

Comments on

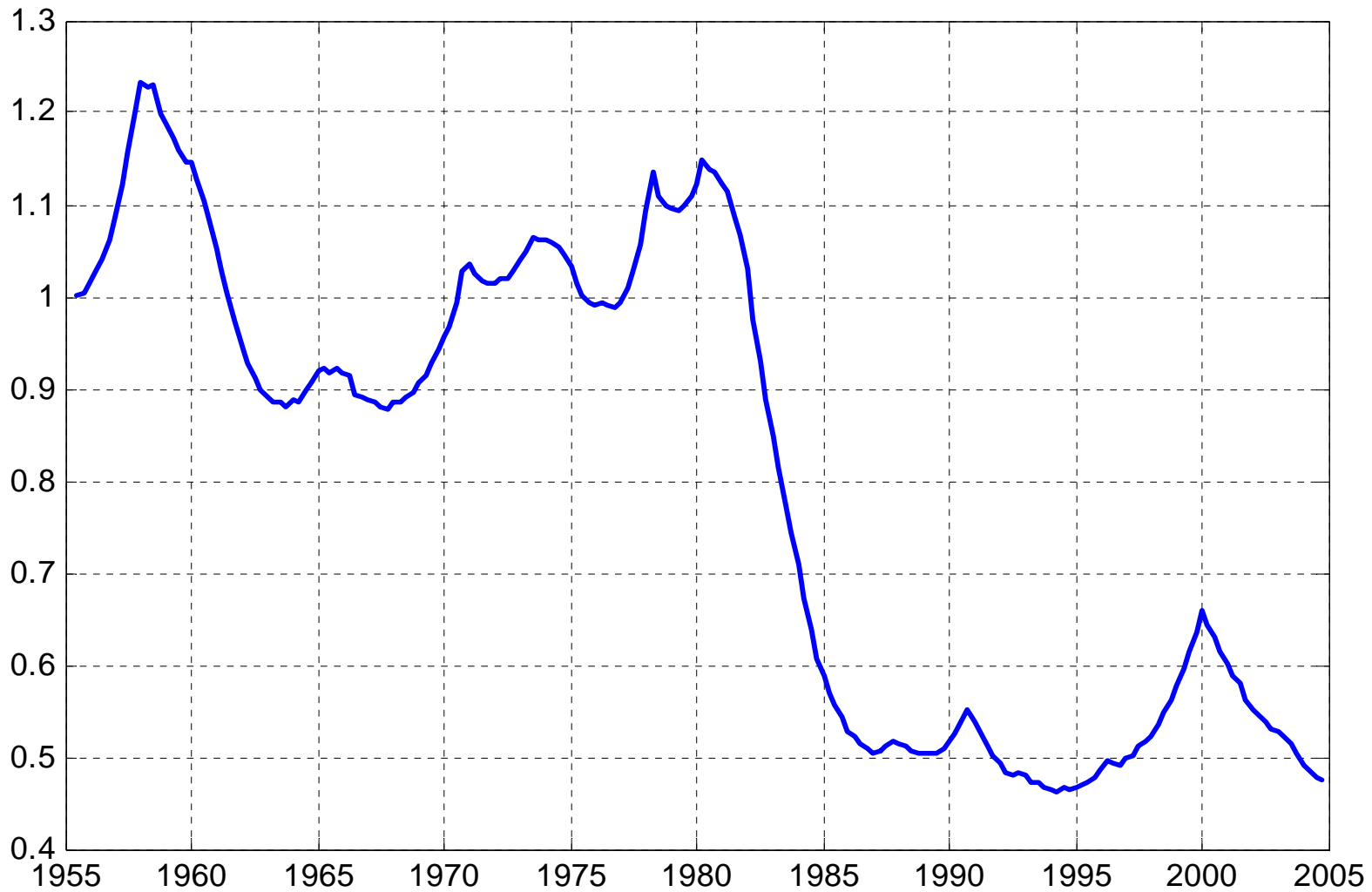
Financial Innovations and Macroeconomic Volatility

by **Urban Jermann and Vincenzo Quadrini**

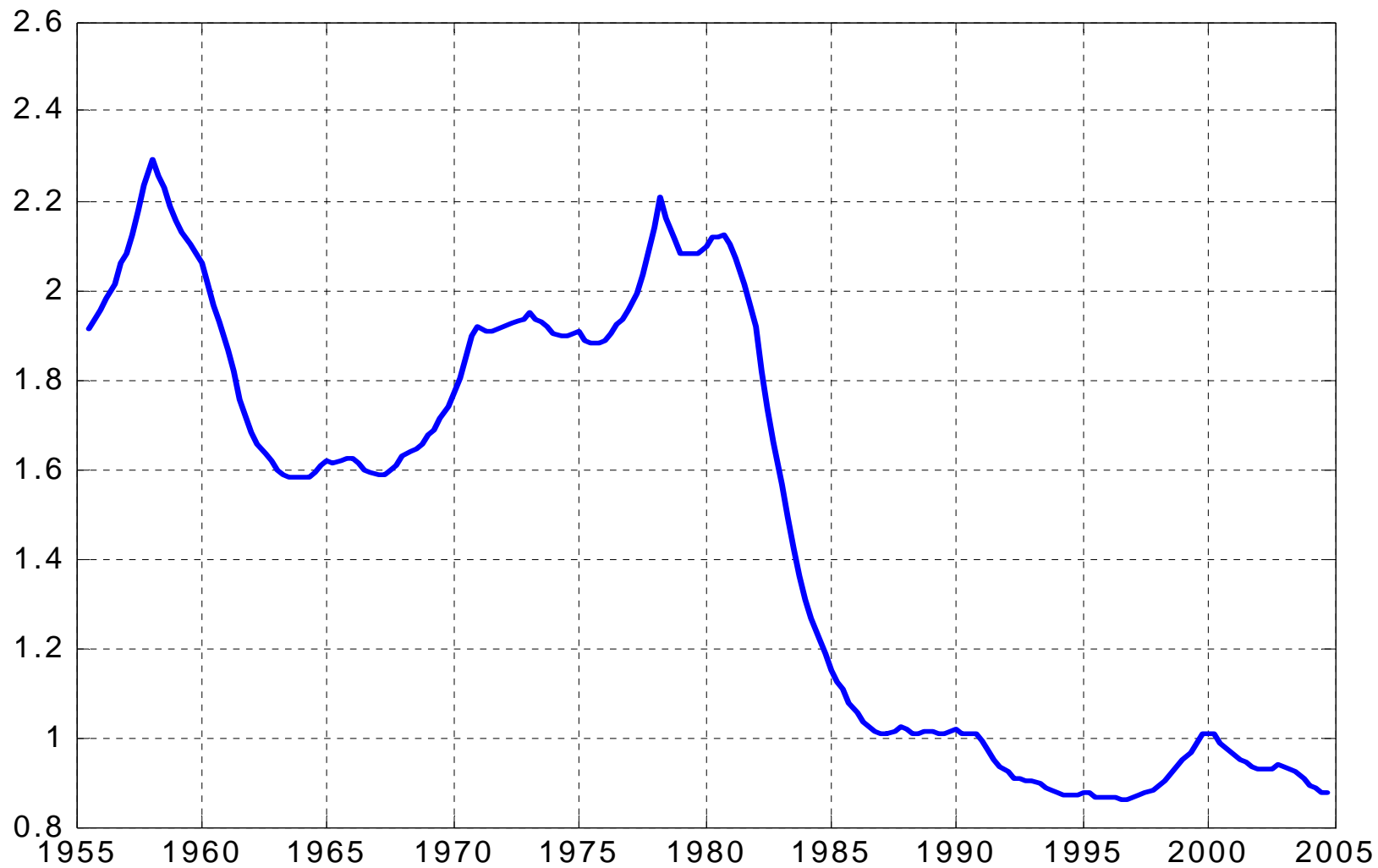
Giorgio Primiceri
Northwestern University

