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## Finance Ritual

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## Finance Ritual

**Abstract:** Finance theories are criticized for failing to capture the reality in terms of their outcomes and foundation. Nevertheless, we witness the phenomenon that financial theories are being taught and admired in business schools and actively utilized in the finance circle including financial industries, regulators and academia. This paper provides a ritual interpretation to understand this contradiction. We apply the diverse ritual theories of anthropology to the phenomenon. Among ritual theories, we borrow from the perspectives of functionalism, structuralism, and practice theory. We argue that as a ritual does, finance theories disseminate ideology and beliefs and have an effect on society (especially the finance circle). The effect is determined collectively and is not necessarily as intended by individual financial researchers and practitioners. Finance academia is viewed as an agent to officiate the rite of passage, which helps to reaffirm and recreate the unity of society and finance circle. Finance academia and the finance industry are viewed as a hierarchical structure. Finance theories can survive, as a ritual does, even if they lose their connection with reality.

**Keywords:** finance, ritual, ideology, belief

**JEL Classification:** A0, B0, G0

## Finance Ritual

### 1. Introduction

Finance theories such as the Markowitz portfolio theory (PT), capital asset pricing model (CAPM), Black-Scholes option pricing theory (OPT), capital structure theory (CST) following the Modigliani and Miller theory (MM) and the efficient market hypothesis (EMH) have formed the basic building blocks for modern finance academics and practice. Such contributions have been acknowledged with Nobel prizes. Nevertheless, there has been a lot of discontent with and arguments against these finance theories. The criticisms come not only from within the financial circle but also from the outside.

A main cause of this discontent is the fact that the theories fail to capture the reality (see Fernandez, 2015; Shiller, 2000; Occupy Wall Street movement, for example). This failure can be seen at two different levels of outcome and foundation. At the level of outcome, finance theories fail to explain the reality. For example, the PT implies that investors should be passive while there are many active investors in reality. The CAPM is too simple to explain actual asset returns. The OPT is applicable only to a short time horizon. Moreover, the CAPM and the OPT have been built on the assumption of normal distribution, which does not seem to explain the recurrent financial crises. People do not behave as rationally as the EMH presupposes.

From a different viewpoint, however, it is not unusual for an economic theory (probably, for any social science theory) to fail to capture all aspects of reality. The virtue of a good theory actually exists in its simplicity; the reality is too complex to figure out. A good theory provides insights to understand reality through simplification. Thus, it is rather unfair to criticize one theory based on its failure to address some aspects of reality while also accepting another theory. The insights that the theories provide are important.

Why then are financial theories criticized much more harshly than most other social science theories? It is possibly because they are more practical than other (social science) theories. Most other theories provide researchers with insights for understanding reality. Regardless of their intentions, financial theories seem to have served a very practical purpose in financial markets, that is, making money. Finance theories became the basic tools for portfolio investment, financial engineering, and arbitrage trading. These direct and practical uses of theories are not common among social science theories. While other social science theories help us to better understand society and economy, finance theories are often considered to provide opportunities to make money.

Interestingly, finance theories themselves state their propositions under the condition that the opportunity to make money does not exist. What attracts people, however, is when the theories do not hold, so that they can make money. It would be an irony if theories were criticized for the cases that they ruled out.

The resolution of this irony requires consideration of the theories' deeper foundation. Finance theories are built on the premise that what is good for the financial side is good for society. Propositions and findings are stated from the perspectives of investors, prices, and capital markets, not from those of the society. Finance theories consider the financial side only, while virtually ignoring the real side. For example, financial theories may support that managers sack employees to increase the firm value. This presumption leads to the failure of finance theories at the level of their foundation. While this approach, in some sense, is inevitable when studying financial markets, it contributes to the disparity between theories and reality.

Despite the fact that finance theories fail to capture the reality in outcome and foundation, they are used and applied in practice, affecting many people. This practicality eventually amplifies the discontent.

Why then do people utilize and worship finance theories despite their failure? Finance theories are being taught and admired in business schools and are actively utilized in the finance circle, including financial industries, regulators, and academia. Let us call such a phenomenon the “finance phenomenon” throughout this paper. This paper attempts to provide a ritual interpretation to understand the finance phenomenon.

