

A Conceptual Review of Agency Models of Performance Evaluation

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Abstract The contract existing between agent and principal in most cases does not yield the maximum satisfaction to both the principal and the agent due to dysfunctional behaviour. While the principal requires the maximum effort and cooperation of the agent to achieve his/her goal in the contract, the agent on other hand may be confronted with personal desires which often conflict with the goal of the agency contract. In order to achieve an optimal risk sharing position where both the principal and the agent will simultaneously attain their goal in the relationship, there is need for a framework or model which can be used to develop the necessary management control structures that will facilitate the achievement of goal congruence. The objective of the paper therefore, is to examine agency models by providing the conceptual and theoretical perspective as well as review some outstanding studies in the area with a view to appreciate its applicability to solving agency problems. From the review, we observed that agency models provides a coherent framework which can be used to analyse managerial accounting issues and can therefore be argued for adoption when investigating agent-principal problems facing firms.

Keywords Agency theory/model, Dysfunctional behaviour, Information asymmetry, Goal congruence

1. Introduction

There is no doubt that agency theory and its view of the firm as a complex nexus of Contracts, constitutes one of the major pillars of theoretical accounting. As such it not only helps to understand and explain the behavior of business actors, but also provides a rich fund of practical implications for the design of governing structures.

An agency relationship exists when one or more individuals (called principals) hire others (called agents) in order to delegate responsibilities to them agent (Jensen and Meckling, 1976). The rights and responsibilities of the principals and agents are specified in their mutually agreed-upon employment relationship.

In agency theory, individuals are assumed to be motivated solely by self-interest. An agency arises if the cooperative (or first-best) behavior, which maximizes the group's welfare, is not consistent with each individual's self-interest. This occurs if the employment relationships are such that, given that everyone else is acting cooperatively, one or more individuals could make themselves better off by deviating from their cooperative behavior. Of course, if one or more individuals are expected to deviate from their cooperative behavior, others may find it in their best interest to deviate.

The end result is that when cooperative behavior is not consistent with self-interested behavior (i.e. it is not self-enforcing), the group suffers a loss of efficiency and all individuals are potentially made worse off.

Therefore, agency theory provide a frameworks for analysing the interaction of self-interested individuals within an economic context; understanding the determinants and causes of the loss of efficiency created by the divergence between cooperative and self-interested interested behavior (i.e. the loss horn agency problems); and analysing and understanding the implications of different control processes (e.g. budgeting systems. employment contracts, monitoring systems etc.) for mitigating the efficiency loss from agency problems.

The broad objective of the paper is to examine the agency models by providing the conceptual and theoretical perspective as well as review some outstanding studies in the area with a view to appreciate the problems, methods and findings in the studies. The paper would not dwell on the quantitative descriptive of the agency models in view of their strong mathematical requirements (integration, calculus, differentiation, limit & continuity, etc). However, the qualitative models would be examined by highlighting their assumptions, contributions and limitations.

The research questions that the paper intends to address are:

1. What are the various agency models developed in the agency literature?
2. What are the assumptions, contribution, and limitations

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of the agency models to the managerial accounting research?

3. Has agency theory been empirically tested?
4. What are the problems emanating in agency relationships?
5. Is agency theory applicable to agency related problems in an organization?
6. How can some of the agency related problems be mitigated?
7. What are the areas requiring further research from the precious agency related studies?

1.1. Methodology

The approach adopted by this paper is simply a conceptual review using explorative research and utilizes existing secondary data obtained from the survey of wide theoretical and empirical studies on agency models for the purpose of generating and presenting its arguments. Creswell (2003) argues that for an exploratory study the use of a qualitative approach is considered appropriate (Christy & Wood, 1999; Goodman, 1999). According to Creswell exploratory qualitative study means "that not much has been written about the topic or the population being studied, and the researcher seeks to listen to participants and build an understanding based on their ideas".

The remainder of the paper is structured as follows: the second section focuses on conceptual and theoretical perspective of the agency theory. Section 3 provides a review of some outstanding research work in the area and section 4 presents the findings and draws conclusions as well as suggested areas requiring further research.

