

OKTAY GÜVEMLİ*

The development of accounting thought in Luca Pacioli's time in Turkey

1. Introduction

The Ottoman Empire (1299-1922), a Turkish state, used to reign the present day Turkey during the end of the 15th century and the beginnings of the 16th century when Luca Pacioli lived. In the mentioned period, two crucial developments, which affected accounting thought, existed. One of them was about private sector and the other one was about state sector.

The development which affected private sector's accounting applications was the Loncas (Loggia in Italian and Loge in French). The Loncas originated with the change in the Akhism which was comprised with Turks' arrival to Anatolia (1229s) in the century when Pacioli lived. The Loncas was later known as the Gedik System (monopoly) and was ruled out. These three institutions which emerged consecutively gave shape to private sector's businesses and affected their development process. Private sector accounting thought was formed within the scope of these institutions. Here, the emergence of Akhism, the formation of the Loncas and private sector accounting system are emphasized.

In the state sector, it is observed that during Pacioli's time, important accounting applications were made. There is the Stairs Method which originated in Abbasids during 770 A.D., was developed by Ilkhanids (a Mongol state in present day Iran) in 1258 and was taken by the Ottomans from Ilkhanids in order to be developed in accordance with the circumstances of the time until 1879 for 1110 years. It is seen that this method reached at its prime during Pacioli's time, and here, the introduction of this method's reaching its peak will be emphasized.

2. The Akhism, Loncas and their Effects on the Accounting Thought

2.0. The Birth of the Akhism and Giving Its Place to the Loncas

The birth of the Akhism is closely related to the story of Turks coming from the Middle Asia to Anatolia. Towards 1000 A.D., Turks who came to Anatolia were comprised mostly of nomadic people who lived off livestock. It is seen that

* **Professore emerito presso la Marmara University di Istanbul**

urbanite Turks came to Anatolia in 1220s. Due to the negative effect of Mongol Empire Cenghiz Khan on the Turks living in the cities in the Hazar Sea region, urbanite Turks in this area had to migrate to Anatolia. These Turks had professions like tailor, shoemaker, weaver, baker and barber, etc., and had to pursue their jobs in places in which they settled. However, there were not Turks in the cities in Anatolia. The Turks who previously came to Anatolia were in the rural areas dealing with livestock. In the cities, there were other people like Armenians and Greeks. From the Turks, weavers needed cotton, shoemakers needed animal leather and bakers needed wheat.¹

Akhisim was the one that affected the commercial lifestyles of producers and dealers living in these lands starting from 1220s until the end of 1909 for about 700 years. Akhisim gave its place to the Loncas in 15th and 16th centuries complying with the terms and conditions of that time; and this system gave its place to the Gedik system in 18th century. However, the Gedik System was abolished in 1909 with Padishah's Firman.

The founder of Akhisim, Ahi Evran, was a leather handler. Leather was needed in order to produce clothes, shoes and animal harness. Ahi Evran organized the artisans who used skin under the name of Akhism and these artisans gathered around. In other words, he thought about the unity of artisans who use leather in order to get animal skin. By processing these leathers, Turkish people's needs were satisfied. Urbanite Turk community formed the basis of Akhisim, meeting the needs and unifying in a city in which they had just arrived.

Ahi Evran used Turkishness and Islam while he was providing this unity. However, people were engulfed in a society which was closed to production and sale. It was aimed at meeting the needs of settled Turkish people who lived in a town of a big and every small city. Provision, production and sales were done on a town scale.

Greek and Armenian community which saw the accomplishment of Ahi Evran's Akhism² adopted similar principles. In this case, between the 16th and 17th centuries, Akhisim was no longer a Turkish tradition and became an economical system

¹ Kaþgarlý Mahmut (Düzenleyen: Besim Atalay) : *Divan-ý Lugat-it Türk*, Türk Dil Kurumu Yayýný Cilt 1, Sayfa 90, 1992, Ankara, - Çaðatay Neþet : *Bir Türk Kurumu olan Ahilik*, Sayfa 5 vss. Türk Tarih Kumru Yayýný, 1989, Ankara.

² - Ekinci Yusuf: *Ahilik Meslek Eðitimi*, Milli Eðitim Bakanlýđý Yayýn ý, 1990, Ankara. - Gülvahapođlu Adil: *Ahi Evran Veli ve Ahilik*, Memleket yayýnlarý, 1991, Ankara. - *Oktay Güvemli, Türk Devletleri Muhasebe Tarihi*, Cilt 1, Osmanlý Ýmparatorluđuna Kadar, Sayfa 395 vss., 1995, Ýstanbul.

from which Greek and Armenian enterprises, along with Turkish ones, could benefit under the name of the Loncas. In the 18th century, however, the Loncas became the Gedik System. The Gedik System showed itself as a system that prevented the dispossession of an artisan's workplace and that provided the master whom he trained himself with the take-over. Gedik means the continual tenure of the children of the owner of the workplace.

