General Aritcle:

Accounting Practices in the Ancient Indian Peninsula: Glimpses from Kautilya'S Arthashastra

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Abstract

Many Indians must have heard of Chanakya a.k.a Kautilya. He is credited with compiling the treatise on statecraft called the "Arthashastra". This treatise contains fifteen distinct chapters or parts encompassing all components of statesmanship that a ruler needs to run the affairs of his kingdom. This paper briefly narrates some of the accounting practices prevalent in Ancient India during the Mauryan period as enumerated in Kautilya's Arthashastra.

Keywords: Accounting, Auditing, Forensic, Whistle Blowing, Chanakya, Arthashastra.

Introduction

The Arthashastra is a comprehensive treatise covering virtually all aspects of human life. Artha means wealth and Shashtra means science; thus Arthashastra literally implies the science of acquiring and managing wealth. Arthashastra was conceived and named as the Science of Wealth. It focused on creation of wealth as the means to ensure the well being of the state[6]. The treatise comprises a cohesive whole, including economic administration of the state, trading, imports/exports, retailing, transportation, warehousing, taxation and consumer welfare. A significant part of the Arthashastra deals with the science of wealth or economics. When it deals with politics, the Arthashastra describes in detail the art of governance in its widest sense; the maintenance of law and order of efficient administrative machinery[7].

Kautilya was a great proponent of the notion that the state or government has a crucial role to play in maintaining the material well-being of the people in a nation[7]. He focused on preservation of the state through alliances and viewed good counsel and fair judgment as the constituents of the state's power and as more useful than military might. The Arthashastra takes a managerial perspective on managing the affairs of the state[6]. A perfect balance had to be maintained between state management and people's welfare and this was the essence of Kautilya's economic treatise, the Arthashastra, created about 2,300 years ago. The Arthashastra contains virtually all aspects of commercial transactions in excruciating detail.

Historical Background

Part myth, part legend and part history, Kautilya was believed to be the person instrumental in creating the Mauryan dynasty. He served as teacher, mentor and chief minister of the Mauryan ruler Chandragupta Maurya. Chandragupta was contemporary of Alexander, the Macedonian conquistador who history recalls to have conquered much of the then known civilized world. Alexander died in 323 BC. Chandragupta Maurya established his kingdom around that time. Some Greek historical records suggest that he may have visited Alexander in 326 BC.

Not much is known about the early life of Kautilya, but the legend says that his father belonged to the Kautilya Gotra (clan), hence he is called Kautilya. History suggests his given name was Vishnu Gupta. To make the things more confusing and at the same time interesting for the historians, he was also known as Chanakya since he was born in the village of Chanak. The diplomatic quarters in the capital city of modern India, New Delhi is named Chanakyapuri in honor of Chanakya.

Chanakya was educated at Takshashilla, an ancient center of learning located in north-western part of ancient India (present-day Pakistan). He later became a teacher (acharya) at the same place. Early life of Chanakya was connected to two cities: Takshashila and Pataliputra (present-day Patna in Bihar, India). Pataliputra was the capital of the Maghada kingdom which was connected to Takshashila by Uttarapatha, the northern high road of commerce. University professors at that time were polyhistors who used to teach variety of subjects mostly to princely class. Kautilya mentored Chandragupta Maurya in the diverse fields of knowledge that he would eventually need to establish his kingdom. Chandragupta defeated the powerful Nanda Empire of Maghada and established the new Maurya Empire. Kautilya served as advisor and chief minister to Chandragupta.

The Kautilyan Economy

The Arthashastra divides the economy of the state into three basic types of activities - agriculture, cattle rearing and trade. The state accumulated wealth by generating resources in the form of grains, cattle, gold, forest produce, trade and labor. Kautilya created a centralized administration for the newly created empire. Because the regime was authoritarian in nature, everything was organized in the interest of the state. An elaborate civil service existed and there were departments for accounts, revenue, mines, arsenals, taxation, agriculture, trade and navigation[3]. Besides maintaining the existing productivity in forests, factories, mines and cattle herds, the King was also responsible for promoting trade and commerce by setting up market towns, ports and trade routes and building storage reservoirs[7].

The whole economic policy was regulated and controlled by the state. It was the largest employer of labor. All industrial and natural resources were owned by the state. The state also entered the market as a trader. It engaged in selling activities at the market place. It had its own superintendent of commerce who would supervise the dealings in the market. The revenues earned by sale of resources owned by the state would be directed to the treasury. Thus trade benefited by adding wealth to the state. The principle of modern mixed economy can be traced back to Kautilya's times[7]. Establishment of the vast empire acted as a stimulus to production and exchange[8]. Weavers and other handicraftsmen, braziers, oil-millers, bamboo-workers, corn-dealers and artisans fabricating hydraulic engines, started organizing themselves into economic corporations known as guilds which often served the purpose of modern banks[11].