2. Conceptual and Theoretical Framework

2.1. Conceptual Framework

Agency theory is generally concerned with principal-agent relationships (Fama and Jensen, 1983; Jensen and Meckling, 1976). In such a relationship, one party (the principal) hires another party (the agent) to perform some task on his or her behalf that require some delegation of decision-making authority to the agent (Jensen and Meckling, 1976). Agency theory posits that this delegation of decision-making authority enables the agent to engage in self-serving behavior. That is the agent will be inclined to perform activities that favour his or her own interest over those of the principal. Agency theorist stresses the need for control procedures that align the interest of principals and agents (Fama and Jensen, 1983). These control procedures take the forms of monitoring mechanisms and performance evaluation arrangements.

Modern economic organizations are complex team-productions, since their output is jointly produced by several-input owners, e.g. stakeholders, managers and employees (Alchian & Demesetz, 1972). As the team is forced to achieve some level of efficiency, tasks are

delegated to specialized production units which act on behalf of others. Specialization inevitably involves the dispersion of knowledge and information; in addition, it often entails goal incongruences between the participants. Since the combination of both asymmetric information and conflicts of interest may result in an efficiency loss, procedures and mechanisms are needed to mitigate this problem. The function of performance evaluation in such a setting is twofold. First, it aims to control discretionary behavior by aligning interests through the provision of state-contingent incentives. Secondly, it evaluates the contribution of each input-owner to the overall output, as a means of determining individual performance.

2.2. Theoretical Framework

Agency theory and transaction costs are a refinement of the mathematical modeling based on economic concepts and theory. Rudimentary agency model was developed in the economics literature during 1960s and 1970s in order to determine the optimal amount of the risk- sharing among different individuals (Spence and Zeckhauser, 1971; Ross, 1973; Jensen and Meckling, 1976; Harris and Raviv 1976, 1978; Holmstrom, 1979). However, gradually the domain of the agency theory was extended to the management area for determining the cooperation between various people with different goals in the organization, and attainment of the goal congruency (Eisenhardt, 1989). In 1980s, agency theory also appeared extensively in the managerial accounting realms to determine the optimal-incentive contracting among different individuals and establishing suitable accounting control mechanisms to monitor their behaviors and actions (Demski, 1980; Baiman, 1982; Namazi, 1985). It is this last function of the agency model that is most concerned with performance evaluation. Agency theory is based on several assumptions:

- ❖ Both principals and agents are motivated solely by self-interest.
- ❖ Individuals are assumed to be rational and to have unlimited computational ability. They can anticipate and assess the probability of all possible future contingencies.
- ❖ The contracts are assumed to be costless and accurately enforceable by courts. The contracts are expected to be comprehensive and complete in the sense that for each verifiable event, they specify the actions to be taken by the contracting parties. However, this assumption may not hold in most developing countries where judicial systems still lack the necessary resources to act efficiently.
- ❖ The agent is assumed to have private information to which the principal cannot gain access without cost i.e. information asymmetry.
- ❖ The agent is usually assumed to be work averse and risk averse (Baiman, 1990: 343).

2.2.1 The Principal-Agent Model

Assumptions: In the principal-agent model, individuals

are assumed to be rational and to have unlimited computational ability. Further, they can anticipate and assess the probability of all possible future contingencies. Any contingencies which are jointly observable can be costlessly used as arguments in contracts (i.e. are *ex-post* verifiable). The contracts are assumed to be costlessly and accurately enforced by the courts. As a result, the contracts studied are comprehensive and complete in the sense that for each verifiable event, they specify the actions to be taken by the contracting parties. Further, it is usually assumed that the courts will enforce a previously agreed upon contract even if, at some subsequent time, all the contracting parties would prefer to renegotiate the contract. Hence, there is no need for contracts to be self-enforcing.

In the principal-agent model, each individual's actions are endogenously derived, based on his well-specified preferences and beliefs. Further, each individual expects every other individual to act solely on the basis of his own preferences and beliefs.

Common to all principal-agent models is an information asymmetry assumption. The agent is assumed to have private information to which the principal cannot costlessly gain access. This private information may be with respect to the agent's action choice and/or state information. Finally, it is usually assumed that the agent is work-averse and risk-averse.

Contribution: A major contribution of the principal-agent model to managerial accounting research has been in its providing a coherent and useful framework within which we can view managerial accounting procedures and pose managerial accounting questions. For example, based on the principal-agent model, one would expect to find a managerial accounting procedure only in contexts in which individuals would benefit from its use-by mitigating motivational problems within firms made up of self-interested individuals.