Without a doubt, there were times when these three systems existed along side with each other and there are many other factors which affected successive transitions. As it is impossible to mention all of these here, it will be more appropriate to be contented with the short explanations.

2.1. The Effects of the Akhism, Guild and Gedik Systems on the Development of Accounting Thought

As it is mentioned above:

1. The Akhism was a system from which Turkish artisans benefited. However, in the Guild and Gedik Systems, Turks, Greeks and Armenian benefited all.
2. These three systems dominated the economic structure of the country in terms of market production.
3. The Akhism, Guild and Gedik Systems determined the production and distribution conditions of the private sector.

The benefit of the Akhism, Guild, Gedik Systems is that in the Ottoman Empire, they provided people from different religions and cultures with living together in a harmony.

The disadvantage of these three systems is that they stayed as production styles which were directed to only one district. As Turkish, Armenian and Greek districts made production aimed at their own needs, there was not a capital accumulation. Talented artisans could not provide a capital stock by making productions for bigger markets.³ Failing to make capital stock caused small businesses not to develop and this situation prevented the development of accounting thought.

³ Mehmet Özbirecikli: *The Three Institutions which Created the Socioeconomic Structure of Turkish Private Entrepreneurs Between the 13th and 19th Century: Akhism, the Lonca and the Gedik System*, Paper for (Business History Symposium) 2nd Balkans and Middle East Countries Conference on Auditing and Accounting History, 15-18 September 2010, İstanbul, Turkey.

During Luca Pacioli's time, the Loncas was dominant in Turkey. For this reason, it is beneficial to mention more about the Loncas in the Ottoman Empire⁴.

The Loncas became an efficient system which gave shape to production conditions on artisan level of private sector. It is seen that the Loncas was organized according to job branches and some of the titles existing in the organization are as follows.

Chamberlain: Representative of the Loncas to the state and other foundations.

Guild master: The person who provides the Loncas.

Yöitbapý: The person who directs the financial system of the Guild and who arranges the training within artisans and the transition from apprenticeship to mastership.

Apart from these, there is also a council known as *Board of Alderman* which is responsible for the quality control.

The Loncas, as it can be understood from this short explanation, is a powerful system providing the organization of artisans. However, it is an artisan organization and it prevents the foundations of big production establishments.

In the period when Luca Pacioli lived, the Loncas bore importance in affecting the development of accounting thought and the structure of production and distribution in Turkish society. However, there is another factor which restricted the development of private sector and that is the statist understanding of Ottoman Empire, which was generally valid in the Middle East. Below are the factors concerning this issue.

3. The Statist Approach Giving Shape of the Accounting Thought of Private Sector in the Ottoman Empire

In the Middle East countries, an economical statist understanding generally dominated. This understanding is also seen in the Ottoman Empire and it shows a quality which prevents the development of private sector. Some examples belonging to the attempts of the government to the economic life are as follows.

1. *Muqata'ah System:* The Ottomans gave their production areas (fishing, various incomes of the lakes, saltworks, customs, mines etc.) to business via diverse methods (muqata'ah, cavalrymanship etc.) and set a payment in return. This general application limited the working area of the private sector. government workers to get by. It is seen that these lands and farms which

⁴ Oktay Güvemli: *Türk Devletleri Muhasebe Tarihi, Osmanlı İmparatorluğu- Tanzimata Kadar*, Cilt 2, Sayfa 65 vss., 2. Baskı, 2000, İstanbul.

were

2. *Timar System*: Soldiers and high rank government workers got shares from the agricultural products of the regions in return for their service. It is called Timar System. Timar owners had to contribute to the food needs of the army and soldiers during war by giving grain and corn.⁵ In the 16th century, places which had up to 200.000 Akçe income were called timar and their managements were given to cavalymen who were armed troop generals. Places which had up to 20.000-100.000 Akçe annual income were named Zeamet and were given to high rank generals of armed troops. Places which had up to 100.000 Akçe annual income and were named Has were given to high government workers. The system suggests that the statist understanding was on the high level.
3. *Manor System*: The Manor System which appears as the third statist system is the allocation of agriculture forms in order for high rank generals and government workers to get by. It is seen that these lands and farms which were given with letter of conveyance could be left to the children of the general and government workers.
4. *Foundations*: Trust institution emerges as a field to which the Ottoman applies half statist understanding. It has a special place in accounting applications and is a non-profit system which appears in a way that an income of a place is attained to charity work. It also enables the incomes of affluent persons' assets to be used with a social purpose.⁶

Four examples which are given above and belong to the 16th century put forward these issues:

A. It is understood that the Ottoman gave priority to a social-purposed, non-profit system which increased the government's incomes.