Ritual theories have been developed in anthropology in diverse contexts. We apply the diverse perspectives of ritual theories to the finance phenomenon. Among ritual theories, we borrow from the perspectives of functionalism, structuralism, and practice theory. We argue that as a ritual does, finance theories disseminate ideology and beliefs and have an effect on society (especially the finance circle). The effect is determined collectively and is not necessarily as intended by individual financial researchers and practitioners. Finance academia is viewed as an agent to officiate the rite of passage, which helps to reaffirm and recreate the unity of society and finance circle. Finance academia and the finance industry are viewed as a hierarchical structure. Finance theories can survive, as a ritual does, even if they lose their connection with reality.

The next two sections provide brief reviews of finance theories and ritual theories, respectively. Section 4 applies the ritual theories to the finance phenomenon. Section 5 presents the conclusions.

## 2. Finance Theories

Finance theories have been developed to analyze financial markets and corporate financial decisions (see Brealey, Myers, and Allen, 2014). The PT and the CAPM are concerned with the prices of stocks and other financial assets. OPT studies the prices of options, and the EMH supports that the financial markets correctly reflect the real side. CST is focused on how the financial decisions of a firm may interact with firm value. Let us provide a brief introduction to the financial theories.

The PT applies the celebrated law of large numbers to portfolio investment. Consider a rational investor who is selfish and risk averse. One important assumption is that the market is perfect. While there are some variations regarding the degree of perfection, a perfect market refers to a market such that there is no cost factor other than price. Specifically, in a perfect market, participants are well informed, no externalities exist, and no transaction costs are incurred. In short, the perfect market is an ideal market for economists.

Now, the investor needs to construct a portfolio composed of financial assets. The investor's only concern is making a profit while at the same time reducing risk. The PT is set up in a so-called mean-variance model in which profit and risk are measured by the expected value and variance of the portfolio's (rate of) return, respectively. Selfishness with risk aversion implies that the investor prefers a higher expected return given risk and a lower risk given expected return among risky assets. This observation leads to a set of target portfolios with the highest expected returns for each level of risk. Such a set of portfolios is called an efficient frontier. When there is a risk-free asset with return  $r_f$ , the investor's portfolio is composed of the risk-free asset and a portfolio of risky assets that lie on the efficient frontier. It turns out that all investors choose the same portfolio on the efficient frontier because the portfolio when combined with the risk-free asset allows investors to enjoy the highest expected return at each level of risk. The common portfolio on the efficient frontier that all investors choose is called a market portfolio. The locus of risk and return of the combination

between the market portfolio and the risk-free asset is called the capital market line (CML). The CML formula is given as follows.

$$E(r_P) = r_f + \frac{\sigma_P}{\sigma_M} [E(r_M) - r_f]$$

where P is the portfolio under consideration, M is the market portfolio,  $r_K$  is the return of portfolio K (= P, M),  $r_f$  is the risk-free return, and  $\sigma_K$  is the standard deviation of the return of portfolio K. The CML states that the risk premium of a portfolio P ( $E(r_P) - r_f$ ) is proportional to the market risk premium ( $E(r_M) - r_f$ ) with ratio  $\frac{\sigma_P}{\sigma_M}$ , the risk of the portfolio relative to the risk of the market portfolio. In equilibrium, the investor's portfolio is composed of a risk-free asset and the market portfolio. The portfolio's expected return is determined according to the CML.

The CAPM is derived directly from PT. While the CML shows how the expected return of a portfolio on the CML is determined, it says nothing about the expected return of an individual asset. This is where the CAPM comes in. The CAPM formula is expressed as follows.

$$E(r_i) = r_f + \beta_i [E(r_M) - r_f],$$

where  $\beta_i = \frac{\text{Cov}(r_i, r_M)}{\sigma_M^2}$ ,  $r_i$  is the return of an asset (or portfolio) i,  $\sigma_M^2$  is the variance of the return of the market portfolio, and  $\text{Cov}(., .)$  is the covariance operator.

The CAPM states that the risk premium of the return of an individual asset ( $E(r_i) - r_f$ ) is proportional to the market risk premium, similar to the CML. However, the ratio is now beta ( $\beta_i$ ), which is different from the CML. Beta of an asset measures the contribution of the asset to the risk of the market portfolio as measured by covariance. The CAPM implies that the expected return of asset i is determined by beta ( $\beta_i$ ), not by the asset's own risk ( $\sigma_i$ ). To understand why beta is more important than its own risk, note that the investor invests in the market portfolio in equilibrium. The meaningful risk to the investor is the risk of the portfolio and not the individual asset's risk. Thus, the investor values an asset based on its contribution to the risk of the market portfolio, which is measured by beta. Beta is one of the most influential findings within finance academia.

