

DOCTORAL PROGRAM (Ph Degree)

CRITICAL ANALYSIS

BOOK: AGAINST THE GODS: THE REMARKABLE HISTORY OF RISK

DISCLAIMER AND COPYRIGHTS INFORMATION

Unpublished work © 2008 Jaime Javier De La Guardia Avilés. All rights reserved. No part of this publication may be used, reproduced, stored in any retrieval system of any nature, or transmitted in any form or by any means - electronic, mechanical, digital, photocopy, recording, scanning, or any other - except as permitted under the United States Copyright Act, without the prior written permission of Jaime Javier De La Guardia Avilés.

This document is designed to provide general guidance only on accurate and authoritative information, in regards to the subject matter covered, and does not constitute professional or academic advice. If professional advice or other expert assistance is required, the services of a competent professional should be sought.

CONTENT

Abstract	.....	4
Risk History	.....	5
Risk Management	.....	7
Risk and Entrepreneurship	.....	10
References	.....	14

ABSTRACT

Risk has always existed. Yet it was not recognized; at least not quantifiable, until 1600 AD. For the ancient world there was no form to measure risk, everything was chance and it was attributed to the Gods. Humans were living in a constant present (Bernstein, 1998).

History tells that gambling, or the game of chance, has always been a popular pastime and often an addiction (Bernstein 1998). So, it would later become about defeating when gambling. Gambling, the fastest-growing industry in the United States; a \$40 billion business according to an article in The New York Times, September 25, 1995 (Bernstein, 1998).

Religion forbids “reasoning” to question “faith”; a period of intellectual repression (Bernstein, 1998). Many died, and many would study in secret meetings. As nature would act, humans moved from one place to another; from generation to generation; bringing knowledge and learning from others. This combination would transform humans as no one would have ever predicted. The Arabian numbers mixed with the Hindu numbering system, transforming new methods of calculation which later develop into sciences.

Humans wanted to conquer the future.

Studies of numbers develop into mathematics, bookkeeping emerge. New formulas were defining basic statistics, which later resulted into the basic concept of what is called probability. These would become the methods mankind will eventually utilize to measure what is called risk.

The revolutionary idea that defines the boundary between modern times and the past is the mastery of risk: the notion that the future is more than a whim of the gods, and that men and women are not passive before nature. Is risk what converted the future from an enemy into an opportunity (Bernstein, 1998). More interesting something originally studied for the purpose of gambling turn into an instrument for business. Now humans are active before nature.

RISK HISTORY

For the ancient world there was no form to measure risk, everything was chance and it was attributed to the Gods. There was an absence of understanding terms such as odds or probabilities in society; something clearly noticed in the scoring system they used in their games, which proves this, as awarded points were not proportionate to any kind of difficulty.

Humans develop, and as such, knowledge would develop. That's how numbers and letters started to signify something. Mathematics born, followed by bookkeeping; things totally unknown before. Still, it was not until the Renaissance that any systematic effort was made to analyze these games within some sort of a theoretical structure.

This marked human fascination with games of chance was probably the element that pulled the trigger to the emergence of probability theory, one of the many risk theories that have emerged as humans evolve.

From Euclid's geometry taught to Prometheus defying the gods; from the Hindu-Arabic numbering system to Renaissance Chevalier de Méré mathematics and Luca Paccioly bookkeeping; from Socrates to Sambusrsky and Leibniz Gottfried von, from Khayyam, Pascal and Fermat to Daniel Bernoulli, Jacob, Gauss, Queletev, von Newmann and Morgenestern, from Bayes and Keynes, to Moivre and Knight, Black and Scholes, from Arrow and Markowitz, to Gauss, Galton and von Neumann, from theory of motion, theory of games, theory of self-control, theory of development, theory of probability, theory of economy, theory of economic behavior, theory of investment value, theory of political economy, theory of speculation, theory of utility, theory of prospect, theory of decision, theory of chaos, law of average, law of probability, law of large numbers, law of supply and demand, mathematics, theorems, statistics,

sampling, regression to the mean, these all contributed to what today we know as the understanding, measuring, bearing and/or avoiding risk.

Not one of these brilliant people could be individually recognized as the problem solver, as each one made significant contribution according to the moment. Not one of these theories, laws or concepts could be awarded as the problem solver as they all could be considered as either a younger sister or a sibling of an elderly theory, law or concept. Thoughts evolved as knowledge extended during human evolution.