B. Government should take precautions which can open the way to the development of commerce. For these precautions, firstly, excluding the profit aspect and encouraging capital stock bear importance. However, in the Ottoman Empire, there are numerous examples which are not suitable for these thoughts. One of these examples is nationalization of assets of rich people with the claim that they

⁵ - Ömer Lütfi Barkan: *Tımar, İslam Ansiklopedisi*, Cilt 12/1. - Mehmet Zeki Pakalın: *Osmanlı Tarih Deyimleri ve Terimleri Sözlüğü*, Cilt 3.

⁶ M.Nihat Özün: *Osmanlıca - Türkçe Sözlük*, 8. Baskı, 1989, İstanbul

⁷ Oktay Güvemli: *Türk Devletleri Muhasebe Tarihi, Osmanlı Dönemi*, 2. Cilt, Sayfa:75 ve 78, 2000, İstanbul.

get their assets illicitly in the 18th century. Its application was made for a while under the name of *Sequestration Institution*.⁷

C. The statist understanding of the Ottoman Empire emerged as protecting the consumer rather than encouraging production. During Pacioli's time, the Ottoman Empire applied *Narh* system in order to protect the consumer. With this system, the prices of consumption products (bread, meat etc) were determined and especially in cities, the goods could not be sold over the specified price.

D. The government produces goods (salt, candles) whose market was very wide in its own establishments (like public economic enterprises); it also produces military clothes, guns and ammunition in its own factories.

These explanations show that the state gave importance to meeting the basic needs of its people with reasonable prices, that is to say, it applied a statist approach in economical field. Within this system, the Loncas undertook the functions which are supply, production and distribution on district scale.

These explanations show that in the 15th and 16th centuries during the Ottoman Empire period, the pursued statist understanding did not give a chance for the private sector to found big establishments by providing capital stock.

It is also understood that artisan production system which started with The Akhisim and continued with the Loncas did not have a suitable atmosphere for enabling capital stock because of the production understanding aimed at confined district.

The fact that big businesses could not emerge by providing a capital stock proves that accounting thought was carried out within a simple settlement system in the private sector. It is due to these reasons why accounting records belonging to private sector in Turkish accounting history cannot be found. The only exceptions of this situation are foundations. The reason why accounting system developed in foundations is that these foundations continued their activities under the state's supervision.

4. The Development of Governmental Accounting In the 15th and 16th Centuries in the Ottoman Empire

4.0. The Stairs Method as Governmental Accounting Method

The explanations above prove that accounting thought in the private sector in the 15th and 16th centuries could not show a certain development because of Ottoman's statist applications.

However, in governmental accounting, a different situation is in question since significant developments in governmental accounting draw all the attention. In the 15th and 16th centuries, it is possible to examine these advances under two titles. One of them is accounting management and the other one is about the organization of governmental accounting. In this section, the Stairs Method, as a governmental method, will be mentioned.

In the documents of Abbasid Empire (750-1258)⁸, which was an Islamic state in the Middle East, the primary use of the Stairs Method is encountered. Abbasids sought for ways to meet the needs of holding records of governmental accounting and benefited from the system whose examples can be seen in Supplement: 1. This record is the record which shows the government's incomes which were provided as annual agricultural product and money. In a way, it has the characteristics of an annual budget. This information belongs to the previous year and it is understood that in the next year, this information can be benefited from in detecting how much tax will be collected or from which state and in what amount (as agricultural product).⁹ Hulagu, the Khan, or ruler, of Ilkhanids that ended Abbasids, brought this method to Ilkhanids in 1258. In Ilkhanids, four educational books were published concerning the Stairs Method between the years 1309-1363. The Stairs Method, as a governmental accounting system, improved in Ilkhanids. It was able to meet the governmental accounting's needs. An example about these developments is in Supplement: 2.

This example was taken from an important book named *Risale-i Felekkiye* which was written in 1363, and it shows the total of the government's one-year incomes. However, in this example, it is also seen that not only incomes but also the government's annual expenses are shown.

