



16th Annual Conference on Finance and Accounting, ACFA Prague 2015, 29th May 2015

## Management Accounting and Agency Theory

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### Abstract

The main objective of this paper is to explain how management accounting developed and where we see potential for extending the concept of managerial accounting with utilization of agency theory. The paper first describes factors affecting the development of managerial accounting. Special emphasis is devoted to describe three branches of agency theory together with their implications on the field. The paper also discusses overall possible direction of using the agency theory within management accounting.

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Peer-review under responsibility of University of Economics, Prague, Faculty of Finance and Accounting

*Keywords:* Management accounting; Agency theory; Information asymmetry

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### 1. Introduction

In the current turbulent period ever changing economic conditions it is necessary to use flexible tools and approaches. Stronger requirements to reduce costs and increase efficiency, which resulted from struggle for competitiveness reflected in the management style of individual enterprises. These aspects should be taken into account in the management accounting, which leads us to a re-examination and extension of this concept in his classic form. The reflection on some economic theories in management accounting could help bring new insights that ultimately may help solve some of today's critical issues.

The aim of the paper is to explain how management accounting evolved and where we see scope for further extension of the concept of managerial accounting by using agency theory.

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For the design of the future direction of management accounting is necessary to understand the development of management accounting. When interpreting the development of managerial accounting course, we face the significant differences concerning the links to practice. On the one hand, academic theories criticized for inadequate response to practice, but on the other hand, we can say that the observed development of managerial accounting is not random, it is based precisely on the practical requirements. The work is based on the assumption that discoveries in this area come from two sources, which is a corporate practice and concepts, models and theories from other branches of learning fields.

## **2. Development of managerial accounting**

Academic literature is characterized by inconsistent approaches to the development of managerial accounting, the prevailing approach represent authors Kaplan (1998) and Drury (1996). The opinion of management accounting is based on business practice and should serve to promote business activities.

In the development of managerial accounting find many milestones that led to the formation of managerial accounting in its present form. According to Kaplan (1998), managerial accounting associate with the birth of large companies between 1850 and 1925, which resulted in the need for information necessary for planning and control. At this time, companies needed to streamline production, which led to the rise of managerial accounting. The manufacturers have started to hire workers on long-term contracts, which before the industrial revolution was not practiced. Like other changes that support the development of management accounting department would specify the operation of the factory and the building headquarters. Factories were newly placed separately from the headquarters, which increased the information system and the need to effectively evaluate managers and employees of the company. The role of accounting and was no longer limited to the mere keeping of records, but had to meet the requirements of practice and provide the necessary information.

Mass production and distribution also significantly affected the concept of management accounting, which had to provide information about the turnover in individual regions and generate formal reports on the performance, which is little different from reports provided by the current management accounting. The need for management information lead to creation of budget planning and control systems, so as to ensure that the different activities of the various divisions are in line with business objectives.

The described changes have significantly boost the development of management accounting, which has become an essential part of the company. Johnson and Kaplan (1987) concluded that the managerial and financial accounts should be separated because of the different orientation of the provided information because the management accounting provides information for internal use. In contrast, financial accounting provides information to external users. Financial accounting should provide information for recording transactions and provision of data necessary for the compilation of financial statements that are intended for owners and investors. Management accounting should be used to assess and promote the company's internal processes rather than merely measuring profit.

In recent years a business environment has undergone considerable changes. Management accounting had to respond to this development. Changes in the business environment as degradation of barriers to the movement of labor and capital, technological development, development of information technologies contribute to increased competition (Šoljaková, 2006). As a result of increasing competition and globalization of markets has been the excess of supply over demand, and businesses must look for their customers. On this situation firms react with orientation on customer needs and with effort to ensure long-term prosperity. The new basic question is not "what" but "for whom to produce", which resulting in need to shift management accounting, so that it can meet these new requirements. (Šoljaková, 2006).

Managerial Accounting has traditionally focused on financial results and has remain oblivious of other indicators such as customer relationships, market position, customer loyalty, employee motivation and loyalty. It is the development of non-financial indicators, and links to external business environment (suppliers, customers, competitors), which impose new demands on the system of management and information support in the context of management accounting.