The OPT aims to value options in the perfect market. An option is a financial contract to provide the buyer the right to buy or sell an underlying asset at a predetermined exercise price at the maturity date. An option with a right to buy (sell) is called a call (put) option. For example, consider a call option derived from a stock. Let us denote the stock price and the exercise price by S and X, respectively. If an investor has a call option, her investment return depends on S and X at the maturity date. When S is higher than X at the maturity date, the investor makes a profit of  $S - X$ , since she can buy the stock at price X instead of at market price S. However, when S is lower than X, she can simply give up this right, and thus her profit becomes zero. In mathematical notations, the payoff at the maturity date can be expressed as follows.

$$\text{Max } [S - X, 0].$$

In the case of a put option, the payoff at the maturity date can be expressed as

$$\text{Max } [X - S, 0].$$

The payoff is uncertain before the maturity date, because stock price  $S$  is random. The OPT attaches a price to the payoff before the maturity date under some technical assumptions. The call option price ( $C$ ) from the Black-Scholes model is expressed as follows.

$$C = SN(d_1) - Xe^{-r_f T}N(d_2)$$

where  $d_1 = \frac{\ln \frac{S}{X} + (r_f + \frac{\sigma^2}{2})T}{\sigma\sqrt{T}}$ ,  $d_2 = d_1 - \sigma\sqrt{T}$ ,  $N(\cdot)$  is the cumulative normal distribution,  $T$  is the remaining time to the maturity date, and  $S$  is the current stock price. An option is called a derivative because it is defined based on another asset called an underlying asset. In the above example of a call option, the underlying asset is the stock. The option price is derived under the assumption of no arbitrage, which implies that two assets with the same returns should have the same price. The OPT is widely applied in capital structure, investment, and risk management.

Capital structure refers to the structure of the financing side of a firm, such as debt and equity. Simply put, capital structure is about the right-hand side of the balance sheet. The CST is concerned with the relation between capital structure and firm value. Firm value is the value of the total assets of the firm. From the perspective that the value is attributed to capitalists as shown in the balance sheet, firm value can be expressed as follows.

$$V = D + E$$

Where  $V$  is firm value,  $D$  is the debtholders' value, and  $E$  is the stockholders' value.

The MM states that capital structure is irrelevant to the firm value in a perfect market. The reason for this is simple. The firm value is no other than the present value of the cash flows that the firm will earn. Therefore, two firms have the same firm values as long as they have the same cash flows. Capital structure is irrelevant to the firm value. Capital structure simply affects the division of value between debtholders and stockholders, not the firm value. Merton Miller analogized the MM to the cutting of a pizza: the number or shapes of the pieces do not affect the size of the pizza (Economist, 2000).

This simple observation of the MM was responded by economists with the search for rationales as to why and how capital structure may interact with firm value. Information asymmetry, bankruptcy costs, and tax shields of debt, among others, provide some possible explanations for the interaction between capital structure and firm value. With these factors, the market becomes imperfect, which makes capital structure relevant to the firm value.

In the context of the EMH, a market is called efficient when all relevant information is quickly reflected in prices. A lot of research has been undertaken to determine whether or not the market is efficient. For example, technical analysis, fundamental analysis, and the reactions of stock prices to news have been investigated. The active investor's failure to make a consistent return in excess of the market return is interpreted as market efficiency by EMH economists. A general tenet of the EMH is that the capital market is efficient, thus stock prices are right.

The EMH is in favor of passive investment and the index fund, since active investment and selecting stocks cannot beat the market. Given that stock prices are right under the EMH, stock prices are justified as a legitimate target for management and compensation.

While the EMH has been upheld by finance academia, it is also challenged by so-called behavioral finance. Behavioral finance stresses that investors are affected by diverse psychological and social factors, thus the market is not efficient. For example, the stock market may overreact to news or experience bubbles and crashes. These are considered to be evidence of inefficiency by behavioral economists.

### 3. Ritual Theories

Ritual theories have been developed in anthropology in diverse contexts. In this section, let us provide a brief introduction to the ritual theories that are relevant to our discussion (see Bell, 1997 and Ortner, 1984 for detailed surveys). As rituals are apparent in the context of myth and religion, anthropologists' early concerns were the relations between ritual, myth, and religion.

