

Bringing Experiments and the Scottish Enlightenment into the classroom

Vernon L. Smith

Chapman University

References

2010 Jaworski, T, V. Smith and B. Wilson, “Discovering Economics in the Classroom with Experimental Economics and the Scottish Enlightenment,” *International Review of Economics Education*, 9(2), November.

2011 Smith, V* and B. Wilson, *Fair and Impartial Spectators in Experimental Economic Behavior*. Economic Science Institute, Chapman University, April.

<http://www1.chapman.edu/~bjwilson/papers/FairandImpartialSpectators.pdf>.

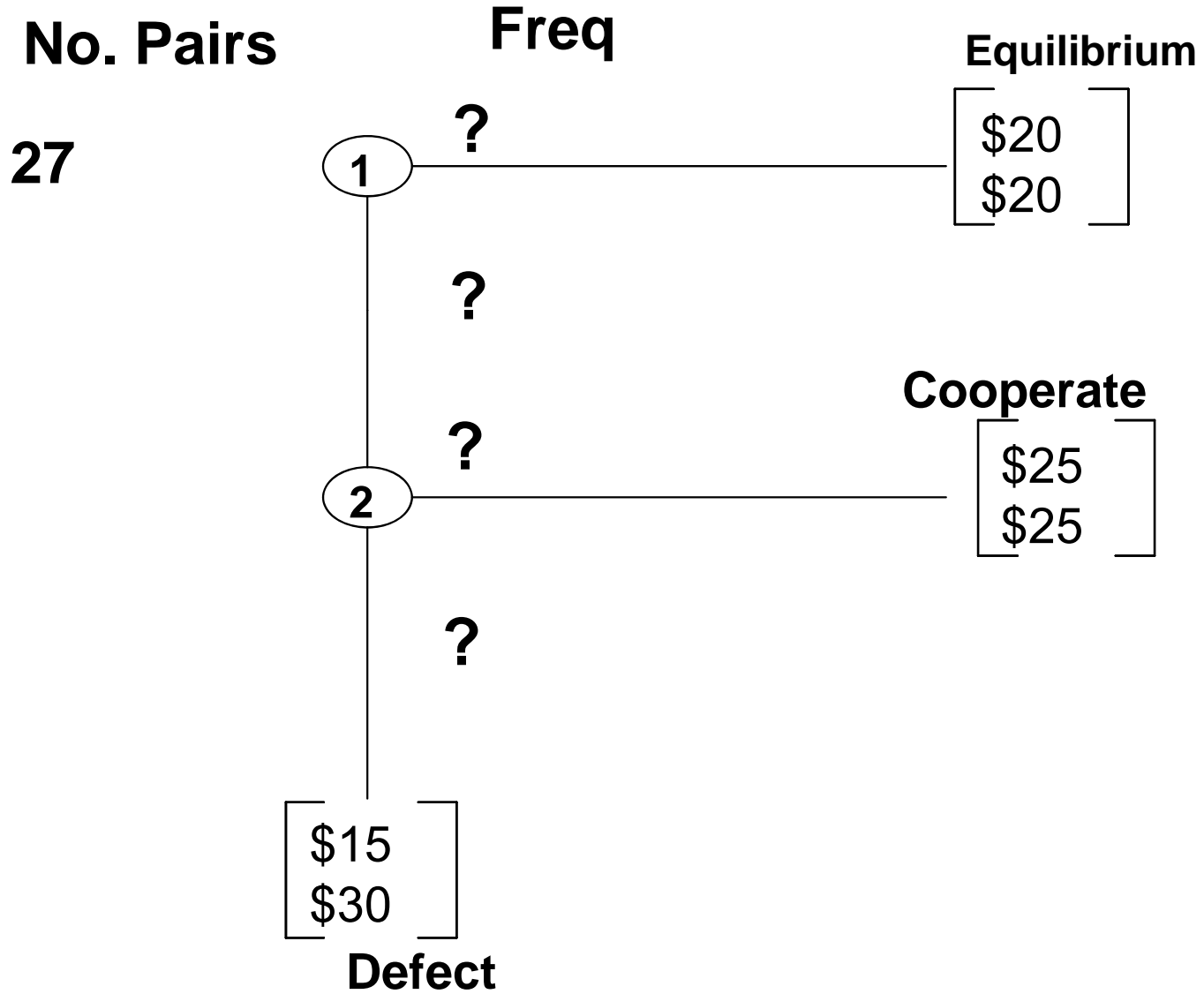
2010 Gjerstad, S. and Smith, V. [Household expenditure cycles and economic cycles, 1920 – 2010.](#)

Outline

- **Introduction**
- **Human Sociality: Experimental game behavior, Adam Smith's *Sentiments*, and property**
- **Markets in Adam Smith's *Wealth*—S & D experiments for non durables**
- **Asset Markets, Lab and Field: the source of economic instability?**

**Human Sociality:
Experimental game
behavior, Adam
Smith's *Sentiments*,
and property**

Figure 1
Voluntary Trust Game



***Axiom of Motivation:* “Man...desires, not only praise, but praiseworthiness...He dreads not only blame, but blame-worthiness.”**

(Sentiments, III.2.1, 113-114)

“We endeavor to examine our own conduct as we imagine any other fair and impartial spectator would examine it.” *(Sentiments, III.1.2, 110)*

**“Our continual observations upon the conduct of others, insensibly lead us to form to ourselves certain general rules concerning what is fit and proper either to be done or to be avoided.”
*(Sentiments, III.4.7, 159)***

“If he would act so as that the impartial spectator may enter into the principles of his conduct...he must...upon all...occasions, humble the arrogance of his self-love, and bring it down to something which other men can go along with.”

(Sentiments, II.ii.2.1, 83)

Beneficence Proposition 1:

“Actions of a beneficent tendency, which proceed from proper motives, seem alone to require reward; because such alone are the approved objects of gratitude, or excite the sympathetic gratitude of the spectator.”

(Sentiments, II.ii. 1.1, 78)