Classical concept of managerial accounting aims adjusting to a more flexible environment and focus towards strategic cost management. In recent years we observe the rise of strategic management accounting as well as new concepts of management accounting, which provides strategic insights into the management; which also contributes

newly conceived objectives, content and structure of management accounting. The total extension of managerial accounting provides new information that may help solve critical problems. Methods and concepts of managerial accounting is somewhat of a starting point for further development in this area. Proactive approach and desire to respond to the situation by shifting managerial accounting from a passive role towards solving action and strategic approach.

### 3. The agency theory

The agency theory has been one of the most important theoretical paradigms in managerial accounting for the past 25 years. Its concept provides a rich theoretical framework for understanding processes in the company from the perspective of principal-agent.

Jensen (2000) defines the relationship agency, such as a contractual relationship in which one or more persons (the principal) employs one or more persons (agent) to perform some action in his favor, which requires delegating certain decision-making powers to the agent. Agency theory assumes that there is a contractual relationship and therefore the two contracting parties, one party can be described as principal, director, supervisor and then the other side an agent thus subordinate. Principal will delegate decision-making authority to the agents and expect that the agents will perform certain actions in exchange for a reward. As principals and agents are considered rational economic person motivated by self-interest, which may vary depending on preference, conviction and information. Since the principal is expected to provide capital and bears the risk, while the agent is expected to perform tasks, make a decision in favor of the principal and take the risk too. (Lambert, 2001).

First, there is a contract between principals and agents, the contractual relationship defines what criteria in the agent’s performance will be evaluated, see Fig. 1.

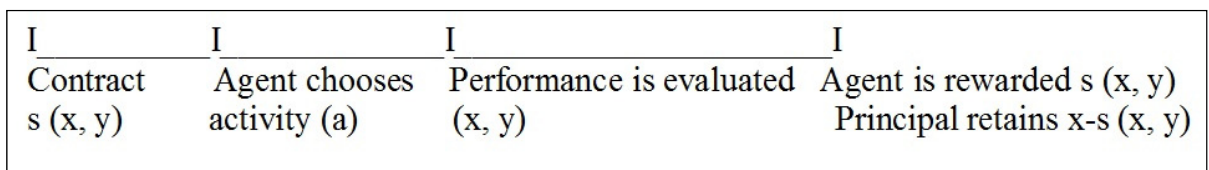


Fig. 1. Agency theory, source: Author, adapted from Lambert (2001)

Alignment function denoted as "s" and "x" represents the company's bottom line, "y" represents the vector utilized in evaluating the performance of the contractual relationship. Agent selects the vector activity "a", which includes operational decisions, financial decisions or investment decisions. Agents and other exogenous factors affecting the implementation of the results of the company. After we jointly evaluated the results of the company, the agent is rewarded by contractual agreement. This sequence of events takes place smoothly when kept key assumptions.

The result of the company 'x' can be measured and may be contractually binding. It is further contemplated that may be "x" may monetise and relate to one period. Agent can choose actions, steps and principal fails to completely observe this option. The result can influence events not under the control of the agent. Principal and agent assume some risk, generally the higher the risk of presumed agent, the higher compensation for the agent.

The agency theory can be approached as a positive agency theory or as a normative agency theory (Jensen, 1983). The term comes from the positive philosophy and is used in economics since the Friedman. Positive agency theory is less mathematical than the normative agency theory and focuses on identifying situations in which principals and agents have potentially conflicting goals. Positive theory describes the control mechanisms to limit self-serving behavior. Emphasis is placed almost exclusively on relations between owners and managers (Eisenhardt, 1989).

Normative agency theory focuses on the design of a more general theory that can be applied to various relationships, such as employer-employee buyer-supplier (Eisenhardt, 1989). Taking a positivist theory agency can enrich economics comprehensive descriptive view of the organization. For normative theory of agency, we can say that it is a more general approach, which has a broader focus and try to propose the optimal solution to the problem.

(Jensen, 1983). The core normative theory agency form work on a compromise between the cost of the measurement behavior and cost of measurement results and transfer of risk to the agents (Eisenhardt, 1989).

### 3.1. *Problem of agency theory*

The agency relationship as we have described it above face a fundamental problem, which is dealing with the behavior of the agent and his desire to maximize their own utility function, which may not be consistent with the objectives of the principal. From this raises the agency problem where the agent may not act in the best interest of the principal. According to Akerlof (1970) the agency theory is characterized by information asymmetry, moral hazard and adverse selection.