One of the early anthropological studies is the so-called myth and ritual school of scholars, including Robertson Smith and James Frazer, which began during the late 19<sup>th</sup> century. This school considered myth to be secondary to ritual. Myths are derived from the ritual activities, such as those of dying and reviving, of ancient sacred kings, rather than from actual history. To Frazer, myth was the original source of the expressive forms of cultural life (Bell, 1997, p. 5). Smith understood myth as an explanation for what the rite was about when the original meaning was forgotten (Ackerman, 1975).<sup>2</sup> The myth was derived from the ritual, not the other way round, because the ritual was fixed and obligatory while the myth was variable and flexible.

On the contrary, myth and mythical symbols are more important than ritual to the phenomenology school. Myths were considered to express more clearly the people's views about their experience and the sacred than rituals did. A ritual is dependent on myth, since the myth relates the actions in the ritual to the actions of the gods and ancestors in the myth. The rite cannot reveal what the symbols reveal (Eliade, 1978).

On the other hand, the school of functionalism is more concerned with the relation between ritual and social function than between ritual and myth. Functionalism is affected by the sociological approach of Durkheim. In the Durkheimian perspective, ritual functions to strengthen the bonds attaching the individual to his society, and religion is a functioning system of social relations. To Durkheim, society is the unique and all-encompassing source and origin of relation, morality, and knowledge (Lukes, 1973).

Two leading figures of functionalism are Alfred Radcliff-Brown and Bronislaw Malinowski. While Durkheim considered ritual a means for expressing collective representations of religious beliefs, Radcliff-Brown emphasized the importance of the ritual's active roles in securing and maintaining the unity of the group or society. Actions determine beliefs and ritual activities are more enduring and stable than beliefs (Bell, 1997, p. 27). On the other hand, Malinowski pointed out that rituals may have the practical and social function of alleviating anxiety, distress, fear, doubt, and sorrow. Ritual also creates new mental and emotional states, instead of simply expressing or affirming the existing mental states. Religion comes from the fear of death of people, not from social phenomenon. Individual thinking processes and interactions and the pragmatic activities of people are emphasized by Malinowski (Bell, 1997, p. 28).

Structuralism was developed from functionalism during the 1950s and 1960s. Given that functionalism understands social structure as a system of relationships connecting people, a question arises about the relation between the meanings (symbols) of ritual activities and the social functions (structure). What is the meaning of the patterns of ritual activities to people

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<sup>2</sup> References in this section are adopted from Bell (1997).



who use them? (Bell, 1997, p. 34) In a study of the Nuer of southern Sudan, E. Evans-Pritchard argued that religion cannot be reduced to the social structure of Radcliff-Brown or to the individual mentality and emotions of Malinowski (Evans-Pritchard, 1974). The rites of the Nuer can be understood only in terms of Nuer's own conceptual oppositions (Bell, 1997, p. 35).

Claude Lévi-Strauss thought of social phenomena like kinship, myth, and ritual as symbolic systems of communication that are derived from structures of thought rooted in the human brain. Lévi-Strauss argued that people impose symbolic systems on social relations in order to structure and organize them (Bell, 1997, p. 42). This implies that the symbolic systems are not simple reflections of social structure, which is in contrast to the Durkheimian approach. Structuralism utilizes the linguistic tool of the binary opposition system developed from linguist Ferdinand de Saussure. The brain of people opposes one thing to the other: for example, culture vs. nature and sacred vs. profane. Ritual is opposed to myth in that the former is verbal, of form, and discrete; the latter is nonverbal, of content, and continuous. As a form of communication, ritual is generated from social relations and exercises a constraining effect on social behavior (Douglas, 1966).

Scholars, including Arnold van Gennep, Max Gluckman, and Victor Turner, from the structuralism perspective, investigated rites of passage, such as the ceremonies of marriage, initiation, and birth. These rites of passage are understood as a three-stage process of separation, transition, and reincorporation. Participants who are separated from the existing structure of society experience chaotic or conflicting situations (antistructure or *communitas*), then return to the society with a new status. Each stage contains symbolic activities and ceremonies that can be considered social dramas reflecting reality. The rite of passage eventually contributes to the integrity of society.

