



University of
Zurich ^{UZH}

Agent-based Financial Economics

Lesson 9: Leverage

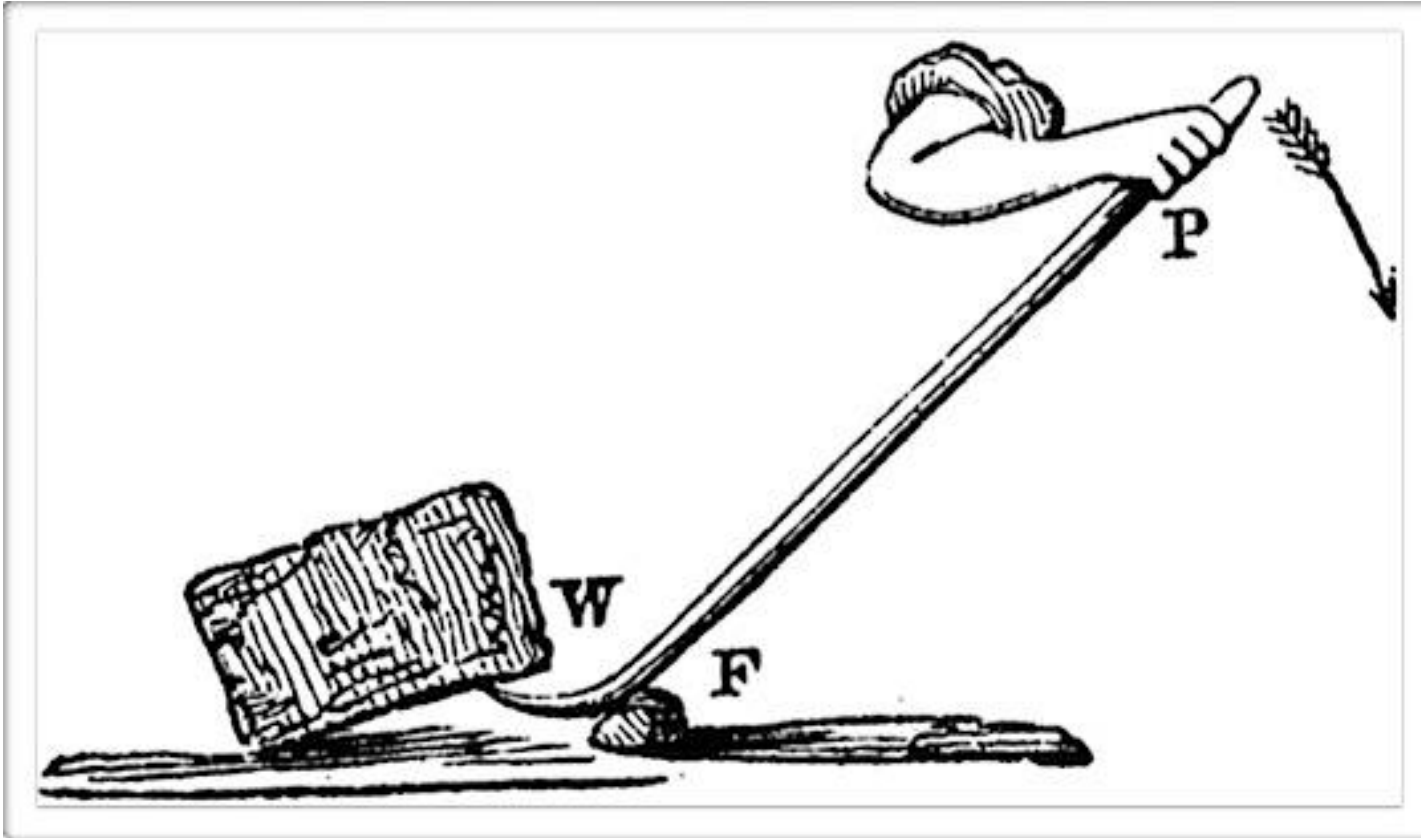
Luzius Meisser, Prof. Thorsten Hens

luzius@meissereconomics.com

“What I cannot create, I do not understand.”

