

**Discussion of A Progress Report on  
Long-Run Risk, Labor  
Market Dynamics and Asset Prices**

By A. Werwatz (B3)

# Main points

- I don't work in this field  $\Rightarrow$  no expert remarks
- Impressive mastery of DSGE model and knowledge of literature
- Paper lacks focus though
- Payoff of seemingly complicated, elaborate model not clear
- Scientifically: „model wizardry“ or explaining real world facts?

# Paper in a nutshell

- Impact of long-run risk (stochastic productivity growth) on asset prices via frictional labor (and capital) markets
- To be explained: asset price-, macro patterns
- Analytical devices: DSGE
  - production economy
  - with frictional labor markets
  - And capital adjustment costs
  - and recursive preferences.

# Focus

- Can long-run prospects (shocks to expected productivity growth) together with frictions in capital and labor markets can solve several asset pricing puzzles?
- What role do search and matching frictions play for long-run risks and asset price dynamics?

# Focus

- Our model sheds light on substantial non-diversifiable risks that lie within the labor market. Ultimately such 'market' risks affect the economy in its entirety. Capital markets, in turn, may accentuate these risks. **Understanding these linkages is the scope of our paper.**
- We believe it is worthwhile to investigate the impact of stochastic growth on labor market dynamics.

# Does inclusion of frictional labor pay-off?

- We propose long-run productivity risk and search matching frictions as an important driver of asset prices. For a fuller picture, we also introduce frictional capital markets into such an asset pricing framework. All in all, this makes our task computationally challenging
- .... Solving our model is challenging....

# Frictional labor is your USP

- However, while these papers provide important insights in labor-financial linkages, none of them addresses long-run productivity risk in a search economy with economic growth and endogenous wage setting.

# Does inclusion of frictional labor pay-off?

- First, while we find that long-run risks matter for asset prices, they have only small effects macroeconomic labor market variables. ...
- We find that a shock to the expected growth leads to little movement in quantity variables.
- .....The key implication of this results is that there is very little interaction of growth shocks and labor market frictions...
- Finally, our model shows that when addressing long-run risk in a GE setup special attention should be devoted to the labor market.

# Why does frictional labor not pay-off?

- “This is a consequence of our growing model economy. Employment stocks are bounded as the economy cannot achieve more than full employment.
- ...” a joint explanation of fluctuation in asset prices and macroeconomic quantities, may require a combination of cyclical risk and long-run risks (or endogenous long-run risk) as an important ingredient.
- Through a Nash bargaining setup in our labor market structure, firms and workers decide over a real economic surplus. This introduces fluctuating economic profits. However, because of the small movements in the labor market following a growth shock, we observe little movement in dividend claims.

# Explanation vs. Model wizardry

- Are you really want to explain asset-prizing puzzles, say?
- ... or see what does it take to make such DSGE models compatible with certain patterns of the data

# Preferences

- Apart from our labor market specification, we employ a different preference assumption. This leads to fundamentally different economic mechanism. In a habits-based utility specification, risk premia depend on time-varying risk aversion induced by deviations from consumption habits. Instead, agents in our economy are endowed with recursive preferences.

# Decision Horizon/frequency

- To remain consistent with the macroeconomic literature, our model is calibrated to a quarterly frequency. We relate the decision horizon to business cycles.
- A monthly decision horizon, as standard in the long-run risk literature, would, however, result in counter-factual matching dynamics.