


# What Can Venture Capitalists and Entrepreneurs Learn from Behavioral Economists?



Presented at the 18<sup>th</sup> Annual Meeting of  
the Academy of Entrepreneurial Finance  
April 25-27, 2007, Austin, Texas

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Preliminary Draft April 2007



# SEGMENT A. PART I: Background

## Specific Topic in this presentation:

- RISK-TAKING BEHAVIOR AND THE PSYCHOLOGY OF RISK BY INDIVIDUALS- either as:
  - Investors- specifically *private* investors: Venture Capitalists (Venture Capital Funds) and Angels (Private Investors)- both categories are referred to VCs in this paper; or
  - Entrepreneurs



## Some Concepts/Definitions:

- Behavioral Foundation- two groups of psychological phenomena affecting decision making by both VCs and entrepreneurs:
  - Heuristics and Biases
  - Framing Effects
- Entrepreneurial Foundation:
  - The Entrepreneur- a real-life definition
  - Entrepreneurial Process- how ventures get created and harvested



# The Entrepreneur

A definition:

Entrepreneur is someone who:

- Recognizes a viable *business opportunity* (a market niche).
- Marshals the *needed resources* towards that opportunity for the purpose of creating a marketable product or service; and in the process,
- *Creates value* for all parties involved, including her-/him-self, investors, etc.



# The Entrepreneur Cont...

## The Defining Entrepreneurial Trait:

- Independence (job-independence, wealth independence, etc)
- Entrepreneur as the exact opposite of Agent (as in the Principal-Agent Relations)

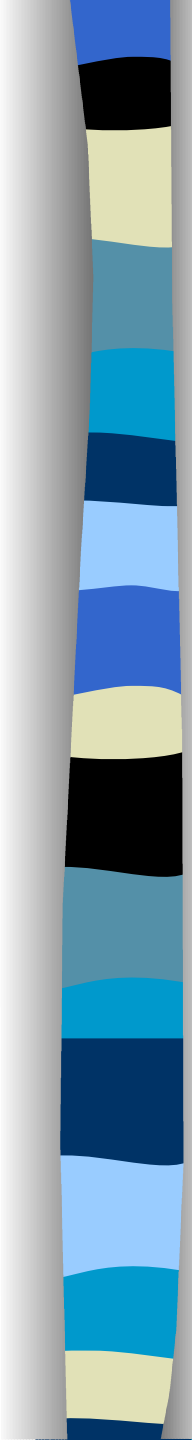
# The Entrepreneurial Process



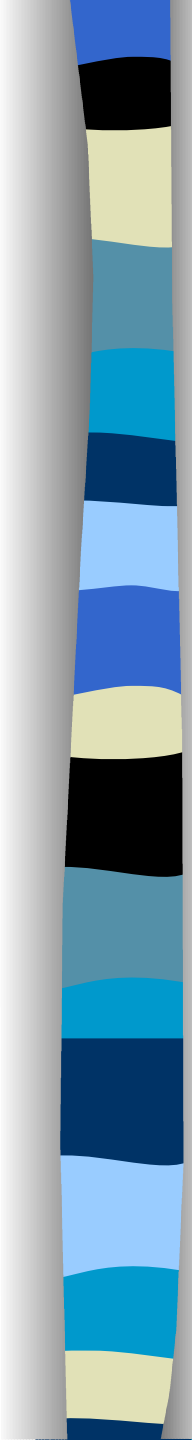
capital, team, marketing

E's sweat",.....

E= Entrepreneur, I= Investor; the "black box" analogy takes especial meaning in this presentation

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The factors that influence both the entrepreneur's and investors' perception of risk and return, and therefore their decision-making process, are present throughout the whole process in above. They are: heuristics, overconfidence, prospect theory, loss aversion, representativeness, framing, anchoring, familiarity bias, perceived control, expert knowledge, affect (feelings), and worry

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- Behavioral Finance- ok
  - Behavioral Corporate Finance- ok
  - But Behavioral Entrepreneurial Finance?

