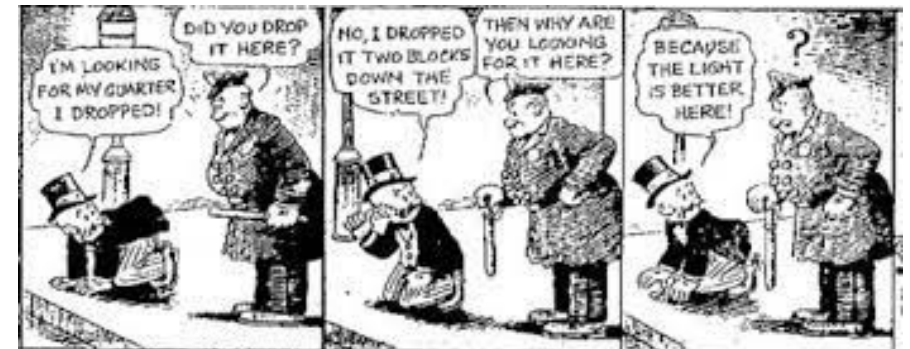


A Random Walk Down San Fernando

JOHN ESTILL AND NINOS MALEK
FOR APEE 2022

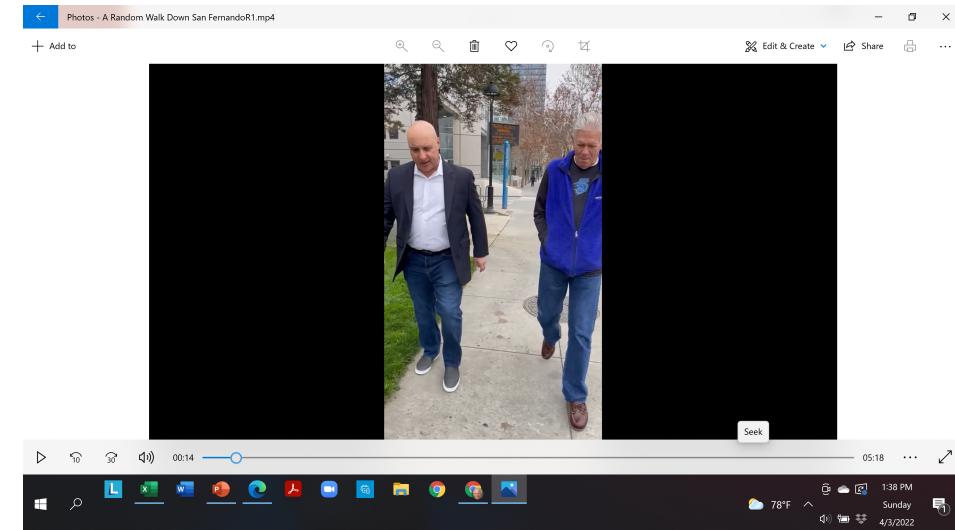
Teaching Entrepreneurship

- ▶ Are \$20 bills laying on the ground?
- ▶ If so, why hasn't someone picked them up?
- ▶ The apparent conflict of entrepreneurial alertness and rational expectations/efficient markets
- ▶ How can we demonstrate an insight about this?



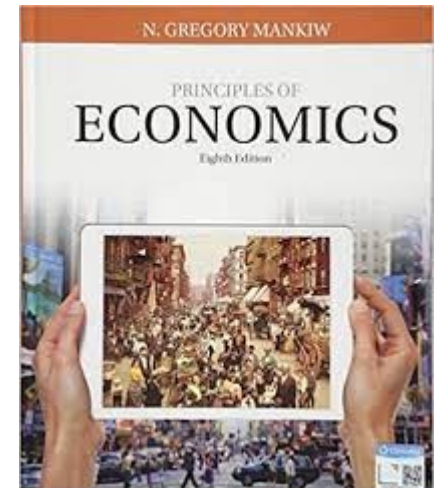
An Experiment

- ▶ <https://vimeo.com/695292930/34539df097>
- ▶ Notice three things in the video
and write them down
- ▶ Save them



Teaching Entrepreneurship – Moving Ahead

- ▶ **More about entrepreneurship is available in Econ Principles texts today**
- ▶ **However, the concept is still often superficial**
- ▶ **How can one improve the understanding of alertness?**
- ▶ **Not how to be, but rather what is it**
- ▶ **A brief econ history of the development of entrepreneurship**



Origins of Entrepreneurship

- ▶ Richard Cantillon's *Essai sur la Nature du Commerce en General* -1755
- ▶ Coins the term from the use of *entreprendre* – to undertake
- ▶ Lost for nearly 100 years though referred to in Smith's *Wealth of Nations*
- ▶ Smith uses much of Cantillon's analysis
- ▶ Cantillon - a full account of the entrepreneur who lives on an uncertain income

ENTREPRENEUR

The word 'entrepreneur' is derived from the French word *entreprendre*. It means 'to undertake'.

