Abstract: By indicating general problems of the studies of defterology in contemporary Ottoman studies, this paper aims at elaborating the principles of postclassical defterology, which is connected with the transition period of the Ottoman Empire. By presenting the existing scientific achievements and focusing on the very procedure of making inventories, the paper defines the access framework for the study of Ottoman inventory books – the defters. Postclassical defterology is defined through the process of fiscal transformation and specific parameters that characterize the existing historiographical research. The case study of defters for the Smederevo sanjak from 1741 is used to illustrate the classic model of postclassical methodology. Special attention was focused on the issue of credibility which burdens the modern approach to defterology. The problem of fictitious archive material is isolated as the dominant paradigm of all further socio-economic studies of postclassical defterology.

Keywords: Ottoman studies, defterology, tahrir defters, the Ottoman Empire, the 18th century, the Smederevo sanjak.

1. Classical defterology

The term ‘defterology’ refers to the study of the Ottoman inventory books – defters.

The official name of these documents, ‘imperial defters’ (defter-i hakani) was often replaced in the very documents of the Ottoman administration and in modern historiography by the name ‘inventory defter’ (tahrir defterleri), or possession and inventory defters (tapu tahrir defterleri). Ottoman archives, primarily the Archive of the Presidency of the Government (Başbakanlık Osmanlı Arşivi) in Istanbul and the Directorate General of Deeds and Land Registry (Tapu ve Kadastro Genel Müdürlüğü) in Ankara, as well as in various archives of the states that were once a part of the Ottoman Empire,
such as the Cyril and Methodius National Library in Sofia, have preserved a total of about one thousand and five hundred defters.  

Defters themselves are divided into several categories: extensive inventory defters (mufassal), which have been the most interesting for researchers, summary defters (icmal), the defters of religious foundations (evkaf) and, from the end of the classical period, possession defters (derdest). Extensive defters contained information about the complete structure of villages, towns and nahiyas within one sanjak, the names of household heads (heritage) and full tax burdens; the kind of tax or agricultural products and livestock that were taxed with a specified quantity and monetary values. Summary defters showed the structure of hases, zeamets and timars, the geographic area that they covered, their monetary value and the names of landowners who they were assigned to. The defters of religious foundations, if there are any, included the inventories of positions and duties assigned to endowments. Possession defters recorded the structure of the change of possession, the name of the sipahi and the exact date when he was given the possession. In addition to the monetary value, only one village was registered there and the nahiya to which it belonged. For that reason, it is clear that these defters were tied to summary defters because this recorded place only referred to the estate in the summary defter, which contained complete information.

The doyen of the study of Ottoman defters, Heath Lowry, divided the studies of defterology into four schools: Hungarian, Barkan-Braudellian, Turkish and French. In addition to these, we can also single out the Yugoslav school. According to this categorization, the Hungarian school is characterized by the focus on a certain peripheral geographic area and the people who inhabited it. The studies of Ömer Lütfi Barkan, the founder of defterology, are directed at the central provinces of the Empire, at the general rather than the specific approach. According to Lowry, Barkan’s approach set an antithesis to the Hungarian school and saw the Ottoman Empire in a Braudellian manner, fitting it into the general trends of the global economic conjunctures. The Turkish school led by Halil İnalcık focuses on series of defters referring to the same provinces and looks at the changes that they recorded. The French school of Nicoara and Irene Beldiceanu represents a cliometric access through microstudies. In comparison to the aforementioned, Yugoslav Ottoman studies became involved in the research of defterology and publication of defters along with others and achieved remarkable results. Although in method close to the Hungarian school, the studies of Yugoslav Ottoman scholars often focused on the position of local people, particularly those of the Vlach status, as well as the research of the correlation between the established system of the Ottoman rule and medieval legal regulations. The analysis of kanunnama did not lag behind Barkan’s studies. In recent years comparative studies have been conducted through a serial study of defters.  