Practice theory began in the 1970s when sociology and anthropology emphasized human behavior (practice) and the doers (agents) of the practice (Bourdieu, 1977 [1972] and Geertz, 1973). Practice theory emerged as a reaction to the criticism of structuralism for its ignorance of the doer's intention and the effect of history on social change. Practice theory seeks to explain the relationship between human actions and the social system. It assumes that society and history are not simply the sum of responses and adaptations to stimuli, but are governed by organizational and evaluative schemes (Ortner, 1984, p. 148). The system is a seamless whole composed of the schemes embodied within institutional, symbolic, and material forms, one of which is ritual. An institution is at once a system of social relations, economic arrangements, political processes, cultural categories, norms, values, ideals, emotional patterns, and so on (Ortner, 1984, p. 148). Practice theory is especially concerned with the realities of asymmetry, inequality, and domination of the system, among others.

According to Bourdieu, the practice of an agent is determined by habitus, capital, and the field to which the agent belongs (Walther, 2014). Habitus is the system of dispositions that people have as a result of history and tradition, and which works as a principle for practices. Habitus is understood as a tendency to act the same way in similar situations (Walther, 2014, p. 13). Capital can be economic, cultural, social, or symbolic. Economic capital refers to wealth; cultural capital to human capital, cultural knowledge, and education; social capital to networking; and symbolic capital to honor and recognition. Field refers to the space in which interactions among people occur. For example, finance academia can be considered a field.

According to Bell (1997, pp. 81–82), three points are important in the practice theory of ritual. First, ritual should be analyzed in its real context, not in isolation independent of other forms of action. As history and structure are embodied in human activities as cultural values,

the study of ritual should be focused on practice itself. Second, practice theory is concerned with the organization of actions that simultaneously define and experience the values of ordering the environment. Actors choose actions with rationality, but not necessarily with the intention or understanding of generating social change. Social change may come about as a result of an unintended consequence of actions (Ortner, 1984, p. 157). Furthermore, practice theory focuses on individual actors that may be actual historical individuals or social types, such as women, workers, and commoners (Ortner, 1984, p. 149). Third, ritualization is a way of acting that tends to promote the authority of forces deemed to derive from beyond the immediate situation.

Marshall Sahlins's study (1981) of the British explorer Captain James Cook provides an interesting example of practice theory. Cook, following an expedition, arrived at Kealahou Bay, Hawaii, on January 17, 1779, at the time when the calendrical ritual of Makahiki was being held. According to Sahlins, Cook was apotheosized as Lono, the god of agriculture and peace. As a part of the ritual, Cook was integrated into the symbolic order of cosmology. However, Cook was killed by the Hawaiians on February 14, 1779, when he returned to the island shortly after his departure from the island. How can we explain the fact that Cook was greeted as a god and subsequently murdered? Sahlins's explanation is as follows. As Lono's departure implies the beginning of the reign of another god in the myth, his return could have been interpreted by the Hawaiians as a cosmological crisis. Cook's murder was an active ritual solution to this perceived cosmological crisis, which was not a simple reproduction of existing rules (Bell, 1997, p. 77). This is how history was created by practice.

While Sahlins emphasized the importance of practice and real context, he was also criticized for ignoring the true context. Gananath Obeyesekere (1992) argued that Sahlins's explanation reflected the European-held myth that the natives worshiped the European as a god. He argued that Hawaiians did not think of Cook as a god. It was Europeans that created the European god for the natives. Cook was murdered by Hawaiians because he exploited them.

#### 4. Finance as a Ritual

Finance theories are exposed to criticisms for their theoretical approaches and applications. Nevertheless, the finance phenomenon is observed. That is, financial theories are being taught and admired in business schools and actively utilized in the finance circle such as financial industries, regulators, and academia. Finance theories seem to reinforce themselves in that people are inclined to accept the theories as others do. For example, as performance is measured by risk-adjusted returns or stock prices as dictated by finance, CEOs and fund managers should accept the logic of finance, regardless of their personal beliefs.

This section attempts to interpret the finance phenomenon from the perspectives of ritual. Let us start with the basic premises of finance. Finance theories focus on the "financial side" as separated from the "real side." Finance's concern with the real side is severely limited, even if it exists. For example, pricing theories study the relations between risk and return of securities, rather than the relations between the real and the financial. Note that financial implies "not real," and that what is eventually important is "real." The question is then when it is acceptable to focus on the (not-important) financial side, ignoring the (important) real side.

