



12<sup>th</sup> World Congress  
of Accounting Historians  
July 20 - 24, 2008 - Istanbul - Turkey

Congress Proceedings  
Vol. I





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# ACCOUNTING EDUCATION FOR THE PRACTICE OF STAIRS METHOD IN THE OTTOMAN STATE

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## Abstract

World accounting history does not have enough information about the Stairs Method (Merdiven) which was developed and used by Ottomans for 500 years. The only reason for this was the absence of a teaching book or a school for the civil servants who undertook the management of finance.

Instead of this, Ilhanian state accounting system which was a primitive form for Ottomans was adopted and hence had an important place in the world accounting history.

For many centuries, accounting officers of the Ottoman State were trained in a master-apprentice relation. Teenagers at the age of 14 or 15 were given as apprentices to Treasury offices or revenue offices in the capital or provinces.

This paper aims to give information about the Ottoman State accounting education which lasted for 500 years and to make a contribution to the world accounting history by mentioning the principles with sample documents.

**Key Words:** Accounting Education, Stairs Method, Ottoman Empire.

## 1. Introduction<sup>1</sup>

The science literature of the Ottoman Empire (1299-1922) can be divided into three main terms as 'Establishment Era' (1299-1453), 'Development Era' (1453-1599), and 'Discontinuance of the Classical Science Tradition and the Starting of the Modern Science Future' (1600-1922)<sup>2</sup>.

<sup>1</sup> In this study, it has been benefited from Oktay Güvemli, his studies and sources widely with his permission. Also, we thank to Prof.Dr. Oktay Güvemli for his kindly support and help.

<sup>2</sup> Sürmen, Yusuf, Kaya, Ugur and Yayla, Hilmi Erdogan. "Higher Educational Institutions and the Accounting Education in the second Half of XIXth Century in the Ottoman Empire", 11th World Congress of Accounting Historians, 19-22 July 2006, Nantes, France.

In the "Discontinuance of the Classical Science Tradition and the Starting of the Modern Science Future Era" Ottomans changed the direction of science comprehension from the East towards to the West and the newly established institutions had greatly influenced this alternation. The Empire was influenced by effects of Renaissance in the West and subsequently opened its gates to new scientific advancements after facing with military losses<sup>3</sup>.

It is possible to divide education in Ottomans into two terms as before and after the Tanzimat. According to this division, pre Tanzimat era covers 1299-1773 as a whole. 1773 is the year when the western influenced schools opened their doors.

Madrasah education has always been influential on Ottoman education system. It is known that the first madrasah was opened in Iznik by Orhan Ghazi in 1330. In the following centuries, five madrasahs in Bursa and two in Edirne were opened.

İ.Hakkı Uzunçarşılı mentions that in these institutions a similar education system to other Islam States was adopted<sup>4</sup>, Prof. Dr. Yahya Akyüz shares the same opinion and asserts that early Turkish Beyliks (emirates) invited scientists and Islamic professors (muderris) to work at madrasahs<sup>5</sup>. Thus, the curriculum of the madrasahs consisted mainly Islam and Islam based courses and it is natural to have course books away from the language spoken by the public.

Books and journals were mainly published by the state. Accounting education books were few in number through the lifespan of Ottoman State. The state had a developed accounting system but the reason for not publishing accounting books can be based to the master-apprentice style education system. This situation may be one of the reasons for the late arrival of double-entry accounting system to Turkey.

State accounting was developed in Ottomans. There had been no developments in the field of private sector accounting for a long time. State accounting was continued through master-apprentice relation, no accounting education was given and no accounting teaching books were written for centuries.

The first traces of accounting education in the Ottoman Empire can be seen in foreign originated schools in the beginning of the XIX century. Accounting education started in Turkish schools after the Tanzimat and flourished very rapidly. The reasons for the development of accounting education may be the transfer to double-entry accounting system, the rise in the number of enterprises and their development, the separation in the concepts of accounting and shopkeeping and the strengthening of the private sector.

