## Jacobs Levy Equity Management Center for Quantitative Financial Research

Fall 2017 Conference September 15, 2017

## 2017 Jacobs Levy Center Fall Conference Welcome Remarks Bruce Jacobs, Ph.D., Advisory Board Chair, Jacobs Levy Center

Thank you, Chris and Dean Garrett.

Good morning, and welcome to the 2017 Fall Conference of the Jacobs Levy Equity Management Center for Quantitative Financial Research. Ken Levy and I established the Center in 2011 in honor of our firm's 25<sup>th</sup> anniversary. The goal was to spur idea creation and innovation that makes a real impact on the practice of finance.

When Ken and I first started our firm, now more than 30 years ago, our aim was to gain a greater understanding of what we used to call "anomalies"—return effects that could not be explained by the prevailing paradigm of efficient markets. I think we were on to something. Today, exchange-traded funds based on anomalies—or factors, as they are now called—have attracted more than 550 billion dollars in assets worldwide. And that figure does not account for additional hundreds of billions in factor-based strategies used by our firm and many other investment managers.

There can be no clearer evidence that quantitative finance has entered the mainstream of modern investing. Yet there is still so much that we don't know about factors. Today's outstanding lineup of speakers will demonstrate how far we have progressed in the art and science of factor investing—and how far we still have to go.

Andreea Mitrache will start us off by describing a global macroeconomic factor model that can explain the positive return premia of the value and momentum factors across asset classes and countries. It can also explain their negative correlation. The model builds upon the Arbitrage Pricing Theory of Steve Ross, about whom I'll have more to say momentarily, and on macroeconomic risk factors identified by Chen, Roll, and Ross. Afterward, discussant Nick Roussanov will offer comments on the paper.

Next, we'll explore the real-world challenges of factor investing with a "State of the Art in Factor Models" panel discussion, featuring John Ameriks of Vanguard, Giorgio De Santis of Kepos Capital, Wai Lee of Neuberger Berman, and Jeff Saret of Two Sigma.

After the lunch break, Jenn Bender will weigh in on a question that has been hotly debated recently: Is factor timing possible? I won't give away her conclusion, but I will mention three challenges she says must be overcome: the dynamic nature of factors and their time varying relationships, the cherry-picking of indicators based on perfect hindsight, and ongoing revisions to macroeconomic data series; that implies back-tests may not accurately reflect information

that would have been available at the time of the forecast. The discussant for this paper is Josie Smith.

Then we'll hear from Michael Roberts about his efforts to assemble a database of accounting data extending back to 1926. This extended database provides a clearer vantage point from which to observe how accounting-based factors performed before, during, and after the periods typically examined in the literature. Michael explores three possible explanations for differences between in-sample and out-of-sample performances: unmodeled risk, mispricing, and data-snooping. Phil Davies will offer his comments on the paper.

As the day culminates, Ken and I will honor the work of Steve Ross by presenting the biennial Wharton-Jacobs Levy Prize for Quantitative Financial Innovation, along with Chris Geczy and Wharton Deputy Dean Mike Gibbons. Steve is being recognized for his work in developing the Arbitrage Pricing Theory, which continues to be a major influence on financial theory some forty years after its publication. We will present the Prize medal to Steve's wife Carol, and, afterward, we will benefit from the reflections of Steve's colleagues Dick Roll and David Musto.

I hope you will join us at the cocktail reception at the end of the program. Ken and I look forward to meeting as many of you as we can. And now I will turn it back over to Chris, who will introduce today's first speaker.

Thank you.