The underlying premise of the financial approach is that the financial side correctly reflects the real side. Only when the premise holds, we can safely focus on the financial side, forgetting about the real side. That is, finance theories are justified only when the premise holds. The problem, however, is that the financial side perfectly reflects the real side only in

ideal circumstances, which is often called a perfect market. In reality, the market is far from perfect. Thus, the premise does not hold in reality.

Furthermore, finance provides diverse practical tools that are accepted and applied to practice and policy making. The above observation implies that these tools may also be misleading because the market in reality is not perfect. How can then we understand the paradoxical phenomenon that a theory is being used in practice when its assumptions fail to reflect reality?

This section proposes ritual theories that help us better understand the finance phenomenon. According to Durkheim and the functionalists, an important role of a ritual is to reflect society (i.e., the finance circle here). A ritual is interpreted as a means for expressing collective representations of beliefs. What beliefs does finance represent, provided that finance is a ritual? Finance reflects and collectively expresses the ideologies and beliefs of capitalism, liberalism, and rationalism. Capitalism is an economic structure built on the monetary system. The monetary system includes central banking, market pricing, and capital market systems. Emphasis is put on money only, although money is not real. Liberalism and rationalism are fundamental premises of modern economics. As finance is a part of economics, liberalism and rationalism are reflected in finance theories, when investors are assumed to make decisions to maximize their own (expected) utilities and exhibit selfishness and rationality. In fact, finance is an extreme case of economics, in regard to its concern with money. While economics is still concerned with money for real (i.e., the prices of real goods), finance is concerned with money for money (i.e., the prices of financial goods).

The EMH provides a vivid case for functionalism in that it plays the role of guardian of the ideology of liberalism and rationalism. Recall that the separation between the financial and the real is not acceptable if the market is imperfect. On the other hand, it is well established that information asymmetry is one of the main causes of market imperfection. Unfortunately, the financial market is full of information asymmetry, which may imply that finance theory is not acceptable. The EMH is a reaction of finance to this criticism. The EMH states that rational and selfish people can recoup market perfection by engaging in trade, even if the market is initially imperfect. Trading can be seen as a magician's (invisible) hand by which imperfection is transformed into perfection. Market imperfection does not matter under the EMH!

However, there have been a lot of cases pointing to market inefficiency. While a theory is considered wrong if one case disproves it, the EMH has withstood a lot of evidence against it. How can it have done so? An answer can also be found in ritual theories. According to Radcliff-Brown, ritual activities determine beliefs and are more enduring and stable than beliefs (Bell, 1997, p. 27). The EMH has functioned not only as an economic theory, but also as a ritual activity, creating and determining the belief of market efficiency. As a ritual, the EMH survives even when the belief abates.

Without market efficiency, financial prices are no longer legitimate. For example, the maximization of stock prices is no longer a legitimate objective of a firm, the performance of management cannot be measured by stock prices, and the increases in stock prices do not mean economic growth. Market inefficiency would become a cause of anxiety or distress to finance academia and financiers. The EMH appears as a relief pitcher. The EMH performs the practical and social function of alleviating anxiety, distress, and fear, as indicated by Malinowski. The EMH can be upheld for its justification of the financial market, regardless of people's beliefs. A ritual is more enduring than a belief.

Finance theories can also be understood in terms of symbolic expressions reflecting their beliefs. One of the underlying tools in finance theories is expected utility. Expected utility, which is the expected value of utility, is expressed as a function of monetary wealth, in

contrast to the conventional economic approach of expressing utility as a function of consumption of real goods. This monetary expression is for convenience of analysis on the one hand, but also represents the ideology of the separation between the financial and the real on the other hand.

Firm value is another example. In principle, the value of an organization should be measured based on its contribution to the society in which the organization resides. In the CST and other finance theories, however, firm value is equated with the contribution to capitalists composed of debtholders and stockholders.

While capitalists are important stakeholders of the firm, they represent only a part of the stakeholders. Other stakeholders of a firm include employees, government, consumers, suppliers, and communities. Interestingly, these excluded stakeholders represent the real side. Once again, the approach of finance theories is to ignore the real and focus on the financial. Firm value is a symbolic expression of the belief of the separation between the financial and the real.