Figure 2
Voluntary Trust Game Data

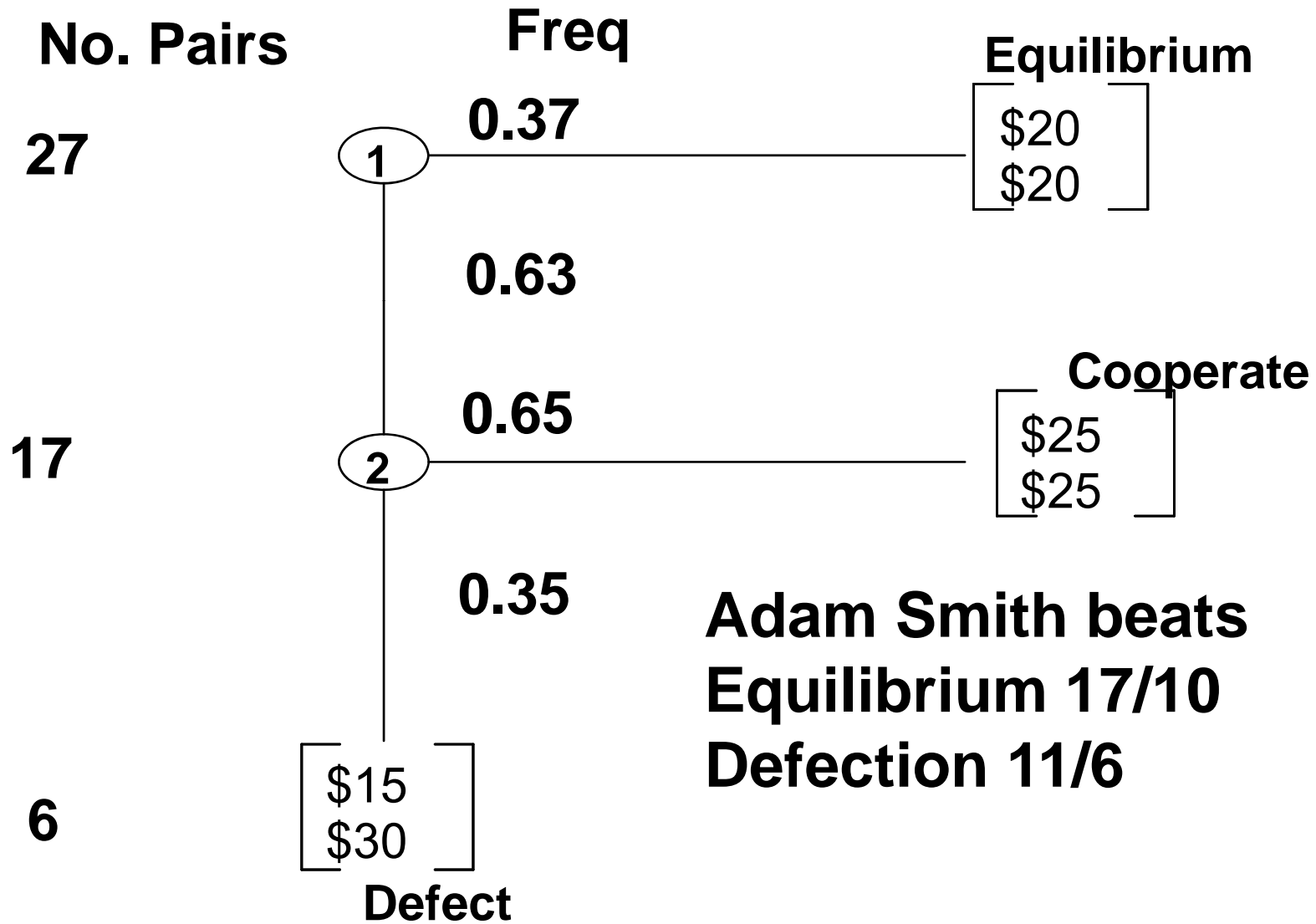
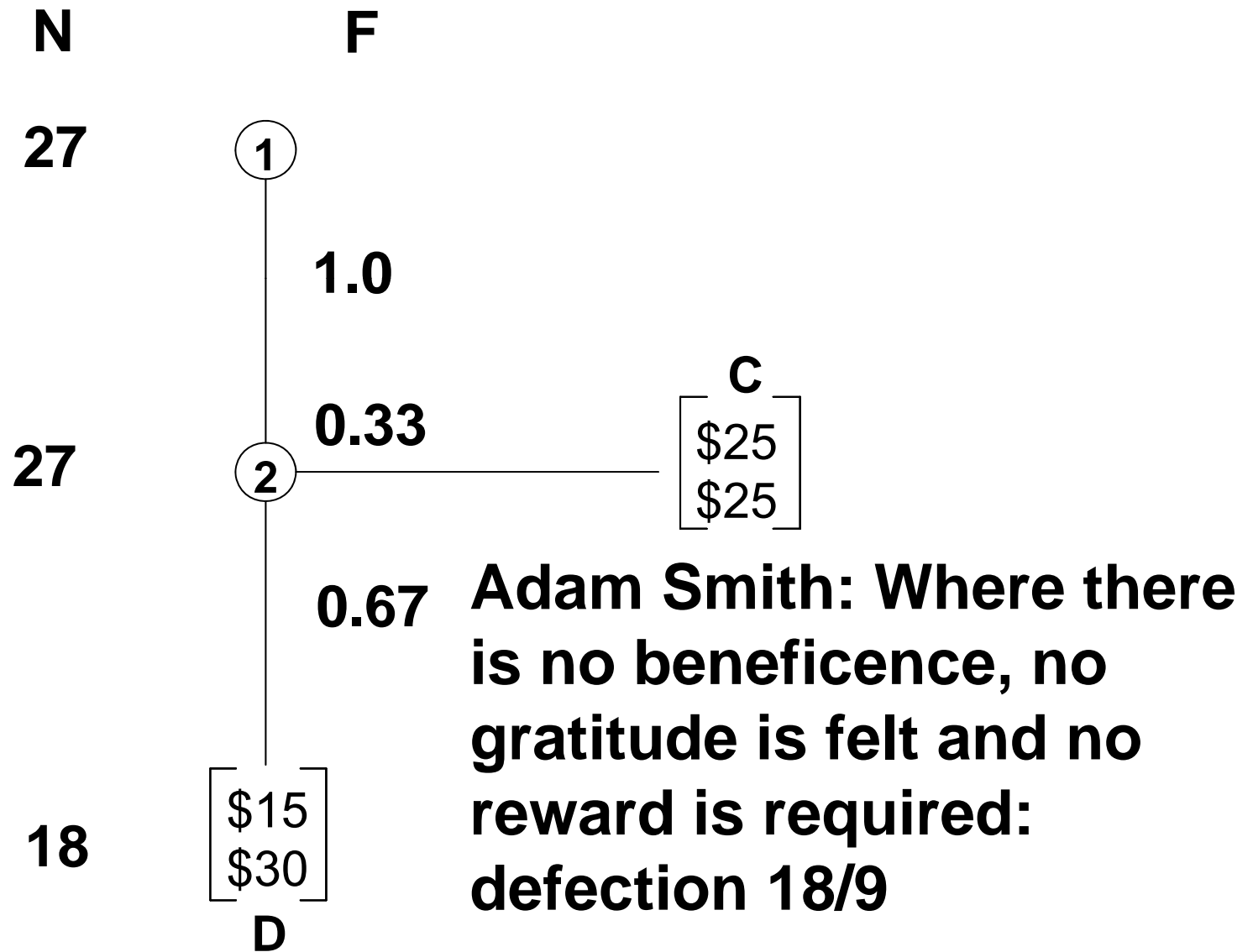


Figure 3
Involuntary Trust Game



Beneficence Proposition 2: “Beneficence is always free, it cannot be extorted by force, the mere want of it exposes to no punishment; because the mere want of beneficence tends to do no real positive evil. It may disappoint of the good which might reasonably have been expected, and upon that account it may justly excite dislike and disapprobation: it cannot, however, provoke any resentment (and punishment) which mankind will go along with.”
(*Sentiments*, II.ii.1.3, p 78)

Ultimatum Game

- Proposer has available $\$M$ supplied by the experimenter
- Proposer selects $x \geq 0$, offering the division $(x, \$M - x)$ to Responder
- Responder chooses between:
- $(x, \$M - x)$ and $(0, 0)$

Standard Prediction: $x = M - 1$

Ultimatum Observed results

“Divide \$M”: median $M - x = 0.5 M$

mean $M - x = 0.45$

Results change surprisingly little if M is made larger by factors of 10, 100, up to a months wages.

Amount offered declines significantly, with no increase in rejections if

- Proposers earn the right to move first
- Proposers are sellers posting a price offer to a buyer

**Table 1 Frequency (8, 2) is Offered; Proportion Rejected
When Alternative to (8, 2) is Varied.**

Alternative to Offer of (8, 2)	Frequency (8, 2) Offered	Proportion Rejected
(8, 2)	1.0	0.180
(10, 0)	1.0	0.089
(2, 8)	0.73	0.267
(5, 5)	0.31	0.444

Based on Falk et al, 2007

Property (Propriety) Rights in *Sentiments*

Injustice Proposition: “Actions of a hurtful tendency, which proceed from improper motives, seem alone to deserve punishment; because such alone are the approved objects of resentment, or excite ...sympathetic resentment.... (*Sentiments*, II.ii.1.2, p 78) “Resentment seems to have been given us by nature for defence, and for defence only. It is the safeguard of justice and the security of innocence. (*Sentiments*, II.ii.1.4, p 79)

“Among equals...and antecedent to the institution of civil government, (each individual is) regarded as having a right both to defend himself from injuries, and to exact...punishment for those which have been done to him (80)

As the greater and more irreparable the evil that is done, the resentment of the sufferer runs naturally the higher...(83-4).....