The notion of monopoly existed even then, with certain producers being granted exclusive rights to sell their respective wares in the market. Monopolistic firms would be those individual traders dealing exclusively in the marketing and sales of certain commodities which would be available in the market only through them. Profit margins on the sale of monopoly goods were a significant source of revenue. The monopoly tax was collected by the state, in the form of a license fee, whenever a private manufacturer or trader of a state monopoly item was granted permission by the state to sell. This was under the control of the chief controller of state trading who was responsible for orderly marketing, maintaining buffer stocks, avoiding excessive profits and collecting the transaction taxes[7].

Private trade was not encouraged for most commodities, except very few goods which were not indigenously available, as the state was anxious to preserve its lucrative monopolies. Prices were controlled[3] so as not to let sole producers of commodities engage in free-riding practices which could potentially the market mechanism structure.

Money was used as the medium of transaction in the form of coinage. The coin used was the pana which was subdivided as follows: sixteen mashakas to a pana and four *kakanis* to a mashaka. The coinage in circulation was: silver coins of one, half, quarter and one-eighth pana and copper coins of one mashaka, half a mashaka, one kakani and half a kakani. The value of the coinage was sought to be maintained by stringent punishments for counterfeiting. A special official, the Coin Examiner, certified the genuineness of coins meant for circulation and exchange in market transactions. The state and private merchants, both local and foreign, were involved in trade. These merchants could sell their wares to customers in the marketplace, or to the state in bulk quantities. The state would thereafter distribute these goods for sale in the market place, while retaining back some stock as reserve/buffer[7].

The concept of contracts and contractual agreements had its significance in society and was subject to the law. Any contract entered into by anyone with others of his own class, community or group would be held valid, provided that the contract was concluded in a suitable place and at a suitable time, observing all the due formalities, including the presence of witnesses and further provided that all the details of the object of the contract, such as the appearance, distinguishing marks, quality and quantity were properly noted down[7]. The Chief Controller of State Trading was responsible for the equitable distribution of local and foreign goods, buffer stocking, sale of Crown commodities and public distribution. He could appoint private traders as agents for the sale, at fixed prices, of Crown commodities or sell them direct to the public through state-owned retail outlets[7].

The governance structures then projected the potentialities of centralized administration but having adjusted to the socio-economic patterns and differentiations. Urban administration had its hierarchy of officers, supporting supervision of production and exchange in urban centers, presumably to control revenues[4].

Accounting Practices during the Mauryan Period

The content of Kautilya's work indicates that the pre-requisites for the establishment of the discipline of accounting already existed in India during the Mauryan period. Kautilya used fractions, percentages, summation and subtraction operations and even permutations and combinations quite extensively, displaying a deep knowledge of arithmetic[9]. He developed not only bookkeeping rules but also the procedures for preparing periodic income statements and budgets and performing independent audits[7].

Book-keeping and Mandatory Accounting Functions: Kautilya devised a system of bookkeeping rules and financial rules or codes of conduct to manage the financial affairs of the state; he developed a format for 'recording, classifying and summarizing' data on financial variables and suggested a comprehensive approach to maintaining accounts for revenue, expenditures and net balances for each department[7,9]. According to Kautilya, the Comptroller-Auditor would maintain detailed accounts, along with financial closing dates[7,9].

Kautilya’s system detailed in the Arthashastra required every trader to compulsorily maintain an account book with every transaction element recorded by date which had to be presented to the superintendent of commerce while paying the taxes[2]. Every transaction had to be recorded on the date of transaction in the account book; not maintaining such a book was considered fraudulent and was punishable. The terms used in Arthashastra viz. income, expenditures, excess, surcharges, receipts, payments, balances, current, estimated, accrued, outstanding etc. clearly signify that time’s complete and comprehensive accounting system just like the modern day[2,10]. Arthashastra’s description of accounting concepts in many cases parallels modern accounting use as suggested by evidence of periodic budgets for revenues and expenditures, fixed and variable costs, manufacturing accounts, non-financial information[10]; work-in-process and finished goods inventories[5].

Kautilya emphasized maintenance of accounts following a particular accounting period of 364 days and nights which constituted the year of work; herein, accounts were slated for reporting on the full moon day when the officers came with sealed accounts books and balances in sealed containers and these accounting records were preserved in the record office which was supposed to face the east/north direction with separate place for record keeping activities[2,7].

Financial Accounting System: The state, even in those days, exhibited a closely controlled and orderly financial accounting system. The Chancellor was responsible for collecting revenue from the whole of the country, along with his delegates, the Governor Generals in each city[7]. It was his duty to prepare the budget and maintain detailed accounts of revenues and expenditures pertaining to all activities. The governors and record keepers in every city were to keep records of the number of people in each family, their gender, caste, family name, occupation, income and expenditure patterns[7]. Manufacturing establishments also kept a stock register showing the purchases of all raw materials, the quantities of the same consumed in production, stock changes due to mixing of materials and a manufacturing costs register showing expenditure on the labor employed and wages paid.

In the case of stores of all kinds (jewelry, articles of high and low value and forest produce), the record books showed the prices, quality, quantity (by weight or volume) and description of the containers in which these were stored[7]. The procedure of year-end Audit existed even then. Thus, all individuals and establishments involved in manufacturing, trading, retailing and all such activities which engaged in monetary transactions were subject to audits and scrutiny.