Making defters was the last segment of the extensive work of the Ottoman bureaucracy which aimed to list all taxpayers and was based on the Timar-Sipahi System, as the

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2 Lowry 1992a: 3.  
3 Lowry 1992a: 3-18.  
4 Selective bibliography: Šabanović 1964a; Šabanović 1964b; Hadzibegić, Handžić, Kovačević 1972; Aličić 1985a; Aličić 1985b; Stojaković 1987; Katić 2010. For the analysis of tax levies and the connection with Serbian medieval law see: Bojanić 1973: 78-116; the studies were created on the basis of the serial research of defters: Miljković Bojanić 2004; Miljković 2013; Šuletić 2013. (unpublished PhD thesis).
foundation of the organization of the Ottoman Empire. In order to distribute the estates (timars, zemamets and hases) and determine the monetary value of these properties, the administration assessed a realistic situation in the field and made an appropriate record in the form of a defter. The emergence of defters was directly related to the military organization and paying sipahi units. In exchange for the possession given to him, each timariot had to give military equipment and provide adequate military escort in accordance with the value of the ceded feuds. The basic segment that was given to him for his own livelihood, the pair (çift), was an indivisible whole which could not be alienated or divided even in the case of the rights of heritage. The land divided into timars was considered to be the state property. The sipahi enjoyed the right of keeping the possession and was often termed the owner (sahip). However, the right to dispose of the estate was considerably limited. Although he was in charge of establishing order and ensuring the safety of the local population, he had no power over them. The relationship between the sipahi and the local population was regulated by legal norms, where the qadi possessed the exclusive right to interpret the law. This arrangement maintained the balance of power and prevented potential abuses. The distribution of timars was an important segment of Ottoman rule at the local level.⁵

Making the inventory book was done for each sanjak separately at intervals of 30 to 40 years. The procedure of inventory began with the issuance of the permit to inventory makers. Thus in 1489-1491 the former qadi of Galata mevlana, Cemâleddin-zade Piri Çelebi, was named the emin for the inventory of the Smederevo sanjak and Mehmed was named the chief scribe. In the province they had at their disposal the entire administrative apparatus, especially the institution of defterdar and its scribes (katib). The administration often issued orders about inventories in several provinces. There are indications that there was a simultaneous inventory in the sanjaks of Vidin and Smederevo and in the Bosnian eyalet in 1740-1741. In that case, the same emin and scribe could not perform the task in hand. At that time two defters were made for the Smederevo sanjak and they are somewhat different. This could be a reliable sign of involvement of different people in the two parts of the same sanjak.⁶ On the basis of the text in the permission, the task of the inventory maker was the following:

„They should go to that sanjak and, from the village, the surrounding area and land, vineyards, gardens and other sources of income of all places [located in the timars], waqfs and mülks, and from the population living in the timar and the population in the mülks, from miners, tar makers, derbenci, from the liberated and the pardoned, from falconers and from people in the hases that belong to me, from every individual in general without any difference, without leaving a single person, they should explore, find, list and record how much of what there is, whether a lot or a little“.⁷

The text clearly alluded to the personal participation of the appointed officials during the census by gaining insight in the field in every populated area. During the implementation of the procedure they would rely on earlier defters, both the comprehensive ones and cizye

⁵ Hakkı Uzunçarşılı 1988.
defters, which were made in the intervals between two lists. The new defter would represent a copy of the previous one with some corrections that were created over time. The permission itself ordered to the “sanjakbeys, qadis, subasis, timariots, people who replaced them, knez and primikurs” to help the inventory makers. After the arrival of inventory makers to a certain place, the task of local representatives was to inform them about the current situation. An important role was played by the qadi, who had to disclose all documents from the sicil related to a specific territory. Representatives of the state and of provincial authorities, of sipahis and of the local population would in such a way determine the tax burden for the future period. In this case the permission also determined the rules of procedure. They would count a three-year income of one place and on the basis of that they would establish the average yield. Sipahi were obliged to submit permissions as proof of the possession of the feud and inventory makers would make a defter which was sent to the central administration for further processing without the right to confirm the possession lists (tezkere). It can be reliably concluded that defters were further copied, because the very name of the city would sometimes change beyond recognition. The scribe at the local level usually recorded every toponym and name by ear. Further copying led to mistakes. Of course, the record itself was adapted to the Ottoman language which could not illustrate a richer vocalization. Another frequent problem was the grouping of consonants, when an elif would be added to such a toponym. There is reliable evidence that in some cases the representatives of the local authorities and the local population would come to provincial towns or cities with completed reports, which the scribes would take and note in defters.8

