Financial Crises & Fluctuations in Uncertainty

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Discussion by David Backus
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Uncertainty and business cycles

Nice paper about uncertainty and business cycles
- I wish I’d had time to read it

Facts about risk in recessions
- Fact 1: Risk spreads go up
- Fact 2: Cross-sectional dispersion goes up

Questions
- Is uncertainty central to business cycles?
- Uncertainty about what?
- Can uncertainty account for “wedges”? 
Uncertainty and business cycles

Nice paper about uncertainty and business cycles
▶ Good issue, interesting focus on financial frictions

Facts about risk in recessions
▶ Fact 1: Risk spreads go up
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Questions
▶ Is uncertainty central to business cycles?
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▶ Can uncertainty account for “wedges”? 
Approach 1 (Gourio)

Representative agent business cycle model with
- Stochastic variation in uncertainty (aggregate productivity)
- Magnified by recursive preferences
- Smooth technology

Increases in uncertainty generate
- Increases in risk spreads (fact 1)
- Declines in investment, employment, and output
- Wedge in foc for investment

Open issues
- No heterogeneity of households or firms (silent on fact 2)
- No labor wedge
- Uncertainty is an input, not explained
Approach 2 (Bloom)

Firm’s investment problem
- Stochastic variation in uncertainty (micro and macro)
- Nonconvex investment technology
- Partial equilibrium, uncertainty not priced

Increases in uncertainty generate
- Declines in aggregate investment, employment, and productivity
- Increases in micro dispersion? (fact 2)

Open issues
- No risk spreads (silent on fact 1)
- No labor wedge — no consumers to have a foc
- Uncertainty is an input, not explained
Approach 3 (Arellano-Bai-Kehoe)

Business cycle model with
- Stochastic variation in uncertainty (micro)
- Heterogeneous firms face financial frictions
- Smooth technology, no capital
- Representative household

Increases in uncertainty generate
- Declines in aggregate employment and output
- Larger labor wedge (reflects financial frictions)

Open issues
- Wider corporate risk spreads? (fact 1)
- Increases in micro dispersion? (fact 2)
- Uncertainty is an input, not explained
Questions

Does micro uncertainty generate macro uncertainty?

Chapter 11? Conglomerates?

Can micro uncertainty be an output? [Clementi-Palazzo]

Why the odd interest rate response?

Would partial equilibrium deliver some of this at lower cost?
Partial list of related work

Cyclical behavior of asset returns
- Ang-Piasezi-Wei, Atkeson-Kehoe, Campbell-Cochrane, Fama-French, Gilchrist-Zakrajsek, Mueller, Backus-Routledge-Zin

Cyclical behavior of cross-section dispersion
- Lillien, Loungani, Storesletten-Telmer-Yaron

Business cycle models with uncertainty shocks
- Gourio, Justiano-Primiceri

Firm dynamics and business cycles
- Bloom, Clementi-Palazzo, Cooley-Quadrini-Marimon