## 2. Ottoman Accounting System: Stairs Method

The Stairs Method, which is a bookkeeping method, was born in the Middle East and after centuries of use was eventually phased out in the Middle East and replaced with double-entry bookkeeping adopted from the west. The first traces of this method are found in the accounting records of the Abbasid State early in the VIII century. The last examples of the application of the method are in the Ottoman Empire near the end of the XIX century. Accordingly the aforementioned method has had a lifespan of 1100 years.

<sup>3</sup> Sürmen et al. 2006.

<sup>4</sup> Uzunçarşılı, İ.H.; Osmanlı Devleti'nin ilmiye Teşkilatı, sayfa. 2, T. Tarih Kurumu Yayını, 3. baskı, 1988, Ankara.

<sup>5</sup> Akyüz, Y.; Türk Eğilim Tarihi, sayfa. 55, Kültür Koleji Yayını, 5. baskı, 1994, Ankara.



There are currently about 95 million accounting documents and 360,000 state accounting ledgers in Stairs Method at the Turkish Republic Prime Ministry Ottoman Archives. Unfortunately no specimens of accounting documents for the foundation period of 1299-1453 exist in the archives. The reason for this is the change of Ottoman capitals several times until 1453 and as a result many of the state accounting documents were lost in these transfers. Earliest examples belong to second half of XV century when Istanbul was conquered. Development of the Stairs Method in Ottomans began in this period. After the XVI century deficiencies in the fiscal structure of the state were resolved, administrative structure was consolidated and accountancy at the capital and provinces were organized better to work in harmony.

#### **Basic features of stairs method<sup>6</sup>**

- It is used for state accounting in countries where statism was dominant.
- It is based on the principle of collecting and spending taxes for the incomes and expenditures of the country.
- Each province's taxes are estimated by writing total tax revenues and tax types under each other.
- It is fundamental to write expenditure types and amounts under each other.
- It is fundamental for the system to work on the basis of accrument principle. But it is known that procedures continued to run without making an accrument article. Accrued amount is followed in another place.
- The system has an available structure which allows both to write amount and quantity.
- It allows keeping records the yearly revenues of the country with a single entry.
- Stairs method was used for state accounting, so no such representative of business entity were found.

### **3. Ottoman Accounting Education**

In the first 500 years of the Ottoman State, according to the education system, civil servants were divided into three groups as military, academic and public servants.

Madrasahs gave the education for the academic class. In these schools, the clergy and legislators were educated. Military and state officials were educated in Enderun.

Public servant class responsible for the financial affairs of the state had no definite schools. These were trained in a master-apprentice relation and in secretaries which were responsible for the financial affairs of provinces.

These officials were given as apprentices to the secretaries under the Treasury, head revenue offices, Anatolian revenue offices or other low rank revenue offices<sup>7</sup>.

First of all, they had to learn Arabic and Persian writing systems, and later siyakat writing

<sup>6</sup> Cemal ELİTAŞ, Oğuzhan AYDEMİR, Mehmet ERKAN ve Uğur ÖZCAN "Accounting System In Ilhanians And A Sample Practice", The Balkan Countries' 1 st International Conference On Accounting And Auditing, 8-9 March 2007, Edirne, Turkey.

<sup>7</sup> For example, Sari Mehmet Pasha, who was assigned as the head of financial affairs between 1701-1714, was born in 1657. He started working in the revenue offices in 1671 at the age of 14 and grew from the inside of the system.

and numbers<sup>8</sup> and had to develop their mathematical capabilities. In the following step, they were responsible for learning the organization of tahvil (bond) documents which constituted the basis for record keeping. It was natural for them to take place in record keeping transactions. Working in several offices in a revenue office, then in other revenue offices and finally learning end term accounts was necessary for the profession.

Accounting education in Ottomans continued in such a way for centuries. There was no necessity for writing teaching books because of the master-apprentice relation. For this reason, world accounting history could not learn much about this system which developed itself for centuries without changing its principles.

Accounting system in Ilhanians was more primitive than accounting system in Ottomans. However, Ilhanians had its own teaching books about stairs method. Therefore, stairs method used by Ilhanians was introduced and had an important place in world accounting history.

