

Collegio Carlo Alberto

UNIVERSITÀ DEGLI STUDI DI TORINO



# Collegio Carlo Alberto

UNIVERSITÀ DEGLI STUDI DI TORINO

## Discussion

## Pension Projections and Risk Indicators

By E. Luciano, CeRP, September 9, 2016



**Università  
degli Studi di Torino**



# Summary

- **Aim:** define “best” information to be provided to pension plan members
- **Focus:** risk and return
- **Plan:** account of international experience (extremely diverse and sometimes puzzling),  
discussion of best model to get forecast of risk and return,  
proviso on current low-yield trap (incentive to risk-taking on the part of funds) & on uncertainty for the long run (not short)
- **Conclusion:** **model open**, priority is to **make people aware of uncertainty at given horizon (term structure)**

# Comments:

## Model conundrum

- Paper claims that Black-Scholes model is not appropriate, long-run risk or disaster risks are much better, but no ultimate preference is given
- Alternatives: historical averages = risk premium 6%, vol 19% versus – say – Bansal and Yaron (2004) = risk premium 6.84%, vol 18.65%
- But analytic model permits to have term structure

# Comments: make people aware

- The take-home of pension plan members, out of a given content, depends on financial literacy and cognitive traits, psychological traits (from risk aversion to ratchet, conservatism, overconfidence)
- We can NUDGE investors, but should also accept that their **expectations** (beliefs), out of a given info, are **heterogeneous**, that **elasticity of intertemporal substitution** is relevant, and work on that.
- Two lessons on risk and return .....

# Heterogeneity

## Evidence of heterogeneity of beliefs

- even among professional investors (De Bondt and Thaler (1990), Graham and Harvey (2013), Cookson and Niesser (2016), Carlin et al. (2016)),
- even after public announcements (Kandel and Pearson (1995), Dumas et al. (2016)),
- countercyclical (Dumas et al. (2016)),

that raises risk premia and risk perception at the macro level. Collin-Dufresne et al. (2016) take this as **THE** explanation of macro behavior!!

# Elasticity of intertemporal substitution

- Investors prefer early versus late resolution of uncertainty
- that raises risk premia and risk perception at the macro level (Bansal and Yaron (2004))
- and explains the term structure for risk premia (Lettau and Ludvigson (2005, 2014), Marfe' (2016))

# Methodological design to define a communication plan

- Define target group: who contributes most to the plans? Affluent, at least high-school education, middle aged, with offsprings, males
- Include horizon-based risk
- Lab experiments: give risk/return info and assess their take-home, in terms of expectations and risk
- Measure heterogeneity of beliefs out of that given form, and degree of preference for early resolution of uncertainty
- Fine-tune info

# References

- Carlin, B., F. Longstaff and K. Matoba, 2014, Disagreement and Asset prices, *Journal of Financial Economics*, 114, 226–238
- Collin-Dufresne, P., J., M. Johannes and L. A. Lochstoer, 2016, Parameter Learning in General Equilibrium:  
The Asset Pricing Implications, *American Economic Review*, forthcoming.
- Cookson, A. J., and M. Niessner, 2016, .Why Don't We Agree? Evidence from a Social Network of Investors, unpublished paper, Yale University.
- De Bondt, W. and R. H. Thaler, 1990, Do security Analysts Overreact?, *American Economic Review*, 80, 52-57.
- Dumas, B., K. Lewis and E. Osambela, 2015, Differences of Opinion and International Equity Markets, working paper, INSEAD, *Review of Financial Studies*, forthcoming
- Graham, J.R. and C. R. Harvey, 2013, The equity premium in 2013, wp.
- Kandel, E. and N.D. Pearson, 1995, Differential interpretation of public signals and trade in speculative markets, *Journal of Political Economy* 103, 831-872.
- Lettau, M., and S. C. Ludvigson, 2005, Expected returns and expected dividend growth, *Journal of Financial Economics*, 76, 583-626.
- Lettau, M., and S. C. Ludvigson, 2014, Shocks and Crashes, *NBER Macroeconomics Annual* 28, 293-354.
- Marfe, R., 2016, Income insurance and the equilibrium term-structure of equity, *The Journal of Finance*, forthcoming