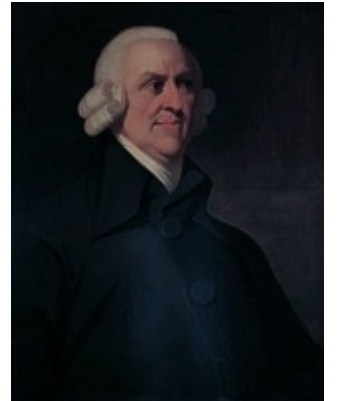
Thus, entrepreneur is the person who undertakes the risk of new enterprise.

Prepared By: Dr. Shree Arora



Origins of Entrepreneurship

- ▶ **Adam Smith recognizes that the “undertaker is paid profit rather than other payments – rent, wages, or interest**
- ▶ **Smith uses the term “undertaker” to identify someone who undertakes of a project and must be paid a profit to hazard their stock in an adventure**
- ▶ **Jean Baptiste Say finds the entrepreneur is a person uses judgement in the face of risk to combine the factors of production into goods that consumers want**
- ▶ **Say notes the distinction between the entrepreneur and the those who supply capital.**



Origins of Entrepreneurship

- ▶ **Carl Menger develops the initial framework of the Austrian School of Economics**
- ▶ **He identifies entrepreneurship as the primary agency of economic growth**
- ▶ **He stressed individualism and subjective value**
- ▶ **Risk is only incidental**
- ▶ **Entrepreneurial activity consisted of four elements:**
 - ▶ **a) obtaining economic information,**
 - ▶ **b) economic calculation,**
 - ▶ **c) the act of will by which goods of higher order (capital goods) are assigned to a particular production process, and**
 - ▶ **d) supervision of the production process**

The Marginal Revolution and the
Birth of the Austrian School



Lecture One



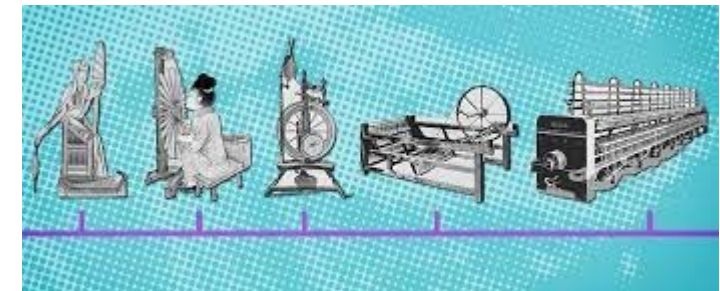
Origins of Entrepreneurship

- ▶ Ludwig von Mises further developed Austrian economics along Mengerian lines
- ▶ Mises - cost is simply the measure of relative scarcity
- ▶ Using deductive - cost only discovered through competition over the use of scarce resources in the marketplace
- ▶ The market is not a place or a thing, but a process for determining scarcity
- ▶ Without a competitive market, a socialist state cannot know what or how to produce efficiently
- ▶ *Human Action* – a full development of the market process - entrepreneurs move the economy

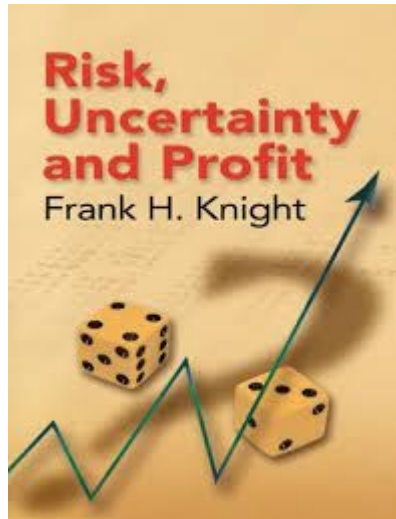


Origins of Entrepreneurship

- ▶ Joseph Schumpeter - *Capitalism, Socialism and Democracy*, Chapter 7, “The Process of Creative Destruction”
- ▶ Entrepreneurs incessantly revolutionize the economic structure from within, incessantly destroying the old one, incessantly creating a new one
- ▶ An evolutionary process
- ▶ The entrepreneur is the destabilizer that moves the static economic model forward
- ▶ Only missing are the other elements of change driven by the uncertainty of future events



