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# THE HISTORICAL CONTRIBUTIONS OF CHINESE ACCOUNTING (OR R-P=E-B)

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**NOTE: This is a revised version of the paper presented by Professor Guo at the Fifth World Congress of Accounting Historians in Sydney in August, 1988.**

Going back to prehistorical times, primitive tribes in China created rich and varied symbols of calculation and of record-keeping to meet the needs of production and distribution. Archaeological studies have verified that the engraved symbols of the Jiahu Man about 8000 years ago in the province of Henan were in use much earlier than Egyptian papyrus.[1] Also, numerals were employed 6000 years ago by the Banpo Man in the province of Shaanxi.[2] It is easy to recognize that the usage of compound symbols indicated that a calculation had occurred. Other examples of record-keeping are notching wood and tying knots. These methods were mentioned in Chinese mythology and clearly reflect an embryonic stage of accounting in China. These primitive accounting activities are major marks of progress in the Chinese culture.

Governmental accounting in China during the Zhou Dynasty (1100-256 B.C.) has attracted the attention of accounting historians throughout the world. Michael Chatfield stated "In the procedural areas of internal control, budgeting, and audit, the Chaos (Zhous) probably had no peers in the ancient world."[3]

A well organized accounting and treasury system was established during the Zhou Dynasty, as reflected in the book of the rites of Zhous.[4] The Prime Minister (Tianguan) appointed both the Chief Accountant (Sikuai) and the Grand Treasurer (Dafu). The Chief Accountant was in charge of calculating national figures and of his accounting staff, which were responsible for accounting, receiving, and disbursing both money and commodities. The jobs of receiving and disbursing money and commodities were divided into three sections. The three officials in charge were: the Zhinei, in charge of national receipts; the Zhisui, in charge of national expenditures; and the Zhibi, in charge of the surplus. These three divisions checked and examined each other.

The Dafu (Grand Treasurer) was the highest ranking officer in the Treasury organization. He appointed five custodial officers. They were the Neifu, in charge of valuables; Waifu, in charge of receiving and disbursing articles of everyday use; Jiouzheng, in charge of wine; Siqiou, in charge of furs; and Zhangpi, in charge of receiving and disbursing leather. In addition, the Court of Zhou established the Quanfu post, in charge of taxes levied on city-states. The national government used the taxes for investment to earn interest by making loans or for price regulation actions in certain markets. The Tianfu post

was established to strengthen the property management function in the Zhou ancestral temple. The Zhijin post was established to control the receipt and disbursing of fines, and these officials the Court of Zhou formed an economic control system.[5]

As already-mentioned, internal control was achieved by these officials cross-checking each other. The Zaifu (Supervisor) post was quite significant in the Zhou Dynasty. The Zaifu was in charge of on-site auditing in the national storehouses (Treasury). If inappropriate expenditures occurred or an inventory of property was inconsistent with the accounts, a report was issued to the Prime Minister (Tianguan), and punishment would follow. Conversely, if one did a good job, he would be rewarded by the Prime Minister because of the report of the Zaifu.

In order to live within its means, the Court of Zhou established a receipts and disbursement system. There were nine revenues (Jioufu); nine types of feudal tributes (Jiougong); and nine types of expenditures (Jioushi).[6] All the financial and accounting divisions were to follow the basic tenet of "regulating expenditures within the stipulation of Jioushi" in their work. The determination of receipts and expenditures of the different divisions should depend on the relationship between Jioufu (revenue) and Jioushi (expenditures) of the different divisions. Specific types of revenue could be used only for certain types of expenditures. Each division would collect its data in a timely fashion and report to the higher level each 10 days, month, and year. The expenditures of the King were not subject to budgetary control but his expenditures were audited. At year end, the Sikuai (Chief Accountant) would submit an accounting report to the King through the Prime Minister. The King took a personal interest in financial affairs of the year and rewarded/punished officials based on the results of the budget surplus/deficit. This system became called the Shangji System (Grand Calculation System).[7] There is no doubt that the Zhou Dynasty had a well developed system of financial and accounting controls well before the Christian era.

The Statute Book, written by Likui during the Warring States Period (475—221 B.C.), was the first book on Law in China. There were some references to accounting in the book. These references had a direct impact on the economic legislation of the Qin Dynasty (221—207 B.C.). The Qin Statutes contained very penetrating and definitive clauses on accounting, probably much more advanced than the Code of Hammarabi in ancient Babylon.