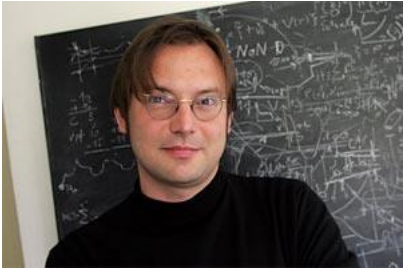
- Richard Feynman

Today



- Discussion of leverage paper by Farmer et al.
- Diving into the code, discussing ideas for your agents

Leverage: single slide overview



Stefan Thurner

“The market can stay irrational longer than you can stay solvent.” - Keynes

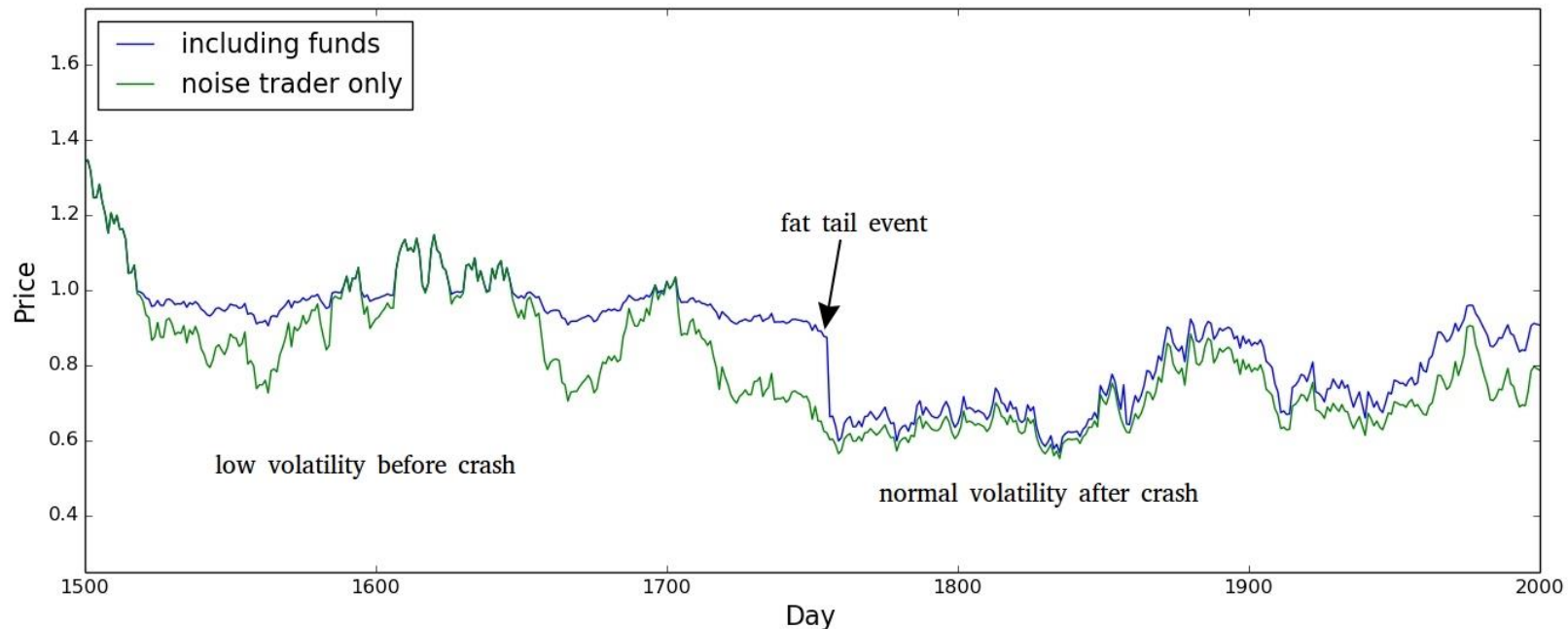
- Leverage can cause fat tail events through cascade of margin calls.
- Two active types of investors:
 - Noise traders
 - Leveraged, fundamentalist funds