The most sacred laws of justice, therefore, those whose violation seems to call loudest for vengeance and punishment, are the laws which guard the life and person of our neighbour; the next are those which guard his property and possessions; and last of all come those which guard what...is due to him from the promises of others.” (84)

**Markets in Adam Smith's
Wealth—S & D experiments
for non durables**

In *Wealth* property rights are essentially taken as a given:

“Where there is no property...civil government is not so necessary.”

And he speaks of “natural liberty” wherein:

“Every man, as long as he does not violate the laws of justice, is left perfectly free to pursue his own interest his own way, and to bring both his industry and capital into **competition** with those of any...order of men.”

Discovery Axiom: “...the propensity to truck, barter and exchange one thing for another.” (*Wealth*, I.ii.1. 25)

“This division of labour, from which so many advantages are derived, is not originally the effect of any human wisdom, which foresees and intends that general opulence to which it gives occasion. It is the necessary, though very slow and gradual consequence of a certain propensity in human nature which has in view no such extensive utility...(*Wealth*, I.ii.1. 25)

CHART I

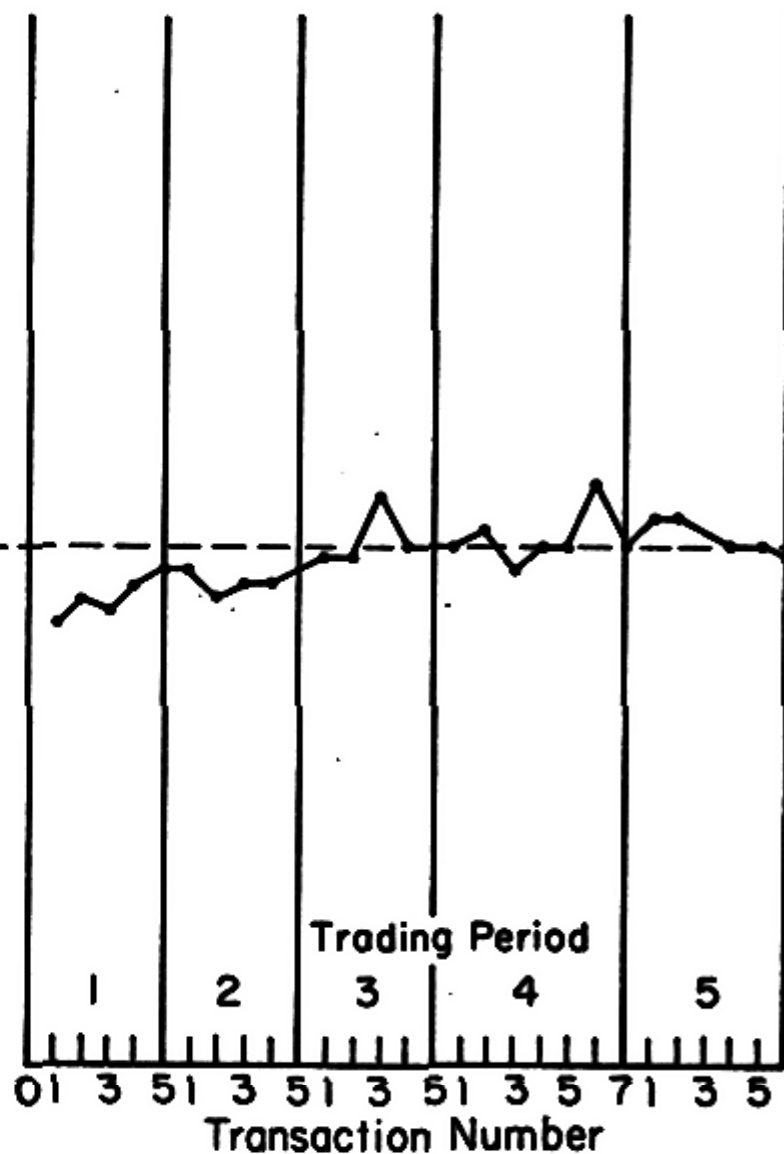
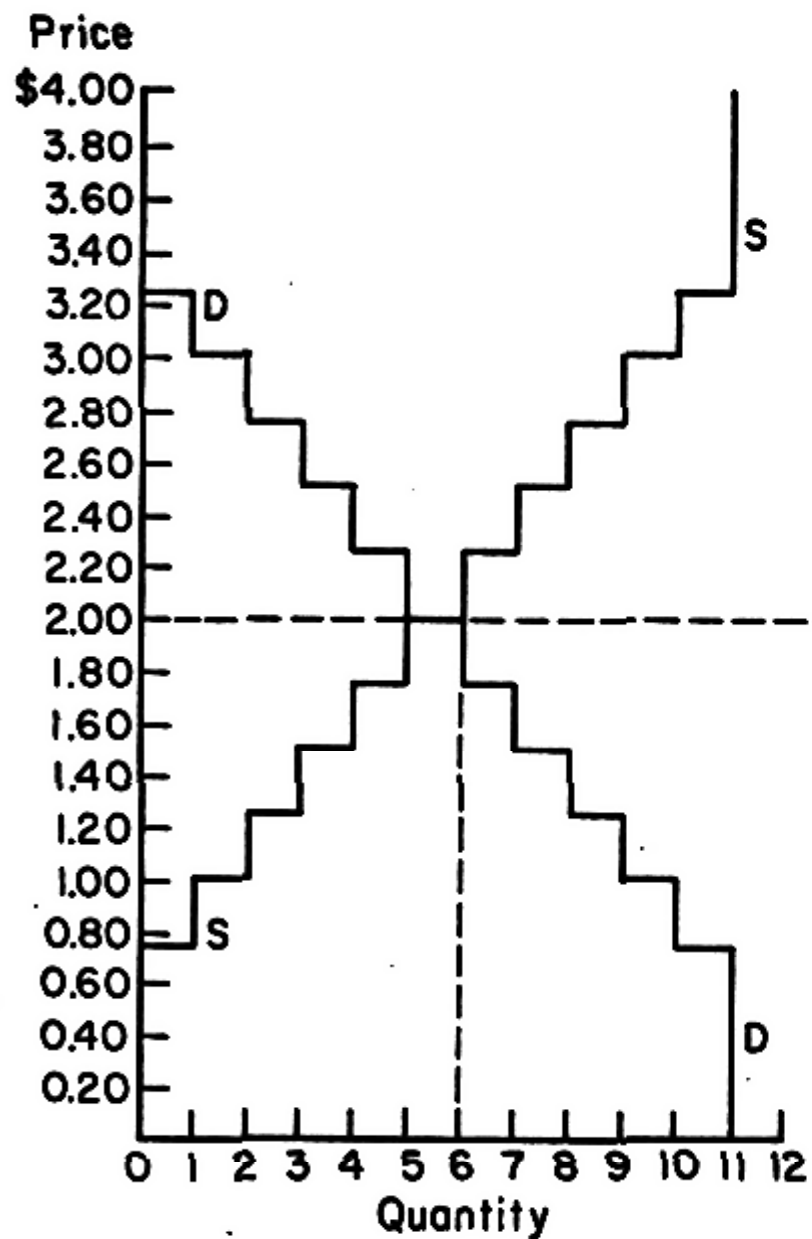
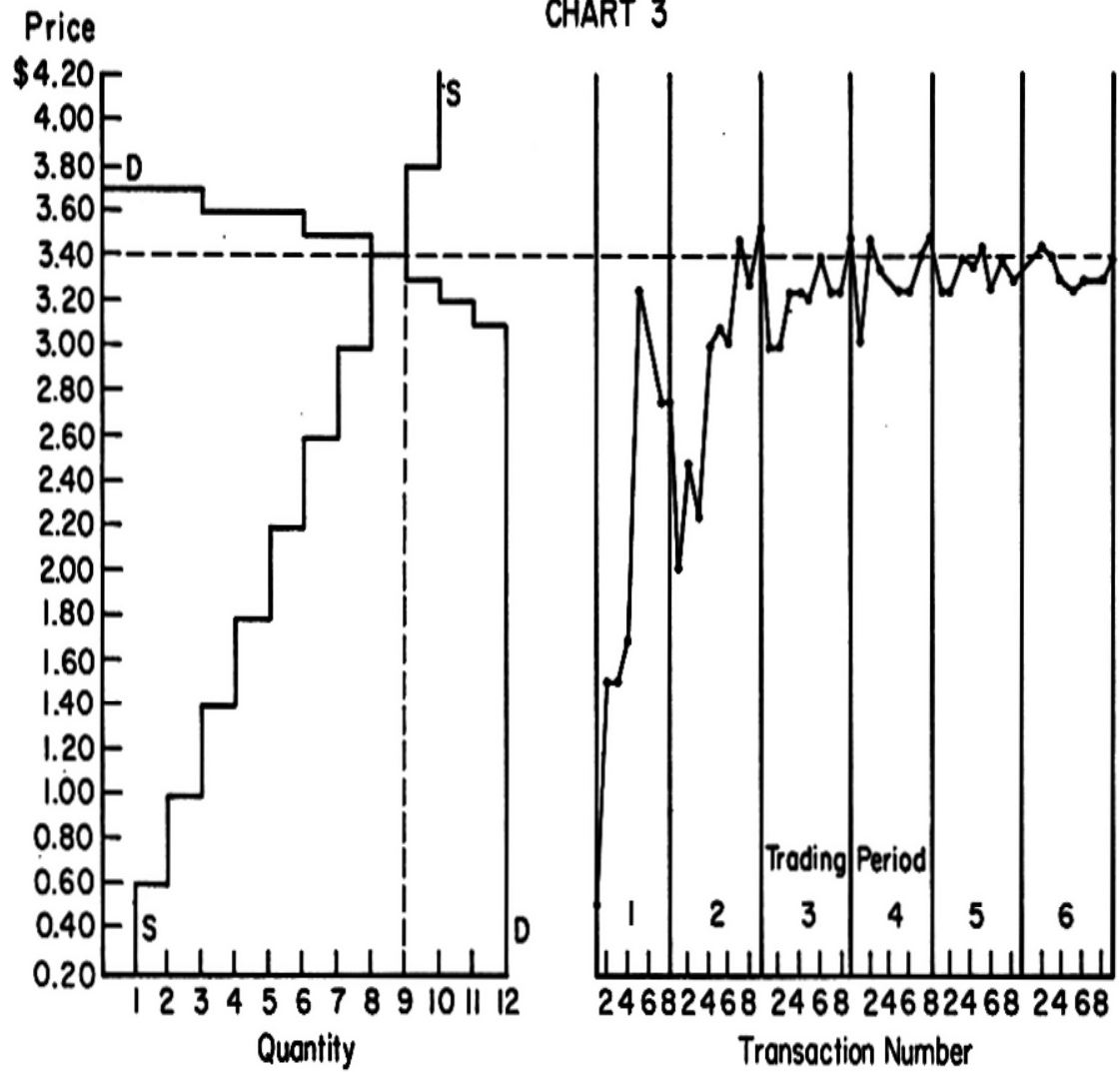
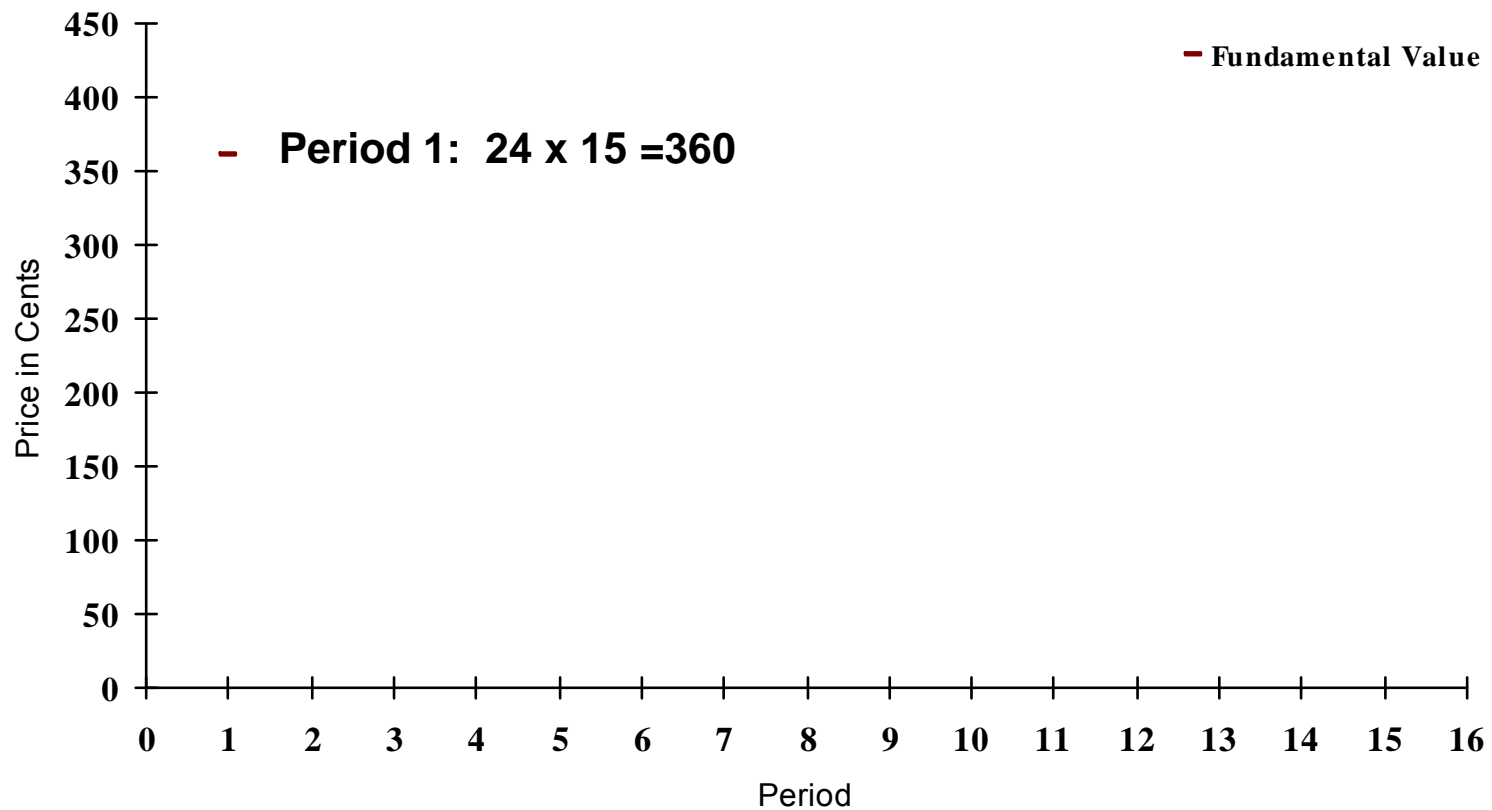