#### **4. Accounting System**

In the central accounting administration of Ottomans, accountants grown up from revenue offices established provincial record keeping and disseminated Ottoman state accounting throughout the empire in a successful way. Salines, mines and customs records were kept successfully by the accountants in provinces who grew up in the central accounting system or by the officials who were taught by these accountants. But these locally kept records did not have the same quality as the records kept in the central system.

The necessity of reformation in the administrative system became evident in the XVII century. But such a reformation did not take place as it should be. If the reformation was only towards west, there would probably be a tendency for double-entry accounting system. Present state accounting was sufficient for meeting the requirements of the state. There was not much financial difference or development which would put the accounting system in danger. Taxing system was based on agriculture and mukataa (renting state properties) was the main income. The changes which should be met by the state accounting system generally emerged from the administrative system of the empire. This necessity was covered by the introduction of a record keeping system in the provinces which was similar to the central system.

But the rise in the number of civil servants working in state accounting, the necessity to employ more qualified clerks in provincial and central system and schoolization movements in military order influenced the training of apprentices in accounting offices and required training programs.

#### **5. Education of Accountants in the Ottoman State**

Accounting education cannot be seen in Ottoman schools from the foundation era until the Tanzimat. This education was generally given in a master-apprentice relation in the Treasury. With the rise in the number of servants of Treasury, or in other words apprentices, in the XVIII century, a collective education method was chosen<sup>9</sup>. This education was not a kind of education given by an independent institution.

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<sup>8</sup> It is known that siyakat writing and numbers which were used in accounting had passed from Ilhanians to Ottomans and was used until the middle of XIX century.

<sup>9</sup> Bkz.: Güvemli, O.: T. Devletleri Muhasebe Tarihi, cilt: 2, 1998, istanbul.

The apprentices taken to the head accounting were generally chosen from literate children of seven or eight years old. They would apply to the posts with a petition. The head accountant would write to the petition "...he can read and write, knows numbers and can be an apprentice to your department." With the approval from the head of the department, his name was written into the apprenticeship book with the date. On his petition, a small note about his recording was dropped. The apprentice would start working under the control of an official in the department. He would come to work with his master and leave the work with him. The child who will be a clerk would have to learn and memorize the use of books and their chapters.

When the master asks a specific book and year, he had to know where it was and bring it immediately. With his experience, the master would give him more important jobs and he would start to write down. For this reason, he would not forget the things he had written a long time ago. Since there were no indices, apprentices more than ten years old would not be taken. If the apprentice was capable of the job, loyal and hardworking, he would be taken as a regular apprentice with payment in five or six years time with the expression "the apprentice is continuous" in his file.

He would be paid a hundred akces in every three months which makes thirty three akces a month. After working for five or six years, he would earn more than his peers. He would continue his development everyday and finally would reach to the rank of caliphate (junior clerk) of an estate, property, cookery or marketplace. Or he would keep the record books of the artillery or carter department. Finally he would reach to the ranks of head of finance and kethüda (steward of a vizier), later reisü'l küttab (secretaryship) and ultimately serdar-ı ekrem (chief commander). He would continue his profession with such aims. His salary would rise every month with his loyalty, progress and continuity.

In this way, after working ten years, he would have a yearly income of five hundred gurush. It was acceptable to pay such an amount to such clerks who survived with a salary of thirty akces. He would do his job carefully with the fear of deprivation from such an income and rise slowly and reach to the rank of caliphate (junior clerk). He would know that he should not make mistakes with the fear of the abasement from the lower ranks and was obliged to be loyal to the state.

When they reach to the salaries of five or a thousand akces, these officials would not change a piece of bread with anything since they learnt the importance of money in their previous lives. They would not do their jobs with feelings but with laws.

## 6. The First Accounting Education School in Ottomans: Bab-ı Defterdarı School

Bab-ı Defterdarı<sup>10</sup> is the place where Ottoman state accounting order was located, in other words revenue offices<sup>11</sup>. Osman Ergin is the education historian who made the most detailed study on Bab-ı Defterdarı School. In his work *Türkiye Maarif Tarihi* (Turkish Education History)<sup>12</sup>, under the title of Bab-ı Defterdarı School, he does not give information about the foundation date of the school. Prof. Akyüz does not also mention the foundation date of the school while giving information about it<sup>13</sup>.