The procedure would continue in the offices of the main defterdar (başdefterdar) at the Imperial Divan in Istanbul. The extensive defters was copied, the kanunnama was added,9 as well as the tughra, and at the very beginning there was a list of nahiyas and villages to which they belonged along with the numbers of the pages on which they were noted (or the numbers of toponyms) for easier handling. Then, a summary defter was made and after adequate permits were issued and the timar was appropriately distributed, the procedure was completed. It should be noted that not all defters contained kanunnama/kanun, so it can be assumed that such a case was the result of the negligence of administration or that the omission implied the validity of the previous one from an older defter. Therefore, an extensive defter for the Smederevo sanjak for the period 1574-1595 contains a calligraphically very well highlighted Kanun for the Smederevo sanjak (Liva-i Semendire), while apparently the first following defter from 1741 does not contain either a kanun or a kanunnama. The uniqueness of each defter lies precisely in the kanunnama. The principle of the adjustments of the Ottoman administration to the state of affairs in the field is well known. Accordingly, tax levies determined during the first inventory actually represent a codification of earlier legislation adjusted to the language and form of the Ottoman tax system. Therefore, the study of these types of Ottoman documents is a sort of a testimony to the particularities of the status of each sanjak.10

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9 The terms kanun and kanunnama can be considered synonyms.
10 On the connection of the Ottoman tax system and the elements of Serbian medieval law see: Bojanić 1973: 78-116.
largely prevents comparative research in defterology. The importance of kanun was first identified by Ömer Lütfi Barkan, who published them as a series of legal regulations from all sanjaks of the Ottoman Empire. Although it is still today the most impressive project in this field of scientific research, the selection included most often one kanunnama, which prevented the comparison of changes over time.\textsuperscript{11} Each kanun proscribed precise tax burdens and the principles of redistribution. It most often contained special sections for the local population, for customs, rivers and ferries, armatoloi or other military support units, princes and elders, and other tax categories in accordance with the peculiarities of the territory (taxes on fishing, salt, falconers and hawkers).\textsuperscript{12} Of the utmost importance was the determination of the value of keyl, i.e. the alignment of measurement units so during further work with the defter they would be able to establish the real value of grains and other agricultural products that were taxed, such as the bucket of şire.\textsuperscript{13}

Studies in the field of defterology began in the 1950’s and in the following thirty years dominated the Ottoman studies. There is almost no Ottoman scholar who did not pass through a defterological phase. The primary scientific interests were focused on comprehensive defters. Whether the focus remained on serial publications of documents, cliometrical or demographic studies, the first generation of defterologists was characterized by the initial enthusiasm and a sudden abandonment of this scientific field as unreliable.\textsuperscript{14} In this sense, Heath Lowry represents a paradigm of this process. As he himself pointed out, he began his research during the golden age of the opening of the Ottoman archives and personally examined about 1,200 defters. During the two decades until the end of the 1970’s he became the undisputed authority in this field. Having established that defterology is characterized by the absence of a useful methodological approach, Lowry advocated for seven dictums which he used to indicate all the problems of working with defters and completed the guidelines for further research. He explicitly pointed out that defters could not be used as the sole basis for the study of toponymy, topography, the tax system, agricultural production or the population. He gave precedence to extensive over summary defters and advocated for their serial investigation wherever possible. Lowry believed that the use of defters in the estimation of population is actually the practice of alchemy. The reliability of defters is higher in non-Muslim settings and in the early years of the Ottoman rule. The differences in the period after 1520 are particularly observable, especially in terms of language, style and reliability.\textsuperscript{15} The resignation of Heath Lowry ended the golden age of defterology. By the early 1990’s Ottoman scholar abandoned the study of defters. Along with the meticulous research of the Ottoman transitional period a question arose regarding