Information asymmetry arises when one party is better informed than the other side. On the contrary the elders of economic theory is based on perfect awareness of contracting parties. In the case of information asymmetry one party has an information advantage over the other, this situation arises in the market normally. In most cases, it is the agent who has an information advantage over the principal, the reason may be his direct involvement in the daily operations of the company. Information asymmetry can be seen as a form of market failure, which causes inefficient allocation of available resources.

Information asymmetry leads to the formation of two specific problem of agency theory. The very existence of information asymmetry may result in moral hazard, where one of the parties exploits the information asymmetry for their own benefit. Principal has limited possibilities to monitor the behavior of an agent and can evaluate the manager's performance only by results. In such cases, the agent (manager) may be tempted to shirk his duties because the principal may not be able to monitor and detect such behavior without incurring additional costs for monitoring the activities of the agent.

Information asymmetry may also lead to an adverse selection, which arises from the lack of information. Principal cannot assess the effectiveness of agent behavior due to lack of information. An example might be a situation where the agent's tasks itself is so highly complex and if an agent misrepresents his ability but the principal is unable to verify the actual ability of the agent either at the time of hiring or even while the agent is working on the project. This may lead to the fact that the principal selects an agent who is not the most appropriate for a given project / position.

The agency problem is also related to the specific type of shareholder-manager relationship, that received the attention of research in management accounting field. The separation of ownership and management of the company is crucial in shareholder-manager relationship. The separation may lead to a situation where a shareholder fails to observe the behavior of the manager. This may lead to the growth of the risk that the manager will not act in the interests of shareholders and may begin to behave opportunistically. Under the opportunistic behavior of agent we can imagine especially fraud but also incompetence, excessive consumption and agent's indifference. This deception can take a variety of forms, but probably the best known form is tunneling, when the agent tries to secretly drain assets from the company, that he manage. Under agent's excessive consumption we understand all consumption, which is not directly related to the performance of its functions in the company. Agent's indifference is also linked to the performance of its functions, when agent approach the work laxly. In case of incompetent agent we face deficiencies in basic management skills, to which the function is associated. These forms of agent's behavior negatively affect the company's operations. This imposes a risk, to which the shareholder-manager relationship is exposed.

The agency problems can be mitigated or eliminated entirely by monitoring the agent's activities or providing incentives that engender behaviour congruent with principal's interests. Agency cost can be considered as all the costs that arise due to the existence of the relationship itself such as agency, monitoring costs, bonding cost and residual loss.

Monitoring costs incurred in connection with monitoring of agent, we're talking about the cost of the audit, investment management structure, the cost of information system and other costs of supervision, which help to eliminate opportunistic behavior of the agent.

Bonding costs used to help align agent's interests with principal's interests. We can imagine the cost of the reward system that minimise the loss of agent's inefficiency or opportunistic behavior.

Residual loss, this term imagining all other costs arising from the conflicting interests of principal and agent in spite of the monitoring process.

In general there is a trade-off between monitoring costs and bonding costs. The monitoring system is supposed to provide information for the manager to be able to identify and eliminate opportunistic behavior of the agent. Due to decreased possibility of agent's opportunistic behavior a reduction in the need of bonuses and bonding costs is achieved. Monitoring agent's behavior requires additional expense on information system. This system should be designed to provide information about the agent's activities. Managers are trying to reduce the amount of these costs because it is very difficult to evaluate effectiveness of the system.

Baiman (1990) argues that loss of efficiency due to the agency problem, has increased the need for managerial accounting in the company. Management accounting comes with tools that help to provide information necessary for decision-making. These tools may be for example system of budgeting and performance measurement system.

Budgeting is very important in a sense that it sets targets for agents, but also monitors the agent's activities. Using analysis of variance principal can evaluate the agent's performance and continued to investigate the causes of deviations from budget targets.

Performance measurement system based on the basic principle of what you want to drive, you must also know how to measure it. "Measure" is the key to control. If the company cannot measure then we cannot control. If you cannot control it, you cannot manage it (Král, 2009). Authors such as Kaplan pointed to the need to link the entire performance system with the company's strategy. Synonyms of performance system should be terms such as simplicity, clarity, dynamism. When creating the system must be taken into account both financial and non-financial indicators, there must also be a feedback and efforts to continuously improve of the system. If companies are to survive and thrive in the information age competition, they must use performance measurement systems derived from their strategies and capabilities. Taking into account the agency theory we assume that the performance measurement system designed to alleviate the opportunistic behavior of the agent.

