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Entrepreneurial Theory Based on Schumpeter and Knight

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Entrepreneurs play a vital role in the economic development process. Often their potential and importance is not realized for various reasons. It could be due to the strict assumption of the Neo-Classical model that entrepreneurs have perfect information and act rationally. It could be that perfect information and rationality do not actually occur, and it is to difficult of a variable to account for in the search for economic answers pertaining to the entrepreneur.

There are several economists that have tried to tackle entrepreneurship theory. The two economists that help to lay the groundwork for entrepreneurship theory are Joseph A. Schumpeter and Frank Hyneman Knight. This paper will look at their general theories and their perspectives of entrepreneurs, entrepreneurship, and criticisms of their theories. As well as look at how entrepreneurship can be tested or examined in real world scenarios.

Before breaking down Schumpeter's and Knight's theories a more general textbook definition of entrepreneurship will help as it is defined slightly differently by both Knight and Schumpeter. Shaffer offers the definition of entrepreneurship based on several economists, "as the purposeful activity of an individual or group of individuals to undertake, to initiate, to maintain, or to aggrandize profit-oriented business for production and distribution of economic goods and services," (Shaffer p. 218).

Entrepreneurship theory attempts to answer the question, "Why have some locations been economically more dynamic than others, and what role can public policy play in creating and fostering these conditions," (Shaffer, p. 149-150)? According to Shaffer new technology and innovation causes the market to go into a short-term disequilibrium due to a pathway shift. There are also new firms that start or "spin off" around the technology and innovation. Going along with new business and the short-term disequilibrium, many structural changes are associated with the new technology. Frictions between workers and the firms often occur (Shaffer 2004). This disequilibrium and friction can be seen throughout many industries as new technology is introduced along with friction between workers and management.

The first perspective on entrepreneurship is from Schumpeter's work and his fundamental contribution to the concept of entrepreneurship and innovation in his book *The Theory of Economic Development* published in 1911 and revised in 1934.

In *The Theory of Economic Development* he defines development as a "distinct phenomenon" foreign to the current market in its circular flow and its structure that tends to move to equilibrium. This happens discontinuously, but it will forever change the point of equilibrium and be different than any other that has ever existed. Schumpeter further explains that new combinations of resources happen at a discontinuous rate and can have the same affect as a sudden and abrupt change in the market. So, development is the implementations of these new combinations (Schumpeter 1934).

This definition of development lends itself to five different scenarios: (1) The invention of a completely new product/quality of product to consumers. (2) The creation of a new untested production method or commercially handling a commodity. (3) A new market has opened. This can be in the sense of a company opening in a new geographical area. (4) Getting raw materials from a more cost-effective source. (5) Organizing an industry in a different way (Schumpeter 1934). These cases of development are carried out by the entrepreneur making entrepreneurs key in economic development. For instance, an entrepreneur can find a new source for raw material that may save a company "x" amount of dollars per unit.

Moving into Schumpeter’s definition of entrepreneur, Schumpeter thought of entrepreneurs as “super-normal” with higher capacities in intellect and will. These particular people have the capabilities to bring innovation, new combinations, and help break traditions that bound normal people to facilitate growth and development. These people exemplify the initiative and leadership in the maximum capacity (Raines and Jung 1992). These select few are the ones facilitate development through any method above.

To further define “super-normal” people, Shaffer refers to these people as “human agents in the development process.” These agents are primarily, “entrepreneurs but also include powerful or insightful politicians, business leaders, and university officials,” (Shaffer, p. 150). These people help to cause the disequilibrium and takes in account people that can influence the market who might not necessarily be the entrepreneur who is innovating or changing a process. People such as university officials who contribute new information and perspectives to the market or politicians who push for programs that might help to develop a market for an entrepreneur to take advantage of.

To build on Schumpeter’s own point that only a few “super-normal” will break traditions, Schumpeter states, "This [vision of the entrepreneur] does not seem to verify the picture of the economic man balancing probable results against disutility of effort and reaching in due course a point of equilibrium beyond which he is not willing to go" (Schumpeter, p. 92). To summarize the entrepreneur is properly innovative and acts at a higher level of utility that is more than trying to bring pleasure to the maximum. The entrepreneur will actually go beyond the point of comfort to innovate and search for profit. Once they have satisfied themselves, they will reach a new equilibrium. Like starving artists and actors before their big break and after they have become famous. However, a person must make the decision to push themselves to this point

After this decision has been made to go beyond the point of comfort there are many challenges that face businesses when they have not yet established and are starting from scratch. The major challenges are the political and social resistances. Capital needs to be procured to set up the infrastructure for the business. The fact that there is no organization is a massive hurtle to overcome and requires a special mind to create that organization. The person who has persevered the many challenges will have a profit to keep. However, the profit that he keeps is only part of what is gained. He has benefited society by laying the groundwork for the other entrepreneurs to follow and this business becomes a part of the circular flow (Schumpeter 1934). In short, they have taken the existing resources and implemented new combinations with those and have turned a profit. They have also made society as a whole better of.

