Accounting and Fiscality in the Ottoman Empire

Violeta ISAI*, Riana Iren RADU**

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ABSTRACT
The Ottoman Empire was an imperial superpower that manifested its domination in the Mediterranean zone between 1299 and 1922. At the moment of their maximum glory, the ottomans ruled over three continents, meaning 19,9 millions km². The tax system applied during 600 years, but also the accounting methods used, prove a remarkable administrative and fiscal organization in the Empire. There were taxes based on the Islamic law, but also taxes established by the sultan concerning the salaries of employees and the military campaigns. The necessity of a correct evidence of tax collecting and distribution required keeping registers “in stairs”, according to an accounting method overtaken from the Arabs, named the "Merdiban Method". The method was based on principles available until nowadays. It was applied until the end of XIXth century, when it was replaced with the method based on double-entry recording, overtaken from the west.

1. Introduction
Luca Pacioli, a Franciscan monk and mathematician, published in 1494, in Venice, his work “Suma de Arithmetica, Geometria, Proportioni et Proportionalitate”, where he mentioned the theory of double-entry accounting.

In the same time, in another part of the world, a method old by 11 centuries was used, named the Stairs Method, or the Merdiban Method. We talk about the Middle East, especially about the Arabic countries and the Mongols states. Here, the taxes were collected in territories (governorates), and sent to the Central Treasury. We have: haraç, jizya, zekat, ganimet, őşür etc. They were classified in three categories: taxes collected in cash, taxes on goods (percentage of goods value) and taxes by renting lands. The tax recording was kept in the Stairs Method, born in the VIIIth century.

The method was created to be compatible with the writing from right to left (the Arabic writing).

The Ottoman Empire took over the tax system and the accounting method from the Arabs, and developed it according to its political, economic, military conditions and fiscal structure. The method reflected the structure of taxes, expenses and incomes at these times. It was used until 1879, when it was abolished by a Royal Edict, and replaced by the double-entry bookkeeping.

We have 15 millions accounting documents and 180.000 books kept in Stairs Method, left from the Ottomans (Elýtaş et all, 2008). The method study started in 2004 and the research is still in the beginning. In order to analyse the fiscality and the accounting method in the Empire, the economists accepted the political and historical division in four periods: rise, growth, stagnation and regression, dissolution.

2. Accounting and taxes in the Rise Period
It's the period between the foundation in 1299 and the conquest of Constantinople in 1453. We don't have many accounting documents and records until the middle of XVth century, because the capital of the Empire was frequently changed (Söğüt, Bursa, Edirne and Istanbul).

In the XIIIth century, Anatolia was populated by small Turcoman states (emirates), among them, the Ottoman Emirate, that had border with Byzantium (Güvemly, 2010).

In 1299, its ruler, Osman Bey, unified all these tribes, founding the Ottoman Empire with the capital at Söğüt. The rise of the Empire continued in the next century, by a policy of conquest, and the capital was moved to Bursa, and later to Edirne.

The first silver coin (akçe) was minted by the ruler in 1327 (1,152 g).

The Ottomans used the Arabic writing and numbers, but, in the accounting records, they used the siyakat script, difficult to read, in order to keep the secret of documents. The numbers in siyakat were written in words or figures. By this way, the numbers could be covered and impossible to change.

Even the bookkeeping method changed in time, the siyakat system kept its secrecy and reporting clarity.

* ** Dunarea de Jos University of Galati, Romania. E-mail addresses: violeta_isai@yahoo.com (V. Isai), raduriana@yahoo.com (R.I. Radu),

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The accountants were educated in practice about terms, calculation and bookkeeping. Their job was considered very respectable, and their duty was the protection of state properties.

Economically speaking, the Ottomans were occupied in farming and raising livestock. Also, the taxes in this period were based on agriculture. The main source of incomes was the land products: cereals, vegetables, fruits, olives, textile plants, grape vine etc.

The production was not efficient because of the primitive technology and unable to make possible the export (Mantran et all, 2001).