CHART 3

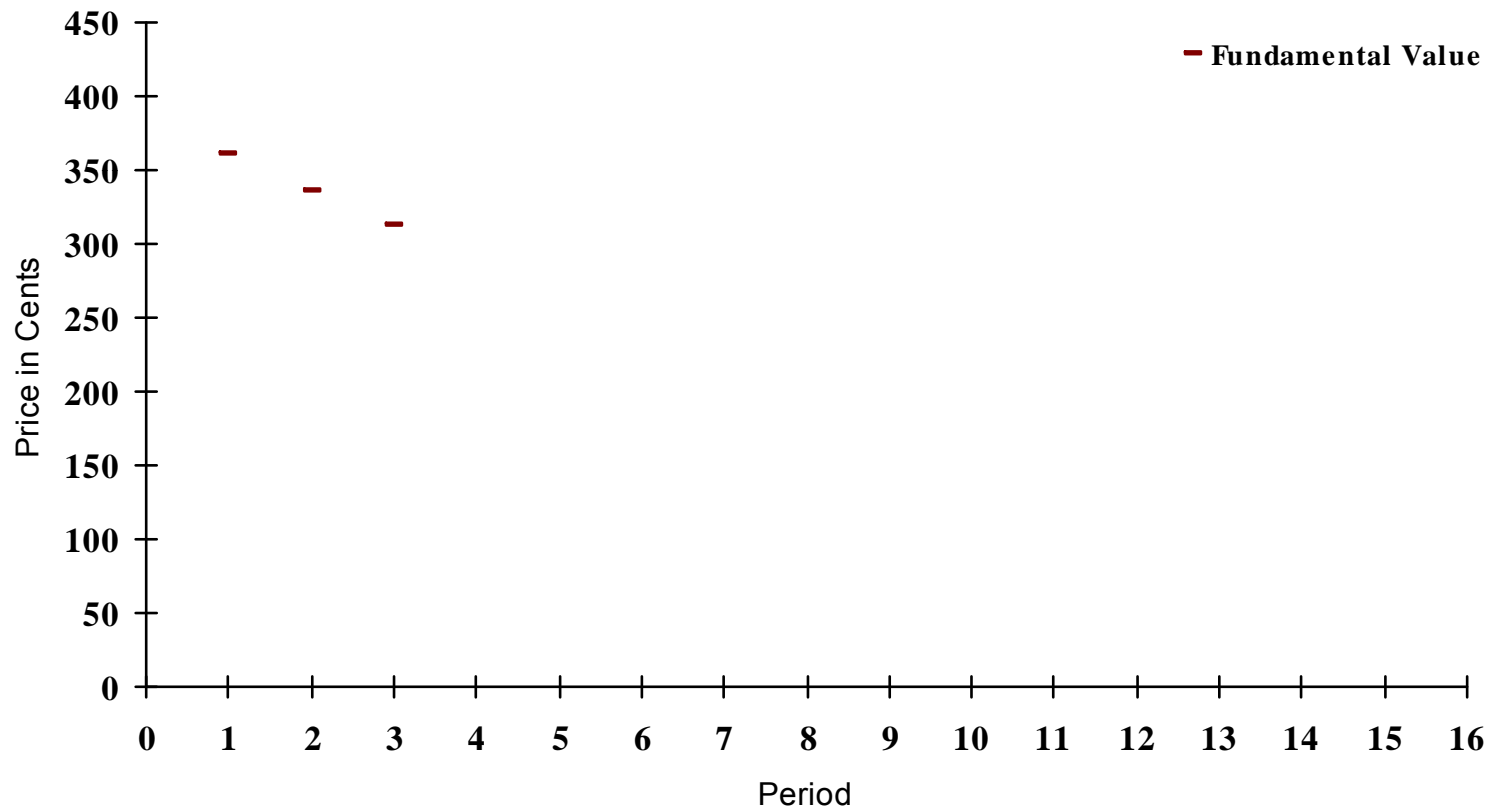


**Asset Markets, Lab and Field:
the source of economic
instability?**

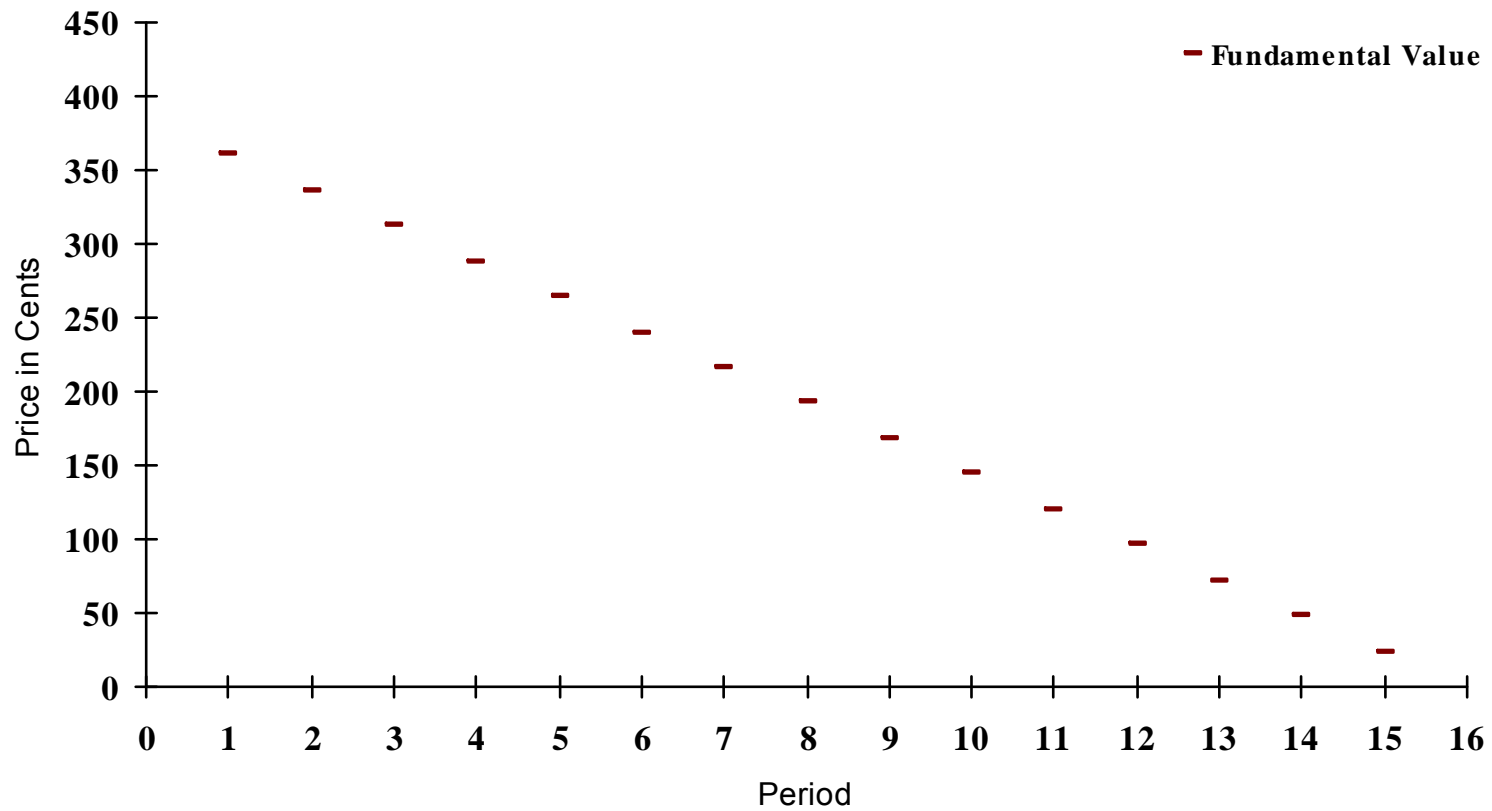
Simple Asset market experiment