After the entrepreneur has endured all the challenges and has set up the business, he has obtained a monopoly position and will have the benefit of “entrepreneurial profit.” This, however, is temporary because other entrepreneurs that follow begin similar businesses and the business is then fully integrated into the circular flow diagram (Schumpeter 1934). The entrepreneurial profit is an incentive for entrepreneurs to continue to be innovative.

It is also important to know who an entrepreneur is not, so Schumpeter suggested that those acting with rationality have learned a particular way through experience. Those people then prefer to work in the same traditional way because it requires less energy in the form of thinking (Raines and Jung 1992). This is how the majority of people act and operate in day-to-day life. Most people are average is the belief that Schumpeter acts upon to develop his theory of entrepreneurs and the role they play in growth and development.

It is easy to criticize any model or theory and Schumpeter is no exception. One point that is argued is his clear stance that, “The entrepreneur is never the risk bearer,” (Schumpeter, p. 137). The true risk bearer is the one who finances the entrepreneur and taking risks is not a part of the “entrepreneurial function”. If the entrepreneur puts forth his own capital, he then becomes the bearer of the risk as a capitalist not as an entrepreneur (Schumpeter 1934). In many cases the entrepreneur takes on two roles. Take for instance the multitude of companies that began and form in people’s personal garages. Schumpeter also said, “Even though he may risk his reputation, the direct economic responsibility of failure never falls on him,” (Schumpeter p. 137).

Baumol made the point that there is the loss of opportunity cost associated with the innovator’s time, effort, etcetera. There is also a high probability of failure that is associated with invention and those entrepreneurs that fail risk other things like reputation. (Baumol 41-42). This argument is grounded and reasonable to make because reputation is something that people build on and use as leverage for a number of reasons.

Another criticism made by Baumol is Schumpeter’s thoughts on innovators, “having no competitors when the new products first appear,” (Schumpeter 1911) and their ability to set prices in a way of monopoly (Baumol 42). Baumol’s argument is that there is an easy of replication and free entry to markets with a lag for others to figure out the replication.

This is a valid argument but Baumol seemed to not put enough emphasis on the word “first.” Schumpeter is probably accounting for patent laws allowing for a that type of capitalization on innovation. Also, “first” does not provide a length of time, so the lag it takes for replication could be a small one. This lag in replication could be viewed as the short-term disequilibrium

The second economist on the theory of entrepreneurship is Frank Hyneman Knight. Like Schumpeter, Frank Knight wrote a book, *Risk, Uncertainty, and Profit* that was published in 1921 and is where he laid the groundwork for his theory. He worked on the problem of Profit and uncertainty. The entrepreneur was brought into the equation as the solution and bearer of uncertainty in the pursuit of profit.

J.P. Gunning provided background and a general summary of Knight's theory of entrepreneurship in the article, *Entreprenurists and Frimsits: Knight vs. The Modern Theory of the Firm.* Gunning summed up Knight's definition of entrepreneurs and entrepreneurship by saying Knight thought producers were entrepreneurs. They took the factors of production and made products that could be sold in markets already established. Knight defined entrepreneurship as the actions of a leader or someone who has power in a production project (Gunning 1993).

Knight's view on entrepreneur's role within the market was their tactic to deal with uncertainty. Uncertainty to Knight was the unavoidable amount of judgments that must be made regarding other humans within the market economy (Gunning 1993). The entrepreneur's role in dealing with this uncertainty then becomes the tactful decisions about employing useful innovations that help to change the business (Leigh 1974). Based on the predictions made about others in the economy, entrepreneurs must make decisions and take actions that are better than everyone else. From there the uncertainty is dealt with either by the entrepreneur taking on the uncertainty or trying to pass the uncertainty onto others (Gunning 1993).

The reward to the entrepreneur who is best at bearing the problem of uncertainty, making the best decisions, and has the most "socially desirable behavior" is a profit. Profit was the "residual" or the left-over revenue after the subtraction of costs associated with enterprise. These costs include advantages owned by the enterprise that provide monopoly power and any payments made to insure insurable risk. The remaining profit is caused by uncertainty. This uncertainty is uninsurable risk due to the unpredictable nature of changes in technology and market conditions (Leigh 1974). The uncertainty measured by the profit remaining would be compared to the Schumpeter's entrepreneurial profit. It also acts as the incentive to become an entrepreneur.