Isn't that Redundant?

So we just stick with Entrepreneurial Finance- which is all behavioral



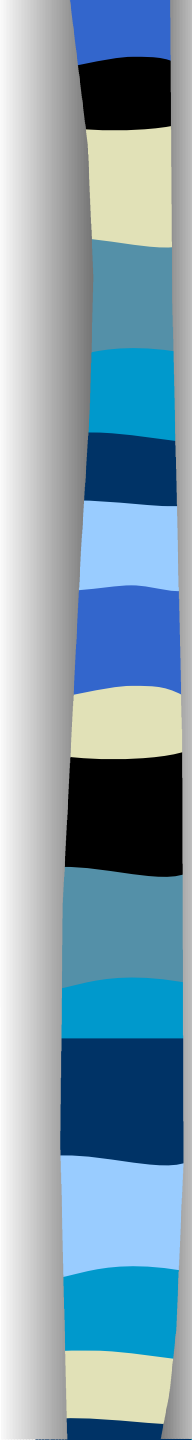
# Key Problem with Standard Theories in Economics and Finance

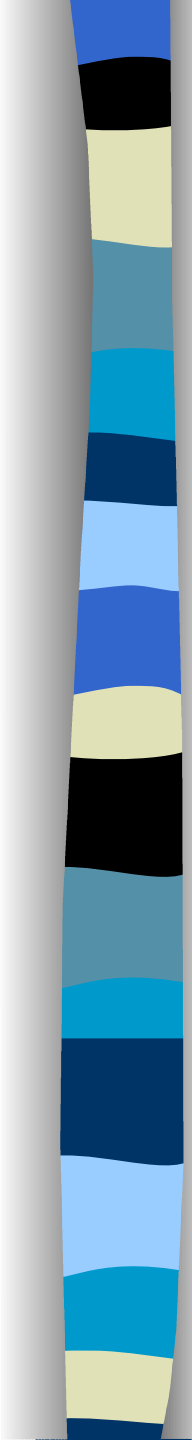
- No Consideration whatsoever for Human Behavior- as evident in mechanical/value-maximizing approaches of such theories.
  - The rational construct assumes that individuals- both investors and managers- are “capable of understanding vastly complex puzzles and conduct endless instantaneous optimizations”. Main results of such classical thinking are the concepts of market efficiency and arbitrage- with major practical implications for both areas of investment and corporate finance.
  - See, Montier, James; Behavioral Finance: Insights into Irrational Minds and Markets; 2007, John Wiley & Sons.

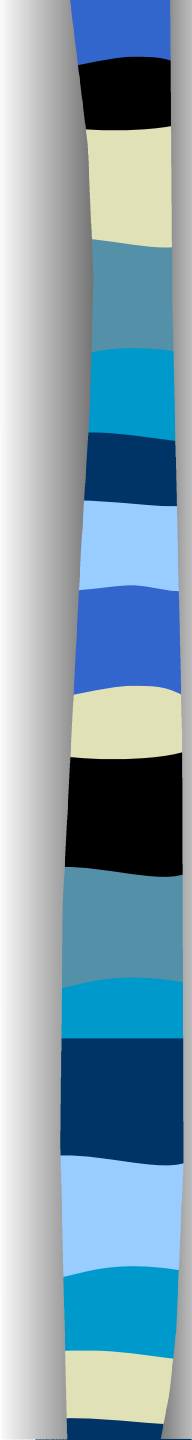


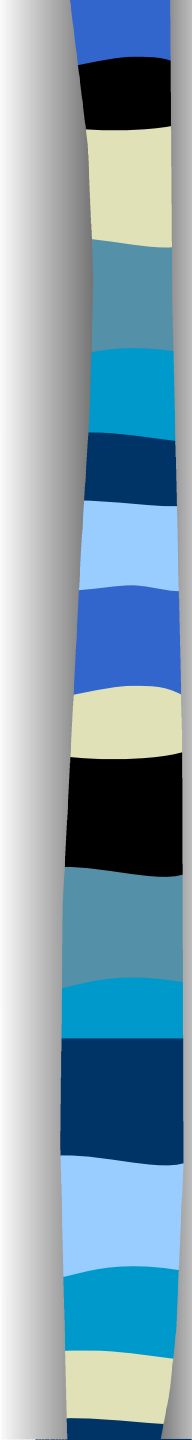
# Key Problem with New Behavioral Theories in Economics and Finance