According to Lambert (2006), the agency theory helps to address two basic questions:

How are characteristics of information, accounting and reward system affect motivation problems? How the existence of the motivation problem affects the design and structure of information, accounting, and design of reward system? The main benefit of agency theory can be seen in the fact that we are able to explicitly include conflicts of interest, motivation problems, and mechanisms for management motivation problems in our models. Management accounting addresses control and performance measurement in company and consideration of agency theory seems adequate step in the development of management accounting.

### *3.2. Problem of agency theory*

Baiman (1990) carried out an extensive search of the agency theory, which provides analysis of the major theoretical fundamentals and technical issues that arise when modeling problems of management accounting from the perspective of agency theory. The authors identify three basic branches of agency theory, which can be applied in the context of management accounting research.

- Principal-agent model
- Transaction cost economics model
- Rochester model

In this part we briefly mention the basic benefits of these models. Also we point out their limits when the models are used in the context of management accounting.

### *3.3. Principal-agent model*

With the principal-agent model we focus on the choice of ex-ante contracts and options of information system. The model is based on the rational behavior of individuals and assumes that they are able to anticipate and evaluate the probability of future eventualities. The actions of individuals in the model is endogenously derived based on their specified preferences and beliefs. From individuals we expect that they will act exactly according to their own preferences.

Contracts are complete in the sense that for each event, they indicate the actions to be taken by the contracting parties. This model expects perfect justiciability of contractual rights.

For all principal-agent models there is an information asymmetry assumption. Agent has information, to which the principal cannot costlessly gain access. Finally, it is also assumed that the agent is risk-averse.

Baiman (1990) states that the main benefit of the principal-agent model in managerial accounting is to ensure coherent and useful framework in which we can show management accounting and imagine managerial accounting issues. Principal-agent model appears in texts of managerial accounting for example Kaplan (1982).

Model emphasis on rational player and an optimal solution forces the research to study the use of management accounting practices in the context of models in which is a underlying inefficiency, for which the use of these procedures may be an optimal solution (Baiman, 1990, Demski, 1981). Principal-agent model brings new recognition of the role of management accounting practices and their information needs.

### *3.4. Transaction cost economics model*

The model assumes that individuals are acting in their own interest. This can be described as opportunistic behavior - individuals do not always behave according to the rules, but they prefer their own interests.

Unlike principal-agent model, here we assume that individuals have limited rationality. As a result of bounded rationality. So individuals can not anticipate all possible future contingencies and therefore they cannot incorporate these unforeseen contingencies into employment contracts *ex ante*. Therefore, unlike the principal-agent model, in this model we assume that contracts are incomplete. This means that there may be future events, which are not contractually treated. Due to limited rationality model can no longer rely on perfect legal enforceability of contracts. The principal-agent model contracts are deemed complete and therefore there cannot be *ex-post* bargaining. Now incompleteness of contracts in the model naturally leads to further study of contracts and considerations on the rewarding system.

The model provides an explanation of unusual relationships between companies that are trying to build or use of monopoly power. Analysis based on the model showed that some of these relationships may be due to a desire to minimize transaction costs. The model focuses on the resolution of contractual relationships between firms, unlike the principal-agent model, which focuses more on contractual relationships within the company.

Perhaps the best known use of the model economy transaction costs within management accounting presents in the work "Relevance Lost" Johnson and Kaplan (1987). The authors consider the organization as an alternative to a market mechanism for coordinating economic activity. Management accounting is becoming a crucial element in the corporate environment, which provides monitoring and information management support company.

### *3.5. Rochester model*

Rochester model is based on the work of Jensen and Meckling (1976). This model is very similar to the transaction cost economics model that also mentions opportunistic behavior and transaction costs. The model, however, is based on the positive accounting theory (Watts and Zimmerman, 1986). One benefit of Rochester model is that the framework is applied to agency problem and its aim is to understand how the agency problem occurs and how it can be mitigated by the organizational structure.

Research based on a positive model of Rochester has a tendency to identify situations in which there are differences of interests between principal and agent evident and evaluates the cost-effectiveness in the setting of the control mechanisms (Hoque, 2006).