The high point in both examples is, whether incomes or expenses, the fact that the main sum is written on top and the sums forming the main sum are written one under the other and downwards. The writing system forms the basis of the recording system and is the reason why the system is named "Stairs".

The Stairs Method, which originated in the Abbasids and lived its initial form, reached and experienced its prime in the Ottoman Empire (1299-1922).

⁸ A. Freyherrn von Kremer, *Über da Budget der Eynnahmen unter der Regjerung des Harun Alrasid*, 1876, Wien.

⁹ Oktay Güvemli- Batuhan Güvemli: *The Birth and Development of An Accounting Method yn the Middle East (Merdivan Method)*, Paper, The Fifth Accounting History International Conference, BANff (Canadas), 2007.

During the first 60 and 70 years of its foundation, the Ottoman Empire paid taxes to Ilkhanids who were around the east border in order to be able to expand toward the west. The Ottomans found out about this method during the taxpaying processes. The first findings concerning the method were discovered after the middle of the 15th century in the Ottoman Empire. In the previous periods, as the application findings, which existed when Bursa and Edirne were capital cities, did not survive until today, we do not have the initial findings of this method. The second half of the 15th and the beginnings of the 16th century in which Pacioli lived are the beginnings of the Stairs Method, reaching its prime in the Ottoman Empire. In the 16th and 17th century, the method completed its prime stage. It went through its excelling process at the end of the 18th and 19th century and with the Sultan's Firman in 1879, it gave its place to Double Entry Bookkeeping Method and claimed its magnificent place in history.

During Pacioli's time, there is a journal book in using the method and a lot of sub ledgers having the characteristics of general ledger accounts in the Ottoman Empire. In the journal book, the money entering in and coming out of the Treasury and the sums of valuable products are inscribed. However, sub ledgers in the characteristic of general ledger account consist of hundreds of sub ledgers, tracking the incomes and expenses separately. Into every single one of these sub ledgers, expenditures which will be made in income and expense places to be provided from the income place which the ledger belongs to at the beginning of the year are written. By benefiting from these hundreds of sub ledgers at the end of the year, incomes of that year (according to their types) can be determined and the expenses can be calculated in accordance with their places. It is clearly seen that by benefiting from this information, the government determines its income and expenses in the characteristics of budget realization at the end of the years. As an example of place of use of the method, sub book registry will be mentioned which is in the characteristics of general ledger account into which incomes belonging to the year 962 (Muslin Calendar) (Gregorian calendar-1553) and provided from the government's one income place (the Farm written.¹⁰ In the first section of this paper whose copy is in Supplement: 3, the collection which was made by Hasan Subaşı, who was responsible to make such collection in government's income place the Farm Kuruçay, within the year exists as income types. However, in the second section, there is information concerning on what dates and in what amount these collections were made to the General Treasury by Hasan Subaşı

¹⁰ The Archive of Prime Ministers Office for the Ottoman Empire under the reference Bab-ı Defteri, D. BSM No 44.

who was responsible for these collections. It is known that by benefiting from the journal book, second section's records are entered. When paid attention, it is clearly seen that Hasan Subaşı made a collection of 158.836 Akçe, however 158.600 amount of this total was put into the government's treasury. This record shows not only the income which was provided by an income place of the government, but it also shows itself as auditing record.

Again when it is paid attention to recording style, it is observed that little costs which comprises the main cost and in which the main cost is written are classified downwards like stairs. It is the classical application style of the Stairs Method.

4.1. The Situation of Governmental Accounting Organization Applying the Stairs Method in 16th Century

The Ottoman Empire, just like the former Turkish states and other states in the Middle East, had a statist understanding in economy management. However, in a state where a statist approach prevails, the accounting system needs to have a strong structure.

Documents which give importance to governmental accounting are seen during Fatih Sultan Mehmet's time (1432-1481). There were verdicts suggesting that entry and exit could not be carried out without an accounting registry to the Treasury and that Ba°defterdar is very much like Minister of Finance. Without a doubt, the necessary importance will be given to the organization of a governmental accounting establishment which is again given just as much importance.

In this section, accounting organization structure of the state in the 16th century will be mentioned.¹¹

Table 1

Central Accounting Organization in the Ottoman Empire in the 16th Century

1. Departments connected to Ba°defterdar (Governmental Accounting President, Minister of Finance)

¹¹ Oktay Güvemli: *Türk Devletleri Muhasebe Tarihi, Osmanlı Dönemi – Tanzimat'a kadar*, 2. cilt, Sayfa : 108 vss., 2000, İstanbul.

