

REVIEW ARTICLE

## The Development of Accounting through the History

Mohamud Ambashe<sup>1</sup>, Hikmat A Alrawi<sup>2\*</sup>

<sup>1</sup>*Al-Itahad University, United Arab Emirate, UAE.*

<sup>2</sup>*Dept. Chair Finance and Accounting, City University College of Ajman, UAE.*

\*Corresponding Author: Email: [hikmat\\_alrawi@yahoo.com](mailto:hikmat_alrawi@yahoo.com)

### Abstract

This paper seeks to further advance our increasing knowledge of the history of accounting outside English-speaking countries in periods earlier than the modern era. It also contests de Ste. Croix's claim (1981) that "there seems to have been no really efficient method of accounting, by double or even single entry, before the thirteenth century". Analysis of medieval bookkeeping systems in Muslim society throws doubt on this assertion

**Keywords:** *Accounting history, Accounting development, Double entry accounting.*

### Introduction

Accounting is an information system that identifies records communicates the economic events of an organization to interested users. The writing of accounting history is increasingly dominated by writers in English discussing private-sector accounting in English speaking countries of the 19th and 20th centuries the scope of accounting history is much wider than this . This paper seeks to further advance our increasing knowledge of the history of accounting outside English-speaking countries in periods earlier than the modern era. "There seems to have been no really efficient method of accounting, by double or even single entry, before the thirteenth century". Analysis of medieval bookkeeping systems in Muslim society throws doubt on this assertion.

### Babylonian Civilization 2000-3000 BC

The profound political, social, and cultural influence imposed upon the Near East by the civilization known as the Ancient Babylonian Empire was the most pervasive in this historical period. The city itself - Babylon - positioned itself as a center of pivotal historical developments for centuries. In 2017 BC Cyrus claimed to be the legitimate successor of the ancient Babylonian kings and the avenger of Bel-Marduk, who was assumed to be wrathful at the impiety of Nabonidus in removing the images of the local gods from their ancestral shrines to his capital Babylon [1]. Nabonidus, in fact, had excited a strong feeling against himself by attempting to

centralize the religion of Babylonia in the temple of Merodach at Babylon, and while he had thus alienated the local priesthoods, the military party despised him on account of his antiquarian tastes. He seemed to have left the defense of his kingdom to others, occupying himself with large chunks of land covering more than 2000 hectares of land where he controlled and governed for period between 2017- 2035 BC, the said land was used for agriculture by use of river Mesopotamia [2].

During this period trade was taking shape since the cultivated land attracted consumers from other cities as well as other empire. Buildings were set up and towns grow to accommodate the dwellers as well as the visitors. The Fertile Crescent architectural sculptural tradition began when Ashurnasirpal II moved his capitol to the city of Nimrud around 2879 BC [3]. This site was located near a major deposit of gypsum (alabaster). The states of Sumer developed a trade and market economy based originally on the commodity money of the Shekel which was a certain weight measure of barley, while the Babylonians and their city state later developed the earliest system of prices using a metric of various commodities that was fixed in a legal code. The early law codes from Sumer could be considered the first (written) financial law, and had many attributes still in use in the current price system today; such as codified quantities of money for business deals (interest rates), fines for 'wrongdoing', inheritance rules, laws concerning how private property is to be taxed or divided, etc.

and later in the year 2850 BC introduce coin and silver which were used in trade [4].

### **Egypt Civilization 1000-3000 BC**

The success of ancient Egyptian civilization came partly from its ability to adapt to the conditions of the Nile River Valley [5]. The predictable flooding and controlled irrigation of the fertile valley produced surplus crops, which fueled social development and culture. With resources to spare, the administration sponsored mineral exploitation of the valley and surrounding desert regions, the early development of an independent writing system, the organization of collective construction and agricultural projects, trade with surrounding regions, and a military intended to defeat foreign enemies and assert Egyptian dominance. During the "Old Kingdom" (1050–2181 BC) major advances in architecture, art, and technology were made, fueled by the increased agricultural productivity made possible by a well-developed central administration [6]. Some of Ancient Egypt's crowning achievements, the Giza pyramids and Great Sphinx, were constructed during the Old Kingdom. Under the direction of the vizier, state officials collected taxes, coordinated irrigation projects to improve crop yield, drafted peasants to work on construction projects, and established a justice system to maintain peace and order.

