

Empirical Asset Pricing II

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1. Course Description

This PhD course uses the term structure of equity as a laboratory to study how empirical asset pricing research develops: from the discovery of new empirical facts, through the tension with mainstream models, to the design and testing of new theoretical and empirical frameworks.

The recent literature on dividend strips, dividend futures and equity term structures documents striking facts about how risk premia and discount rates vary across horizons – e.g. high returns and Sharpe ratios on short-maturity dividend claims despite low market betas, and rich state dependence of the slope of the equity term structure. These findings challenge canonical representative-agent models and have triggered a wave of new theoretical and empirical work.

The course has three overarching goals:

1. To map and understand the main empirical facts about the term structure of equity expected returns and risk premia across markets and horizons.
2. To study how standard asset pricing models fail in this dimension and to analyse the new models that seek to reconcile theory and evidence.
3. To learn how to construct and use synthetic data for equity term structures, both from traded dividend claims and from the cross-section of equities, including recent affine models that infer equity term structures without dividend strips.

Throughout, the course emphasizes:

1. New empirical facts;
2. Their implications for mainstream asset pricing models;
3. New models designed to explain and reconcile these facts;
4. Construction of synthetic data for equity term structures;
5. Time variation in term structures;
6. The joint behaviour of equity and bond yields.

The course concludes with student presentations in the final meeting, which serve as the formal examination. Students will critically assess selected papers from the

course and related contributions, demonstrating their ability to position new research within the existing literature.

2. Learning Outcomes

Upon successful completion of the course, students will be able to:

1. Explain and systematize the main empirical facts about the term structure of equity, including the behaviour of dividend strip and dividend futures returns across horizons and states.
2. Critically evaluate the success and failure of mainstream asset pricing models (e.g. consumption-based, long-run risk, affine term structure models) in matching the observed equity term structure.
3. Understand and compare competing modeling approaches: duration-based explanations of the value premium and equity term structures, disaster-based models with recoveries, intermediary-based models, and affine no-arbitrage frameworks.
4. Construct and interpret synthetic equity term structures, both from traded dividend claims and from cross-sectional equity data using portfolio-based or affine models.
5. Analyse the time variation of the equity term structure and understand how macroeconomic conditions, disasters, intermediary constraints, and monetary policy shape the slope and curvature over time.
6. Evaluate the joint behaviour of equity and bond yields, and articulate how term structures in different asset classes jointly inform the pricing kernel and expectations about growth, inflation, and risk.
7. Develop a critical perspective on ongoing research in empirical asset pricing, formulate research questions, and design empirical strategies that build on the equity term structure literature.

3. Assessment

1. Class participation and discussion (30%)
 - Quality of interventions in class discussions.
2. Final presentation (70%)
 - In the final meeting, each student presents a critical assessment of one or more papers directly related to the equity term structure theme. The presentation should:
 - Summarize the main empirical facts and methodology;
 - Position the paper within the broader term structure literature;
 - Evaluate methodology, results, and economic interpretation;
 - Potentially connect to related work not covered in detail in class;
 - Outline at least one concrete extension or research idea.

The presentation serves as the final exam of the course.

4. Tentative Schedule

February 19th and 20th

March 5th and 6th

March 26th and 27th

5. Tentative References

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