November 17, 2006

Standard deviation of US GDP growth



Standard deviation of US GDP (HP filter)



This paper...

- **Financial structure** of firms has become **more volatile** after 1984
- Model in which financial factors are key to generate fluctuations
- Two financial frictions:
 - Endogenous borrowing limit (limited commitment)
 - Exogenous cost of paying out dividends

Main result

- Model calibrated to US data pre and post-1984
- Explain the Great Moderation as a consequence of firms' greater financial flexibility

Outline of my Comments

1. Will tell you why this is a very nice paper
2. Comments on the empirical motivation
3. Comments on the theoretical framework

Why I think this is the right direction

- A look at the Great Moderation from a different perspective

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- **Justiniano and Primiceri (2005):**
Large scale DSGE model with time varying volatility of structural shocks

Why I think this is the right direction

- A look at the Great Moderation from a different perspective
- **Justiniano and Primiceri (2005):**
Large scale DSGE model with time varying volatility of structural shocks
- Reduction in volatility of GDP explained by a reduction in volatility of a **shock to the real return on capital**

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- This shock is a “wedge” in the Euler Equation pricing the capital stock
- Might proxy for un-modeled financial frictions (CKM, 2006)

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- This shock is a “wedge” in the Euler Equation pricing the capital stock
- Might proxy for un-modeled financial frictions (CKM, 2006)
- Interpretation: Great Moderation comes from a reduction in financial frictions
- Bingo!

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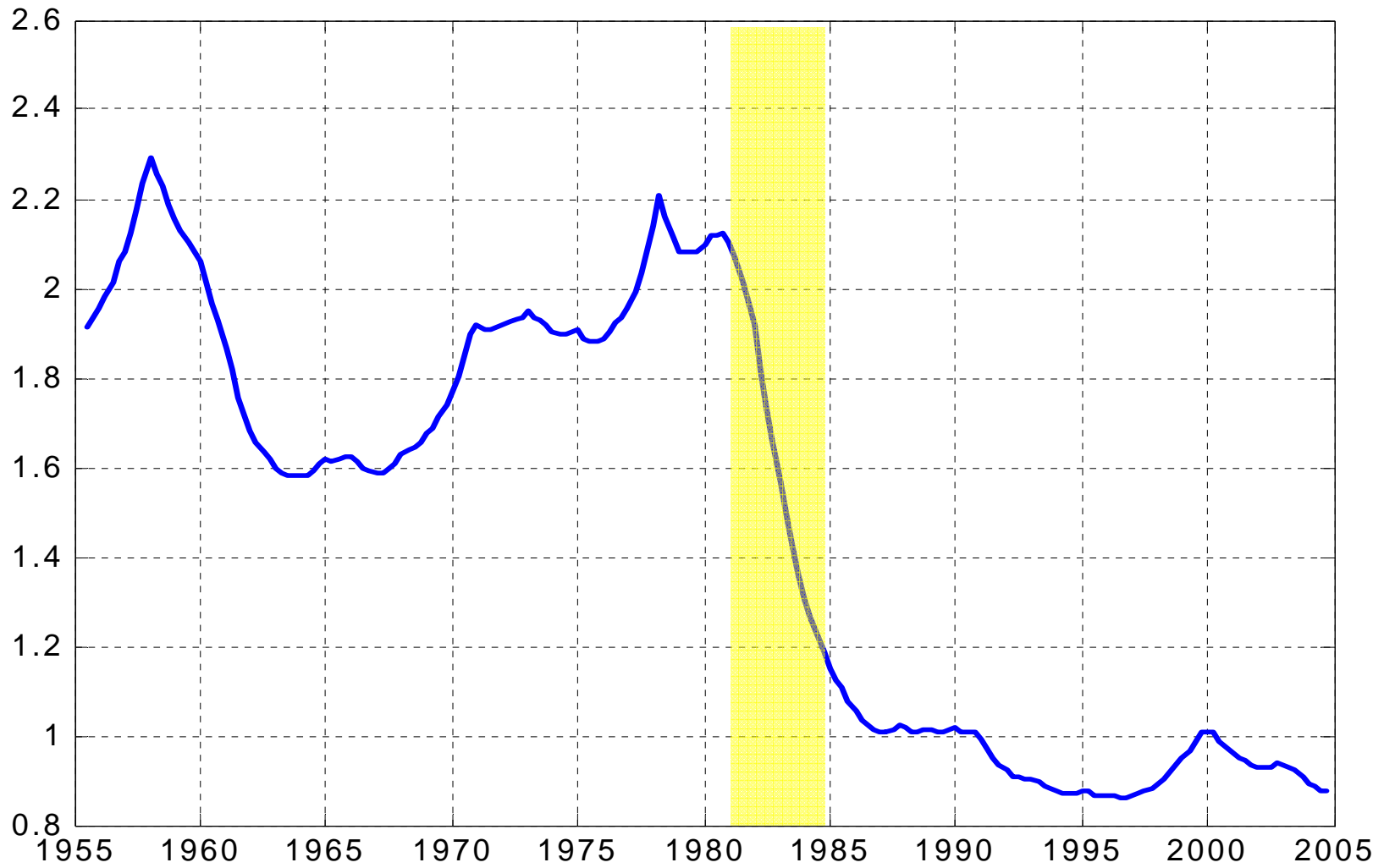
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A closer look at the empirical motivation of JQ