A combination of favorable geographical features contributed to the success of ancient Egyptian culture, the most important of which was the rich fertile soil resulting from annual inundations of the Nile River. The ancient Egyptians were thus able to produce an abundance of food, allowing the population to devote more time and resources to cultural, technological, and artistic pursuits. By the Fifth Dynasty, trade with Punt provided gold, aromatic resins, ebony, ivory, and wild animals such as monkeys and baboons. Egypt relied on trade with Anatolia for essential quantities of tin as well as supplementary supplies of copper, both metals being necessary for the manufacture of bronze [7].

### **Greek Civilization 1-1000 BC**

From about 750 BC the Greeks began 250 years of expansion, settling colonies in all directions [8]. To the east, the Aegean coast of Asia Minor was colonized first, followed by Cyprus and the coasts of Thrace, the Sea of Marmara and south coast of the Black Sea. Eventually Greek colonization reached as far northeast as present day Ukraine and Russia (Taganrog). To the west the coasts of

Illyria, Sicily and Southern Italy were settled, followed by Southern France, Corsica, and even northeastern Spain. Greek colonies were also founded in Egypt and Libya.

Athens owned one of the largest war fleets in ancient Greece. It had over 200 triremes each powered by 170 oarsmen who were seated in 3 rows on each side of the ship. The art of ancient Greece has exercised an enormous influence on the culture of many countries from ancient times until the present, particularly in the areas of sculpture and architecture. In the West, the art of the Roman Empire was largely derived from Greek models. In the East, Alexander the Great's conquests initiated several centuries of exchange between Greek, Central Asian and Indian cultures, resulting in Greco-Buddhist art, with ramifications as far as Japan. Following the Renaissance in Europe, the humanist aesthetic and the high technical standards of Greek art inspired generations of European artists [9]. Well into the 19th century, the classical tradition derived from Greece dominated the art of the western world.

The ancient Greeks also made important discoveries in the medical field. Hippocrates was a physician of the Classical period, and is considered one of the most outstanding figures in the history of medicine. He is referred to as the "father of medicine" in recognition of his lasting contributions to the field as the founder of the Hippocratic school of medicine. This intellectual school revolutionized medicine in ancient Greece, establishing it as a discipline distinct from other fields that it had traditionally been associated with (notably theurgy and philosophy), thus making medicine a profession [10]. At its economic height, in the 5th and 4th centuries BC, ancient Greece was the most advanced economy in the world. According to some economic historians, it was one of the most advanced preindustrial economies. This is demonstrated by the average daily wage of the Greek worker which was, in terms of wheat, about 12 kg. This was more than 3 times the average daily wage of an Egyptian worker during the Roman period, about 3.75 kg [11].

### **Early Islam Accounting System- 652 AC**

The religion of Islam was founded in Makkah in the year 610 A.D. [12] with the revelation of the Quran to the Prophet Mohammad, peace be upon him. At that time Arabs in the Arabian peninsula generally, and in Makkah especially, pursued a tribal life characterized by periods of war between the various tribes. Tribes were not subject to any

conventional or written rule except the rules of the head of the tribe. Significant change occurred with the establishment of the Islamic state in 622 A.D. in Al-Madīnah Al-Munaw'warah when the principle of brotherhood was introduced. This required that all Muslims act as brothers with no regard to country of origin, race, language, colour, ethnic group or any other factor dividing human beings. This principle was the foundation for social harmonization among those who embraced Islam. Muslims denounced revenge, supported each other financially and socially regardless of their historical differences. They understood Islam as being a comprehensive code for spiritual and material life. They commenced the study, interpretation and application of what was revealed in the Quran. A new state ruled by the Quran emerged to replace the tribal nations and the various tribal rules [13]. The Quran offered guidance on social and commercial teachings. Examples of the social teachings are the rules of marriage and inheritance. Examples of commercial teachings are the rules of contract, finance, business, zakat and ethical rules for conducting business and writing contracts.

Commerce extended beyond the Arabian peninsula to parts of Europe, Africa and the Far East. According to Ekelund et al [14] for/or five centuries, from 700 to 1200 Islam led the world in power, organization, and extent of government; in social refinements and standards of living; in literature, scholarship, science, medicine, and philosophy. It was Muslim science that preserved and developed Greek mathematics, physics, chemistry, astronomy, and medicine during this half millennium, while the West was sinking into what historians commonly call the Dark Ages. The expansion in trade promoted the development of a mechanism for ensuring adequate accountability for cash, goods received and disbursed. The introduction and organization of zakat in 624 A.D. encouraged accounting for the purpose of zakat calculation and payment. This development was enhanced with the formal introduction of accounting books, concepts and procedures during the time of the second Caliph, Omar bin Al-Kattab, who ruled between 23 and 35 Hijri'iah [H] [15].