<sup>10</sup> Bab-ı Defterdarı means the entrance door of the treasurer.

<sup>11</sup> Pakalın, M. Zeki, *Osmanlı Tarih Deyimleri ve Terimleri Sözlüğü*, Volume: 1, 1993.

<sup>12</sup> Ergin, Osman: *Türkiye Maarif Tarihi*, Volume: 1, p. 74 cont., 1997, Istanbul.

<sup>13</sup> Akyüz, Y : *ibid.*, p. 90.



The reason for the ambiguity about this subject may lie in Bab-ı Defterdarı's development alongside with the master-apprentice system.

For example, Osman Ergin, attributing to Amasya province historian Hüseyin Hüsamettin, says that an education department was started with the transfer of Bab-ı Defterdarı to Yerebatan Sarayı (the Basilica Cistern) in 1709. But he does not share the same opinions with Hüseyin Hüsamettin about the existence of a finance school in that time because of insufficient proofs.

Osman Ergin mentions that this education department was, in fact, a saloon which was reserved for the clerks to develop themselves. When bookkeeping departments separated from these places, it was easy to transfer to educational programmes for apprentices. Especially in the second half of the XVIII century, there is a possibility of collective training for apprentices on siyakat and mathematics. But it is impossible to prove this case at the moment.

But the case gains clarity in the beginning of XIX century. For example, according to a document dated 1836, Hacı Pertev Efendi was assigned to teach Arabic and Persian to apprentices. Osman Ergin asserts that education of calculation and siyakat writing and numbers in these education programmes was necessary.

According to these explanations, it will be correct to admit the first use of Bab-ı Defterdarı School falls in the first half of the XIX century, but collective training of clerks working in accounting offices by accountants matured in central system was started in the XVIII century.

## **7. The New Formation in State Accounting Organisation in the XVII<sup>th</sup> Century**

State accounting formed around Hazine-i Amire was reorganized in the XVII century and the numbers of officials working in accounting departments were changed according to the needs.

Offices were attached to a single head of financial departments. This person was the Başdefterdar (chief head of financial department). Other financial departments were not abolished but put in an ineffective position as the assistants of the chief head of finance.

There was no significant rise in the number of offices in the new formation. 24 accounting offices in 1566 rose to 27 in 1670.

Income books were abolished in the middle of the century because of the ineffectiveness of second and third rank heads of finance. Instead of yearly final accounts books, these accounts were kept by the responsible offices. But the accounting record system continued to carry its feature of presenting term end accounts.

The number of offices where the payments of military staff were kept rose from two in the middle of XVI century to seven in the middle of XVII century. The reason for this situation may be the increase in the number of military units and the need to prevent malpractice.

It is understood that there were 714 clerks in accounting offices in 1670. Although there is not much information about the XVI century, it is understood that there was a significant increase in the XVII century.



## 8. Accounting Books in Ottomans

Tanzimat Charter (1839) and Islahat Charter (1856) brought challenges and innovations, mainly generated from the West, both in the state order and culture. The first influences were seen in education. All of the institutions of education started to give place to accounting in their curriculums in the second half of the XIX century<sup>14</sup>.

In this education movement, secondary schools and higher education institutions embedded accounting education to their systems. Double-entry accounting method which was generally used by western countries was taught as a simple method instead of the traditional state accounting understanding<sup>15</sup>.

Books of uniform and double-entry accounting methods were required for this education mobilization. Accounting books were translated from French first and later Turkish writers started to write their own teaching books. French accounting books were used in Ottoman Higher Education. The reason for this was the practice of Kanunname-i Ticaret (Code of Commerce) which became effective in 1850 and was influenced from French Code de Commerce in 1807<sup>16</sup>.

