A NOTE ON THE IMPLICATIONS OF MINIMUM PAY REQUIREMENT

Chiaho Chang, Department of Accounting, Law and Taxation, Montclair State University, 1 Normal Avenue, Montclair, NJ 07043, 973-655-7458, changch@mail.montclair.edu

ABSTRACT

This paper deals with the moral hazard problem in a simple agency setting by comparing characteristics of the optimal compensation contracts with or without the minimum pay requirement. We find that, even when the agent is risk neutral, the principal is compelled to pay extra whose amount is equal to the agent's extra utility gain. The moral hazard problem is not lessened in the presence of the risk-neutral agent as long as the minimum pay requirement is in place.

INTRODUCTION

For various reasons, delegation becomes a norm in an organization. With it comes the problem of moral hazard in which the agent (the party being delegated an assignment) tends to take care of her own interests first to the detriment of the principal's (the party that delegates the assignment). The thrust of the problem rests upon two conditions, according to Holmstrom (1979). One is that the parties' interests are not properly aligned. The principal, for example, prefers due diligence on the part of the agent in order to extract better result from the assignment. The agent, on the other hand, favors less work and avoids risky (but potentially rewarding) approaches. All these can be prevented if the principal can perform the assignment himself. Obviously, this option is not available when delegation is necessary in the first place. By delegating, the principal also forgoes the chance to directly observe what (and how well) the agent is doing. The combination of both (misalignment of interests and unobservability of the agent's actions) leads to the moral hazard problem.

The principal's remedy to the moral hazard problem is his reliance on information available to him – any signals, no matter how remote or indirect, linked to the agent's behavior or actions. The compensation contract is thus designed based on the available signals to provide incentives to the agent to work in a way preferred by the principal and lessons the adverse impacts of the moral hazard problem.

The argument above is in line with the traditional exposition of the moral hazard problem (see, for example, Gross and Hart 1983; Itoh 1993; Macho-Stadler and Perez-Castrillo 1993) by assuming that (1) the principal can not observe the agent's actions and (2) the agent is risk (and work) averse. Since the incentives built into the compensation contract inevitably increase the agent's risk exposure, the agent's choice of actions will only lead to the principal's second-best solution in terms of risk sharing and effort inducing.

An alternative approach to the moral hazard problem assumes that (1) the principal's observation of the agent's actions is imperfect, (2) the agent is risk neutral and (3) there is a minimum pay restriction. The presence of (3) may be regulated by law (such as the federal minimum wage requirement), or to guarantee the agent's minimum living standard. Allgulin (1999), Demougin and Fluet (1997), Kim (1997), Park (1995) and Shapiro and Stiglitz (1984) adopt these assumptions. When the agent is risk neutral, the incentives inherent in the compensation contract will no cause the principal to pay extra to

take care of the agent's risk sharing concerns. However, the compensation contract must stipulate a base salary that is at least as much as the minimum pay to guarantee the agent's participation. What sort of changes does the compensation contract have to be made to accommodate such requirement? What are the characteristics of the new compensation contract vis-à-vis the one under the risk aversion assumption? What are the impacts to the principal's employment costs and the agent's utility?

This paper looks at the issues of contract design under different assumptions to address the moral hazard problem in a simple modeling setting. The remainder of the paper is organized as follows. The next section provides a model building process, followed by the development of incentive contracts. The last section concludes the paper.

THE MODEL

(Skipped)

INCENTIVE CONTRACT DESIGN

(Skipped)

CONCLUSION

The problem of moral hazard is prevalent in organizations. Because of the principal's inability to observe what the agent is doing, combined with the agent's aversion to risk and work, the compensation contract will involve agency cost in a second-best world. The tradeoff between risk sharing and incentive inducing will not disappear.

When the agent is assumed to be risk neutral, the principal should be able to provide enough incentive to the agent without incurring extra cost to compensate for additional risk exposure, thereby eliminating the moral hazard problem. It is in this context that the minimum pay requirement is imposed, whose justification can be grounded on legal or social foundation. The principal in this scenario has to pony up the payment to the agent, an increase that contributes to the agent's higher expected utility. The agency cost is back. The minimum pay requirement restores the moral hazard problem even if the agent is risk neutral.

This paper develops a simple agency model to analyze the situation and characterizes the optimal compensation contract for both the principal and the agent. This paper looks at the single-agent case in one period. When more than one agent is involved, communication and/or monitoring may be internalized to alleviate the agency problem, which is beyond the scope of the paper.

APPENDIX

(Skipped)

REFERENCES

(Skipped)