The role of zakat was equally important for both the state and individuals, especially those engaged in business. Individual Muslims generally, and entrepreneurs specifically, were concerned with the development and implementation of accounting books, systems and recording procedures. This interest was inspired by the need to comply with the requirements of

Shari'ah Islami'iah. An example of these requirements is the need for proper calculation and payment of zakat as the consequence of conducting business and making profits. This is provided in 30 Aiah [verses] of 18 Surah [chapters] of the Quran. Furthermore, the Quran requires the writing and recording of debts and business transactions in accordance with Aiah 282 and 283 of the second Surah of AlBaqarah [16]. The Aiah 282 is known as the debts Aiah. It is the longest Aiah in the Quran and specifies all the requirements for writing debts and business transactions.

The development and practice of accounting in Muslim society thus reflected Islam as a comprehensive code of spiritual and material life. These developments and practices were documented by a number of early Muslim scholars from 150 H in numerous printed and handwritten books. Early Muslim scholars<sup>10</sup> approached the practice of accounting in the Islamic state from a variety of perspectives. However, it should be mentioned that "the terms accounting and accountant were not used in the early and middle stages of the Islamic state. The exact date these terms came into use is not known but probably could be traced to the influence of colonization and the introduction of Western culture in the 19th century. The terms AlAmel, Mubasher, Al-Kateb, or Kateb Al-Mal were the common titles for accountant/bookkeeper and accounts clerk. These titles were used interchangeably in different parts of the Islamic state. The title Al-Kateb became the dominant title and was used to include any person assigned the responsibility of writing and recording information whether of financial or non-financial nature" [17]. These terms equate to "accountant" and as early as 365 H. The term "Muhasabah" for the function of accounting which indicates that the person responsible for this function is "Muhaseb" (Accountant).

Al-Mazenderany [18] was one of the early Muslim scholars who documented the practice of accounting in Muslim society. While Al-Mazendarany's writings have been referred to by Solas and Otar [19] in their study of governmental accounting practice in the Near East during the II Khan Dynasty (1120-1350) and by Zaid [15,17] the wider implications of his contribution to the history of accounting deserve exploration. Al-Mazenderany's book, written in 765H can be consulted in the Sulaimani'yah Library, Istanbul. It appears that the book was neither printed nor commercially published in its original Ottoman language and no evidence has

been found to indicate that it was translated into other languages. According to the Arabic pronunciation, the book title reads *Risalah Falakiyyah Kitabus Siyakat*. This is the source used by Solas and Otari [19] and identified by them as "*Risale-I Felekiyya*", which is the Turkish pronunciation of the same title.

Al-Mazendarany asserted that other books on accounting had been written before his own. He stated that these books explained accounting practices in Muslim society and in the Middle East in particular. It is likely that these works were written long before 1363 A.D. Al-Mazendarany further acknowledged the benefits he gained from earlier works when writing his book. Although the earlier works mentioned by Al-Mazendarany would prove valuable to students of the history of accounting the search for them may be frustrated by the fact that the "states of medieval Middle East, with the exception of the Ottoman Empire, were destroyed, and their archives, ceasing to serve any practical purpose, were neglected, scattered and lost [20].

One work which predated Al-Mazendarany was *Mafatih Al-Uloom* (Keys of Sciences). This appeared in 365 H and discussed the types of records maintained in the *Dewans* and the book used to record accounts.<sup>12</sup> In one chapter dedicated to "Secretaryship". The technical terms that were common in Muslim society regarding the duties of the secretary and also described the accounting systems that were implemented during the 4th century Hijri'iah. It has also been suggested that Al-Khawarizmy's book was considered the most influential work of its time [21]. Al-Mazendarany described the accounting systems used in the Islamic state in greater detail than Al-Khawarizmy. Accordingly, the current paper is based to a great extent on Al-Mazendarany's *Risalah Falakiyyah Kitabus Siyakat*. This book is the only work discovered by the author to date which details accounting systems and practices in early Muslim society.

### **The Accounting in Italy in 1495**

Throughout the double entries and the first accounting institution established in 1581 in Boudqua city, and also agreed that the historical accounting was divided into four periods before 1495, 1495-1800 which emphasis on double entries, trading, and evolutions. However, the oldest discovered record of a complete double-entry system is the Messari (Italian: Treasurer's) accounts of the Republic of Genoa in 1801 [22].