On the other hand, recall that Lévi-Strauss and Douglas, among others, emphasized the structure of binary opposition inside the human brain. For example, sacred vs. profane, cultural vs. natural, and pure vs. polluted. The structure of binary opposition provides a useful tool for understanding the ritual because ritual symbols are communicated through it. Such binary oppositions are abundant in finance theories. Examples include rational vs. irrational, efficient vs. inefficient, risk averse vs. risk loving, diversified vs. undiversified, liquidity vs. illiquidity, and no arbitrage vs. arbitrage. In each binary opposition, the former is sacred and pure, while the latter is profane and polluted. The polluted ones are unnatural and unacceptable. They are classified as dangerous, and thus need to be cleaned and purified (Douglas, 1966). Purification of the polluted is exactly what finance theories are doing. Within the framework of the theories, finance often calls upon agents to officiate at the purification rite. The polluted are purified by the agents and regain their purity. The agents, or rite officiants, include market maker, arbitrageur, risk premium, abnormal return, and beta. For example, arbitrageurs eliminate an arbitrage opportunity, if it exists, so that prices can recover their equilibrium levels. Market makers provide liquidity to illiquid markets, so that markets can accommodate more trading. Excessive or undiversified risk taking is not compensated by high beta. Any abnormal return should be non-existent or disappear quickly, if one exists, so that markets can recover their efficiency.

Ritual theories also help us to understand the roles of finance academia and education. Specifically, the perspectives of the rite of passage and ritualization shed light on the role of finance education in the business school. As in a typical rite of passage, the education process undergoes the three stages of separation, transition, and reincorporation. Participants are separated from the society, stay at the school for a period of years, then return to the society. Once participants enter the school, their status in the society becomes denied or postponed. When they return to the society after education, their status is changed as they have earned new degrees or certificates. More importantly, as mentioned above, finance education reflects its ideology and beliefs. Thus, participants return to society not only with a new status, but also with new beliefs, which reinforces the ideology and beliefs of finance in society. In this way, finance education not only promotes the authority of finance theories, but also contributes to the reaffirmation and recreation of the unity of society and finance circle.

On the other hand, finance academia can also be understood from the cultural theory of risk. According to Douglas (2004) and Douglas and Wildavsky (1983), society can be classified into four types based on the two dimensions of “grid” and “group.” Grid refers to the strength of the rules governing the interrelationship of individual roles and formal positions in a society. Group refers to the strength of people’s associations as a tightly knit or

closed community (Bell, 1997). Strong (weak) grid implies a strong (weak) order-relationship inside the society, while strong (weak) group implies a high (low) pressure to conform to others in the society. From this viewpoint, the society with strong group-strong grid is characterized by hierarchy, weak group-weak grid by individualism, strong group-weak grid by egalitarianism, and weak group-strong grid by fatalism.

A hierarchical society is ritualistic, in which rituals define and express its internal classification structure. Symbols delimit reality. Members of the society conform to the rules and will face automatic punishment for violation of the rules. The society exhibits a strong concern for purity. A danger (the polluted) is actively denied for protection if it is uncontrollable, or accepted if controllable. On the opposite side, there is an individualistic society in which members enjoy the maximum freedom and symbols do not delimit reality. A danger is accepted, and is subsequently negotiated and utilized.

It seems that finance academia corresponds to a hierarchical society. As noted earlier, finance theories adhere strongly to the ideology of rationalism and money only, which distinguishes them from other social science theories. In addition, the members of finance academia are strongly affected and regulated by the symbols reflecting the ideology. Finance academia perceives irrationality as an unacceptable pollution (danger), and has thus denied it until recently. For example, the so-called behavioral approach was denied by mainstream finance. Only when the behavioral approach became no longer deniable, was it accepted as a complement with limited applications. Due to this hierarchical structure, finance academia has focused on a narrow spectrum regarding human behavior, which allows it to form a uniform and consistent voice. On the negative side, however, finance academia lost some of its diversity and richness. Ironically, finance academia is characterized by hierarchy, while finance theories emphasize individualism.

Similarly, the finance industry seems to be hierarchical. The financial sector is clearly distinguished from and contrasted with the non-financial sector. While the finance industry is admired as smart and highly salaried (as signified by Warren Buffett), it is also criticized as corrupt and greedy at the same time (as signified by the Occupy Wall Street movement and the Wall Street movie sequels). Similar to finance academia, the finance industry adheres to the ideology of money only. Monetary measures such as portfolio return and profit are used as barometers by which performance is measured. Performance is often evaluated on short-term bases. Daily evaluation is not uncommon among fund managers. The focus on monetary performance naturally forces practitioners to accept the ideology of finance. Moreover, as monetary performance is calculable and comparable, it becomes a strong tool for regulating practitioners. Here, the polluted are the low return and profit which need to be purified.