Origins of Entrepreneurship



- ▶ **Frank Knight -“Risk, Uncertainty and Profit” - clarified the idea of risk, an area of contention among economists and business educators**
- ▶ **Entrepreneurs bore a certain kind of risk and were rewarded for it with profits**
- ▶ **Additionally, in a world of constant change, it was this search for profits by entrepreneurs that moved the economy forward**
- ▶ **He identified three kinds of probabilistic risk, a priori probability, statistical probability, and estimates.**
- ▶ **The first two could be turned into costs through insurance**
- ▶ **Estimates required expertise and intuition and led to entrepreneurial profit and loss in the face of uncertainty**



Origins of Entrepreneurship

- ▶ Friedrich Hayek - “The Use of Knowledge in Society” followed by “Competition as a Discovery Procedure”
- ▶ The market is a process, but a discovery process where value cannot be known in advance but must be discovered through competition
- ▶ The knowledge required to satisfy the evolving individual desires, given the limited means at hand, is that of time and place known only to each individual
- ▶ No central planner has access to this information, it can only be determined through the market process
- ▶ This knowledge is always forward looking in the face of constant change



Origins of Entrepreneurship

- ▶ William Baumol's "Entrepreneurship in Economic Theory," identifies the entrepreneur as the missing person in mainstream economic models
- ▶ His "Entrepreneurship: Productive, Unproductive, and Destructive," outlined different types of entrepreneurship: productive, unproductive, and destructive
- ▶ The supply of entrepreneurship is greatly affected by institutions (the rules of the game)
- ▶ Entrepreneurs always exist, but their concentration is dictated by incentives of the prevailing institutions
- ▶ Ignores the contributions of the Austrian school



Baumol's (Simpson's) Typology

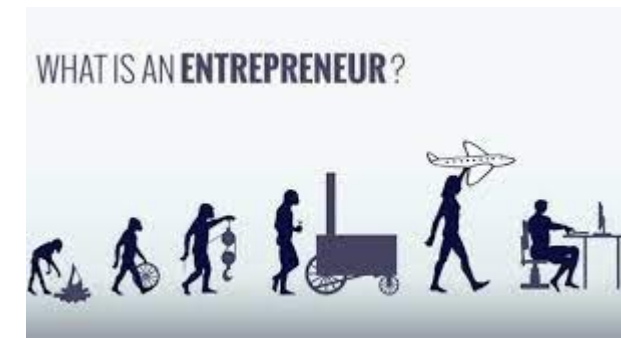
- Productive entrepreneurship (maximises individual (private) and social benefits)
- Unproductive entrepreneurship (maximises individual (private) but not necessarily social benefits)
- Destructive entrepreneurship (maximises individual but not social benefits)

Origins of Entrepreneurship

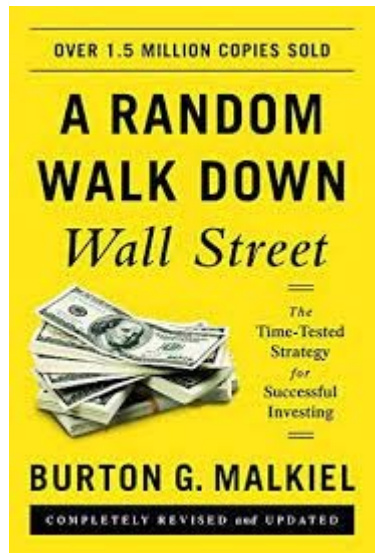
- ▶ **Israel Kirzner has spent his career further amplifying the role of the entrepreneur and entrepreneurial alertness in the Austrian tradition**
- ▶ **Entrepreneurial alertness, the tacit and spontaneous recognition of profit opportunities that is costless, without a market, and does not represent the mere possession of superior knowledge**
- ▶ **Each market exchange represents an entrepreneurial effort to reduce ignorance by buying something undervalued and selling it for a potential profit – an equilibrating process**
- ▶ **The market is a discovery process driven by entrepreneurial activity**



