

Title: THE PRICE OF LONG-RUN TEMPERATURE SHIFTS
IN CAPITAL MARKETS

Speaker: RAVI BANSAL
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Importance: Why this matters:

The dangers of climate change seem to be far into the future and there has been little thought given to how that might affect the value of securities. How much should we spend to avert unfolding and/or abrupt impacts on physical and biological systems? When should we spend it: what is the global preference for early resolution of uncertainty?

Investigation: "Speaker analyzed XXX data to address the questions yyy, zzz, etc."

Finance thinking is often based on studies of the past to figure how things interconnect. Dealing with implications that extend far into the fuzzy future and are not yet reflected in current data requires some out-of-the-normal thinking.

The current market can be viewed as optimal for the current climate. But climate changes may impact human welfare and society in forms such as disease, migration, and reduced food supplies. So we would expect capital markets in the future, if not now, to contain information about the importance of climate risks. The study centers on the relationship between growth and risk effects.

Some industries, such as oil, mining and utilities have high heat-exposure, while other industries such as communications and manufacturing have low exposure.

Innovation: Are there new techniques of interest in the data or approach to the problem?

Develops long run risk estimates based on a climate change model to quantify the social cost of carbon.

Estimates temperature sensitivity of equity valuation. Explore the impact of long-run temperature shifts using forward looking asset returns.

Insights: 1-2-3, what are the three most important things the speaker offered?

1. In global and US markets, equity prices show a significant negative response to low-frequency temperature fluctuations.
2. Distant climate change risks carry a significant risk premium.
3. The social costs of carbon are sizable and suggestive of high incentives to curb emissions.

Audience rating: 3.06