- “Homogeneous/Universal” Behavior by *all* individuals across the Board and across *any* business pursuit, whether individuals within:
  - Corporations, or
  - Government, or
  - Totally independent, entrepreneurial ventures
- Key Distinction: Employee (agent, and in some branches of government like military, perfect agents) vs. free-spirited, independent Entrepreneur (principal)

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- A Key Question: Will the nature and type of individual behavior be the same in three above cases? In other words, when it comes to decisions- any type of decision, from strategic to operational- will agents and principals behave the same way?
  - Aren't there any differences between: perfect agents, agents, and principals (owner/operators, entrepreneurs)? (recall the entrepreneurial process)

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- An Example related to problem with standard finance theory: Case of Information Asymmetry and Principal-Agent Relations; where entrepreneurs are seen as *agents* and investors as *principals*;
  - Reality Check: As argued in above, such a view is not consistent with reality- or at least not consistent with most of the reality.

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- Reality: The Entrepreneur *can also* be the Principal (Investor) because the entrepreneurs are:
    - Decision makers & risk bearers- Knight;
    - “Gap fillers” for poorly established markets- Leibenstein;
    - Innovators who carry out “new combinations”: new products, new production functions, new markets, new sources of material, new organization of industry- Schumpeter; or just simply and for the main purpose of this behavioral-finance-based presentation,
    - Modern entrepreneurs of the 21st century who take on all types of functions throughout the whole *entrepreneurial process*. Functions involving *both* sides of the business- the entrepreneurial or venture creation side, and the investing side.

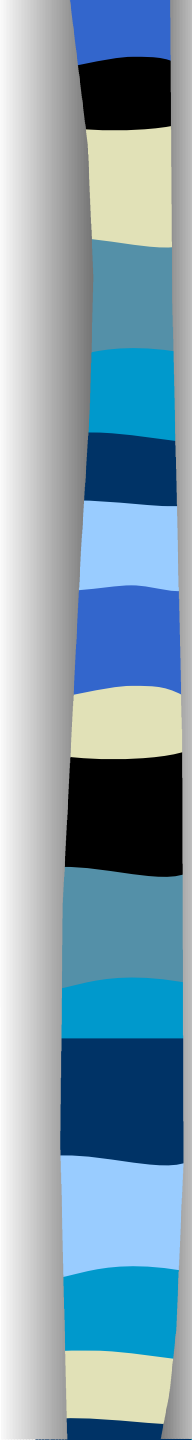
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- By the same token, the Investor/VC *can also* be the Agent (Entrepreneur) again due to the reasons stated in items i, ii, iii, and iv in above[1].
    - [1] This is especially true given the fact that the complexity (read risk of success or failure) of entrepreneurs and their new products and services have increased tremendously. Examples can especially be found in more complicated fields of IT, biotech, nanotech, and similar industries.