The principal-agent model's emphasis on internal consistency, rational players and optimal solutions forces the researcher to study the use of managerial accounting procedures within the context of models in which there is an underlying inefficiency for which the use of those procedures may be an optimal solution. It is this new appreciation for the role of managerial accounting procedures and a more subtle understanding of the demand for and effect of managerial accounting policies and procedures which the principal-agent model has brought.

Criticisms: A number of criticisms can be made of the principal-agent model. The first set of criticisms deal with the realism of some of the assumptions underlying the principal-agent model. First, the computational requirements of the principal-agent formulation, the assumption that courts can costlessly and accurately enforce all contracts and the assumption that the courts will enforce contracts even when all of the parties subsequently wish to re-contract are all unrealistic.

The second set of criticisms deal with the simplicity of the models analysed. Because of the principal-agent model's

emphasis on internal consistency and optimal solutions, principal-agent research has been restricted to highly stylized, simplified models. For example, most principal-agent models take a restricted view of the environment in which the firm operates. The analysis of the interaction between the optimal contract and the labour and product markets is often ignored in modeling the agency problem. Related to this, the principal-agent model typically ignores the effect of the capital markets by assuming a single owner rather than a group of owners and debt-holders. In addition, an inherent characteristic of firms is that they are organized as hierarchies." However, there has been little modeling of hierarchies in the principal-agent literature." Finally, the principal-agent model has often been criticized as too narrow because it, apparently, leaves no room for trust and fairness, which are also claimed to affect behaviour.

A third set of criticisms deals with the results of the principal-agent model. While we often observe the use of simple and robust contract forms (i.e. contracts forms which are not sensitive to the underlying parameters of the problem), as a result of the principal-agent model's emphasis on internal consistency, rationality and the optimality of contracts, we typically end up deriving complicated contracts whose forms are very sensitive to the model assumptions. As a consequence, some claim that the result of principal-agent research gives us little insight into the form and shape of observed contracts (see, for example, Baker *et al.* (1988)).

2.2.2. The Transaction Cost Economics Model

Assumptions: Like the principal-agent model, transaction cost economics assumes that all individuals act in their own self-interest (this is referred to as opportunistic behavior). However, unlike the principal-agent model, transaction cost economics assumes that individuals do not have unlimited computational ability. Rather, while all individuals act to maximize their expected utility, their success in doing so is restricted by both their limited capacity to acquire and process information (as a result of bounded rationality) and the out of pocket cost of decision-making and contracting. Further, unlike the principal-agent branch, transaction cost economics assumes that the courts are imperfect enforcers of contracts.

As a result of bounded rationality, one cannot foresee all possible future contingencies and hence cannot incorporate these unforeseen contingencies into the *ex ante* employment contract. Further, as a result of contracting costs and the imperfect nature of their enforcement by the courts, one may choose to not incorporate into contracts some *foreseeable* contingencies, even ones that are *ex post* verifiable. Therefore, unlike the principal-agent model, contracts are assumed to be incomplete. That is, it is assumed that there exist events in the future for which the contract does not stipulate the appropriate actions for the contracting parties. Because of opportunism, when an un-contracted for contingency does arise, each party will try to exploit it (i.e. act opportunistically) to the extent that market conditions

allow. Therefore, when an un-contracted- for event arises, cooperative and self-interested behavior may diverge.

Contribution: With incomplete contracts, the division of surplus when un-contracted for events arises depends upon the players' relative bargaining positions. One's relative bargaining position may depend upon any previous investment in relationship-specific assets and the way in which the transaction is organized, including the agreed upon governance procedures. Therefore, a prior investment can influence both the total amount of surplus to be bargained over and the players' relative bargaining position when an un-contracted for contingency arises. To the extent that the latter concern influences the previous investment decision, there is an investment distortion. Because the way in which the transaction is organized may also affect the players' relative bargaining positions, it may also indirectly affect one's *ex ante* investment decision.