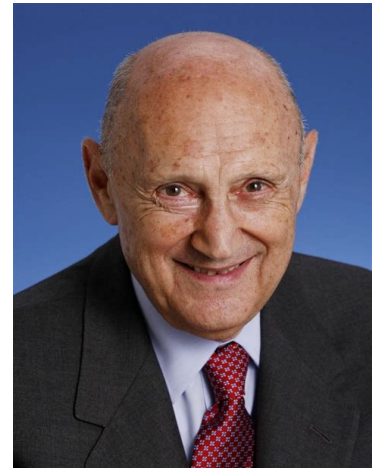
Israel Kirzner



Counterpoint – A Random Walk

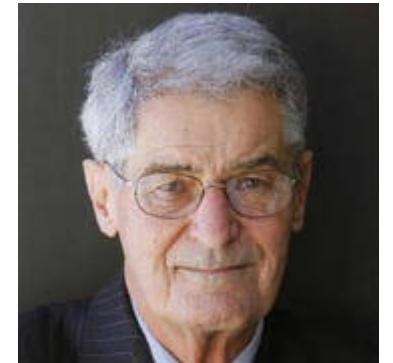


- ▶ **Burton Malkiel in *A Random Walk Down Wall Street* posits that that stock prices move randomly based on new information that is uncertain until divulged and, thus, cannot be predicted in advance**
- ▶ **This idea suggests that one cannot outperform capital markets and became an underpinning for investing in broad, low cost index mutual funds**
- ▶ **It provided support of the idea of the efficient market hypothesis and rational expectations theory**



Counterpoint – Rational Expectations

- ▶ John Muth published “Rational Expectations and the Theory of Price Movements” that helped clarify the way economists viewed expectations
- ▶ While stock market prices move randomly based on new information, one might, under specific circumstances, successfully predict outcomes
- ▶ Originally a microeconomic statement, it was nearly ten years later that economists began to apply the idea to macroeconomics with lasting effects
- ▶ If economic actors are rational, they use reason and logic to try to improve their situation, and they have experience and the relevant information, the distribution of their subjective expectations will closely match a predictive objective distribution model
- ▶ Muth added a caveat, “It does not assert that the scratch work of entrepreneurs resembles the system of equations ... nor does it state that predictions of entrepreneurs are perfect or that their expectations are all the same.”



New Keynesians and Rational Expectations

- New classical theory assumes complete flexibility of wages and prices.
- New Keynesian rational expectations theory assumes rational expectations is a reasonable characterization of how expectations are formed, but drops the assumption of complete wage and price flexibility.
- Long-term labor contracts often prevent wages and prices from fully adjusting to changes in the anticipated price level.

Counterpoint – Efficient Markets

- ▶ Eugene Fama, a University of Chicago economist who specializes in finance, published “Efficient Capital Markets: A Review of Theory and Empirical Work
- ▶ The capital market’s primary role is to provide accurate prices for resource allocation. A market is “efficient” when it fully reflects all current information
- ▶ In broad markets with good information, new developments were quickly priced into securities leaving little room for arbitrage opportunities

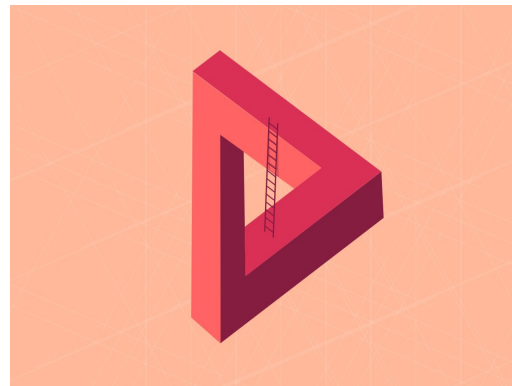


Efficient Market Assumptions

- Assumptions
 - Large number of analysts assessing
 - The true value of the firm
 - Analysts look for mispriced securities
 - Buy or sell them
 - Driving the market price towards true value
 - Competition pushes prices to true value
 - Stock prices reflect new information

Paradox

- ▶ Given rational expectations and efficient markets, how is it possible for entrepreneurs to find profit opportunities and innovate?
- ▶ There should be no \$20 (or even \$10) Bills laying on the floor