Both the appointments of and the professional ethics of accounting officials were clearly stipulated in the Qin Statutes. Accounting officials were assumed to be honest and any shortcomings caused penalties. If there were a misappropriation of public funds, the rules of corruption would be applied. The Qin Statutes stipulated that incoming accounting officials under the supervision of his superior must carefully check the records of the prior accounting official at the expiration of his term in office. If any loss were found in the audit process, the official would be fined or punished according to the seriousness of the situation. If an excess were found, the accounts must be increased.[8]

In addition, the Qin Statutes also covered: (1) losses and damages in the process of receiving, disbursing, and storing; (2) the formalities and procedures in property expenditures; (3) the planned consumption of each material object; and (4) the presentation of the financial report of the year's transactions. There were some very detailed clauses. For instance, prisoners' garments had time stipulation

as well as the quality of cloth and the quantity to be used for each suit. If there were some garments remaining, they must be sent to the storehouse and noted in the annual report.[9] Another example was the standards for the salaries of officials. Different items from salary to meals were strictly stipulated and were provided to officials according to their official ranks. A third example was the storage of grain. It was necessary to have the stamp of the official in charge of the storehouse along with the signature of the accounting official for all receipts and disbursements of grain from storehouses. October 1 was the beginning of the fiscal year.

The Shouji System (Reporting and Checking) started in the Zhou Dynasty, developed in the Warring States period, and became perfected in the Han Dynasty (206 B.C.—220 A.D.)." The accounting report was renamed Shangjibu[10] and the receiving and examining the accounts report by the Emperor was renamed Shouji.[11]

At the end of each year, the report books were carried to the capital by officials from different regions of China. The reports were summarized by the Central financial department and presented to the Emperor. Sometimes the Emperor personally received the accounting reports from the accounting officials and closely questioned them. This gave the Emperor personal insight into the success and failures of these officials and allowed him to reward or punish these officials. For instance, as recorded in the Book of Han, Emperor Hanwudi used this practice quite frequently.

The examination of accounting reports was a serious matter. For example, in 121 B.C., Hao Xian, the governor of the region of Shanggu, was removed from his post because of accounting fraud. To prevent the reporting system from becoming a meaningless ritual, the Emperor authorized the Public Prosecutor (Yushi) to examine the accounts.[12] The Yushi had the right to audit and had the authority to deal with the discovered problems. For those of an extremely serious nature, the Yushi had to report the state of affairs to the Emperor for a decision of whether to assign heavier punishment.

The accounting system of the Han Dynasty has continued through almost every subsequent dynasty and has been improved through the centuries. The major tenets of the system of preparing and reporting accounts and of summarizing and examining by the central department have continued to the present. The Han Dynasty surely had a profoundly significant impact on China and Chinese accounting.

Auditing has a long history in China but it was not until the Tang Dynasty (618—907 A.D.) that auditing became mature and perfected. The Bibu, the supervisory ministry in the administrative organization of the Tang Dynasty, exercised authority for auditing. The Bibu was independent from the financial departments. The Bibu performed its audit function by law and, hence, its decisions were judicial in nature. All financial matters of the army and the government could only be approved by the Bibu during the Tang Dynasty and were often audited by it. For such strategically important sections as the Storehouse in the Capital, the audit function was performed quarterly. There was a nation-wide audit of governmental accounting records each year. All accounting reports from the different regions were sent by the Ministry of Revenue (Hubu) to the Bibu to be audited. Only correct expenditures were to be reimbursed to the local officials. If corrupt acts and unlawful practices were found, Bibu reported the cases to Yishitai (the highest-ranking supervisory official) for reexamination. Bibu then reported the cases to the

Emperor for his final decision.[13]

The financial and accounting systems of the Tang Dynasty relied on a double-checking system for these five functions—Statistics and Taxation; (2) Cashier; (3) National Treasury; (4) Storekeeping; and (5) Economic Regulation. This checking function based on financial and accounting methods not only played a key role in consolidating a feudal economy but also had a profound influence on the development of the auditing division and of economic regulation.

It is probably indisputable that China had the most advanced accounting system of any in the ancient world. The Sanzhufa (the Three Column Accounting Method) was used as early as the Zhou Dynasty. The Chinese people had developed the "balance from the last period" concept in the Eastern Han Dynasty (25-220 A.D.). It was in the Tang Dynasty that the Four Column Accounting Method—Beginning Balance, Increase, Decreases, and Ending Balance—was first used.[14] This accounting method became popular in the Song Dynasty (960-1279 A.D.) and later was widely used in both governmental and private accounting in the Ming and Qing Dynasties (1368-1912 A.D.). In the Song Dynasty, the Four Column Difference Formula [Receipts - payments = ending balance - beginning balance] was used for trial balance accounting. The application of this accounting equation in China was several hundred years earlier than in the Western World.[15] The Four Column Method was employed as a main theoretical pillar of a Chinese movement to improve bookkeeping in the 1930's.