- Decline in volatility of GDP in early 1980s **is very sharp**

Volatility of US GDP



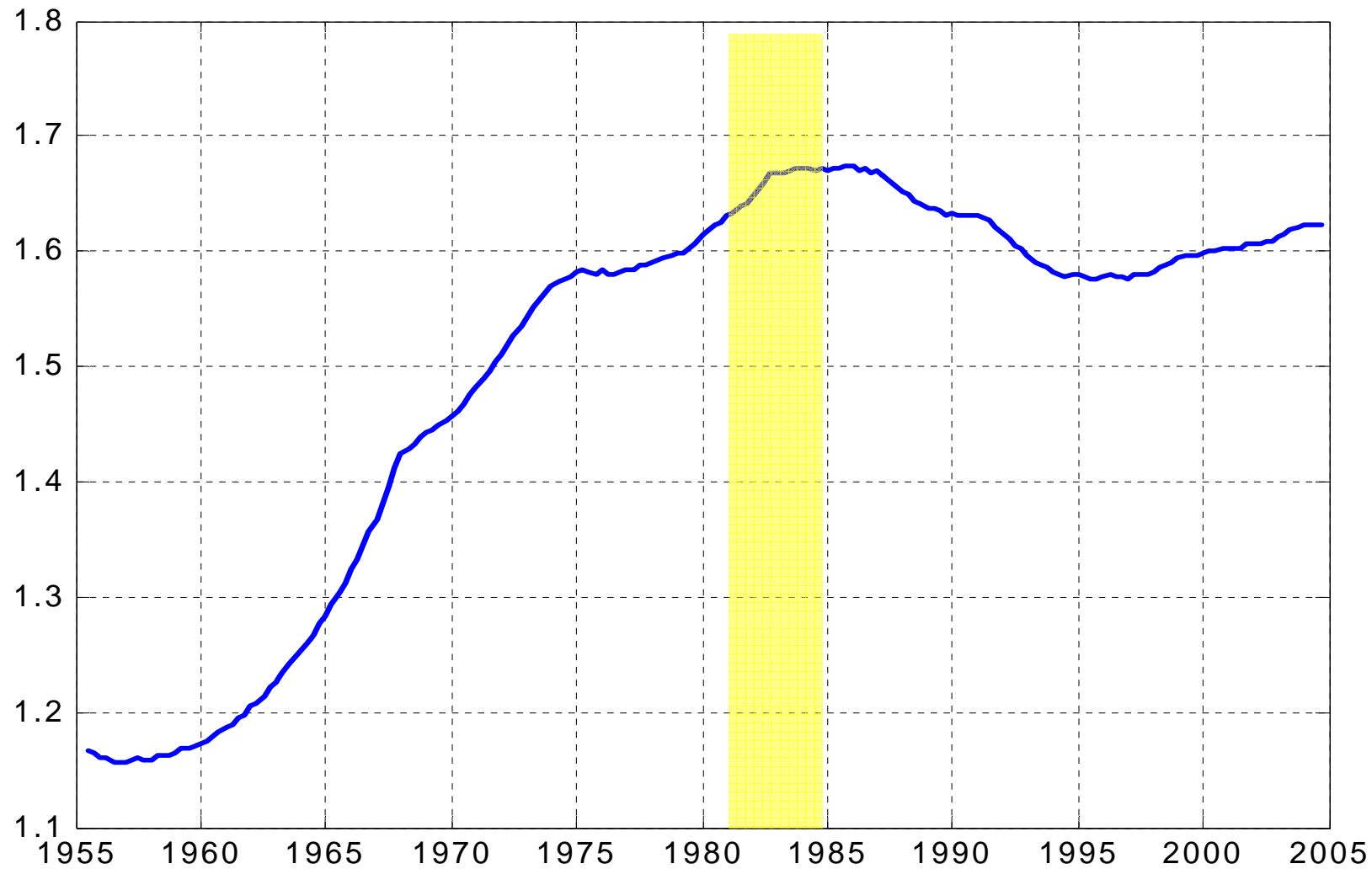
A closer look at the empirical motivation of JQ

- Decline in volatility of GDP in early 1980s **is very sharp**
- This is the real puzzle
- This is why the Monetary Policy hypothesis has received so much attention