All these knowledge allowed humans to move from a simple game to the most significant stories of investments, whether those stories ended in success or failure. But most important, humans learned how to recognize risk, how to avoid it (risk averse), or how much risk they are willing to accept (risk bearing), depending more or less on what they “invest”. But also, humans now know that risk is not only part of business but a key part of it as well as an integral part of life.

An investigation into the history of risk as an economic concept and the origins of economic risk as part of the institutionalization of futures trading in the latter half of the 19th century US. Conceived with Marc Ventresca, this research shows how risk became a solution to a political (not economic) problem: how to distinguish futures trading from gambling. By using risk and hedging, members of the Chicago Board of Trade were able to make convincing arguments about the social value of futures trading. We use court cases, legislation, and expert discourses in the form of early economics writings about futures trading to show how futures went from being understood as akin to gambling, to being treated like insurance (Levin, 2007).

The word “risk” derives from the early Italian “risicare”, which means to dare (Bernstein, 1998). So, it is time to learn how to manage risk to the most.

WHAT IS RISK MANAGEMENT?

Risk doesn't mean danger—it just means not knowing what the future holds. That insight resides at the core of risk management for companies, whether in managing the potential downside of an investment or putting a value on the option of waiting when making irreversible decisions (McKinsey, 2008).

Some authors have made a significant distinction between risk (measurable) and uncertainty (non measurable), as originally proposed by F.H. Knight (1921). But today, that distinction is not as remarked as before. In fact, today, many refer to both words as the same.

What is risk management? Risk management is a relatively new discipline. Thus until now no general standard has been developed what to understand by a holistic risk management (Henschel, 2008). The discipline of management studies contains no single definition for the term risk.

There is an agreement that risk is to be seen as something negative and thus should subjectively convey the idea of uncertain developments. The spectrum of definitions to be found in management studies ranges from risk as a synonym for quantifiable or measurable uncertainty (Knight, 1921) up to complex measures of risk such as Leitner's measure of "speculative risk" (Leitner, 1915).

Unfortunately, professionals, in their own industry, do not provide enough attention to risk. Moreover, they probably refer to it as an inevitable contingency to which a budget amount is assigned. It is very interesting that when people speak about the word risk, they are most of the time thinking of investments and/or insurance, and do not even speak about risk in any other profession, even when risk is part of life itself.

That is why management risk, probably, started to be considered precisely in the financial industry, just as history of risk tells how people tried and tried to manage risk within the industry.

Yet, not only humans have not been able to conquer risk, but just a few people study it, or even consider it, as mentioned before. For example, at the recent World Economic Forum in Davos, Switzerland, William J. Parrett, CEO of Deloitte Touche Tohmatsu, lamented the narrow focus of risk management efforts to the area of financial risk. He went on to state that there were physical risks that were not being adequately addressed; the primary example he cited was the impact of a potential bird flu pandemic. A white paper referenced in the press release on the Deloitte site goes on to encourage those involved in risk management to “imagine the unimaginable” when assessing potential risk to an organization. The key requirement for the success of this effort is the fostering of “a holistic and integrated risk management culture” (Sharon, 2008).

The aim of risk management is therefore to control and manage the existing and future risks of a company. As a result, given reduced risks and continuing opportunities for earnings, the value of a company increases and there is an assurance that the risk position of a company does not exceed its risk-bearing ability. Risk management is thus an important aspect of value-based management (Baetge and Jerschensky, 1999).

Still, today, in many cases, risk management practice was driven by regulatory requirements (Lange, 2003). Risk management has also raised its profile in the wake of significant corporate disasters, including Exxon Valdez oil spill, the collapse of Barings Bank, the Tylenol product tampering, among others. Value-based management aligns the organization’s objectives with those of shareholders, and hence the financial markets. Risk

management has an important role in this process through the identification of internal and external threats to an organization's objectives (Lange, 2002).

Thus, people have to understand that organizations face numerous types of risk everyday. These range from employee fraud to computer failure. The costs of these risks are high as they could ultimately result in human suffering and/or huge financial losses for business firms (Chin, 1998).

People shall not avoid risk management. It's implications for businesses should be a matter of study and implementation at all places, including private and public sector, large and SME organizations. If it is to succeed, the capacity to manage risk, and with it, the appetite to take risk and make forward-looking choices, are key elements of the energy that drives the economic system forward (Bernstein, 1998).