# PART II: Breaking the Mold

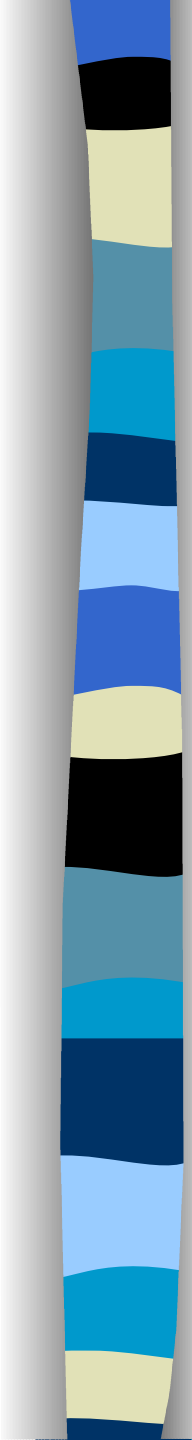
- The Issue: Limitation of the Principal-Agent Paradigm
  - Principal-Agent relations may work for managers and employees in public or private corporations, and certainly in Military (case of perfect agents); but definitely will not work for entrepreneurs as we have come to know them.
  - Environment-Dependent Behavior vs. “Heterogeneous/Universal” Behavior: A Case for Environment-Dependent Behavior:

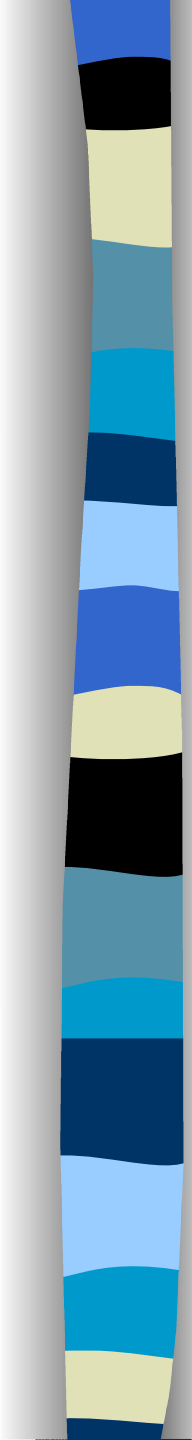




# Entrepreneurial Behavior vs. Non-Entrepreneurial Behavior

- Entrepreneurial Behavior: *Authentic/unrestricted/True Behavior*
- Non-Entrepreneurial Behavior (type of behavior prevailing in public or private corporations, government agencies, or any place where the Principal-Agent paradigm governs): *Imposed upon/Non-true/managed/artificial/forced Behavior*

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- Recap: Conclusion/Reality:
    - Modern entrepreneurs of the 21st century take on *all types of functions* throughout the whole *entrepreneurial process*.
    - Functions involving *both* sides of the business- the entrepreneurial or venture creation side, and the investing side. This alone has direct implications relative to decisions by both entrepreneurs and VCs/investors.



# **PART III: An Illustrative Example- Applying Behavioral Phenomena to a Real-life Venture**

The real-life case for this part is taken out to make the presentation more manageable as far as size is concerned.