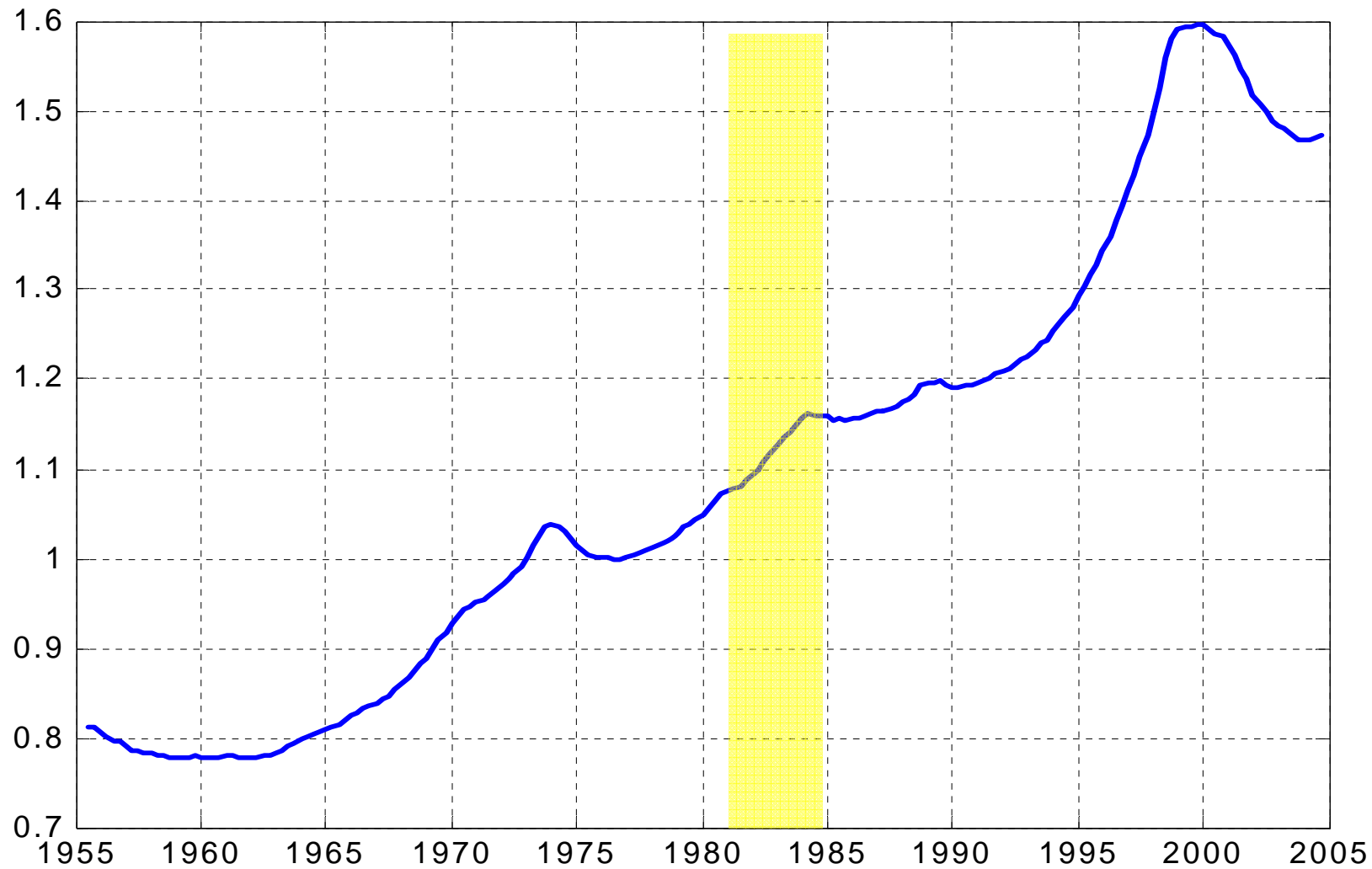
A closer look at the empirical motivation of JQ

- Decline in volatility of GDP in early 1980s **is very sharp**
- This is the real puzzle
- This is why the Monetary Policy hypothesis has received so much attention
- Let's have a look at the financial variables examined in JQ