Doyne Farmer



John Geanakoplos

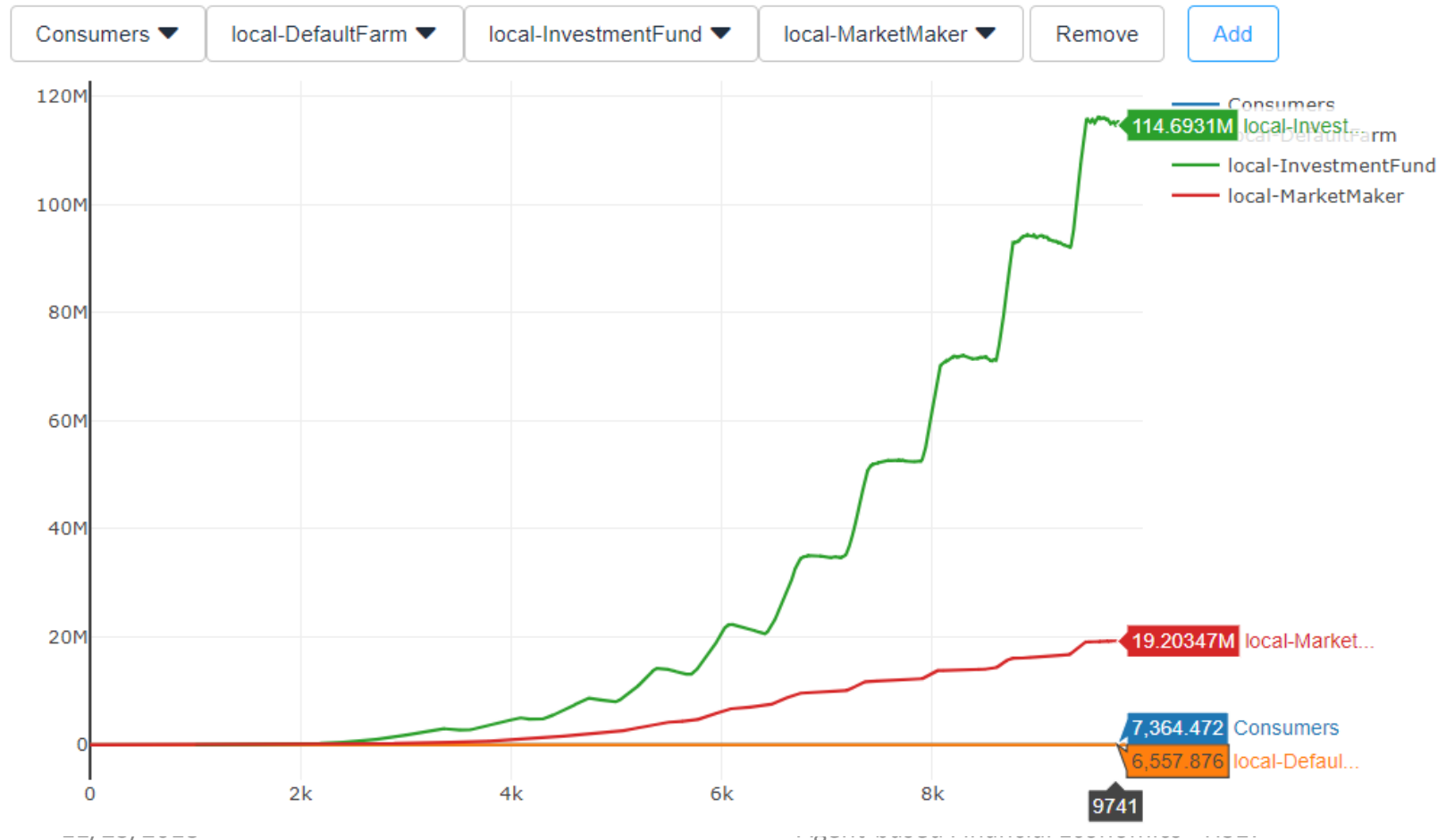


See separate presentation for further information.

Simulation: inflated prices

Metric: wealth ▾ Download

Net worth at market prices. Related: cash statistics.