**First Journal Second Journal Rumelia Accounting Anatolia Accounting
Central Accounting**

Book	Book	Department	Department	Department
(The extent of the job Government required two journal book departments. Thus, included) income and expense records can be separated from each other.)		Foundation Books - Poll tax books	- Government - Workers in the Foundation Books - The wages of soldiers in Anatolia	- Padishah's Palace (Soldiers

2. Departments connected to Defterdar of Rumelia (Accounting of the regions in Europe continent)

First Muqata'ah Department	Second Muqata'ah Department	Mefkufat Department	Revenue Department
---------------------------------------	--	--------------------------------	-------------------------------

(The book registration of incomes due to giving department government's income places to rent. Two departments makes the because of overload. incomes the presents may			- Book of soldier (The fee which is taken which from the ones who sums of do not go to the at the end of army. year and it to whom it concern)
--	--	--	--

Fortress Soldiers Department

(The wage book of the soldiers
of
Who are in Europe continent and
Arabia.)

Order Preperation Department

(The department where preparations
negotiations and orders are given to the
departments making the accounting

applications in Europe)

3. Departments connected to Defterdar of Anatolia (Accounting of the regions in Anatolia)

First Muqata'ah Mefkufat Department	Second Muqata'ah Department	Third Muqata'ah Department	Department
---	--------------------------------	-------------------------------	------------

(Departments where accounts of income places that are given to rent. The department where the

As there are a lot of muqata'ah, there are three departments.) payments from people who do not go to the army

are taken.

Revenue Department
Department

Order Preparation

(The department which makes the total calculations where preparations of incomes at the end of the year and who presents negotiations and orders are given to the it to whom it may concern.)

(The department departments making the accounting applications in Anatolia.)

4. Treasurer (Person in charge of National Treasury), Chamberlain (Person protecting the coming presents), Delivery Person (Person who gives the palace clothes to the tailor and keeps track if them)

Treasurer	Chamberlain	Delivery Person
(Person in charge of clothes National Treasury)	(Person protecting the coming presents)	Person who gives the palace to the tailor and keeps track of them)

Notes:

1. It is understood that organization structure was organized in connection with the place where Ba°defterdar (Minister of Finance) is and again in connection with two revenue offices associated with main revenue office. There is also another department, dealing with treasury and palace matters linked with Ba°defterdar.)

2. Although a third main revenue office was founded in order to do the jobs of big places like Istanbul, Bursa and Edirne in the 16th century, after a while, this revenue office was closed down and its jobs were transferred to other two revenue offices.

3. It is obviously observed that journal book records are where Ba°defterdar is and a document recorded into a journal book was sent to the associated department of revenue offices. The journal book is the recording system which was benefited from in order to track the daily activities and routines. The rest of all records are sub ledgers in the characteristic of general ledger account.

4. A contract needs to be made with the person who gets muqata'ah (giving government's income places to rent). It is understood that these contracts were prepared by Order Preparation Department which prepared the documents sent to the Empire regions from central accounting.

5. This organization gains importance in meeting the needs of central accounting of the Empire. It is necessary to mention that the order which would transfer the documents and information to central accounting in various parts of the Empire was available. It is also known that all of the incomes of the Empire did not come to this center and all of the expenses were not satisfied from this center, and that this application was performed in the way that certain big states' incomes and expenses were managed and keeping accounts were carried out in the state center.

These explanations indicate that governmental accounting in the Ottoman Empire in the 16th century had a quite developed order on those time's circumstances.

5. Conclusion

In the second half of the 16th century and the beginnings of the 17th century when Luca Pacioli lived, it is understood that accounting thought could not develop in the private sector in the Ottoman Empire while in the state section substantial improvements occurred. The fact that private sector businesses could not expand prevented the development of accounting system. The circumstances which had production styles, such as The Akhism and the Loncas, on artisan level, government not paying enough attention to protecting the consumers rather than encouraging production, not taking precautions towards recognizing profit motive and not encouraging capital stock are among the reasons why private sector could not develop. It is seen that Ottoman's statist understanding had significant role on this result.

It is understood that development of accounting thought in the state sector was suitable for the era's requirements. This success is based on two events; one is that an accounting system called the Stairs Method was developed and used in governmental accounting and the other one is that there was a solid and sound organizational structure recording Empire's income and expenses.