Solution

- ▶ Return to Hayek's "Use of Knowledge in Society." He asks a simple question. "What is the problem we wish to solve when we try to construct a rational economic order?"
- ▶ If we had all of the information we needed, there would be no problem, but rather a simple a logical use of that information
- ▶ But in real life this is not to be, "...the "data" from which economic calculus starts are never for the whole society "given" to a single mind... and can never be so given."
- ▶ That data is not scientific knowledge that can be easily passed from person to person, but rather the tacit knowledge of time and place that is specific to each individual. It is subjective, internal (who knows what you want?), and constantly evolving

The American Economic Review
VOLUME XXXV SEPTEMBER, 1945 NUMBER FOUR

THE USE OF KNOWLEDGE IN SOCIETY
By F. A. Hayek*

What is the problem we wish to solve when we try to construct a rational economic order?

On certain familiar assumptions the answer is simple enough. If we possess all the relevant information, if we can start out from a given system of preferences and if we command complete knowledge of available means, the problem which remains is purely one of logic. That is, the answer to the question of what is the best use of the available means is implicit in our assumptions. The conditions which the solution of this optimum problem must satisfy have been fully worked out and can be stated best in mathematical form: put as their briefest, they are that the marginal rates of substitution between any two commodities or factors must be the same in all their different uses.

This, however, is emphatically not the economic problem which society faces. And the economic calculus which we have developed to solve this logical problem, though an important step toward the solution of the economic problems of society, does not yet provide an answer to it. The reason for this is that the "data" from which the economic calculus starts are never for the whole society "given" to a single mind which could work out the implications, and can never be so given.

The peculiar character of the problem of a rational economic order is determined precisely by the fact that the knowledge of the circumstances of which we must make use never exists in concentrated or integrated form, but solely as the dispersed bits of incomplete and

Solution

- ▶ As Mises pointed out in “Economic Calculation in the Socialist Commonwealth,” prices don’t arise without competition by entrepreneurs over control of private resources in the face of change and constant uncertainty
- ▶ Hayek, in “Competition as a Discovery Procedure,” notes that just as one cannot know the outcome of a ball game until it is over, even if the one has all available statistics
- ▶ Entrepreneurs bid for resources in search of profit. Profit represents the value individuals place on goods and services above their cost of production. Success means profit and more resources. Failure means losses and resources are redirected to those successful
- ▶ This self-healing process drive the economy forward when allowed to work



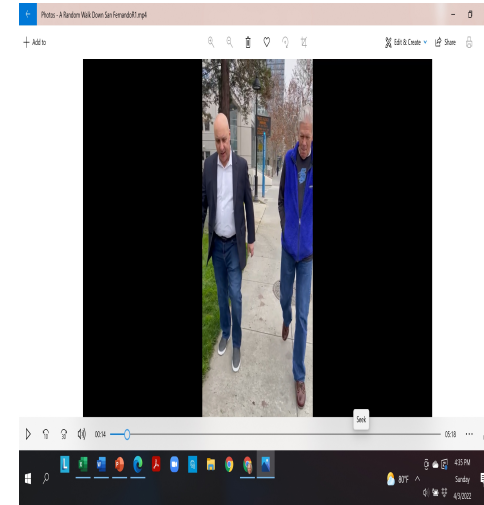
An Example

- ▶ When you goes to the supermarket, do you only buy what is on your shopping list?
- ▶ Were this the case, all those expensive displays and packaging would be of little use. Entrepreneurs must compete for customers, as well as resources. And, this competition is always forward looking
- ▶ This system doesn't work like a probabilistic, well-informed, random walk, where profits disappear quickly as if they were lying in plain sight
- ▶ Rather, entrepreneurial profits are the product of the unique, tacit knowledge of time and place that each individual possesses



Demonstration

- ▶ **How do we know that each individual possesses unique information not available to others?**
- ▶ **Please tell me the three things that you notice in the original video I showed**
- ▶ **How different are the answers?**
- ▶ **Each of us has a unique mental framework that differs from everyone around us**
- ▶ **Kirzner - “The discovery of a profit opportunity means the discovery of something obtainable for nothing at all. No investment at all is required; the free ten-dollar bill is discovered to be already within one’s grasp.”**



Concluding Remarks

- ▶ **Convincing students that they have unique insight is often daunting and seems to be getting harder**
- ▶ **I have had positive feedback about this demonstration**
- ▶ **I wish you good luck should you try it**
- ▶ **Thank you for listening and participating**