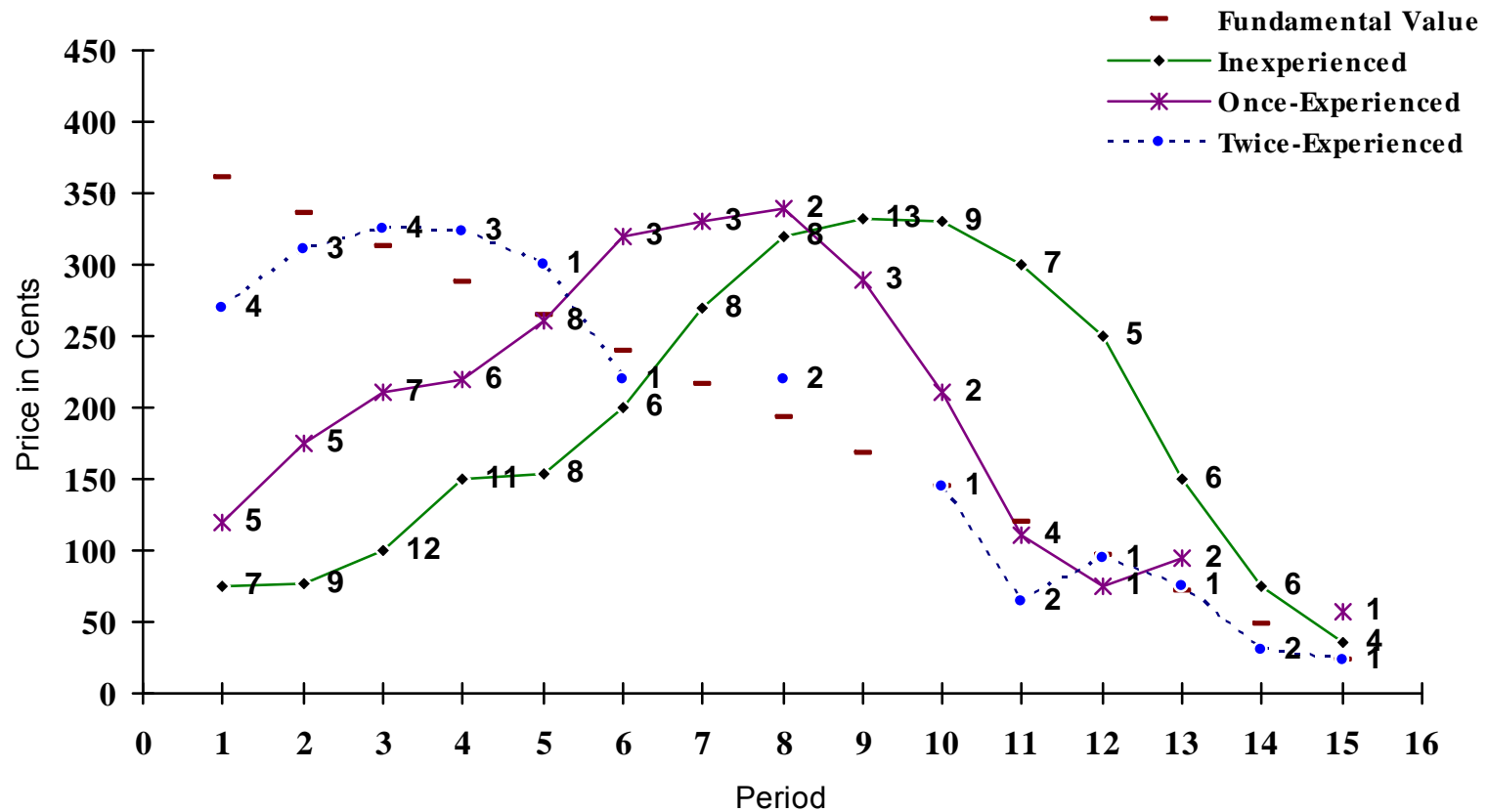
Fundamental Value Line



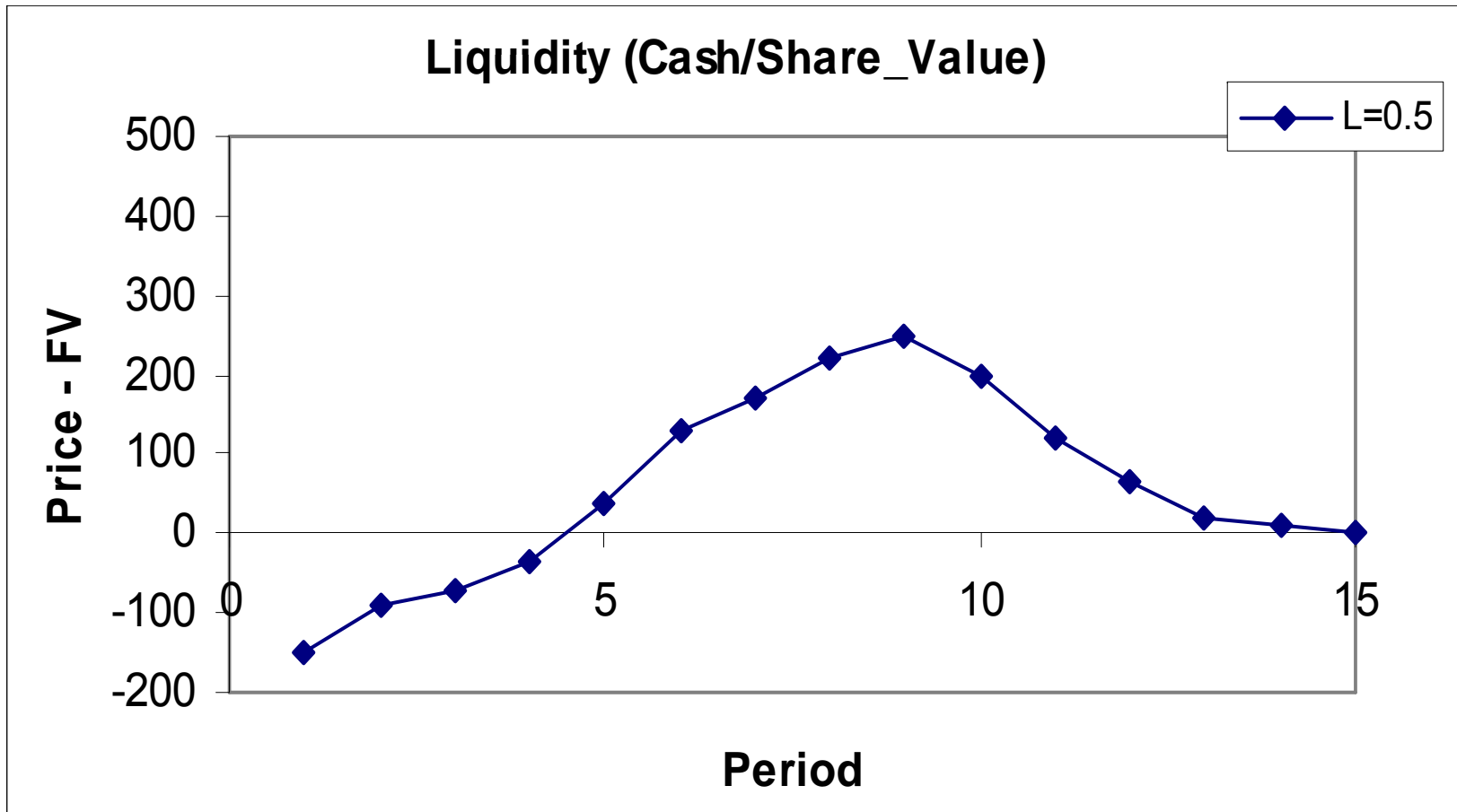
Fundamental Value Line



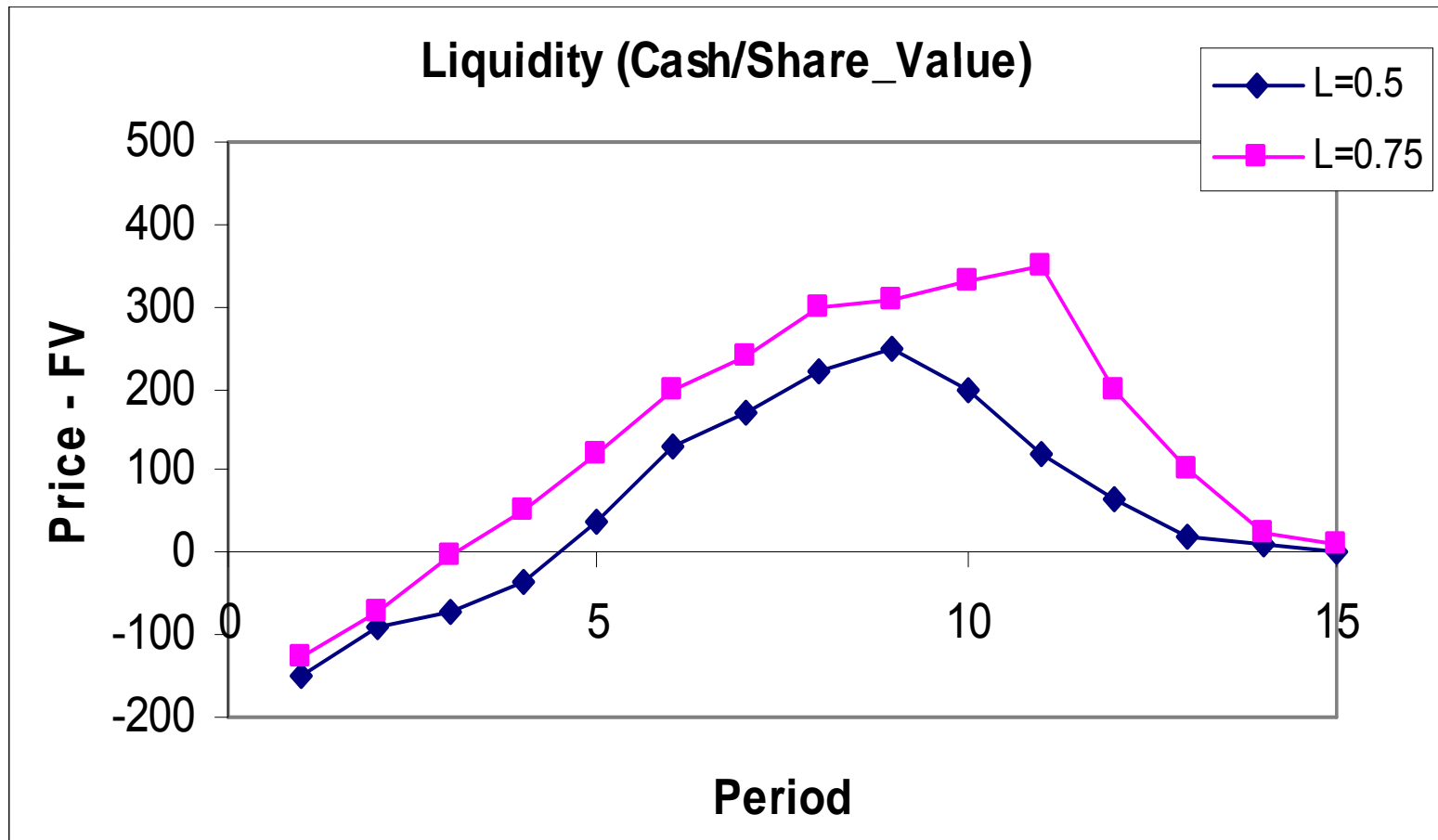
Effect of Experience on Time Series of Trading



