1. PAPER IN A NUTSHELL

» We sketch the anatomy of derivatives trading by European equity funds
» 26% of European equity funds use derivatives

» 79% of trades are currency/forwards, equity/futures or equity/options

» Fund-fixed characteristics can explain 28% of funds’ decision to use derivatives and 54% of extent of funds’ derivatives use:
  » Relevant characteristics seem to be fund family, investment strategy, incentives schemes as well as fund managers’ personal traits
  » Less important are size, geographic focus, base currency, or domicile of the fund

» Moreover, we find evidence for derivatives trading to minimize transaction costs and to mitigate (currency) risks

3. SUMMARY STATISTICS

- 5,202 equity funds
- 442,816 derivatives trades
- EUR 322m net asset value
- 2.5 trades per fund-day
- 40% propensity to trade on a fund-day (avg of trad.)

4. ECONOMETRIC SETUP

1. Fund-fixed characteristics and use of derivatives
   » Fixed effects approach to analyze decision to use derivatives and extent of derivatives usage
   » Consecutively, add fund-fixed characteristics to the fixed effects model:

\[ DTD_{t} = \alpha + \beta \text{size} + \gamma \text{asset} + \delta \text{return} + \epsilon_t \]  
   (Eq1)

2. Time-variant fund characteristics and use of derivatives
   » Linear probability model to test which time-variant fund characteristics (e.g., flows, risks, and returns) may drive derivatives use, 
   » Derivatives trading dummy = fund fixed effect

\[ DTD_{t} = \alpha + \lambda \text{asset} + \mu \text{return} + \beta \text{risk} + \epsilon_t \]  
   (Eq2)

5. RESULTS

» Distribution of trades across asset classes and derivatives types

- Currency/forward: 20% long, 48% short
- Equity/option: 14% long, 86% short
- 28% of variation explained by benchmark fixed effect

» Time-variant fund characteristics and derivatives use (Eq. 2)

- Net flows (proxy of trading costs) are positively related to use of derivatives
- Effect comes from positive net flows
- One SD increase in currency risk increases the likelihood of a derivative trade by 0.06 SD
- For fund return and excess return, we do not find a relation to the use of derivatives

6. NEXT STEPS

» We plan to further exploit rich details of derivatives trading data (e.g., underlying and derivative instrument)

» Moreover, we will add information on fund manager & incentive scheme

» Finally, we are exploring possible shocks that affect only some of funds to establish causal relation from fund characteristic to use of derivatives