Many products, like: honey, wood, silk, cotton, spices, furs and wax were imported from different countries. The state controlled the traffic of cereals and practiced fixed prices.

The taxes in the Rise Period were (Elytaş et all, 2008):

**Sharia Taxes** (based on the Islamic Law):
- **Zekat** (Islamic poor tax) – was paid only by the Muslims as 1/40 of their property, and was collected once a year.
- **Haraç** (land tribute) – was paid by the cultivators of land (farmers), fixed for each territory and collected once a year. This tax had different forms:
  - for the land renting;
  - for leave or damage the land;
  - for products and fruits (1/10 form the harvest, paid on harvest time);
  - for vineyards (10% - 50% from the harvest);
  - for orchards (10% - 50% from the harvest);
  - for vegetable products (10% - 50% from the harvest);
  - for silk cocoons (10% - 50% from the harvest);
  - for cotton, for fishing etc.
- Taxes taken from animals (for sheep and goats, for pigs etc.).

**Orfı Taxes** (collected under the control of the ruler):
- Taxes on salaries, collected from the state employees.
- Taxes of war campaigns etc.

In this period (XIVth-XVth century), the rural sector is administrated by the Coranic Law, according which the sultan is the owner of the land and subsoil. He gives the land for use to the farmers.

The farmer, Muslim or non-Muslim, is named "raya" and is registered as a cultivator. He’s not tied of the land. He pays taxes from the land, the harvest and the animals he owns. The taxes are collected by a person named "timariot" (Mantran et all, 2001). The timariots are a category of population who lives from the taxes collected from the rayas (farmers). They can be Muslims or non-Muslims.

The state yield the fiscal incomes to the timariots, temporary (for three years), in change of military and administrative services.

If a regular timariot earns few hundreds of aces yearly, a governor (ruler of a province) reaches 600,000 aces (545 kg gold) per year. For example, under Mehmet the IInd, the Governor of Rumelia reached 1.142 kg gold in a year.

The services of the timariots to the state are different according to the annual income. They must be present in the military campaign, with all the equipment and weapons they need in the war.

This Ottoman system, named "timar" is between the state, the timariot and the raya.

The timariot receives the fiscal incomes (taxes) as a servant of the sultan, and, in the same time, the raya (farmer) receives the land for rent, in order to assure by the taxes paid, the sustenance of the timariot.

Other categories of population who benefits of the tax renting are the miners, who enjoy of good work conditions, the salt mines workers, and the rice cultivators. They benefit also by important fiscal exemptions.

The timariots had to have hais, who risked paying with their freedom or even with their life, the mistakes of the timariots.

The accounting of the tax renting (timar system) was supervised by a kadi (man of low) and a financial inspector, named by the state.

The Ottoman Empire had to support enormous military expenses (1,375,000 gold coins under Mehmet the IInd, meaning 4,910 kg gold for one year, and the annual incomes were 1,800,000 gold coins, meaning 6,426 kg gold).

To manage this situation, the state used registers and accounting books, kept by the defterdars.

We can resume the fiscal and economic system in this period on three levels:
- the state collected indirectly the taxes, by renting these taxes to the timariots;
- the state controlled the tax collection using imperial employees, paid by the state;
- the timariots collected directly the taxes from the farmers.

The records kept in the Rise Period:
- Jizyah Accounting Office Catalogue (for non-Muslim population);
- Haremeyn Accounting Office Catalogue (for foundations);
- Great Ruznamçe Office Book Catalogue (for salaries of the officers and imperial employees);
- The Head of Accounting Office Book Catalogue;
The accounting organization was represented in the Divan by a vizier (minister). The country was administrated in provinces, and responsible for accounting in each province was a defterdar. The defterdars were ruled by a Minister of Finances.

3. The development of fiscal system and accounting in the Growth Period

It's considered the period between the conquest of Constantinopole in 1453 and the death of Great Vizier Süleyman Sökollü Mehmet Pasha in 1579. The most prominent ruler in this period is considered Süleyman the Magnificent.

