium

Implications of Accepting Vision B

- The stock market crash *caused* the Great Recession

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- There is no "natural rate of unemployment"

Implications of Accepting Vision B

- The stock market crash *caused* the Great Recession
- There is no “natural rate of unemployment”
- The economy was more stable in the post-war period because of successful monetary policies and fiscal stabilizers

Summary

- Confidence matters and can determine economic activity in the long-run

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- The natural rate hypothesis is false
- Any inflation rate is consistent with any unemployment rate in the steady state