The choice of becoming an entrepreneur is difficult and bears a level of uncertainty and is only made after one thinks that one's decisions will bring in more income than other competing entrepreneurs (Gunning 1993). This could be compared to Schumpeter and how entrepreneurs that succeed are ones that best use their resources or are the most efficient. They too make better decisions with their resources or push the uncertainty onto someone else.

When deciding to become an entrepreneur, one must make the assessment or appraisal of their current earnings as an employee compared to that of an entrepreneur. Another factor is uncertainty and an examination of the amount that an individual would like to assume needs to be made. Some choose to assume that level of uncertainty and pursue becoming the entrepreneur (Gunning 1993). This reasoning offers the answer to why people become entrepreneurs. It is different from Schumpeter's in the lack of innovation, perseverance, and breaking traditions, but it is rather a better decision process.

Knight is the first to tie the entrepreneur into the marginal productivity theory in his book. The entrepreneur was previously treated as an outside element to the theory. By adding this element Knight was able to show that the competitive equilibrium model was designed to capture the intent of entrepreneurs trying to deal with economic uncertainty (Gunning 1993).

Arthur Leigh summed up Knight's theory outlined in *Risk, Uncertainty, and Profit* that Knight's concept of profit helped to push entrepreneurial theory forward. By isolating profit and combining that with the entrepreneur it helped to shed light on the role of the entrepreneur. His work also helped to simplify the previously and still complex concept that is profit (Leigh 1974).

Knight's theory was met with criticism like Schumpeter. Knight's theory on entrepreneurship was a general theory not based heavily in mathematical explanations and proofs of his theory (Leigh 1974). Economics being a science that bases itself around mathematics it is easy to see why it would be met with some resistance within the economics community.

Knight was however, tied to provide a sound base in economic theory that could be applied to the world as we see it. His theories had more of a goal of defining and discovering, making the concepts easier to understand as opposed to making it more difficult and harder to attain (Leigh 1974). This can be plainly seen as his book, *Risk, Uncertainty, and Profit*, laid the groundwork and the in-depth explanation of his theory rather than a complex mathematical analysis that many economists tend to use and strive for.

Comparing both Schumpeter's theory to Knight's theory they both rely on the entrepreneur to attain a monopolist's position. This position allows for the entrepreneur to take advantage and attain profits. The monopolist position is a temporary disequilibrium mentioned by Shaffer. In the competitive market this is a short-lived position. It is short-lived because according to Schumpeter other entrepreneurs will innovate, follow one of the five scenarios for development, or others may follow in the footsteps of those who have the monopoly position.

This will drive the economy back to an equilibrium. It is short lived based on Knight's theory because entrepreneurs will make decisions that are better than the one with the monopoly position making less uncertainty for them and there is a constant game of trying to out decide others in the market.

Testing any economic theory is important to proving and better understanding the theory. Research could investigate a specific industry like technology or agriculture. Innovations and decisions can be easily seen in these two industries. One could look at the diffusion of tractors throughout agriculture between 1900-1950. Looking into this would allow a researcher to look at how decisions affected farms in terms of profitability and competitive advantage and longevity throughout. This would help to test Knight's theory by showing the effects of decisions (adopt the tractor or not).

A study could be done on Ford inventing the three-point hitch. This is still a piece of technology in use on farms today and it fundamentally changed agriculture. The study of Ford's innovation of this technology and how its profits changed could provide insight on Schumpeter's theory of innovation. A study of when the patent expired on the three-point hitch and other manufactures developed their own three-point hitch could be done to test the aspect that the first entrepreneur lays the groundwork that others will follow.

To conclude entrepreneurship theory attempts to explain the function of the entrepreneur in an economy and how they affect it. They bring the economy to a point of disequilibrium brought about by innovation or decisions in search of a profit. This is quickly accounted for but helps to push society further because resources used are better allocated and explains how innovation helps push society further. The entrepreneur is the agent that helps to tie the many factors of production together in a more efficient and elegant way than before to provide society with more.

Schumpeter's belief that innovation and a better combination of resources provided the entrepreneur the ability to make a profit. Knight believed it was the decisions made that would allow the entrepreneur to receive a profit. Their work is grounded both in the pursuit of profit that is short lived. The short-lived nature of entrepreneurial profit pushes entrepreneurs to continue to innovate or make decisions that prolong a state of entrepreneurial profit.

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