In the XVIth century, the Ottoman Empire conquered huge territories, on three continents (Asia, Europe and Nord-Africa), reaching approximately 20 millions km² and the population was 20 millions persons of different religions (Muslim, Orthodox, Catholic, Mosaic etc.).

The economic situation was powerful. The money value was stable, also the prices and the tax levels. The Ottoman Empire became the most powerful state in the world.

The economy was still based on agriculture, but also on trade, transportation and small industries (silk). The types of lands in this period were (Elýtaş et al, 2008):
- **miri** lands (timar) – given to the viziers and commanders for covering their expenses in return for their military services. They were worked by the rayas who paid taxes to the master (the timariot);
- **maılč lands** (malikhane) – transferred by the sultan to his family members, high officials, governors etc. – as private properties;
- foundation lands – transferred by the owners to the religious foundations;
- **metrâk** lands – abandoned to the public and used as roads or grasslands;
- **mevat** lands – useless lands.

The timar system, or the tax renting reached a new level of development. The timariot, except the taxes collected from the farmers, received also his own farm (land, vineyard, orchard, mill), that he had the duty to work, earning all the income.

If for a province governor the income is 100.000 *açkes* for a year, for a regular officer (cavalier), the income is only 3.000 *açkes*.

The timariot must fulfill military, civil or religious services. If the service is very good accomplished, he receives supplementary incomes (parts), and if is not, the timariot loses his income (Mantran et all, 2001).

The timar system is not for life and not hereditary. In order to be good informed about the fiscal incomes, the state organized periodical census, registered in books (*defteri*) that contained the lists with the rent owners and the taxes paid by these ones. The total of these taxes represented the fiscal income for the entire province.

After each conquest, a primary book of the new province was made, and later, at 20-30 years, this book was modified according to the time. The books and registers the most sure and rich in information are those from the time of Süleyman the Magnificent.

They started by a rule (*kanunname*) containing the fiscal features of the province and the relations between the timariots and rayas (Mantran et al, 2001). The timariots and the possession descriptions were written in the short registers. The timars were given based on these registers. In this period, only the Muslims could become timariots. If at the beginning of Süleyman’s reign there were 28.000 timars, at the end of XVIth century, they reached 43.500. The taxes for persons were collected making the difference between Muslims and non-Muslims, but the taxes for products are the same, according to the region (in nature, meaning 1/7 or 1/8 until 1/3 from the harvest) and also the taxes for animals. The farmers paid also war contributions: work services, food or textiles deliveries and cash. At the end of XVIth century, almost all the taxes were paid in cash.

The Treasury of the Empire had two sections (Güvemly, 2010):
- **Internal Treasury** – the treasury of the Sultan, ruled by the head of treasury;
- **External Treasury** (the main one) – ruled by the Finance Minister and controlled by the Great Vizier.

If the External Treasury was in difficulty, it could borrow money from the Internal Treasury, with the Great Vizier accept.

The collection of taxes was made by the External Treasury. They were mentioned in the Land Register Books and the financial decisions were taken by the *Bus Defterdar* (Minister of Finance). He had to be able to increase the state incomes and to pay the salaries in time. Each province of the Empire had a financial office. The total of taxes in the province was written in a special Book in two copies (for the state archive and for the local court). The books and records were kept chronologically.

In the Growth Period, we have two groups of taxes: *şeri* and *örfi*.

The main taxes were: *zekat, őşur, haraç* (tribute), *jizyah* and other detail taxes. They came from: lands, saline, ports, mines etc.
- *zekat* - collected from the Muslims for the poor (1/40 of the wealth);
- *őşur* - collected from Muslims farmers, different according to the fertility of lands (1/5, 1/7, 1/8 and 1/10 from the products of the land);
- tax taken for cattle of Muslims;
✧ haraç – collected from non-Muslims farmers (1/10 – 2/10 from the products of the land);
✧ jizyah – collected from non-Muslims, for the exemption of military service and protection guaranteed by the state;
✧ customs tax – collected from Muslim and non-Muslim tradesmen (5% - 10% from the products);
✧ war taxes and compensations;
✧ revenues from mines, forests and saline;
✧ tributes collected from subordinate countries.