REFERENCES

1. Çadırtay Neşet: *Bir Türk Kurumu olan Ahilik*, Sayfa 5 vss. Türk Tarih Kumru Yayını, 1989, Ankara.
2. İkinci Yusuf: *Ahilik Meslek Eđitimi*, Milli Eđitim Bakanlıđı Yayını, 1990, Ankara.
3. Gülvahapođlu Adil: *Ahi Evran Veli ve Ahilik*, Memleket yayınları, 1991, Ankara.
4. Oktay Güvemli: *Türk Devletleri Muhasebe Tarihi*, Cilt 1, Osmanlı Ýmparatorluđuna Kadar, Sayfa 395 vss., 1995, Ýstanbul.
5. Oktay Güvemli: *Türk Devletleri Muhasebe Tarihi*, Osmanlı Ýmparatorluđu-Tanzimata Kadar, Cilt 2, Sayfa 65 vss., 2. Baskı, 2000, Ýstanbul.
6. A. Freyherrn von Kremer: *Über da Budget der Eýnnahmen unter der Regýrung des Harun Abrasid*, 1876, Wien.

7. Mehmet Özbirecikli: *The Three Institutions which Created the Socioeconomic Structure of Turkish Private Entrepreneurs Between the 13th and 19th Century: Akhism, the Lonca and the Gedik System*, Paper presented at (Business History Symposium) 2nd Balkans and Middle East Countries Conference on Auditing and Accounting History, 15-18 September 2010, İstanbul, Turkey.
8. Oktay Güvemli-Batuhan Güvemli: *The Birth and Development of An Accounting Method in the Middle East (Merdiban Method)*, Paper, The Fifth Accounting History International Conference, BANff (Canada), 2007.
9. Kaþgarly Mahmut (Düzenleyen: Besim Atalay): *Divan-ý Lugat-it Türk*, Türk Dil Kurumu Yayýný Cilt 1, Sayfa 90, 1992, Ankara.
10. Ömer Lütfi Barkan: *Týmar, Ýslam Ansiklopedisi*, Cilt 12/1.
11. Mehmet Zeki Pakalýn: *Osmanly Tarih Deyimleri ve Terimleri Sözlüdü*, Cilt 3.
12. M.Nihat Özün: *Osmanlyca-Türkçe Sözlük*, 8. Baský, 1989, İstanbul
13. The Archive of Prime Ministers Office for the Ottoman Empire under the reference Bab-ý Defteri, D. BSM No 44.

(Ar)
Appendix: 1 (Transcription)
A Record in the State Accountancy with Merdiban System used by the
Abbasids from 775 and 786

A Record in the State Accountancy with Merdiban System used in Abbasids from 775 and 786					
State _____ 1					
Taxes in kind and cash and their places which come to the state treasury for every year in Harun al Rashid Era					
Drachma _____					
530.312.000					
Total _____ 3			Total _____ 2		
buying as goods			as cash		
5.706.000 Dinar			404.780.000 Drachma		
1 Dinar 22 Drachma					
125.532.000 Drachma					
A kinds _____ 4					
of Tax and names of provinces					
pomegranate _____ 7		Raisin _____ 6		Honey _____ 5	
and quince	from Iran	from Rey	from Ecnadussan	from Humus	from Hamadan
			300.000	1.000	and Bestaki
pomegranate	pomegranate		Ritl	Rahile	13.000 Ritl
quince	1.000 portion				20.000 Ritl
150.000				from Iran	from Isfahan
portion				1.000 Ritl	20.000 Ritl
					from Cilan
					20.000 Ritl
Salt _____ 10		Wax _____ 9		Sugar _____ 8	
from Armenia		from Isfahan		from Ahvaz	
		20.000 Ritl		30.000 Ritl	
Plum _____ 13		Indian Cherry _____ 12		Syrup _____ 11	
from Rey		from Iran		from Hamadan and Destebi	
1.000 Ritl		20.000 Ritl		1.000 menn	
Provisions _____ 16		Cummin _____ 15		Persimmon _____ 14	
from Sind		from Kirman		from Kirman	
with Kufe meter		100 Ritl		20.000 Ritl	
1.000.000 vakır					