In modern times the long continuation of a feudal economy in China caused its accounting to lag behind the West, although some progress was made. At the end of the Ming dynasty and the beginning of the Qing Dynasty in about 1644 A.D., there was increased capitalistic spirit in China. As social and economic activities became more complicated, Chinese double-entry bookkeeping (Longmen account) developed from the Three-Foot Account.[16] This bookkeeping method used Shou (Receipt) and Fu (Payment) as bookkeeping symbols to record the cause and effect of each transaction. The method classified all economic transactions into four types: Jin (Receipts); Jiao (Payment); Cun (Keeping); and Gai (Owing). There were some subtypes under each type. Each transaction was recorded according to this bookkeeping rule—"every receipt must have a payment and receipt must equal payment." The closure formula "Jin - Jiao = Cun - Gai" was used periodically to settle the accounts. While this practice was different from the Western style of double entry bookkeeping, the Eastern style was quite functional. Hence, the Longmen accounting was the beginning of the development of Chinese Double-entry bookkeeping.

In the Qing (Ching) Dynasty (1644-1912 A.D.), the Four-foot Account developed from the Longmen Account.[17] The four-foot account was a more perfected bookkeeping system. The principle of the Tiandihe (Heaven matching with Earth) balancing method was similar to the Western bookkeeping equation and the balance sheet. The four-foot account was an important milestone in the development of Chinese accounting.

The Longmen Account and the Four-foot Account were not widely used in China and were not factors, because of their imperfections, in the development of accounting in the West. Yet, these methods were great inspirations to the Chinese of today. First, as part of Eastern accounting history, they prove the developmental law of history, in that accounting developed from the single entry to the double entry method. Second, they indicate the process of the formation of

double-entry bookkeeping principles were the same throughout the world.

Chinese accounting has had a long history. In ancient times it was far better developed than accounting in the Western world. The history of Chinese accounting should be known by accounting historians of the West. Both Eastern and Western accounting historians then should search for cross-cultural contacts through the centuries. It may well be that governmental accounting in the West may be improved by the West studying the much longer and much richer heritage of governmental accounting in China.

**Footnotes:**

[1]Engraving Symbols in Liahu Relics is Older than Oracle Inscription on Bones or Shells, Xinhua Digest, Volume 2 (1988), p. 64.

[2]See the ancient painted pottery or the photos of engraving symbols and colored drawing of the Neolithic Age, stored in the Banpo Museum, Xian, China.

[3]Michael Chatfield, *A History of Accounting Thought,* Illinois, 1974.

[4]Rites of Zhou, Tianguan (Part 1); or Lin Yi, *Today's Notification and Interpretation on Rite of Zhou* (Volume 1), Booklist and Reference Press, 1985.

[5]Annotation on the Historical Records by Sima Qian, Shanghai Publishing House, 1986.

[6]Ditto with [4].

[7]Guo Daoyang, *Accounting History of China,* Vol 1, China Finance and Economics Press, 1982, Chapter 2.

[8]Bamboo Slips in Qin Tomb at Shuihudi, Xiao Rule, Hubei Museum, 1980.

[9]Ibid., Jinbu Rule.

[10]Guo Daoyang, Chapter 4.

[11]Op. cit.

[12]Op. cit.

[13]Ouyang Xiu, et al (the Song Dynasty), *New History of the Tang Dynasty,* Official Records, Shanghai Publishing House, 1986.

[14]Op. cit.

[15]Chi Tianwen, *Research on Ancient Accounts of China,* Shanghai Publishing House, 1984.

[16]Guo Dao Yang, Chapter 5.

[17]Cheng Shengshu, "Antique but Scientific Bookkeeping Methods of Our Country," *China's Economic Issues,* Vol. 3, 1980.

[18]National Tiannan Commercial Accounting School, *Bookkeeping and Accounting, Gist of Accounting,* Part One, 1924.

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## DO YOU BELIEVE THIS?

A Miami accounting student visited a Cuban coffee shop after a lecture which introduced him to the concept of activity costing. The proprietor, as is usual, placed a glass of iced water on the table when he served him an espresso. "Do you realize," the student said, "that if you were to allocate the overhead of this coffee shop using the activities that you perform, you would probably find out that this free glass of water is costing you between one and two cents."

The coffee shop owner looked shocked. Every day that week, as he served the student a glass of water with his cup of coffee, the owner would say to him, "You gave me a problem, eh? I'm a good business man, I'll solve it."

On Friday morning the owner was all smiles. "I solved the problem!" he told the student. "All week I've been worrying about the money I was losing on the glasses of water, but I've found out how to make up for it. I'm putting less water in the espresso now."