All three models provide a similar framework for analyzing the behavior of individuals in the economic context for understanding the efficiency losses caused by the differing interests of individuals and an analysis of the consequences of different control processes to mitigate the loss of efficiency caused by the agency problem. Now the efficiency loss caused by agency problem raises the need for managerial accounting in the company.

#### 4. Use of agency theory in the context of management accounting

Roirdan (1987) notes that the role and value of management accounting will differ depending on whether the theory of agency we assume completeness of the contract or not. It should further be appreciated that besides agents even principals can behave opportunistically if they have the opportunity. However, most research on agency theory assumes that the principal's decisions are verifiable and can be contracted, therefore there are not subject to moral hazard.

Research in management accounting is significantly focused on performance evaluation and problems concerning the control of the company. This includes management incentives and behavior of principals and agents. The agency theory comes from a concept that can predict managerial and organizational output in response to the financial information and procedures. Management accounting also begun to address the value of monitoring. Research in this area has focused on the design of optimal monitoring system. Principal must decide how much to invest in the production process and how much to the monitoring system. Kumar (1989) found that if the principal invests heavily in the production process, then the company will invest in a monitoring system to reduce the agency problem.

In addition to the above-mentioned values of the monitoring system, the research also focuses on the manipulation of results. Relatively well-known fact is that managers seek to smooth out and manipulate reported results. Healy (1985) confirmed the link between choosing the method of financial reporting and contractual compensation. In the case of altering results the agent is privately informed about actual outcomes. However information sent to principal are not the actual results but the altered results. So what leads the principal to delegate the selecting the reporting method on agent? In this area, for example Demski (1984) offers an explanation based on the fact that the agent has private information that the principal considers valuable and wants to obtain it.

Agency theory applies also to relations between organizations and tries to explain the relationships between them (Hopper, 2007). An important prerequisite is the imperfection of contracts, it is impossible to incorporate all future contingencies in the contract. Agency theory explains the inefficiency in relation buyer-seller, which is the result of information asymmetries and opportunism. Information asymmetry in this case means that one company has information that can be used against another company with which he has a contractual relationship. To eliminate the information asymmetry between firms, it would be better to promote exchange of information. For management of inter-organizational relationships it is also necessary to provide incentives that motivate and educate firms to not behave opportunistically. Improved information exchange leads to greater efficiency in the supply chain. Suppliers and customers can easily identify cost reduction. Information can be exchanged for example by using target costing, performance measures or interviews. However, promoting the exchange of information increases the risk of future misuse of such information. When it comes to contract negotiations the company may seek to ensure its future negotiating position using the provided information.

By combining agency theory and managerial accounting we found out that there is a growing need for tools that monitor the behavior of the manager. In addition, there is also a requirement to control and manage the monitoring costs. For the enterprise, it is necessary to balance the monitoring costs and benefits. Agency theory provides a description of manager's behavior's, which has a direct impact on the value of information in managerial accounting. Obtaining information in managerial accounting is not without incurring the cost of this acquisition, from this perspective, we must consider where this information is used and what is their value for the company. The obtained information should reveal the self-serving behavior manager (agent) in an enterprise. If the information of management accounting are not able to reveal this opportunistic behavior based on agency theory, then we spent inefficiently costs and is a waste of resources companies. The benefit of agency theory is that it forces the practice to take account of the value of management accounting techniques.

In relation to management accounting, we identify problem areas, which the research in the field agency theory further discussed. The first part deals with the causes and effects of separation of ownership and the company management, which are characterized by modern businesses. The second part refers to the agency costs and their effect on firm value. The third issue deals with the contractual relationship between principal and agent when trying to design the structure of contractual relations in which the agent will watch the interests of the principal. The first two rounds can be included in the positive theory and the third problem falls more into the normative theory.

Possibilities for future research can be seen especially in a better understanding of how information of management accounting transformed into useful and reliable information, which can be used for performance

evaluation. While the increased availability of information evaluating performance helps to more accurately predict business results. Another line of development provides an analysis of agency theory, which takes into account new forms of organizational structure. The organizational structure is a key factor through which the problem of management has traditionally been discussed and solved. Future research should pay more attention to motivational mix and also take into account monitoring strategies in the new organizational structure of the company.