Time varying SD of Debt Repurchase



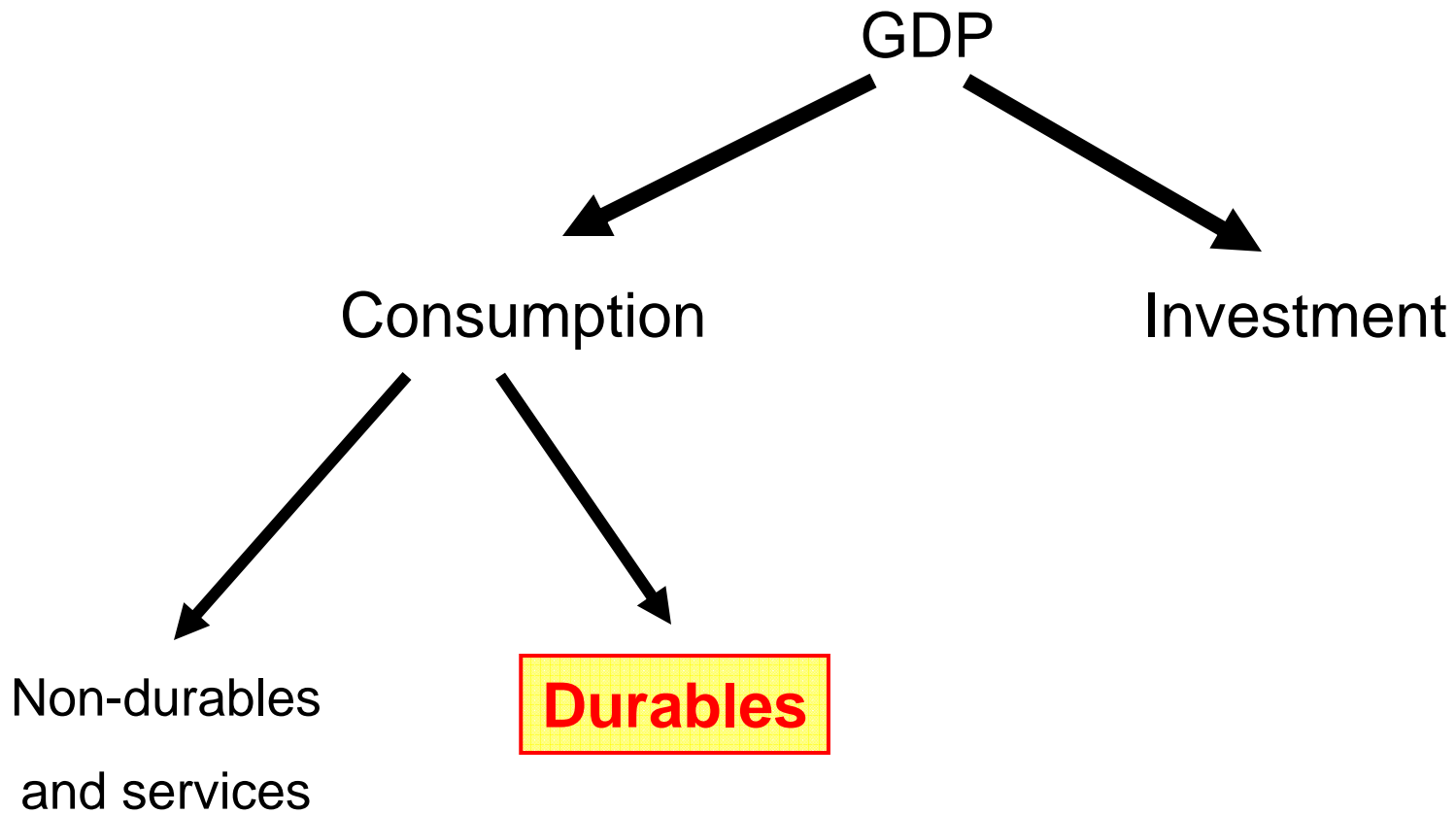
Time varying SD of Equity Payout



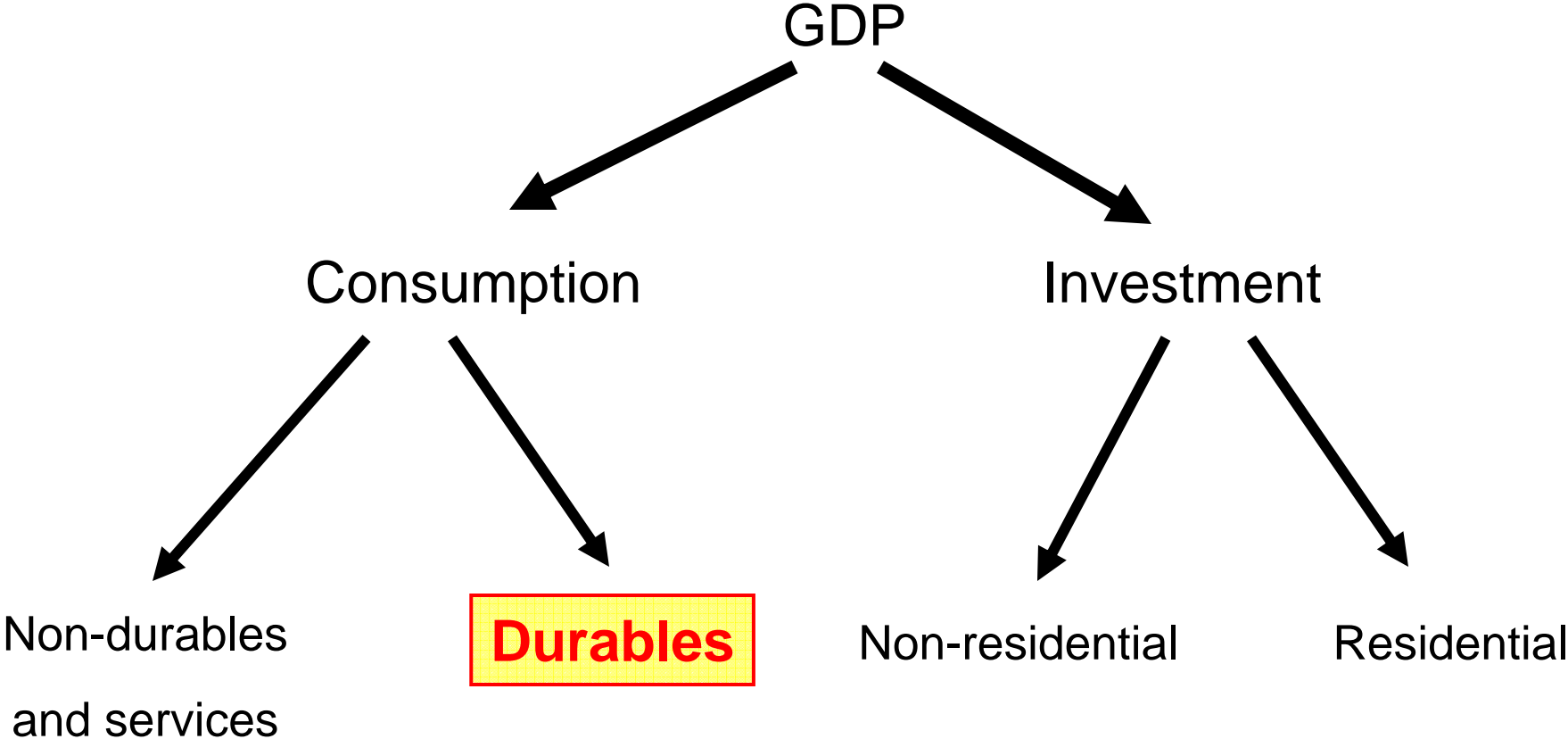
Reduction in vol. of components of GDP

- Which component of GDP has experienced the sharpest and most dramatic reduction in volatility?