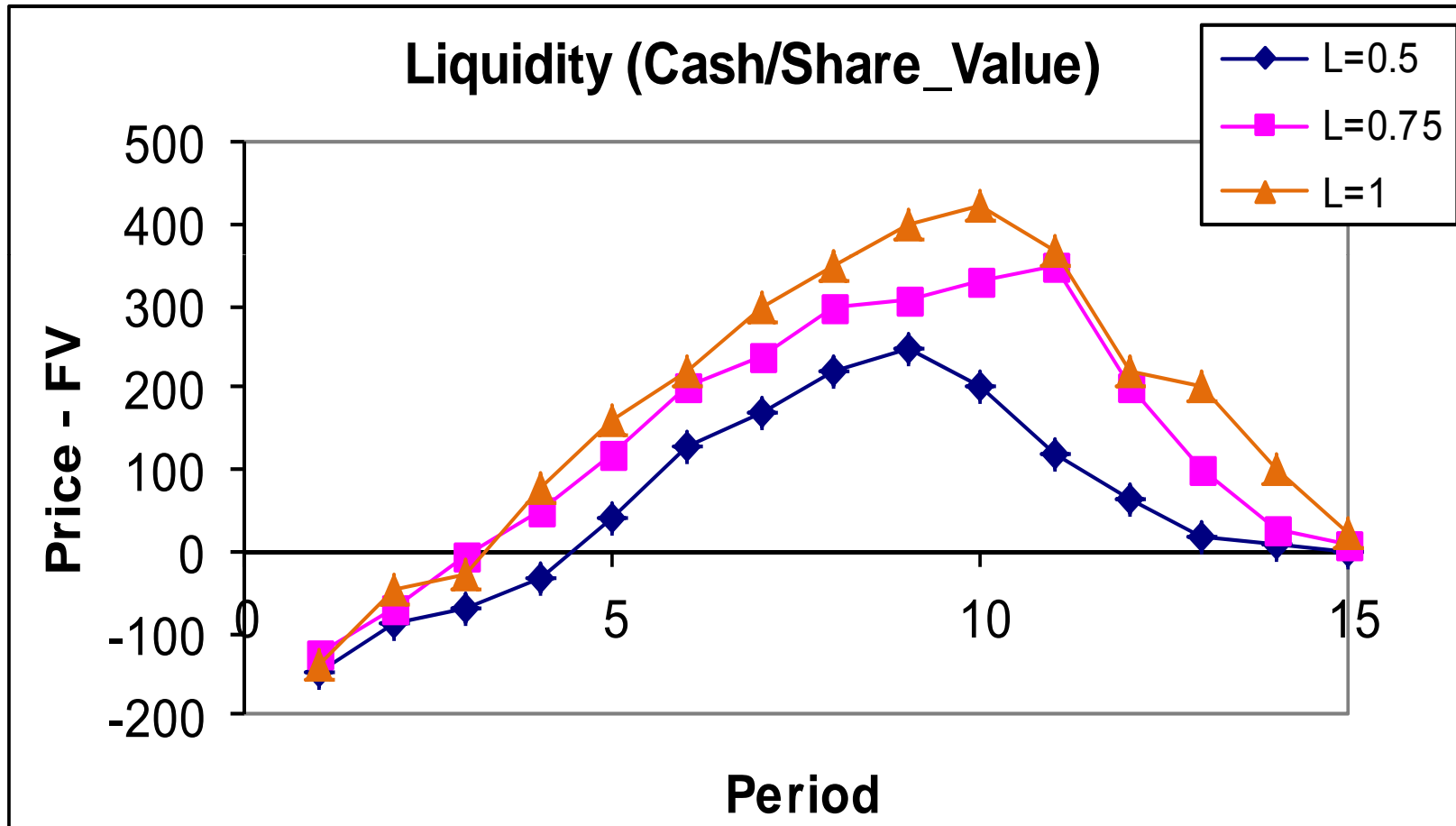
Liquidity Effects

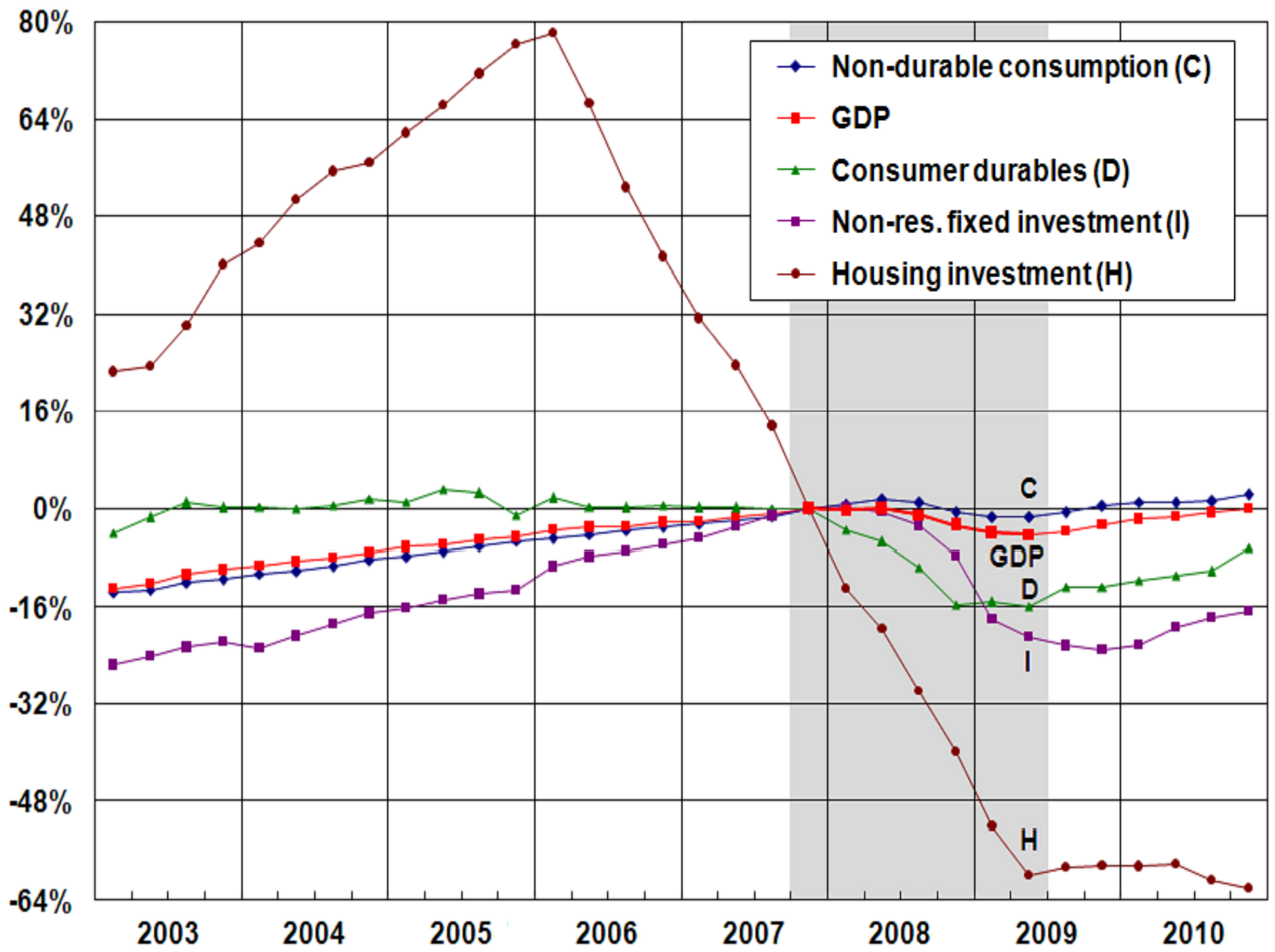


More liquidity, bigger bubble?

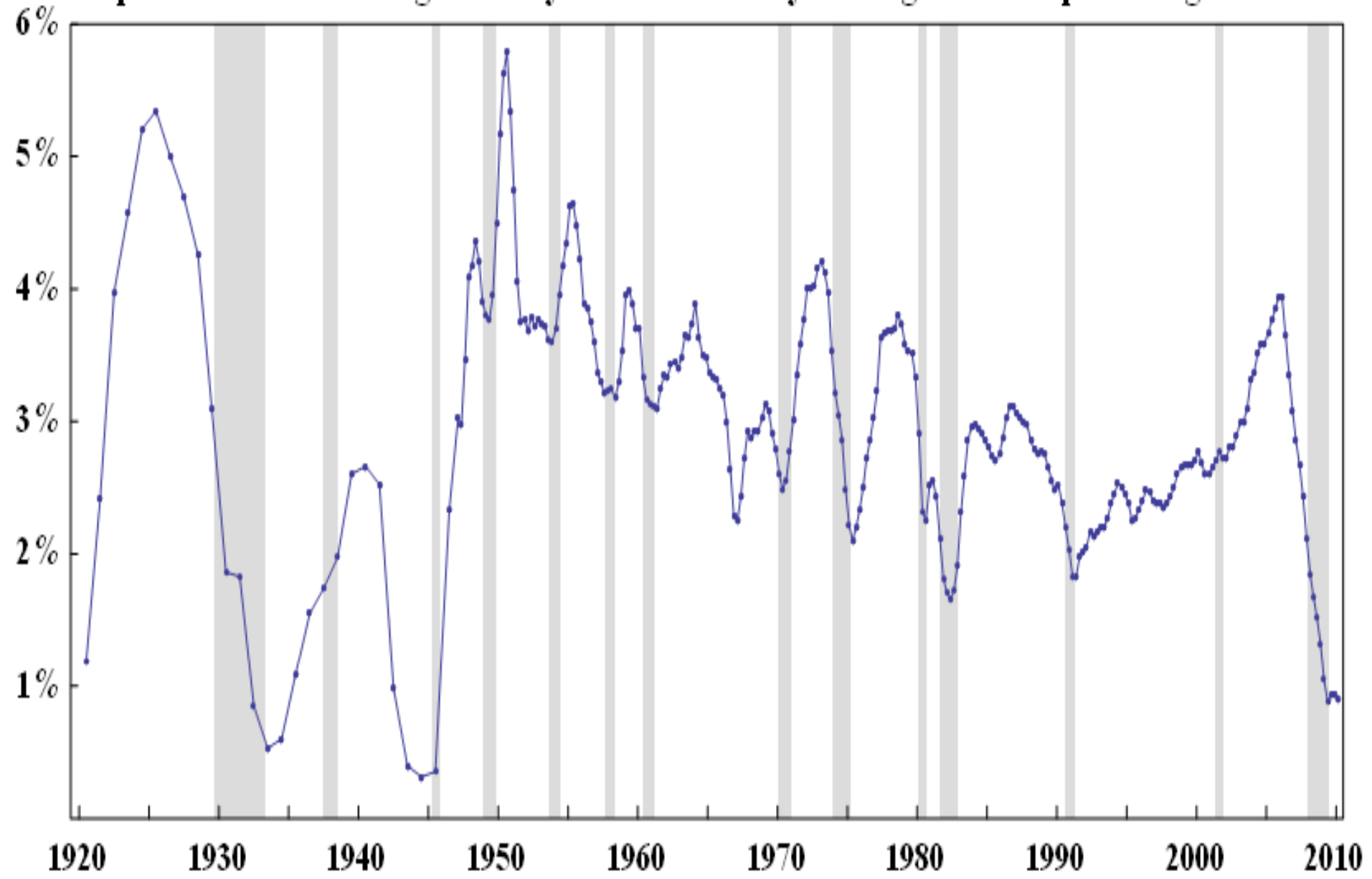


More money, bigger bubbles!





Expenditures on new single-family and multi-family housing units as a percentage of GDP



Shaded areas indicate the depression and the last 13 U.S. recessions.

In 2005, before the housing bubble burst, 45 percent of first time home buyers made no down payment at all. Concerning this observation, A. Smith would surely say that:

“...being the managers rather of other people's money than of their own, it cannot well be expected, that they should watch over it with the same anxious vigilance with which...(they) frequently watch over their own.” (*Wealth*, II, p741)

Summary

- **Smith's propositions on human social conduct better anticipated behavior in trust and ultimatum games than do current MAX utility models.**
- **These propositions account for the origin of property rights.**
- **Smith's discovery process, the human propensity for exchange, is alive and well in S&D experiments for consumer nondurables, some 80% of private product.**
- **National instability in consumer credit financed housing purchases, is echoed in laboratory asset experiments.**
- **Smith would say that this instability comes from too much of "other people's money."**