\textsuperscript{11} Lutfi Barkan 2001.
\textsuperscript{12} On kanunnama see: Lowry 1992b: 19-46.
\textsuperscript{13} Every kanun or kanunnama also defined the proportion of the measures that were used. So the kanun for the local population of the Smederevo Sanjak from 1574-95 defines the mutual proportion of lukno, keyl, merica, pinta, karta, dirhem and okka. Although Dušanka Bojanic translates keyl as merica, in literature the usual term is Smederevo keyl. The value of keyl was coordinated with the local proportion of units of measure inherited from the medieval period. Although it is not stated explicitly, in the defter from 1741 as well as in all other documents Istanbul keyl was applied. See Tričković 1973: 242-323.
\textsuperscript{15} Lowry 1992a: 7-15.
the evaluation of the few defters from this period, which provided a symbolic reaffirmation for defterology, this time under the term ‘postclassical defterology’.

2. Postclassical defterology

Given the large number of defters dating from the classical period (15th to 16th century) and the focus of Ottoman scholars on the aforementioned historical period, the defters from the transitional era remained neglected. The term ‘postclassical defterology’ implies a certain historical period (17th to 18th century) but also the transformation of the Ottoman timar system that necessarily had the consequences with respect to defters. This is connected with a special methodological approach advocated by Elias Kolovos. In the Ottoman Empire in the period from 1550 to 1650 there were radical changes in organization of the army, which resulted in the dysfunctionality of the janissaries-sipahi organization. During this period there were many fiscal reforms, which by 1670, according to Bruce McGowan, reduced the number of timars in the overall tax system and established the system of extraordinary levies, avariz, that were gradually legalized as regular along with the cizye. The share of these taxes exceeded 40 percent of the total tax abstraction. The process of fiscal transformation was also conditioned by inflation and the inability of the state to fulfill its financial obligations. The introduction of extraordinary taxes, avariz, and their legalization and regular collection compensated for the losses of the state caused by the real reduction in the value of the currency. Parallel with that there was a reduction in the income of sipahis and janissaries, who resorted to the introduction of additional illegal tax burdens on the local population, which were tolerated by the state, and increasing desertion of the military service (but not of the military status!) and interference in economic activities. The janissaries formed their own guilds, while the sipahis were regularly incorporated in the business of collecting taxes by lease (iltizam) and credit. The timar-sipahi system survived nominally, but its real functionality gradually decreased. The timars thus became both the means of acquiring status and money. By implementing the system of lease of tax through mukata’a and, since 1695, malikane, the state privatized the system of tax collection. The significance of defters in the new system gradually declined and gradually the cizye and avariz defters completely assumed the function of old defterology. However, the defters from the classical period did not completely disappear. The practice

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17 The iltizam system implies the manner of collecting taxes in the Ottoman Empire since mid 16th century. First the lease of the tax was introduced through mukata’a for a certain period of time, which became a lease for life since the 17th century through malikane. This put tax collection in the hands of private collectors who bid the highest sums at auctions. Practically it implied the introduction of the pyramid structure, where the leases were given to the most powerful state dignitaries in Istanbul, and then through subleases the responsibility and part of interest was given to provincials and local associates. Genç 2013: 154-158.

18 The process of fiscal transformation led to the weakening of central organs of power and the strengthening of administration on the level of provinces, berleybeys and sanjak beys. In such a way all the administration at the lower level was gradually organized after the principle of personal dependence and belonging to an intisap (a pyramidal structure of patronal relationships). Metin Kunt 1983: 77-93; Aksan 2007; Darling 1996; İnalçık 1980: 311-338.
of the Ottoman bureaucracy recorded making defters after the classical or slightly modified model during the transitional period as well. These were the territories that could be treated as newly conquered, or lost during the wars and then again returned to the Ottomans. As there was no formal suspension of the distribution of timars, in order to inspect the situation in the field, it can be assumed that the administration applied the only reliable system that the previous practice had known in rebuilding the government and establishing estimates of the revenue side of the tax burden. Previous studies have established this pattern on Crete and the Aegean Islands in 1670/1671, in Edirne in 1669/1670, in Morea in 1716 and the Smederevo sanjak in 1741. All four defters reflect some differences because of which Lowry’s thesis about the inconsistency of the method must be a starting point for further research. Kolovos indicates that the defter from 1670/1671 was made after a completely modified form, which is why the term ‘postclassical defterology’ was introduced. Similar changes were noticed by Stefka Parveva from Edirne. These lists contained the characteristic determinant ‘the land of’ (zemin-i) followed by the name of the household (hane). This enables the study of the land area and the household income realized there. Although it retained the classic form of the inventory by towns and nahiyas, the recording of the tax burden was not cumulative any more. As the size of the land was given, this opened up new possibilities in the study of defters. Given that household size was not presented, nor that the minors and kinship relations were reliably noted, demographic studies remained limited. The problem of the reliability of postclassical defterology, as Kolovos pointed out, was raised again, now through the question of the reliability of sources.