The Chief Comptroller and Auditor was responsible for the maintaining the Records Office where the accounts officers, hired by the state, maintained consolidated accounts books showing for each and every business establishment in the marketplace, the nature of its activity and the total income received from it. On the closing day for Accounts, all the accounts officers were to present themselves with sealed account books and with the net balance of revenue over expenditure in sealed containers. The Chief Comptroller and Auditor would have the accounts thoroughly audited by the audit officers who would check the entries to verify net balances. The King would then be informed of the audit results[7].

Kautilya considered accounting as integral part of economic administration[7,9]. Kautilya prescribed that each public enterprise be required to generate a maximum amount of profit without crossing ethical bounds; therefore, accurate measurement of the economic performance of a public enterprise and the elimination of opportunities for misappropriation of public funds by government employees were deemed absolutely critical[7,9]. For these reasons, adoption of an appropriate format for bookkeeping and codification and compliance with financial rules could not be left to the discretion of individual enterprises; so, Kautilya attempted to develop solutions to mitigate such problems through uniform bookkeeping rules for recording data systematically and by advocating frequent periodic reporting and the adoption of independent audits to reduce system failures[7,9].

Accountability and Consumer Rights: Kautilya's Arthashastra talked about consumer rights[7]. In the Arthashastra, there are references to the concept of consumer protection against exploitation by the trade and industry, short weights and measures, adulteration and punishment for these offences. The law dealt severely with businessmen providing products or rendering services to consumers for a fair price and any misdemeanor conducted by these businessmen would be subject to punishment of varied kinds by the state. The reprimands would range from being humiliated in the market square and payments of fines in monetary value increasing with degree of the offence, to extreme punishments like lashing and whipping. Thus, even in that era, an essential aspect of the welfare of the population was the protection of the interests of the consumer[7].

The Arthashastra prescribed it the fundamental duty of the ruler (state) to look after the welfare and benefits of the subjects. It required the ruler to protect his citizens, including the peasants, whom Kautilya correctly believed to be the ultimate source of the prosperity of the kingdom. Acting on Kautilya’s advice, the king, during famine seasons, would show favor to his people by providing them with seeds and provisions stocked by the state in the regional and village granaries. He would distribute portions either from his own collection of provisions or from the hoarded income of the rich[7].

Audit and Forensic Accounting: In the Arthashastra treatise, Kautilya had given detailed instructions on check-and-balance accounting and auditing procedures for the royal treasury of the Mauryan Empire[4]. Kautilya was the first person to mention the famous 'forty different ways' to embezzle the Treasury in his Arthashastra during the ancient times. This is one of the earliest records documenting the science of embezzlement; thereby, the logic for listing them out would be to educate supervisors on what to lookout for, as applicable control mechanisms to mitigate fraud risk[7]. At the top of the list were techniques related to revenue, in the middle were techniques related to the cost and the bottom of the list described techniques related to the use of fraudulent measurement standards. The list was bifurcated into 28 techniques related to documentation and 12 techniques related to physical goods and standards of measure. The techniques related to documentation were further grouped under four heads: first, not recording a transaction; second, mismatch between the time of recording and the physical transaction; third, recording a fictitious transaction and lastly, recording a transaction incorrectly[7].

The Arthashastra bears reference to the concept of 'whistle blowing', whereby any informant who supplied credible information about embezzlement, upon being able to prove the allegations, would stand to get as reward one-sixth of the amount in question; if informants happened to be government employees, they would get for the same act one-twelfth of the amount[7]. If informants succeeded in proving only a part of a big embezzlement, they would nevertheless get the prescribed share of the part of the embezzled amount proved; while informants who failed to prove their assertions would be liable to monetary or corporal punishment and would risk being ever acquitted[7].

Kautilya, in his Arthashastra, had held Accounts Officers responsible for rendering the accounts in full for their sphere of activities without any internal contradictions[7]. The Accounts Officer should be ready for audit whenever asked for, should not lie about accounts and should not try to interpolate an omitted entry as if it were inadvertently forgotten, as failure to conform to any of the regulations was punishable by law[7].

Kautilya, in attempts to establish accurate and complete record-keeping systems infallible to moral hazard or human error problems, proposed the establishment of two very important offices to monitor and manage the financial health of the state: the positions of Treasurer and Chief Comptroller-Auditor. Both were to be very well paid and in turn they were to be incorruptible and efficient and reported directly to the King[7]. The Treasurer was responsible for managing assets while the Comptroller-Auditor handled the maintenance of records, compilation of rules, inspection, audit, preparing and presenting financial reports to the King. Thus, Kautilya attempted to encourage specialization and accountability to limit the scope for conflicts of interest[7,9].

Conclusion

This paper briefly discussed different accounting practices prevalent during the Mauryan period in Ancient India. This paper reflects on how accounting has always played a vital role as an integral part in the daily interaction of its citizens. The terminologies employed may have evolved, but the nature of the accounting practices seems consistently pertinent over time.

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