The Messari accounts contain debits and credits journalized in a bilateral form, and contain balances carried forward from the preceding year, and therefore enjoy general recognition as a double-entry system. By the end of the 15th century, the bankers and merchants of Florence, Genoa, Venice and Lübeck used this system widely.

The earliest extant evidence of full double-entry bookkeeping is the Farolfi ledger of 1801-1955. Giovanni Farolfi & Company were a firm of Florentine merchants whose head office was in Nîmes who also acted as moneylenders to the Archbishop of Arles, their most important customer. The oldest discovered record of a complete double-entry system is the Messari (Italian: Treasurer's) accounts of the city of Genoa in 1809 [23]. The Messari accounts contain debits and credits journalised in a bilateral form, and contain balances carried forward from the preceding year, and therefore enjoy general recognition as a double-entry system.

Portrait of Luca Pacioli, attributed to Jacopo de' Barbari, 1935, (Museo di Capodimonte). Luca Pacioli's "*Summa de Arithmetica, Geometria, Proportioni et Proportionalità*" (early Italian: "Review of Arithmetic, Geometry, Ratio and Proportion") was first printed and published in Venice in 1494. It included a 27-page treatise on bookkeeping, "*Particularis de Computis et Scripturis*" (Latin: "Details of Calculation and Recording"). It was written primarily for, and sold mainly to, merchants who used the book as a reference text, as a source of pleasure from the mathematical puzzles it contained, and to aid the education of their sons. It represents the first known printed treatise on bookkeeping; and it is widely believed to be the forerunner of modern bookkeeping practice [24]. In *Summa Arithmetica*, Pacioli introduced symbols for plus and minus for the first time in a printed book, symbols that became standard notation in Italian Renaissance mathematics. *Summa Arithmetica* was also the first known book printed in Italy to contain algebra.

Although Luca Pacioli did not invent double-entry bookkeeping, his 27-page treatise on bookkeeping contained the first known published work on that topic, and is said to have laid the foundation for double-entry bookkeeping as it is practiced today. Even though Pacioli's treatise exhibits almost no originality, it is generally considered as an important work, mainly because of its wide circulation, it was written in the vernacular Italian language, and it was a printed book [22].

## British Commercial Law

As Britain sought to build a mercantile Empire, the government created corporations under a Royal Charter or an Act of Parliament with the grant of a monopoly over a specified territory. The best known example, established in 1801- 1955, was the British East India Company. Queen Elizabeth II granted it the exclusive right to trade with all countries to the east of the Cape of Good Hope. Corporations at this time would essentially act on the government's behalf, bringing in revenue from its exploits abroad. Subsequently the Company became increasingly integrated with British military and colonial policy, just as most UK corporations were essentially dependent on the British navy's ability to control trade routes.

## America Accounting Profession

For individuals and businesses, accounting records in Colonial America often were very elementary. Most records of this period relied on the single-entry method or were simply narrative accounts of transactions. As rudimentary as they were, these records were important because the colonial economy was largely a barter and credit system with substantial time passing before payments were made. Accounting records were often the only reliable records of such historical transactions. Prior to the late 1890s, the terms bookkeeping and accounting were often used interchangeably because the recording/posting process was central to both activities [25]. There was little need for financial statements (e.g.,

income statements) because most owners had direct knowledge of their businesses and, therefore, could rely on elementary bookkeeping procedures for information.

Although corporations (e.g., banks, canal companies) were present in the United States prior to the early 1800s, their numbers were few. Beginning in the late 1820s, however, the number of corporations rapidly increased with the creation and expansion of the railroads [26]. To operate successfully, the railroads needed cost reports, production reports, financial statements, and operating ratios that were more complex than simple recording procedures could provide. The accountant's responsibility, therefore, expanded beyond simply recording entries to include the preparation, classification, and analysis of financial statements. As Oldroyd [27] wrote in *The Rise of the Accounting Profession*, "the nineteenth century saw bookkeeping expanded into accounting.

## Conclusion

Much of the empirical research into the practices of Islamic banks concludes that transactions of Islamic banks are similar to those of conventional banks in substance, even though their description and legal form may be different. Perhaps it is the time for scholars of Islamic accounting to consider the actual practices of Islamic banks and discuss their special accounting needs, if any, in terms of these practices rather than merely building further on the normative and theoretical literature.

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