In the analysis of these defters we can observe a similar or even unique form of the proportion of the production of grain throughout the entire geographical area under scrutiny. This argument strongly suggests the fictivity of the entries of products. This can be explained by the interest of bureaucracy for the amounts of money which were only redistributed after the given form when they were entered into defters according to the requirement of compliance with the final pre-defined sum. Another problem were the settlements that were registered as chiflik in Morea or which were determined to pay the tax cumulatively like in Smederevo. In the first case there was a problem of the legal status of the population. In Smederevo, due to a substantial number of cases, it was impossible to ascertain any other information for these places except for the cumulative sum by which they were bound. Thus, for a substantial geographical area any further studies were not possible. The defter for Edirne captured very precisely waqf and miri estates, while the defter of Smederevo recorded the military crew of the town as being tax-exempt.

The four defters in question can be classified into two categories. The defter of Smederevo was created after the old, classical form and its structure is no different from the previous defters for this sanjak. The other three defters have considerable differences. Postclassical defterology thus manifests both new tendencies and the continuation of the established tradition. A possible solution should be sought in the reforms of the Ottoman

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20 Kolovos 2007: 211.
tax and overall fiscal system. Although the research studies of Ottoman scholars included the questions of adopting the current system developed by the administration, this presupposition was soon abandoned. The new pattern followed the iltizam system, which meant that the need to establish the value of the land and the value of the work, i.e. the proportionality of the size and quality of the land with the achieved yields, followed the modernization of the system of land lease, as Kolovos pointed out. The implementation of the new pattern was carried out in the provinces simultaneously with the introduction the iltizam system. The current trends indicated an attempt of the administration to limit the importance of the administration of the timar system and the peasant labor force in the empire with a stable fiscal base and organized social hierarchy in villages.22 By studying the size of the estates distributed per households we observed different sizes, which was explained by the fluctuations of the social status among the local population in a particular local area. These studies represent the culmination of postclassical defterology. When looking for an answer to the question of the parallelism of the two systems, the old and the new one, the classic and postclassical one, we should take into consideration the presupposition of Molly Greene about the importance of the factor of war when it comes to the redistribution of the timar. Awarding the timar thus became a reward for the performed military service.23 Depending on the pressure that the involved irregular troops would demonstrate after the completion of military operations, the state apparatus would adequately respond. The method of the redistribution of timars in the Smederevo sanjak, the variation in numerical values and the existence of vacant estates testified in favor of the presupposition that the quantity of timars was sooner determined by the number of interested parties than by the availability of land.

3. The epistemological value of defterology

The question of the reliability of the Ottoman inventory books – defters can be viewed on the basis of general and specific features identified in the previous work with this kind of historical sources. The general features are singled out regardless of the chronological or geographical origin of the defters, while the specific features can be divided into two categories. The first one is associated with the origin of defters, while the second concerns the internal features of defters. The origin of defters implies their uniqueness. Each sanjak differed in the type, number and manner of determining the tax burdens as well as the methodology of the inventory. The chronological component should be added to the geographical one, since lower reliability can be established for the later period. In this way postclassical defterology is susceptible to a greater degree of fictivity in comparison to the classical one. This statement is in direct correlation with the problems of military organization and the already indicated fiscal consolidation. The studies of postclassical defterology must seriously take into account the social roles of the military status. Both janissaries and sipahis established their social representation through their military status, which allowed them to interfere with the social relations at the local level and with the flow of money and it allowed them to reach for political roles in proto-political communities. The

analysis of internal characteristics of defters was deduced to cliometric research, which can be roughly divided into demographic, geographic and economic. In these terms it is necessary first to point out the general problems of defterology and then focus on particular ones through an appropriate case study.