RISK AND ENTREPRENEURSHIP

The exclusion of the concept of entrepreneurship from the neoclassical analytical base (Baretto 1989 et al) played a decisive role in its “disappearance” from the analytical framework of growth theories, resulting in the loss of a significant link in the understanding of the growth process (Petraakis, Kotsios, 1998)

A long history of entrepreneurship literature has asserted that a critical economic role of the entrepreneur is risk-bearing. One consequence of that perspective is that the theoretical and practitioner literature has assumed that entrepreneurs are risk-seeking. Some authors propose that there are two distinct sources of uncertainty in entrepreneurial ventures: 1) uncertainty regarding market demand, and 2) uncertainty regarding one’s own entrepreneurial ability. (Wu, Chacar, Knott, 2005).

Schumpeter is the first economist who distinguished between an entrepreneur and a capitalist (Schumpeter, 1939, 1950). According to him, assumption of risk involving innovation is the role of the entrepreneur, while assumption of risk involving potential for profit is the role of a capitalist. Both an entrepreneur and a capitalist undertake risk; but their domains are separate. Individuals who own business and take risk with their capital in pursuit of profit, but do not innovate, are capitalists. There are individuals who take risk by introducing a new product, adopting a new production process, creating new markets, introducing new technology or creating a new economic organization. Schumpeter referred to these individuals as “entrepreneurs” who belong to a “distinct sociological class”. According to him, the process of discovery and innovation modifies the past and creates new opportunities for the creation of wealth in the future. This is what Schumpeter described as the process of “creative destruction”.

An approach now gaining more popularity explains entrepreneurship by combining economic, personal, and sociological variables. Personal characteristics, such as the need for achievement, risk-taking propensity, locus of control, beliefs about wealth and material gain, and business growth are related to a person's predisposition toward business leadership (Gartner, 1990, McDaniel, 2002). A belief that a person can influence his personal destiny and locus of control distinguishes entrepreneurs from the general population (Mondal, 2002).

For others, experiences are more risky than economics of scale. Without experience, knowledge is difficult to achieve and apply better than competitors. Competitors can copy knowledge and get ahead (Porter, 1996)

In management, decision-making is risk-taking and a challenge to judgment. It mobilizes the vision, energies, and resources for effective action. At the end, it is an exercise in courage and responsibility. About the myth that entrepreneurship has the reputation of being very risky, in fact, it is less risky than just "doing the same thing better". Entrepreneurship is only risky, when so-called entrepreneurs "violate elementary and well-known rules". It is not risky when it is systematic, managed, and purposeful (Drucker, 1985).

Interesting also, is the avoidance of risk from so many people in the past versus today's investors' bearing risk. For example, in the old Chinese culture, a Chinese manager is generally risk adverse, particularly if there is a chance that they might have to accept responsibility for a decision later on. Therefore, they will "think about it", which means they are not going to make a decision. If a difficult or unpopular decision is necessary, they will attempt to delegate this to someone else in order to remove themselves from situations that could diminish their wanting to maintain their "good guy" image in an organization (Swaim, 2004).

Among “The New Tasks of the “Manager of Tomorrow” managers must take more risks and for a longer period ahead. And risk-taking decisions will have to be made at lower levels in the organization. The manager must therefore be able to calculate each risk, to choose the most advantageous risk-alternative, to establish in advance what they expect to happen and to “control” their subsequent courses of action as events bear out or confound their expectations

The more successfully tomorrow's manager does his work, the greater will be the integrity required of him. For under the new technology the impact on the business and his decisions, their time span and their risks, will be so serious as to require that he put the common good of the enterprise above his own self-interest (something the old-school manager does not understand). Their impact on the people in the enterprise will be so decisive as to demand that the manager put genuine principles above expediency. And their impact on the economy will be so far-reaching that society itself will hold the manager accountable.

Indeed, the new tasks demand that the “Manager of Tomorrow” root every action and decision in bedrock principles, that he lead not only through knowledge, competence and skill but through vision, courage, responsibility and integrity (Drucker, 1954)

Investors, business owners and self employees do better where risk management is a conscious part of the investment process. Maximizing return is a strategy that makes sense only in very specific circumstances. In general, survival is the only road to riches (Schaik, 2008).

Entrepreneurs are risk-averse towards market demand but are overconfident with respect to their own abilities. These results reconcile entrepreneurial risk aversion with their role as economic risk bearers (Wu, Knot, 2005).

Meanwhile, for some authors, a key to success is the capacity of an entrepreneur, maybe not to measure risk, but rather to develop strategies that could lead to manage risk.