French culture and policies were influential over the Ottoman Empire in the second half of the XIX century. Thus, Ottoman accounting education and practices were explicitly exposed to French impressions. French accounting education and syllabus was taken and adopted. Accounting teaching books were mainly translated from French in the second half the XIX century. Apart from the translations, original books were used in Ottoman academies<sup>17</sup>.

Books about accounting education and practice written in Arabic can be found in several libraries in Turkey from the middle of XIX century on. But the first accounting books found belong to 1853 and 1859. The book printed in 1859 is a sort of "directive" about state accounting<sup>18</sup>.

Teaching books belonging to 1880-1885 period can also be found in libraries. Only short information about three books will be given here. These books can be listed chronologically as;

### Fenn-i Usul-i Defteri Kitabı<sup>19</sup>

This book does not give information about budget making, but samples are given on books and cases. It is understood to be a course book.

Parts of the book are:

1. General ledger book based on precede recording
2. Practice,
3. Profit deficit Account
4. Transfer procedures for general ledger book

<sup>14</sup> Sürmen et al. 2006.

<sup>15</sup> Sürmen et al. 2006.

<sup>16</sup> Sürmen et al. 2006.

<sup>17</sup> Sürmen et al. 2006.

<sup>18</sup> Güvemli, Oktay, XIX. Yüzyılda Türkiye'de Muhasebe Öğretim Kitapları, MÖDAV Bulletin supplement Publication no: 3 p.47, İstanbul, 1997.

<sup>19</sup> This book is 326 pages and can be found in İstanbul University Library. Translated by; Binbaşı Ziya Bey, Fenn-i Usul-i Defteri, Mihran Matbaası, 1880, İstanbul.

## 5. Accounts

### Brief Procedure Book<sup>20</sup>

This book was prepared to give information about accounts, books and inventory. The book consists of two parts. In the first part, information about accounts and in the second part information about inventory is given.

### Muhasebe-i Ziraiye<sup>21</sup>

This book is among the first accounting specialization books in Turkey. In the first eight pages of the book, general information is given and in the following chapters information about inventory stock book, accounting of materials, accounting of cash and accounting of agriculture takes place.

## 9. Conclusion

From the foundation of Ottoman Empire until Tanzimat, accounting education was not given at schools. In this period, accounting education was given in master-apprentice relation in Hazine-i Amire (treasury). Collective education of apprentices was seen in Hazine-i Amire in the XVIII century because of the increase in the number of apprentices<sup>22</sup>. But this education was not of an independent educational institution. First traces of accounting education in Ottoman Empire were seen foreign schools in the beginnings of the XIX century. Turkish schools started to give accounting education after the Tanzimat and it spread very rapidly. In the last twenty five years of XIX century, Ottoman Empire, who met with double-entry accounting method lately, located accounting courses from the curriculums of Rüştiyes (junior high school) to Darülfünun (university) and ensured the introduction and dissemination of double-entry accounting system.

Ottomans continued to use a special accounting system called Merdiban (Stairs) Method from its foundation until the end of XIX century and with special efforts transferred to double-entry accounting system in 1890s and first practices were done in the accounting books of Police Force Department (Zaptiye Nezareti).

In the last twenty years of XIX century, both the dissemination of double-entry accounting method and its education in every level was ensured<sup>23</sup> and continued with the westernization movements of the Second Constitutional Era (İkinci Meşrutiyet).

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<sup>20</sup> This book is 70 pages and can be found in İstanbul University Library. Translation; Süleyman Asaf Bey, Muhtasar Usul Defteri, Matbaa-i Aramyan, 1882, İstanbul.

<sup>21</sup> This book is 80 pages and can be found in İstanbul University Library. Translation; Aram Margosyan, Muhasebe-i Ziraiye, Selanik Matbaası, 1885, İstanbul.

<sup>22</sup> See Güvemli, O.: T. Devletleri Muhasebe Tarihi, Volume: 2, 1998, İstanbul.

<sup>23</sup> Güvemli, O.: Türk Devletleri Muhasebe Tarihi-Tanzimat'tan Cumhuriyet'e-Volume:3, p. 90 cont., İst: YMM Odası Publication, 2000, İstanbul.

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