An econophysics approach to quantifying teamwork in Basketball

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TEAMWORK IN PROFESSIONAL BASKETBALL

- “Hot streaks” and “chemistry” of team scorers is constantly debated in sports media.
- Limitations in possessions implies a zero sum game for players in regards to scoring.
AN ECONOPHYSICS APPROACH TO SCORING TEAMWORK

- Partial correlation matrices are useful in describing the relationships between stocks in an indice like the S&P 500.
- The idea is to extend the analogy

  Stocks ⇛ Player Scoring

  S&P 500 ⇛ Team Score
AN ECONOPHYSICS APPROACH TO SCORING TEAMWORK

- NBA data from games from 1995-2014 scraped from ESPN.
- Using game points per minutes (Game PTS / Game MINS).
Questions In Interpreting Results

- Beneficial “ballhogs”, and “hot” and “cold” streaks.
- Team rosters as “portfolio optimization”.
- Uncertainty in win percentage and correlations.