# PART IV

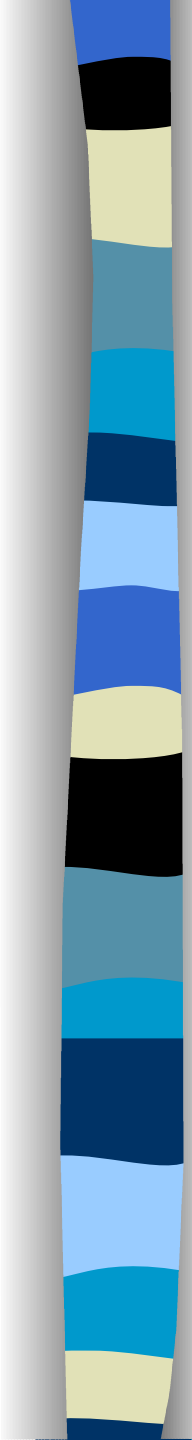
## THE ENTREPRENEURIAL PROCESS-WHAT WE DO NOT KNOW ABOUT

Opportunity Recognition

Black Box

Value Creation

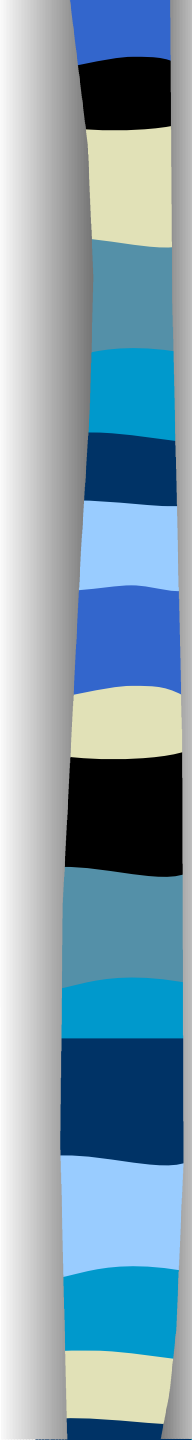
- We still do not have a good understanding of the decision making process on part of *both* entrepreneurs and investors- especially that portion of the entrepreneurial process we earlier referred to as the “black box”.

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- In other words, we certainly know much about the front-end of the entrepreneurial process: Opportunity recognition; and the back-end: Value creation. However, we know little about the middle portion of the process; that is: what else goes into the “black box” and what happens there? How decisions are made in there? How functions are carried out?.....
  - “Black Boxes” can become “Break Boxes”; and very often so- just as the illustrated case in this presentation.



More specifically,

- We still do not have convincing arguments and answers regarding behaviors that lead to venture failure and venture success. For example:
  - Which is really the major factor for venture capitalists when it comes to investing in startups: The product/service or the entrepreneur’s “quality”/traits?
  - And if quality/traits- as some would certainly say- what exactly are those qualities/traits?
  - Furthermore, if so, can we generalize these to add to our predictive power when we want to evaluate success/failure scenarios for a give venture?

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- As Kaplan, et al put it, “Despite the long history of theory and empirical work (relative to the “Theory of the Firm”), there is little systematic evidence concerning what constitutes a firm at birth and how a firm evolves from birth to mature company”[\[2\]](#).

[2] “What are Firms? Evolution from Birth to Public Companies”; Steven Kaplan, et al; 2005; University of Chicago Working Paper; and available on SSRN for download.

# THE ENTREPRENEURIAL PROCESS- WHAT WE WANT TO KNOW ABOUT

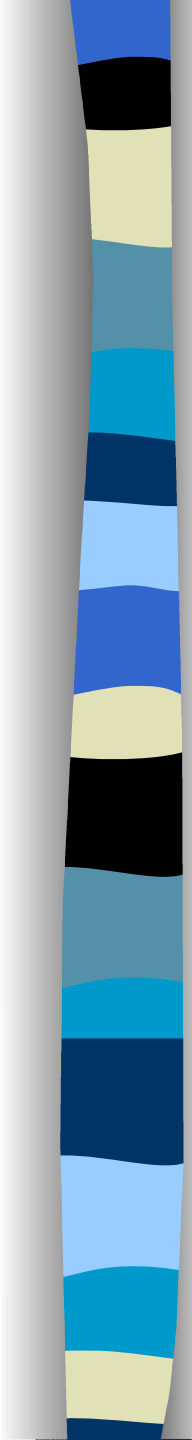
Opportunity Recognition

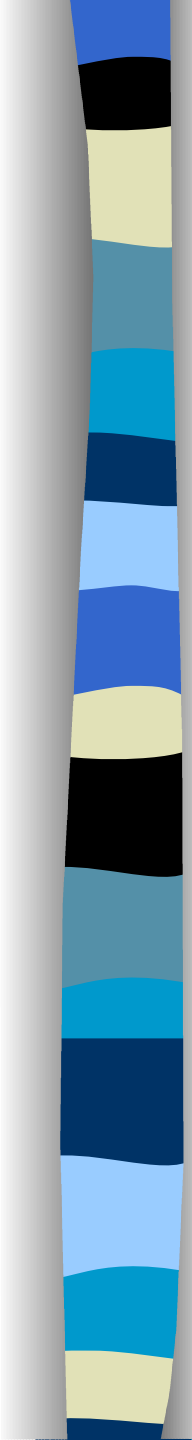
"Black Box"

