

## Teaching Statement – Paymon Khorrami

Two factors initially drew me to economics: (1) its simplicity and (2) its applicability to the real world. Simple models applying utility maximization, competition, and markets can address a wide variety of issues if you think about the issues in the right way. Because the framework relies on a small set of fundamentals, I found it easy to remember, apply, and build on. The scientific nature of testing these theories with actual data and statistics appealed to me. My teaching philosophy heavily relies on the fundamental simplicity and real-world applicability of economics. The following are examples from my experience as lecturer for undergraduate “Introduction to Finance” at University of Chicago.

The task of the teacher is to synthesize vast bodies of knowledge, explaining *fundamental* logic rather than chronology. Introductory finance nominally contains a wide array of topics. But once you know how to aggregate mean-variance portfolio theory to market equilibrium (yielding the Capital Asset Pricing Theory or CAPM), you can do the same thing with consumption Euler equations (yielding the Consumption-CAPM). Once you understand that payoffs are a function of the state of nature, you can do option pricing as well as analyze corporate executives’ incentives under extreme indebtedness. A fundamental approach is powerful: rather than construct a new theory for each phenomenon, start with the basics and add the appropriate wrinkles.

But do the theories work? The simple framework of economic analysis is appealing because it applies to *the real world*. I had my students engage with various datasets to test the theories we discovered in class, like the CAPM. The CAPM is not the frontier, but it is not useless either: for instance, industry portfolios of stocks are actually priced well by the CAPM! I think it is crucial for the students to see our theories in action. Some students may be interested in graduate school, others in professional finance positions, still others simply in being conversational in these topics. All of those aspirations can benefit from real-world examples, experience with data, and practice with computer programming and statistical analysis.

“All models are wrong, but some models are useful.” For an introductory finance class, this phrase has special meaning because practitioners actually do use the models. At the end of the day, the CAPM is wrong – it may work for industry portfolios, but it fails for size and value portfolios. Multi-factor extensions of the CAPM, like the Fama-French model, are wrong. But in many contexts, these models offer useful descriptions of the data. More importantly, to work as a financial professional, or to be critical of what your portfolio manager tries to sell you, it helps to know how to apply these models, where they perform well, and where they fail.

Failure is instructive for other reasons too; it helps us recall and question our underlying assumptions. In finance, we have so many big failures that we actually call them “puzzles”! I had my students learn about the equity premium puzzle, the excess volatility puzzle, the non-participation puzzle, and others. Students should know the limitations of our current models. Maybe they will be the ones to help resolve these puzzles.

If that’s true, then teachers should be willing to adapt based on their students. After class, one of my students asked one of the most important and difficult questions of the subject: “Are investors perfectly rational? Why do our models assume they are?” I don’t really have a great answer to this, but for their sake, I could share a small part of what the academy has learned.

I developed an entire section on bubbles and market inefficiencies (which I tried hard to smoothly incorporate into the syllabus as if I had planned this all along). As always, we took a mixed empirical-theoretical approach here. We discussed examples of bubbles in history (like the Palm-3Com debacle during the 2000 tech boom). And we thought about theories that could deliver bubbles as an equilibrium outcome (such as the classic heterogeneous beliefs models with shorting constraints). This seemed to be among the students’ favorite sections because it reinforced that our simple economic fundamentals could address the real world, even dramatic newsworthy episodes. And for me, this reinforced the notion that adaptability to student interests can be fruitful.