## 5. Conclusions

This paper summarizes the development of managerial accounting with emphasis on the significant changes that have shaped this concept to the present appearance. Globalisation and liberalization of markets leads to increased competition and firms require quality and timely management information. The newly created organizational structure require changes in management practices and a flexible system of management accounting. Given these changes in the business environment, managerial accounting must be able to provide accurate and reliable feedback on the relative success or failure of the firm's strategy.

Management accounting passed during the last two centuries significant changes, but we still have a long way of development during which management accounting must focus more on addressing the needs of companies in economic theory. By combining managerial accounting and agency theory we have created a framework for understanding and analyzing relationships within the company, where one party delegates the authority for decide to other parties.

Agency theory is based on the assumption that individuals are rational-minded, while favoring their own profit before corporate. The agency theory describes a problem that managers already observed in the fifties. We may conclude that the conventional theory of the firm was unable to focus on agency problem.

Crucial benefit of agency theory within the concept of managerial accounting is also application in the area of performance measurement, reward system, control and management within the associated cost analysis. We can identify space for further research both practically and theoretically oriented in the transformation of management accounting.

## Acknowledgements

This paper has been prepared under Institutional support of Faculty of Finance and Accounting, University of Economics, Prague (IP100040), which authors gratefully acknowledge.

## References

- Akerlof, G., 1970. The Market for „Lemons“: Quality, Uncertainty and the Market Mechanisms. *Quarterly Journal of Economics*, vol. 84, no. 3.
- Baiman, S., 1990. Agency Research in Managerial Accounting: A Second Look. *Accounting Organizations and Society*, 15 (4), pp. 341-371.
- Demski, J. S., Patell, J. M. & Wolfson, M., 1984. Decentralized Choice of Monitoring Systems, *The Accounting Review*.
- Drury, C., 1996. *Management and cost accounting*. International Thomson Business Press London.
- Eisenhardt, K., 1985. Control: Organizational and Economic Approaches. *Management Science*, vol.31, no. 2, pp. 134-149.
- Healy, P., 1985. The Impact of Bonus Schemes on the Selection of Accounting Principles. *Journal of Accounting and Economics*. pp. 81-108.
- Hopper, T., Scapens, R. and Northcott, D., 2007. *Issues in Management Accounting*, 3rd, Prentice Hall, Financial Times, London.
- Hoque, Z., 2006. *Methodological Issues in Accounting Research: Theories and Methods*. Spiramus Press, London, pp. 537, ISBN: 1-904905-13-7
- Johnson, H. and R. Kaplan, 1987. *Relevance Lost – The Rise and Fall of Management Accounting*. Harvard Business School Press, Boston, Ma.
- Jensen, M. and W. Meckling, 1976. Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership Structure. *Journal of Financial Economics*, October, pp. 305-360.
- Jensen, M., 2000. *Theory of firm: governance, residual claims, and organizational forms*. Cambridge:Harvard University Press, 2000
- Jensen, M., 1983. Organization Theory and Methodology, *The Accounting Review* pp. 319-339.
- Kaplan, R., 1982. *Advanced Management Accounting*. Prentice Hall, Inc., Englewood Cliffs, NJ.
- Kaplan, R., 1984. The Evolution of Management Accounting. *The Accounting Review*, vol.59, no. 3, pp. 390-418.
- Král, B., 2008. *Manažerské účetnictví*. Management press, 2008. 624 s. ISBN 978-80-7261-141-6.
- Kumar, P., 1989. The Generalized Principal-Agent Problem and Optimal Monitoring: A First Order Approach, Graduate School of Industrial Administration, Carnegie Mellon University.
- Lambert, R.A., 2001. Contracting theory and accounting, *Journal of Accounting and Economics*, vol. 32, pp. 3–87.



- Lambert, R.A., 2006. Agency Theory and Management Accounting. In Handbook of management of Accounting, edited by C. Chapman, A. Hopwood, M. Shields, pp. 247 - 268.
- Riordan, M., 1987. Hierarchical Control and Investment Incentives, Stanford University Working Paper
- Šoljaková, L., 2009. Strategicky zaměřené manažerské účetnictví. Praha: Management press. 206 s. ISBN 978-80-7261-199-7.
- Watts, R. L & Zimmerman, J. L., 1986. Positive Accounting Theory (Englewood Cliffs. NJ: Prentice-Hall)