In the XVIth century the Empire had an annually budget, where the incomes were bigger than the expenses. This situation maintains until Sultan Süleyman’s death.

The Merdiban Method was used for cost accounting in the constructions of great buildings (mosques, hamams, türbes etc.)

4. The increasing of taxes in the Stagnation and Regression Period (1579-1839)

In the middle of XVIth century, we have the final borders for the Ottoman Empire and the incomes stopped. The long wars of conquest, doubled by the old technology used by the army, got into a financial difficulty in paying the salaries. Also, the state increased the taxes collected from the people. Despite this, the budget was in deficit every year. The silver coin reached a devaluation that generated an economic depression in the middle of XVIIth century (Toraman, 2006).

The financial crisis from the late XVIth century until XVIIIth century forced the state to adopt some economic measures (Güvemly, 2010):

a. increasing of current taxes and introducing extraordinary taxes like:
   ◦ help for war – collected in cash, once, during the campaign;
   ◦ help for peace – collected in cash, once, in peace time;
   ◦ nüzül and sursat – collected in cash and goods, to provide food and other requirements for the army.

b. new procedures for collecting taxes:
   The tax farming (İltizam) was introduced to collect the taxes directly in the land. The fields were rented to the tax farmers (multezim), who collected the incomes, for one or three years. The person, who had the promptest payment, obtained the İltizam for life, and immunity against everyone, except the kadis. It was a procedure with good results, the budget deficit was reduced and the relation between people and Treasury became letter.

c. the transfers between the Internal Treasury and Central Treasury:
   During the war period, from XVIIth century, a big transfer with gold and silver from the Sultan Treasury, that was very strong, took place to the External Treasury.

d. the confiscation (Musadere):
   Especially during the war time, the properties of statesmen, soldiers and employees could be transferred to the Treasury in situation of death, as a gift etc.

e. the implementation of Debasement:
   The state collected the money in circulation, reduced their value in silver or gold, and put it again on the market, the value difference being transferred to the Treasury. The prices raised and the power of money declined. The people economies were affected and caused many revolts.

f. Internal Borrowing (Esham)
   Was applied in the XVIIIth century, by selling the properties in rates and paying the annual profit in advance.

g. External Borrowing
   In the XVIIIth century, after loosing important territories, the Empire needed external borrowing, but only from Muslim countries, paying in change products like: flour, silk, cotton, textiles etc. In this period - between XVIIth-XIXth centuries we have a financial organization with 24 offices, each of them keeping its own books and registers:
   ◦ Offices bound by the Treasury:
     ◦ Central Office – kept the book of incomes and expenses of the Treasury
     ◦ Head Office of Finance – kept the books for land renting, state loans, salaries of guardians etc.
     ◦ Cavalier Payment Office – kept the book for salaries of officers (sipahi)
     ◦ Small Office – kept the salary books of doormen and naval workers
     ◦ Infantry Payment Office etc.
   ◦ Offices bound by the Budget:
     ◦ Haremeyn Office – kept the books of mosques foundations
     ◦ Cizye Office – kept the books of taxes collected from the non-Muslims
     ◦ Tax Office – kept the books of food contributions for the army
     ◦ Mine Tax Office – kept the books for mine taxes, transit custom taxes etc.
5. The big transformation of fiscality and accounting in the Dissolution Period (1839-1922)

In the XIX\textsuperscript{th} century we have the period of big transformations, when the Assembly of Finance and the Council of Finance were founded in order to adapt the tax system and the accounting to the new conditions.

We have also new institutions like the Directorate General of Accounting and Court of Auditors, which helped to the accounting modernization (Haydar, 2006).

The financial policy was changed. The system of tax farming was abolished, and the taxes were changed in order to make them equal between Muslims and non-Muslims. According to the new system, every tax payer must be in direct contact with the state.