Criticisms: A number of criticisms of the transaction cost economics model have been made. Most of the criticisms deal with the imprecise specification of the model and the context being analysed. First, the source and size of out of pocket contracting costs, while often used to motivate the incompleteness of contracts, are imprecise. Second, the notion of bounded rationality, although often motivating the use of incomplete contracts, is however, not well-defined. This gives rise to several questions. At what point do these bounds (limits) prevent individuals from doing better? How do they cope with their bounds? And again, why does bounded rationality assumed to give rise to the form of the contract incompleteness? Further, if it is bounded rationality that gives rise to contract incompleteness, how does one *ex ante* evaluation help in choosing between different governance procedures? Note that this criticism does not arise when the reason for incomplete contracts is that of out of pocket cost of including contingencies in the contracts.

2.2.3. The Rochester Model

This model is based on the work of Jensen & Meckling (1976), including the positive theory of accounting (Watts & Zimmerman, 1986).

Assumptions: The Rochester model is similar to the transaction cost economics model in that both emphasize transaction costs and opportunistic behavior. However, in the Rochester model the external labour and capital markets, which are assumed to be efficient and to accurately anticipate the incentives of management, play a much more central role than in the other models. Thus the Rochester model addresses one of the criticisms made of the principal agent model. This model also assumes that observed employment and financial contracts are optimal, given transaction costs. The positive theory model is based not only on this agency model of the firm, but also on an economic theory of government regulation which views the political process as a competition among self-interested individuals for wealth transfers.

Contribution: All of the agency models assume that

management acts in its own best interests and hence responds to the economic incentives embodied in its employment contract. One contribution of the Rochester model and the positive theory was in their early applications of the agency framework to issues of management control and the choice of financial accounting policy. In particular, the positive theory expanded the role for financial accounting information in an efficient market to include a contracting role, and thereby enriched the explanation for the choice of different financial accounting procedures. A second, and continuing, contribution of the Rochester literature is in empirically testing this agency model of the firm and in identifying empirical regularities regarding management's behavior and the form of executive compensation contracts.

Criticisms: with transaction cost economics, the concepts of equilibrium and efficiency as well as the size and source of transaction costs, while very important to the analysis, are not well-specified. Further, in the Rochester literature, careful modeling of the underlying context and deriving optimal contracts are deemphasized because observed contracts are assumed to be efficient, given (usually unstated and unmeasured) transaction costs. But as a result, it then becomes difficult to explain what the motivation for the choice of those observed managerial contracts is (incentive, signalling, screening, tax, etc.) or why contracts differ across different firms and across time within firms. For example, while Healy (1985) is an excellent study which documents the association between income manipulation and the form of compensation plans, it offers no convincing explanation as to why shareholders find it in their best interest to induce this behavior. Without such an explanation it becomes problematic as to whether we are interpreting the observed phenomena correctly.

2.2.4. Agency Asymmetry Problems

Some related theories have emerged from agency asymmetry problems which include:

Moral Hazard: Moral hazard is a situation in which one agent decides on how much risk to take, while another agent bears (parts of) the negative consequences of risky choices. A typical example of this can be demonstrated in the case of insurance. The person who buys insurance is protected against monetary damages. Therefore, he may engage in more risky behavior than if he has to bear the risk himself. A moral hazard is all about information asymmetric i.e. information dis-connects between the principal and agent. Pre-contract investigation and post contract penalties can reduce this problem.

Adverse Selection Theory: This theory flows from moral hazard theory. It refers to the possibility of the agent to take sub-optimal decision. The principle is of the view that where an agent is confronted with a decision involving choices between alternatives, the agent is likely to engage in adverse selection by choosing an alternative that best align with his personal interest rather than that of the principal. A strong

system of inspection and monitoring can reduce this problem.

2.2.5. Relative Performance Evaluation Vs Agency Problems

Relative performance evaluation is an externally determine target setting. It is usually set to determine managers performance based on the performance of a reference group that faces similar conditions.

The principle of Relative Performance Evaluation (RPE) argues that it can mitigate managerial opportunism that results from information asymmetries in an agency model, by determining the performance target outside the sphere of influence of the agent. RPE can reduce the target setting-consequences of the information asymmetries. Even if the principal has limited knowledge of the factors that influence performance, he/she can observe the effects of these factors through changes in peer performance.

