An Introduction to the
Heterogeneous Agents Resources and toolKit

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"Hands-On Heterogeneous Agent Macroeconomics"
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Agenda: A Flavor of HARK

1. "Microeconomic" models in HARK: the `AgentType` class

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1. "Microeconomic" models in HARK: the `AgentType` class
2. Example HARK model
   - Consumption with permanent and transitory shocks to income
3. 30,000 foot view: What else is in HARK?

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Model solution can be constructed as iteration on sequence of "one period problems," conditional on solution to subsequent period.

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  - Some people are more risk averse than others, e.g.

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- Complex models extend basic ones through "class inheritance"

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  - ▶ Mathematical Details: Formal model

Buffer Stock Model Consumption Function
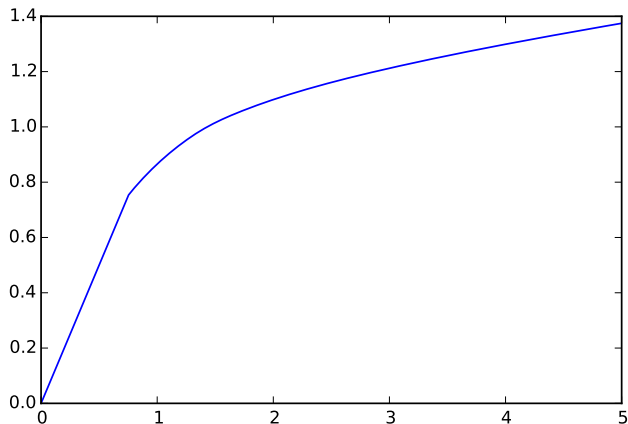
Horizontal Axis: "Money"; Vertical Axis: "Spending"

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- ▶ Much room for improvement: endogenous labor supply (e.g.)

References I

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