The state engaged itself in external borrowing (16 times in the middle of the XIX\textsuperscript{th} century) because of budgetary deficits and foreign trade deficit. Unfortunately, the money are used for current expenses, and not for development.

According didn’t make a progress in the enterprises, except those owned by foreigners, but the state institutions made accounting implementations.

Until 1879, the Stairs Method was used and there weren’t accounting manuals or lessons in schools, because this method was based on the relation between master (\textit{deferdar}) and apprentice. The Merdiban Method was used in the XIX\textsuperscript{th} century for cost accounting in industrial enterprises. After this year, the double-entry recording method was introduced, an important role having the fact that many Turks studied in France during the Reform Period (\textit{Tanzimats}) and began to apply their knowledge in the administration of the Empire (Haydar, 2006). They brought French accounting books about double-entry recording.

In the XX\textsuperscript{th} century, the private sector began to apply this western accounting method.

6. The Merdiban Method in the Ottoman Empire

The Ottomans introduced this method in the XV\textsuperscript{th} century, in Istanbul, when the fiscal and administrative structures of the state were formed (Toraman, 2006).

The principles respected by the method were:

\begin{itemize}
  \item social responsibility – it considered the good of the society;
  \item continuity – the Ottoman Empire existed 600 years;
  \item periodicity – the budgets, the analyses between incomes and expenses and the records were kept in yearly periods;
  \item unit measure of money – the records were kept in \textit{akçes};
  \item truth and validity – the records were signed by an authority and controlled by another (\textit{kadi}, vizier, sultan);
  \item prudence – the preparation of the budget for the next year considered the previous data.
\end{itemize}

The main features of the method were:

\begin{itemize}
  \item it was a method of state accounting;
  \item it followed the collection of taxes from territories by writing the total tax of the province and summing the totals of tax types one under the other;
  \item the expenses were listed on types and totals one under the other;
  \item the records made possible to write the quantity and also the value;
  \item the records made possible to follow yearly the incomes of the state;
  \item the economic transactions had to follow the budget.
\end{itemize}

The rules of recording were (Elýtaş et all, 2008):

\begin{itemize}
  \item any input or output had to be recorded immediately;
  \item the inputs and outputs were classified in different kinds, and they were written and added under one account (with name, date and control signature);
  \item all the records had to be clearly explained, containing large explanations under the entry line;
  \item the space between two inputs/outputs wasn’t allowed but if it existed, it had to be marked by a line;
  \item it wasn’t allowed to correct by scratching;
  \item when the account was closed, it was put a mark;
  \item the similar activities were kept under the same book;
  \item the reports had to be prepared monthly or yearly, with detailed and useful information;
  \item at the end of every financial year, the accountant had to prepare a detailed report about goods and cash kept under his control;
  \item the accounting records were validated by an authority (\textit{kadi}, head of finance, vizier etc.);
  \item the records were kept by persons who learned accounting in the relation master – apprentice;
  \item the records had a title showing the type of tax, the date, and the content was written under the line, the sum was in \textit{akçes};
  \item the records contained subtotals, in stairs (each previous sum is written forward and added to the current sum, generating a new total);
  \item the incomes and expenses were written one after other, on the same part of the page;
  \item the totals were calculated at the end of the page, and checked at the half part, against the errors;
\end{itemize}
the mistakes were corrected by crossing and writing the correct information beside;
 each record received an entry member.

7. Conclusions

Fiscality and accounting reflected in the Ottoman Empire the needs of each historical period. The taxes were established according to the Islam Law and by the decision of the ruler. The collecting ways changed in time, being influenced by the fiscal structure from tax farming to direct procedure, after the Reform period. The accounting method was overtaken from the Arabs and Mongols in the XV\textsuperscript{th} century, being favoured by the Islamic culture, language and alphabet, fiscal structure, economic and commercial traditions.

Used as a bookkeeping method, the Stairs Method reflected the incomes and expenses of that time. In conclusion, it’s no doubt that the huge power of the Ottoman Empire, during 600 years consisted not only in its military force, but also in its powerful fiscal and accounting system.

References