Performance targets are an important and consequential part of the incentive structure (Murphy, 2001). However, determining a relevant height for these performance targets can be difficult, especially when external events and managerial opportunism influence the attainability of the target. Based on agency reasoning, RPE can improve the relevance of the target by incorporating information about peer performance in the performance evaluation (Holmstrom, 1982). By looking at peer performance, targets can be adjusted ex-post for market conditions to filter out noise that is caused by external events. RPE also insulates performance targets from managerial opportunism; whilst budget-based targets are mostly influenced by managerial actions, RPE determines the height of the target outside the sphere of managerial influence. This leaves less room for opportunistic behaviour such as negotiating easy targets.

Information asymmetry makes target setting difficult. Determining performance target height at a relevant level can be problematic when a subordinate has better information than a superior about factors that influence performance, especially when the agent's pay depends on his performance *vis-à-vis* the target (conform: Chow *et al.* 1988).

When information asymmetries concerning an activity exist, the organization can choose to solve them, by investing in knowledge about the activity. Organizations can also choose not to solve the information asymmetry, for example because of the costs involved. The latter strategy might be fully acceptable if the top management is still able to make meaningful claims about the quality of the business unit performance, which is possible via RPE. Through relative performance evaluation, the principal can let the peer-group 'decide' the height of the performance standard, without the need to understand the specific ins and outs of the business unit and the factors that drive its performance. This does not reduce the amount of information asymmetry itself; the principal remains unaware of the specific factors that influence the business unit's performance. Instead, the

principal retrieves the information that he/she requires from the market. This way, the principal works around the business unit to assess its manager's effort, instead of obtaining the – costly or just unavailable–information required to evaluate the performance of the business unit.

3. Review of Related Literature

Eisenhardt (1989) reviewed agency theory, its contribution to organizational theory and the extant empirical work on the topic with a view to develop testable propositions. The objective of the study was to describe agency theory and indicate ways in which organizational researchers can use its insights. The methodology adopted for the study was survey and analysis of insight stimulating cases. The researcher found that the theory has contributed to organizational theory and that it is testable and has empirical support. Eisenhardt therefore, argued for the adoption of the theory's perspective when investigating problems that have a principal-agent structure.

Smith (1989) tried to bridge the gap between managerial accounting and agency theory with a view to bring the assessment of agent performance in line with some of the more recent developments of agency model. The study aimed to find if administrative shirking behavior or behavioral contrivances exist in non-profit organization. The work strictly relied on previous empirical studies and employs qualitative descriptive approach to its analysis. It looked at monitoring administrative shirking behavior or behavioral contrivances that are associated with actions not taken by higher level administrators rather than with those implemented. The monitoring tool considered were (1) performance audits; (2) recording deferred items; and (3) value lost determinations. He found that, the behavioural problems (shirking and contrivances) associated with agent-principal contract also happens in non-profit organization such as library.

Wiseman & Gomez-mejia (1998) constructed behavioral agency model of executive risk taking combining elements of internal corporate governance with problem framing to explain executive risk-taking behavior by developing some specific propositions that combine monitoring with performance. They found that executive risk taking varies across and within different forms of monitoring and that agents may exhibit risk-seeking as well as risk-averse behaviors.

Young, Stedham & Beekun (2000) assessed the Chief Executive Officer's (CEO) performance evaluation process from agency and institutional theorist perspectives. The study employed secondary data consisting of 130 short-term, private hospital in California. The finding was that organization may not always succeed at improving governance through policies aimed at strengthening board independence. Broader contextual factors that may be industry specific need to be considered. However, our review of the problem, methodology and the finding revealed the

following reservations: First the choice of the private hospital as against other private corporation or a combination of both; secondly the choice of only California instead of cross section of some states. The findings could be different if the methodology was different particularly with respect to the choice of the sample.

Hoffmann & Pfeil (2010) studied a continuous time principal-agent problem of a firm whose cash flows were determined by the manager's unobserved effort. The firm's cash flows were further subjected to persistent and publicly observable shocks that were beyond the manager's control. While standard contracting models predicted that compensation should optimally filter out these shocks, empirical evidence suggested otherwise. In line with this evidence, Hoffmann & Pfeil found that managers are "rewarded for luck

Larcker (1983) demonstrated an association between the adoption of long-term performance plans and changes in corporate capital investments. It is possible that the adoption of the long-term plans increased the planning horizon of management which then led them to increase their long-term investments. However, as Larcker noted, it is also possible that management had already decided to increase capital investment and the adoption of the long-term plans was a way of signalling this to the market and of allowing management to benefit from this decision. This raises the issue of whether observed compensation plans are adopted to overcome agency problems or for other reasons, such as taxes and signalling.