Value Creation

At least, about two things:

- Behaviors and any other Factors that lead to Success or Failure in a given venture
  - Contrary to traditional coverage of this key subject, success and failure possibilities are present throughout the whole entrepreneurial process; i.e.:
    - Opportunity Recognition phase
    - Black Box stage,
    - Value Creation phase

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- How Resources are Allocated by both entrepreneurs and investors throughout the whole entrepreneurial process; i.e.:
    - Opportunity Recognition phase
    - Black Box stage,
    - Value Creation phase



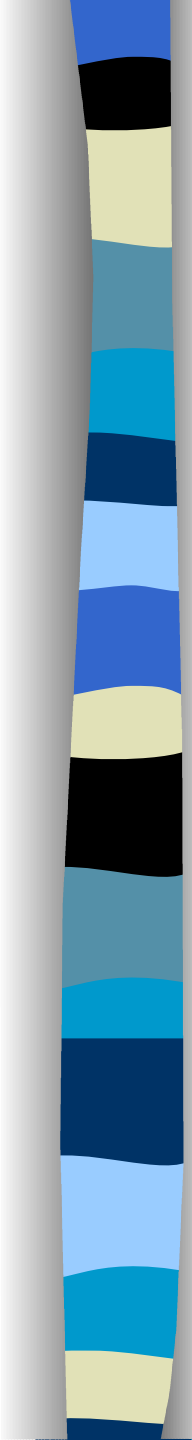
## PART V

# THE PROCESS VIEW OF ENTREPRENEURIAL FINANCE THROUGH THE LENSES OF THE BEHAVIORALISTS:

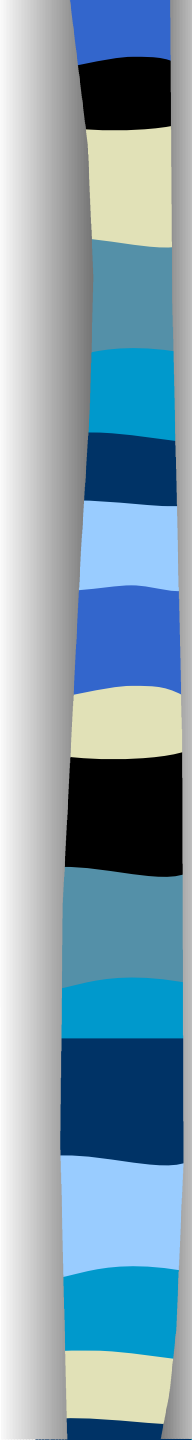
A “back to the basics” approach for better understanding entrepreneurial and investing decisions!

## Some Discussions and Concluding Remarks

- Case for Behavioral Value Drivers- in addition to our Traditional Value Drivers:
  - sales growth rate,
  - operating profit margin,
  - tax rate,
  - capital investment,
  - cost of capital
- What Can Possibly be the Elements of Behavioral Value Drivers?

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- Case for Debiasing: In our efforts to help entrepreneurs and VCs/investors to make more effective decisions:
    - Can we, and should we, debias entrepreneurs' and investors' behaviors? (evidence shows that the psychology that underlies errors and biases is greatly resistant to change (Shefrin))
    - Can we equate biases to mistakes? We learn from our mistakes and can correct our mistakes over time; but does the same goes for biases and other psychological phenomena?



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- If efforts to mitigate biases, heuristics, framing, etc are futile- in other words, if people act based on heuristics, biases, framing, etc- are there other things we can do to improve the decision making process for both entrepreneurs and investors?

Any Thoughts, Suggestions?



**SEGMENT B. The Psychology of Risk:  
The Behavioral Finance Perspective  
Victor Ricciardi**

**For the next part please see the file called  
“Ricciardi.Behavioral.Part2”**