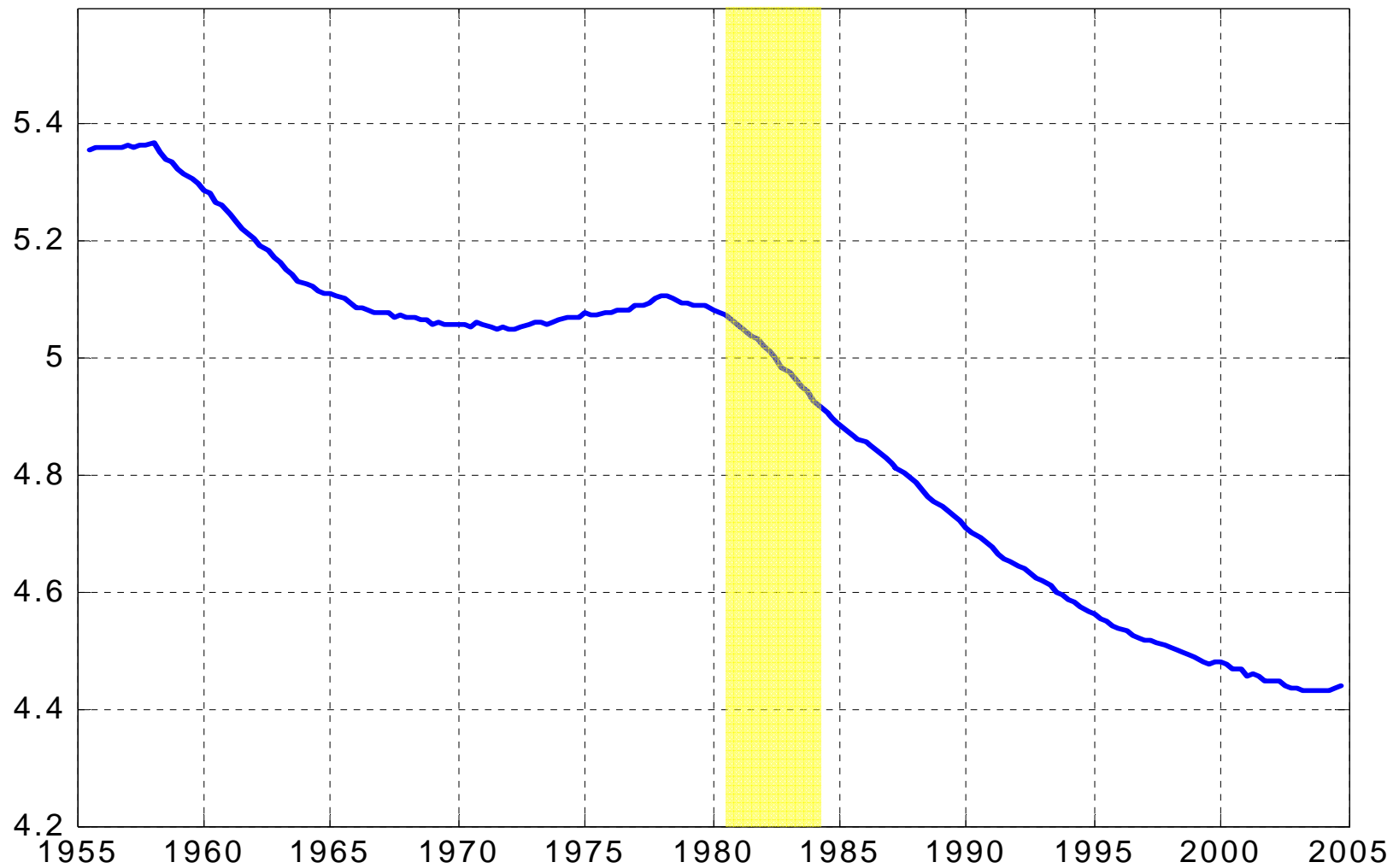
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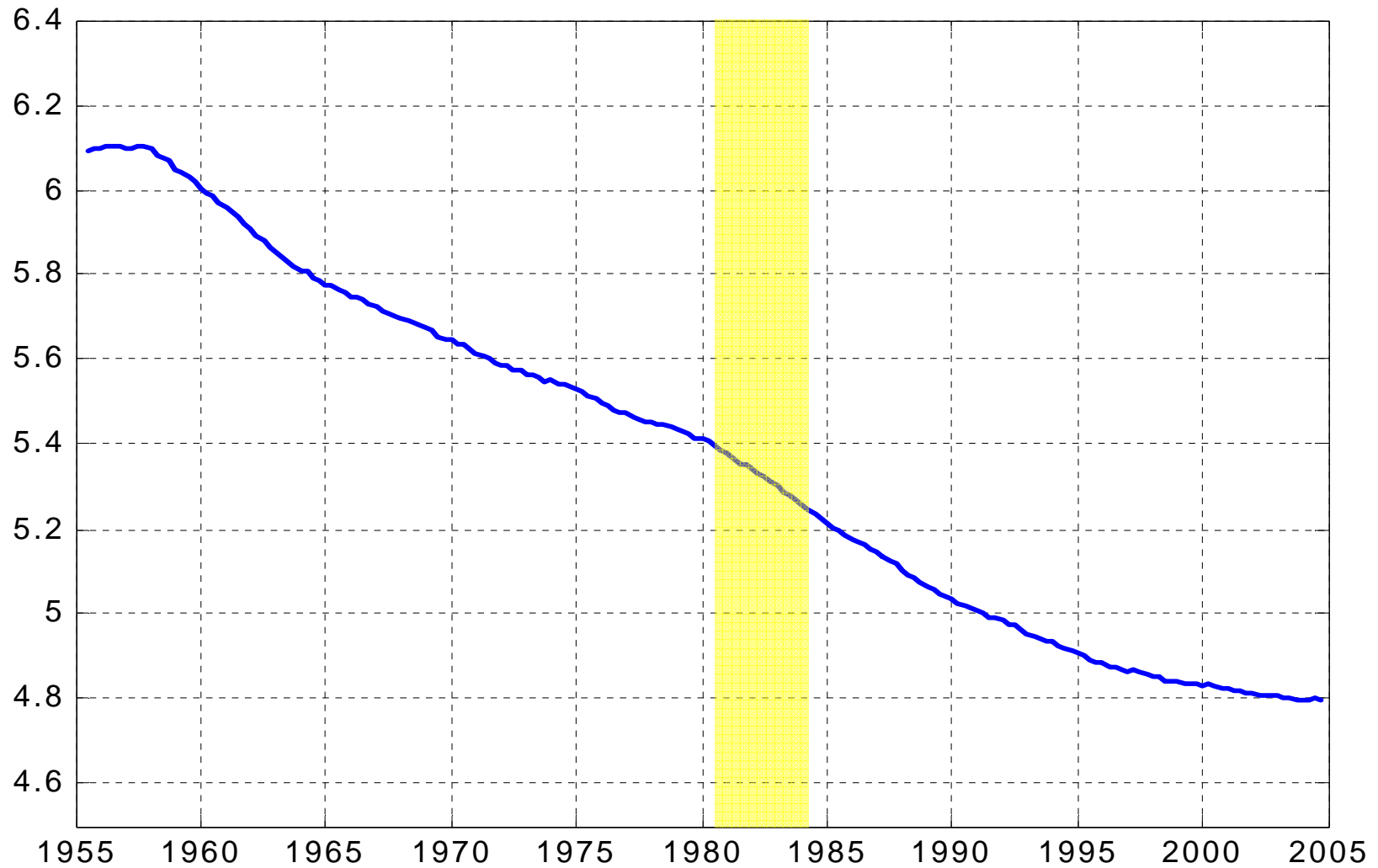
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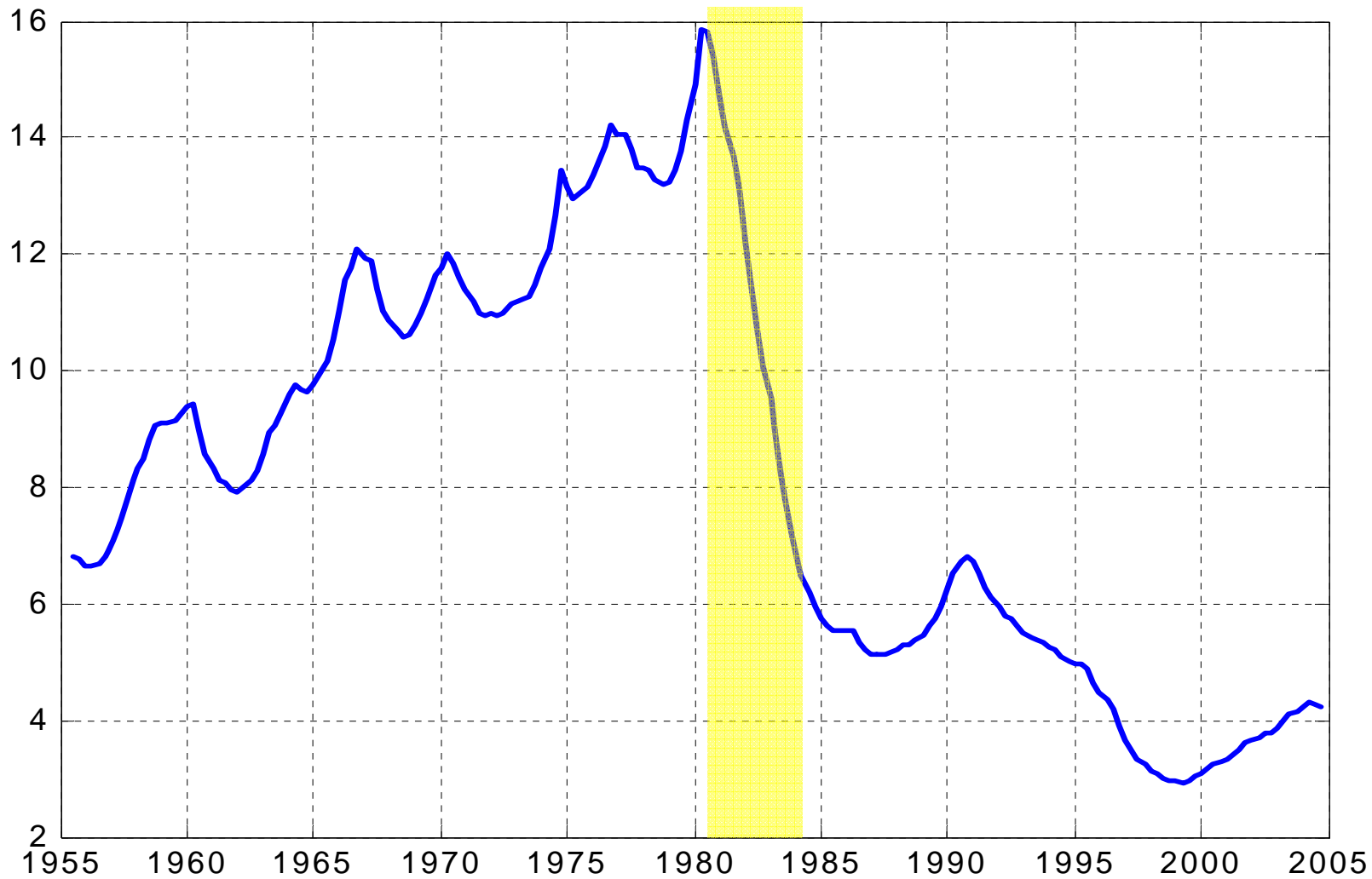
Time varying SD of Non-Residential investment