In an attempt to obtain evidence on the design of contracts to overcome agency problems, Murphy (1986) analysed how compensation plans would differ depending upon whether the problem to overcome is one of incentives versus one of learning the agent's type. From the different models, he derives different implications for the variance of executive pay and for the relationship between pay and performance over time and compares them with actual pay-experience profiles for executives. While the hypotheses are not mutually exclusive, the data seem more supportive of the learning model than the shirking model.

Lewellen et al. (1987) examined whether executive pay packages can be explained as attempts to reduce agency costs resulting from management having a shorter decision horizon than owners. If this were the case, then one would expect to see the components of executive pay (such as cash versus stock based compensation) systematically differ across firms depending upon how severe the horizon problem is in those firms. Lewellen et al. (1987) hypothesized that the severity of the horizon problem is associated with certain observable firm-specific variables and tests the association of these variables with the components of senior executive pay. The components of the executive pay packages are found to vary in the predicted manner, thus supporting the argument that these compensation plans are designed to overcome agency problems.

Holmstrom (1979) constructed a principal-agent model

where effort is not observable, moral hazard exists, and information asymmetries arise in long-term contracts. Only the second best solution, which trades off some of the risk-sharing benefits for provision of incentives, can be achieved. The source of this moral hazard or incentive problem is an asymmetry of information among individuals that happens because individual actions cannot be observed and, hence, contracted. By creating additional information systems, as cost accounting, or by using other available information about the agent's action or the state of nature, contracts can generally be improved.

Wolfson (1985) studied contracts in the oil and gas limited partnership market in which there are both substantial moral hazards with respect to the general partner's decision to complete the drilling of well and potentially important tax implications to contract design. Wolfson identified four different types of contracts between general and limited partners which make different trade-offs between the tax and incentive effects. He then derived hypotheses about the types of contracts one would find in different kinds of drilling, where the moral hazard problems would be of different severity. The data supported the hypotheses. Wolfson also derived a hypothesis about the pricing of reputation for oil and gas general partners. The data supported the hypothesis that a general partner's past performance (reputation) is impounded in the offering price of his new partnerships. In summary, Wolfson's results are consistent with both reputation and explicit incentives being used to control moral hazard problems in oil and gas limited partnerships. Further, Wolfson (1985) is notable for directly incorporating both the tax and incentive aspects of contracts.

Hung (1998) in his article titled "Rethinking Agency Theory" used agency theory in the study of the performance of boards of director. It critically re-examined the use of traditional agency theory as theoretical framework in the research on the effective performance of boards of directors which are treated as a monitoring device to control management (the agent) on behalf of shareholders (the principal). An underlying premise of the study is to identify, discuss and synthesize various relevant theories that may cast insights onto the field of corporate governance and integrate into a new perspective of agency theory that will strive to explain how board performance is affected by the multi-faceted roles that can be played by governing boards in the process of corporate governance. The study concluded that multiple-principal model puts a new position of agency theory in the study of board performance. The traditional view of boards as an agent of shareholders and one-agent-one-principal is challenged by the model.

Banker & Kemerer (2001) developed a principal-agent model that provides a set of decision criteria for the principal to use to develop an incentive compatible contract for the agent. The model identified a set of decision criteria for the principal to use to specify the contract. The model results in two criteria, the precision and the sensitivity of the performance metric which influence the emphasis on various metrics. The model suggested that metrics that are relatively

more precise and more sensitive will be preferred in the long term by both principal and the agent in establishing the contract. The results were then applied to two mini-case studies, one an internal information system group and one an external provider, to illustrate the application of the concept in an information system development context. From the result of the model which involved an ordinal ranking of the metrics, budget and schedule performance where ranked first followed by user satisfaction and then by maintainability. The problem of the study appeared satisfactory, because the inability of the principal to directly monitor the agent requires the use of performance measures, or metrics, to represent the agent's actions to principal which the study aims to provide. However, one of the limitations observed in the methodology is the representativeness of the two mini-case studies. While their measurement practices might actually be as predicted by the model, to what degree are they believed to be representative of current practice?