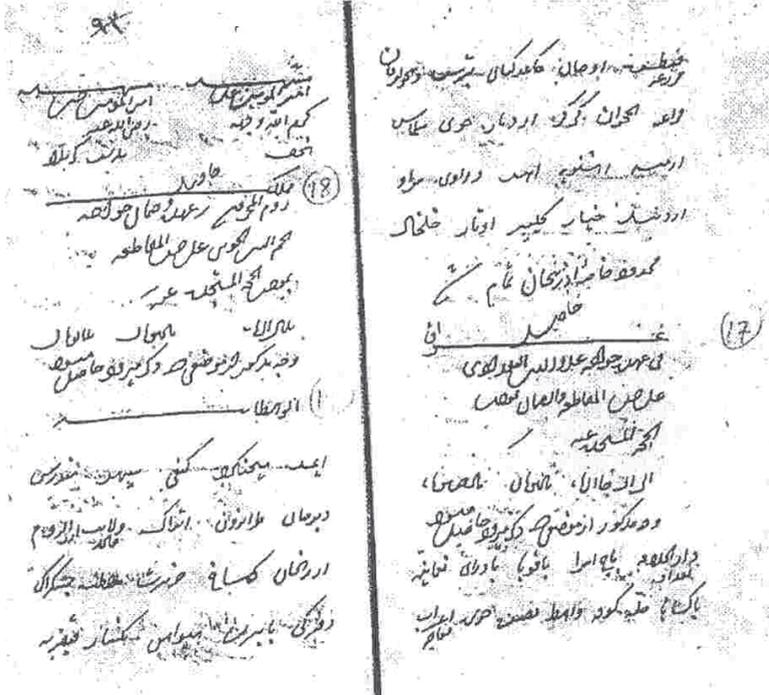
Appendix: 118

aqueous ¹⁹ distillate of rose from Iran 30.000 bottles	Parget Soil ¹⁸ Savad'dan 292 rtl	Perfumes ¹⁷ from Iran 50.000 rtl
Different Clothes ²² from Al Hambra 6.700 items	Clothes ²¹ and fabrics from Armenia 20 rugs	Agalloch tree ²⁰ clove, coconut 300 rtl
from Al Hambra 500 clothes 400 clothes	from Cilan 20 clothes from Anatolia	from India 150 rtl
from Basra 200 from Negran 200 clothes	from Africa	from Sind 150 rtl
Shoes ²⁵ 2,200 pairs of	Horse ²⁴ from Cilan 100 pieces Bird ²⁶ from Armenia 30	Elephant ²³ from Sind and vicinities 3 herds
	from Cilan .15	
Revenue from Bagdhâd was equal to this amount according to Kudama bin Cafer's information after great fire of Baghdad Archives in Hegra 204 during the conflicts created by Emin Begh		

Annex 2:

Risale-i Felekiyye, page 93-94 (Accounting Teaching Book)