The five forces model, from the risk-return perspective, the Porter's Five Forces model indirectly implies that risk-adjusted rates of return should be constant across firms and industries. Yet, it provides the strategies to confront risk situations as well as to manage them.

In other words, accordingly to leading authorities in the entrepreneurial concept, a little distant from the measuring concept, aversion or bearing of risk, it is not about avoiding risk, but rather about decision making. How to manage the situation, how to deal with it, what strategies are being developed and how will they be administered, so that a benefit could be obtained.

REFERENCES

- Baetge, J. and Jerschensky, A. (1999) Frühwarnsysteme als Instrumente eines effizienten Risikomanagement und -Controlling [Early warning systems as an instrument for an efficient risk management and risk controlling].
- Bernstein, Peter L. (1998). *Against the Gods: The Remarkable Story of Risk*. New York: John Wiley & Sons. 1998
- Brian Wu, Knott, Anne Marie, (2005). *Entrepreneurial Risk and Market Entry*. The 2005 Office of Advocacy Best Doctoral Paper Award at the United States Association for Small Business and Entrepreneurship (USASBE) annual meetings.
- Chin, Yee Wah (1998). *Fire And Power Outage Risk Management Practices: Lessons from Auckland's Power Crisis*. Nanyang Business School, Nanyang Technological University, Singapore. 1998
- Drucker, Peter F. (1954). *The Practice of Management*. Published by New York, Harper & Row, 1964.
- Drucker, Peter F. (1964). *Managing for results; economic tasks and risk-taking decisions*. Published by New York, Harper & Row, 1964.
- Drucker, Peter F. (1985). *Innovation and Entrepreneurship: Practice and Principles*. Published by Harper Business, 1985
- Gartner, William B. (1990). "Who Are We Talking About When We Talk About Entrepreneurship?" *Journal of Business Ventures*, January, 1990
- Henschel, Thomas (2008). *International Council for Small Business World Conference: Typology of SME's: Risk Management*. Hochschule Merseburg University of Applied Sciences, Germany.

- Knight, F. H. (1921). Risk, Uncertainty and Profit. New York: Houghton Mifflin, 1921
- Lange, Helen (2002). Total Enterprise Risk Management and Shareholder Value: A Discussion of Some Concepts.
- Lange, Helen (2003). Financial Institution Corporate Governance Arrangements: Evidence from Australia: Table 1: Survey Results - Corporate Governance Practices. 2003. (Corporate Law Economic Reform Program (CLERP) Issues Paper number 9, “Corporate Disclosure - Strengthening the Financial Reporting Framework”, Australian Treasury, 2002.)
- Leitner, F. (1915) Unternehmensrisiken [Business risks]. Einzelwirtschaftliche Abhandlungen
- Levin, Peter (2007). Rethinking Markets: History of Risk. April 27, 2007
- McDaniel, Bruce (2002). Entrepreneurship and Innovation: An Economic Approach. Armonk, New York: M.E. Sharpe. 2002
- Mondal, Wali I. (2002). Microcredit and Microentrepreneurship: An Extension of Schumpeter’s Five-Factor Model – Collateral Free Loan at Work in Bangladesh. Dhaka: Academic Press and Publishers Limited, 2002
- Mondal, Wali I., España, Juan (2005). Entrepreneurship in Biotechnology Industry - A Case Study of Sweden. June 27, 2005
- Petrakis, P., Kotsios, S. (2005). The Dynamics of Structural Change under Risk Influence. Economics Bulletin, Volume 15, No 7, 2005
- Schumpeter, Joseph A. (1939). Business Cycles: A Theoretical, Historical and Statistical Analysis of the capitalist Process. New York: McGraw-Hill. 1939
- Schumpeter, Joseph A. (1950). Capitalism, Socialism and Democracy. New York: Harper and Sons. 1950

Sharon, Bill (2008). Risk Management: The Elusive “Risk Culture”: The “Imaginable and the Unimaginable” As A Basis for Risk Management. 2008

Swaim, Robert W. (2004). Peter Drucker and Manager of Tomorrow: The Chinese Manager of Today - Observations from Dr. Swaim. July 15, 2004

The McKinsey Quarterly (2008). Peter L. Bernstein on risk. Business Journal of McKinsey & Company, January 2008

Van Schaik, Neels, (2008). Of Peter Bernstein (Against the Gods) and extrapolation. Alphen Asset Management. September 04, 2008