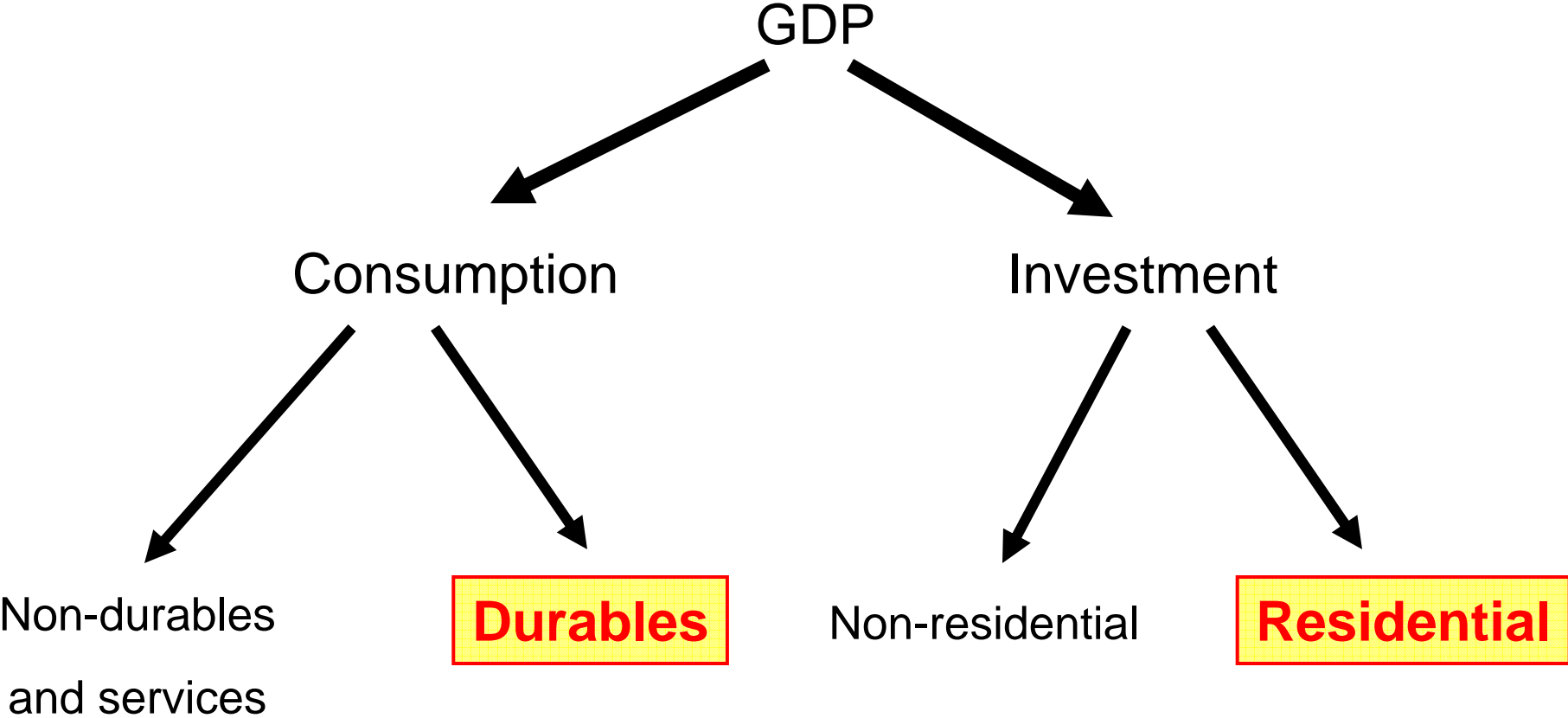
Time varying SD of **Equipment & Software**