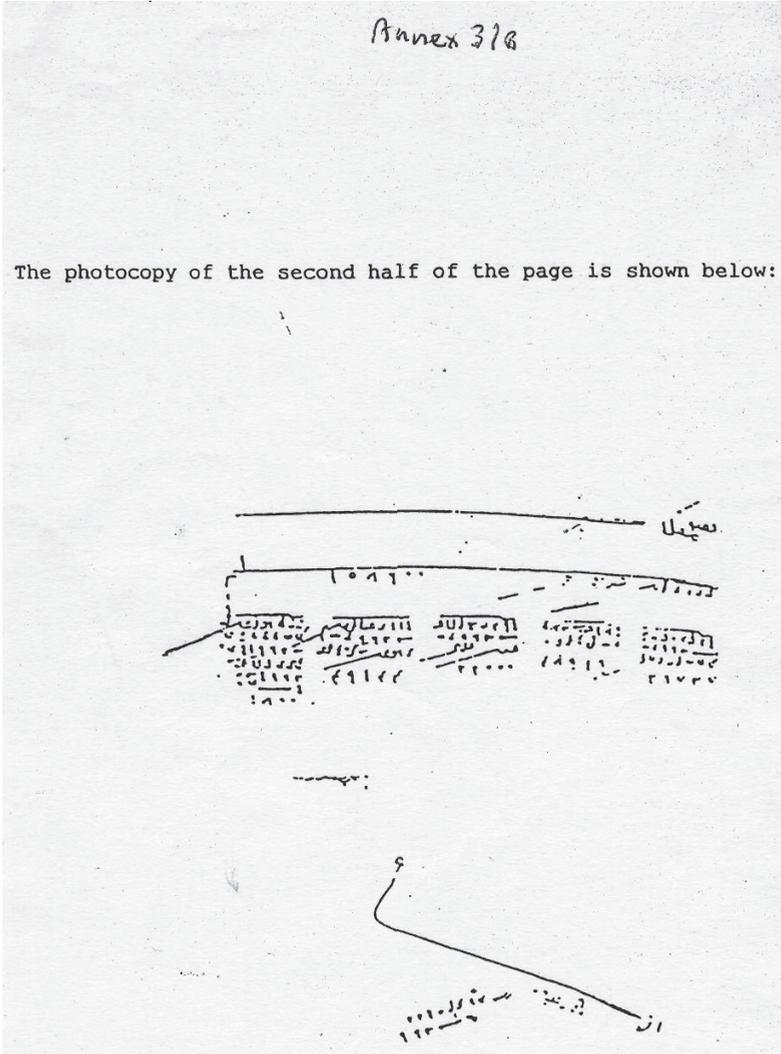
İlhanlı State – Year: 1363



Appendix: 2 (Transcription)		
Record number 17, 18, 19, 20 quoted from Page 93 and 94 in the Risale-i Felekiyye in 1363		
Revenues from Iraq		17
Arabic, prepared onto order based on agreement with Hodja Alaaddin Baghdadî		
2.500.000 Dinar	as tuman (a Persian monetary u	250 tuman
Revenues came from places as follows		
Baghdad, Bakuba, Bederay, Numanîye, Bakuseya,		
Kufe, Vasil, Basra, Huveyze, Araba-ı Mehacir		
Şehi _____ t	Şehi _____ t	
from Ali's country:	from Hassan's country:	
Negef	Karbala	
Homeland		18
Greek (who holds Ottoman citizenship), prepared onto order based on agreement with Hodja Nedjmeddin		
3.000.000 Dinar	as tuman	300 tuman
Revenues came from places as follows.		
Provinces in middle		19
Amid, Meycingerd, Kığı, Sipir, Menderes, Dircan, Trabzon, Erzurum, Erzincan, Kemah, Harput, Malatya, Çemişkezek, Divriği, Bayburt, Sivas, Niksar, Kayseri, Develli, Tokat, Amasya, Merzifon, Osmancık, Ankara, Çankırı, Aksaray, Konya, Akşehir, Seferihisar, Karahisar, Karacadağ, Maden, Gümüşpazar		
Provinces in borderland		20
Karaman, Hamidoğulları, Denizli, Umurbey, Germiyan, Orhan, Gerece, Bolu, Kastamonu, Sinop, Eğridir		
Deduct from revenues		21
Spends for state's requirements deducted from original and extra revenues		
26.041.000 Dinar	as tuman	2.604 Tuman
These amounts spent.		1.000 Dinar
Deduct from revenues		22
Spends made by cabinet onto Sultan's order		
Gümüş Dinar		
8.200.000 Dinar	as tuman	820 Tuman
Deduct from extra revenues		
17.841.000 Dinar	as tuman	1.784 Tuman
		1.000 Dinar

Annex 316

The photocopy of the second half of the page is shown below:



Appendix 31A (Transcription)

The English language translations of the first half page is as follows:

Accounting _____

Following entries represent the ones entered by making use of the entries in his own book of Hasan Subaşı acting as the manager Kuruçay Farm in respect of the income earned in one year during the year of 962 and the amounts turned in thereof

Annual Revenue _____ 158.836 (1)

The break-down of this revenue _____

Based of the enteries in his own book of Hasan Subaşı:
Income of agricultural produce-grains etc:
33.995

Annual agricultural produce
income recorded in the book
of Mevlana, the Canonical Judge
of Kuruçay
22.000

Ispeñçe (one-fifth) tax received
from Non-Muslims per the books
of Mevlana, the Canonical Judge
of Kuruçay
17.320

Income from tax received
per sheep head as per the
book of Hasan Subaşı
46.144

Income from tax on beehives
and on orchards as per its
own book
2.547

Miscellaneous taxation incomes
of Kuruçay Farm as per its own
book
18.000

Income of Kuruçay Farm
from cotton produces
as per its own book
11.520

Income of Kuruçay Farm
from Industrial Production
as per his own book of
Hasan Subaşı
7.310

(1) The amounts mentioned in the entries are in "Akça" being it the currency unit of the Ottomans.

Appendix 3/B (Transcription)

The English language translation of the second half of the page is as follows:

Amounts turned in from such incomes

By Hasan Subaşı amounts turned in the ~~state~~ Treasury:

158.600

By Memi, the secretary of
Kuruçay Farm turned in
on January.2.
36.737

Amount turned in by
Memi on February.18
48.959

Amount turned in by
Hüseyin Çelebi on
April.29.
22.000

Amount turned in by
Hasan Subaşı on June 11
as per payment receipt
49.144

Amount wage paid to
secretary Mehmed on
June 30
1.800

Balance amount

236

(2)

Note:Balance Amount was paid on 963
September.22 to the ~~state~~ treasury

(2) Balance amount (158.836 - 158.600 = 236)