Practice theory provides an insight into the fields of finance academia and practitioners. Recall that practice is determined by habitus, capital, and field. In academia, publication and presentation of research papers are important communication tools among researchers. In writing papers, researchers are required to use specific rigorous mathematical and economic methodologies. What is equally important, however, is that they are also trained to draw interpretations that conform to the ideology. For example, the efficient market supporters, unlike behavioralists, do not think of anomalies such as short-run momentum and the return predictability as evidence of inefficiency (Fama, 1991; Malkiel, 2003; Shiller, 2003). The interpretation conforming to the ideology helps to form habitus. Researchers have a tendency to interpret their findings in a way that aligns with the ideology. In addition, the publication of papers also requires capital, especially social capital. Networking among researchers becomes important because other researchers can determine the publication (or not) of a paper through the review process. Cultural and symbolic capitals may also be important. When some researchers are respected as learned and knowledgeable, they have an impact on

publication and communication. In sum, the practice of researchers (publications and speech) is affected by habitus (their tendency in interpretation) and capitals (network, knowledge, and respect).

In the finance industry, monetary performance forces practitioners to behave according to the ideology of finance, which forms habitus in the field of financial practitioners. In this field, the social capital of networking is extremely important, because information acts as a determinant of life and death. Economic capital or wealth is also important because a large fund and a deep pocket can often be the keys to market power. Likewise, cultural and symbolic capitals are important as they allow practitioners to exert power over others. Similar to academia, the practice of practitioners (investment and portfolio management) is affected by habitus (their focus on short-term monetary performance) and capitals (network, wealth, and market power).

According to practice theory, the agents may choose practices rationally, which leads to social change. However, agents do not necessarily intend to change society, nor understand how their practices generate such a change. Agents' practices collectively change society, regardless of their intentions or understanding. Applying this view to finance academia, it is possible to say that researchers' publications collectively generate changes in academia and further in society.

Most researchers write their papers for personal concerns, such as publication and communication. Similarly, in the finance industry, the investment and advice of practitioners collectively generate the changes in the industry and society. Practitioners do so for personal concerns with their performance and career success. Researchers and practitioners do not necessarily intend to or understand how they might affect social change. However, their practices collectively change society through the dissemination of the assumptions and beliefs of finance theories and by affecting government policies and rules. For example, the identification of firm value as the capitalists' value leads people, lawmakers, and government officers to accept the idea that the interests of capitalists are aligned with those of society. Interpreting academic findings according to market efficiency leads people to accept the belief that the development of capital markets is equivalent to the development of economy and society. The pressure from practitioners leads CEOs of firms to behave according to the financial ideology. The interaction of finance theories with practitioners also exhibits the embeddedness of markets in economics (Callon, 1998), or more appropriately, their entanglements (Maurer, 2005).

Society is further influenced by the mutual reinforcement between finance academia and the finance industries. Academia provides rationales for the ideology to which the practitioners are anchored. In turn, the practice of the industries justifies the finance theories. The discussion of this section is illustrated in the following figure.

Figure 1: Finance as a Ritual

## 5. Conclusion

Finance theories are criticized for failing to capture reality in both their outcomes and foundation. Nevertheless, we witness the "finance phenomenon" that financial theories are being taught and admired in business schools, and are actively utilized in the finance circle, such as financial industries, regulators, and academia.

This paper attempts to provide a ritual interpretation to understand this contradiction. We apply the diverse ritual theories of anthropology to the finance phenomenon. Among ritual

theories, we borrow from the perspectives of functionalism, structuralism, and practice theory. We argue that, as a ritual does, finance theories disseminate ideology and beliefs and have an effect on society (especially the finance circle). The effect is determined collectively and is not necessarily as intended by individual financial researchers and practitioners. Finance academia is viewed as an agent to officiate the rite of passage, which helps to reaffirm and recreate the unity of society and finance circle. Finance academia and the finance industry are viewed as hierarchical. Finance theories can survive, as a ritual does, even if they lose their connection with reality.

Finance theories create and reinforce the “finance world” in which the financial side is worshiped, and is separated from the real side. The finance world is taught, reaffirmed, and recreated through business schools, practitioners, and government. Recall, however, Obeyesekere’s criticism that the European god in Hawaii was a myth created by the Europeans, not by the natives. Is the financial world any less of a myth than the European god was?

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Figure 1: Finance as a Ritual