Christensen (1981) made a clear link between agency models and managerial accounting communication devices, specially budgeting. It was shown that the agency is not always better off if the agent is supplied with more information, since he might use that information to shirk.

Namazi (2013) analyzed the role of the "Agency Theory" in implementing effective control mechanisms. The methodology of the study was based upon implementation of the "agency theory" framework. By adapting the agency theory paradigms and contractual agreement frameworks, it was demonstrated that agency theory has posited, the following: why control is important, and therefore, should be exerted in the organization; performance measures" that must be encompassed in a control system in order to attain a suitable performance; provides an efficient resource allocation mechanism for the firms; leads various stakeholders (managers and owners) on how to select a suitable type of contractual agreements in different situations.

Demski & Dye (1999) in their studies provided explanation that deals with optimal principal-agent contracting. They found that the tendency to downward bias the project report made by the manager depends on the project's output, manager risk aversion, and the bonus portion of the manager compensation.

Kistruck, Sutter, Lount & Smith (2013) empirically tested the arguments, that having a sales agent adopt the more prestigious identity of owner rather than agent for one product in "base-of-the-pyramid" (BOP) markets can lead to higher sales of not only that particular product, but also other products for reasons of identity salience. Identity salience is defined as "the probability that an identity will be invoked across a variety across persons in a given situation" (Stryker & Burke, 2000: 236). They employed an initial multi-methodological study consisting of a quasi-experimental field investigation and subsequent qualitative in-depth interviews with BOP market sales people in rural Guatemala. The results of the studies found

that identity-based mechanisms can potentially mitigate agency costs through a positive identity spillover effect in multiproduct settings. The problem, methodology and findings of their study is considered appropriate. In particular, the problem of their study was recommended by some previous agency theorists who have broadly stressed the importance of integrating a social-psychological perspective into agency predictions (Akerlof & Kranton, 2005; Shapiro, 2005), and their specific integration of identity theory with agency theory suggests how doing so can help better theoretically explain behavioral outcomes in principal-agent relationships.

4. Outcome and Discussion

The broad objective of this paper was to examine agency theory and models by providing the conceptual and theoretical perspective as well as review some outstanding studies in the area with a view to appreciate the problems, methods and findings. Generally from the review of the related empirical studies about the agency model, we observed that, agency theory have been empirically tested to be relevant in addressing behavioural problem relating agency relationship. The result of the various empirical studies shows that, the model can be used to enhance cooperative behaviour and consequently the performance of the agent. Specifically the study found the following:

1. A number of agency models exist having different assumptions and limitations;
2. The theory can be applied to establish an optimal risk sharing mechanism among various stakeholders having different goals in an organization by removing the dysfunctional behavior thereby providing framework for achieving goal congruence;
3. The theory has been empirically proved to be testable;
4. The theory can be applied in both profit and not-for-profit organizations to attain an optimal cooperative of the various stakeholders;
5. It has provided a number of insights into the managerial accounting process; for example it provides various stakeholders (principal and agent) on how to select a suitable type of contractual agreements in different situations thereby providing an optimal control mechanism;
6. Agency theory explains agency problems such as moral hazards and adverse selection which usually arises in an agency relationship;
7. Relative performance evaluation can be applied to reduce some of the agency related problems such as managerial opportunism that results from information asymmetries between agent and principal in an agency relationship; and
8. A number of criticisms to some of the assumptions of the theory have provoked the need for further research in the area.

5. Conclusions and Recommendations

In summary, the study found that agency theory provides a coherent framework which can be used to analyse managerial accounting issues. The model offers unique, realistic and empirically testable perspective on problems of cooperative effort and can therefore be argued for adoption when investigating agent-principal problems facing firms.

Using the principal-agent relationship as a basic framework of analysis, the interest-aligning mechanism of agent and principal can be further expanded to a much more complex nature by taking into account the existence of multiple principals for an agent. The reality of a modern day organization is typically an example of multiple principals. In this regard, the dynamics of the interaction of the various principals representing different types of interest may be an area that merits further studies. In addition, the major assumptions of the agency theory, particularly the self-interest behavior and work-aversion attitude of the agent, have been questioned, and have entered to be scrutinized under different cultures (Osterman, 2006; Kren and Tyson, 2009) hence more empirical research in this line of thought will also be recommended.

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