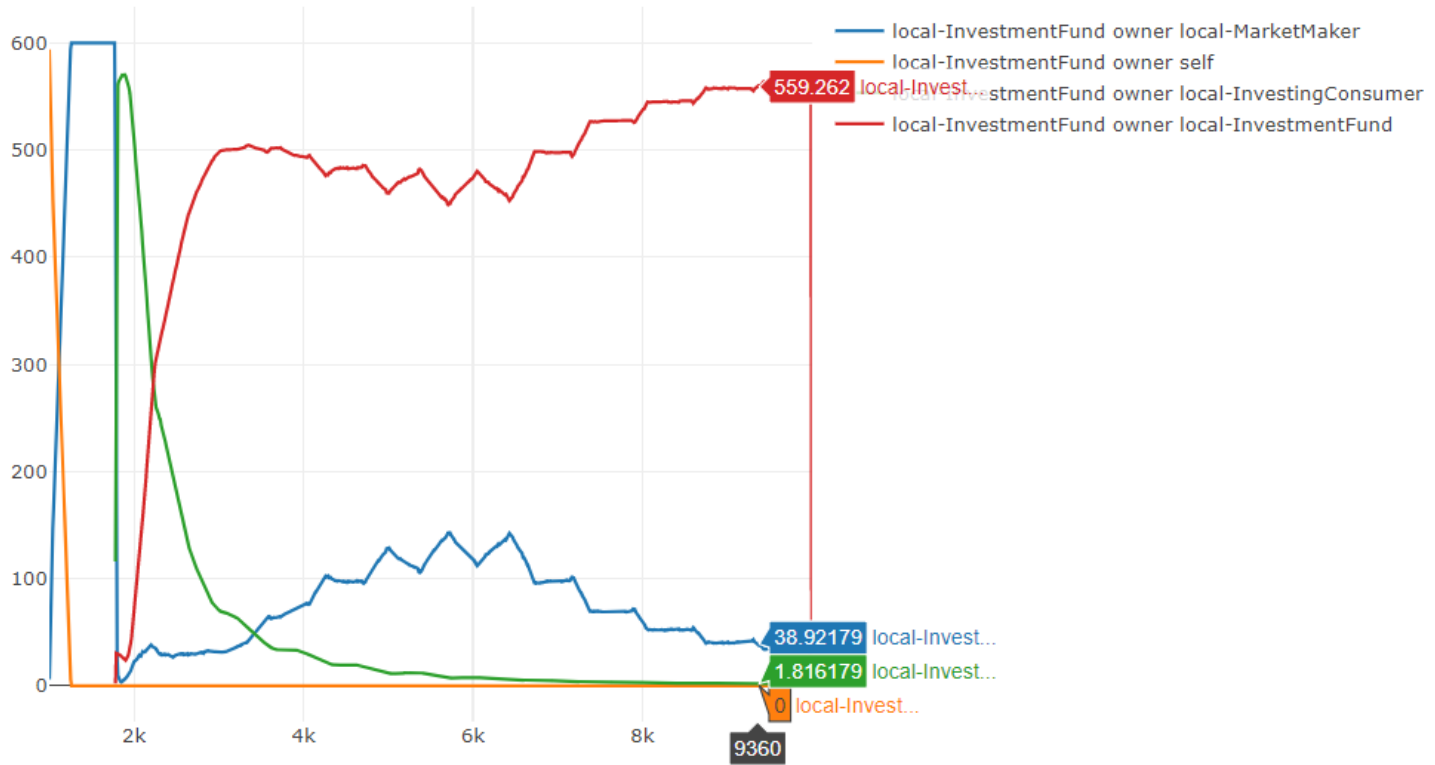


Simulation: inflated prices

Metric: ownership ▾ Download

Some general statistics on firm ownership.

local-InvestmentFund owner local-MarketMaker ▾ local-InvestmentFund owner self ▾
local-InvestmentFund owner local-InvestingConsumer ▾ local-InvestmentFund owner local-InvestmentFund ▾ Remove Add



Funds seem very successful but basically just own each other at inflated valuations...

Code dive...