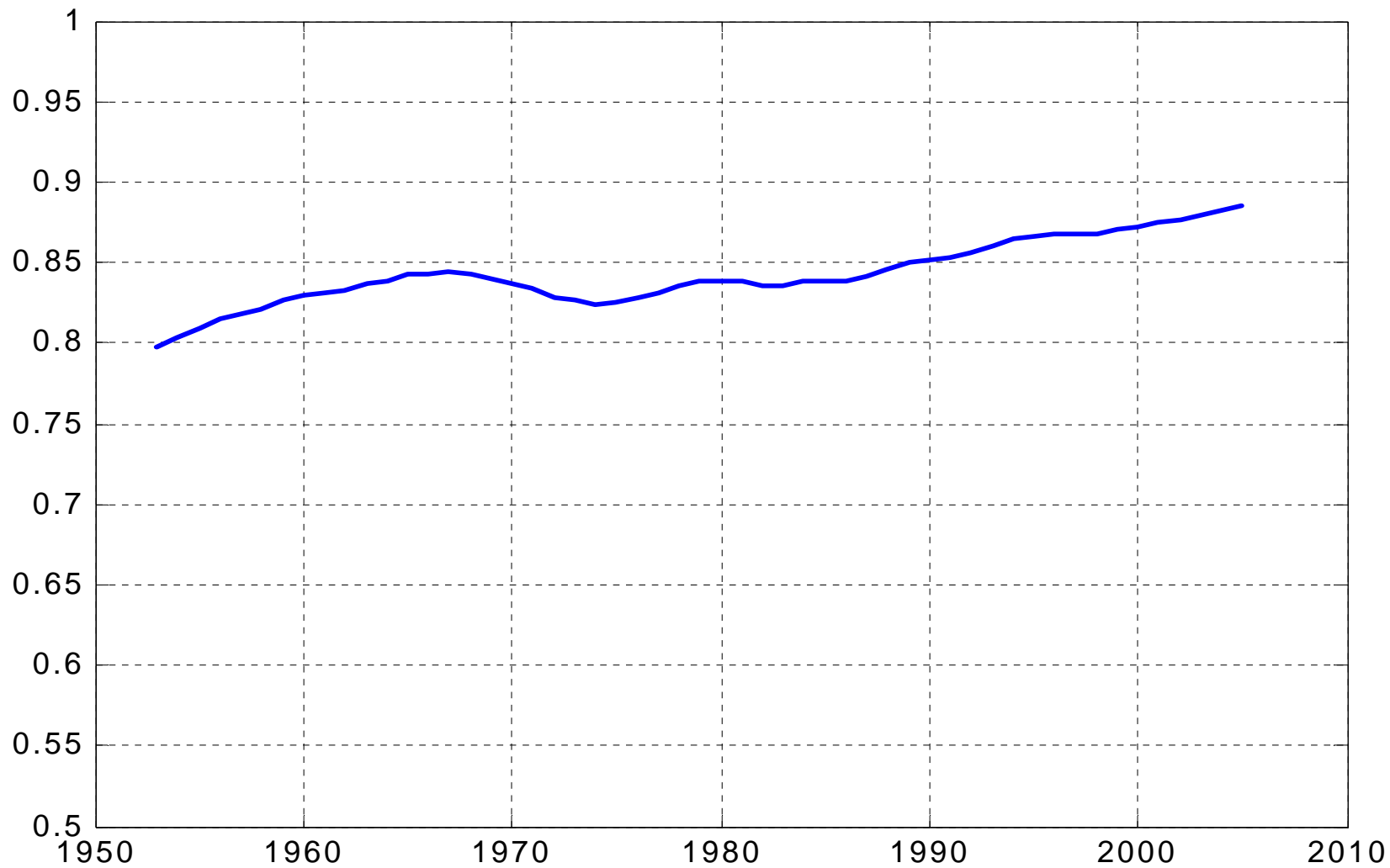
Time varying SD of Residential investment



Reduction in vol. of components of GDP



Share of residential assets owned by HH



What do we learn?

- **Household** sector owns most of **residential** assets (85%)
- **Business** sector owns most of **non-residential** assets

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- Smooth change in volatility of firms' financial structure is consistent with smooth change in volatility of non-residential investment!

What do we learn?

- Household sector owns most of residential assets (85%)
- Business sector owns most of non-residential assets
- Smooth change in volatility of firms' financial structure is consistent with smooth change in volatility of non-residential investment!
- Shouldn't we pay more attention to the **household sector** to explain the Great Moderation?
 - Campbell and Hercowitz (2006)
 - Mertens (2006)
 - Guerron (2006)

Outline of my Comments

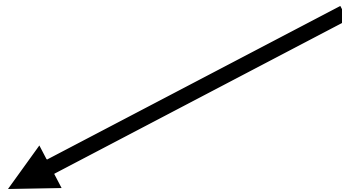
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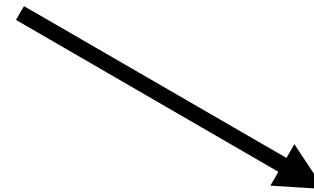
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3. Comments on the theoretical framework

Theoretical issues: a closer look at the model

Key elements



Limited commitment



Quadratic cost of paying out
dividends



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graph TD; A[Key elements] --> B[Limited commitment]; A --> C[Quadratic cost of paying out dividends];
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Limited commitment

- Strong micro-foundation
- No role in the Great Moderation

Quadratic cost of paying out dividends

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- Natural questions:
 - Why do we need it?
 - Can't we write a simpler model?

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Quadratic cost of paying out dividends

- Crucial for the quantitative result!
- Non-standard
- Ad-hoc

Theoretical issues: a closer look at the model

- Ad-hoc quadratic costs of paying out dividends
- Shouldn't we think of structural interpretations?
 - Signaling problem
 - Progressive taxation
 - Risk adverse entrepreneurs
- Either non-symmetric cost or more appropriate interpretation for private equity

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 - Larger scale models indicates this as a promising direction
2. Comments on the empirical motivation
 - Increase in volatility of financial structure is too smooth
 - Household sector seems to be important!
3. Comments on the theoretical framework
 - What is the role of limited commitment?
 - Quadratic adjustment costs of paying out dividends???