The most important argument must take into account the fact that defters are not censuses. Unlike present-day expectations, the procedure of making the inventory did not strive for describing the structure of the population, but the structure of tax revenue. Consequently, a significant number of residents remained outside the inventory due to the privileged status. The privileges could be granted to specific groups, e.g. Vlach herdsmen, due to their frequent mobility and lack of attachment to the land, or to certain auxiliary military units, armatoloi, yamaks, derbencis, etc. Also, due to wars and difficult living conditions, whole villages could disappear from the map of the inventory. The settlements awarded to waqfs as a rule were not recorded in extensive defters (although this was not always the case). If the waqf defter was lost, the final representation was significantly different from the reality. This problem is illustrated by numerous toponyms in the area of Greece which simply did not exist in defters but which could be traced from the Byzantine period to modern times. There was also a different methodology of making the inventory. Somewhere only adult males able to pay taxes were recorded, as well as widows who were heads of the households, while in other cases the unmarried (miserred) or widows (bive) were explicitly recorded. Alongside these problems, the fact that women and children were not recorded in the lists limits the possibilities of reliable estimates of the population in a certain territory. The science has established the coefficient 5 in converting the number of household heads to the number of the total population. However, there are assumptions that the coefficient could be somewhere between 3 and 8. When determining the number of the people missing from the inventory, the usually obtained values are increased by 10-20 percent. It is clear how these parameters are approximate. Former defterological research studies show that it is not possible to identify a unique methodology and thus the data obtained significantly deviated. It should be noted that the population censuses did not record surnames and that the names of the heads of households were recorded with the notation 'son of' (for Muslims: bin, for both Muslims and Christians together veled-i), thus preventing any kind of genealogical research.

The first category of specific features concerns the uniqueness of defters. Although there is no unique pattern of defters prescribed by the administration, extensive defters met only the minimum criteria. They included a unique frame structure: kanunname at the beginning (sometimes omitted), the contents of registered settlements with the number of pages (sometimes distributed inside the defters if the inventory included more sanjaks) and an inventory of settlements by nahiyas and tax burdens. The same nahiyas were changed over time in terms of borders and structure so it is sometimes difficult to carry out comparative studies within the same sanjak. The structure of tax burdens was unique for every sanjak. It was established during the first inventory after the territory had been conquered on the basis of the status quo. Thus, each defter was unique and could not be simply compared with other defters. The information provided by defters represented the ideal-type frozen image related to the exact specified chronological point. In postclassical defterology these were the defters made most often (but not always) after the return of the territory under the Ottoman rule. Due to the state of war in a certain territory there was depopulation, which raised certain questions regarding the ideal-type ratio. As the extensive

defter of Smederevo from 1741 noted military crews in the towns, by combining other forms of archive materials (Belgrade Treasury Fund – hazine), another unreliability of defterology was noticed. The size of the crew varied considerably in the later period. Hence, for the town of Kolar(i) the defter noted 45 mustahfiz and farisans and the hazine noted 70. Jagodina was not found in the data from the hazine while in defters it was recorded with a crew of 60 mustahfiz and farisans together. However, the hazine registered the place Deve Bagrdan with a crew of 70 mustahfiz and farisans. Because of geographical proximity, this was probably the same town. For Kragujevac, Batočina and Valjevo a greater number of soldiers could be noted in the defter compared to the data from the hazine. It should be stressed that identical tendencies were seen in summary defters. When comparing the summary and derdest defters for the Smederevo sanjak, the number of timars significantly changed. Thus the summary defter recorded 734 zeamets and timars although chronologically it was made later, while the derdest defter recorded 627 zeamets and timars for the same territory. The data obtained from defters, as Lowry indicated in his dictum, must be compared with other kinds of historical sources and taken with some reserve as the product of a precisely defined moment in history.

As Amy Singer emphasized, for decades demographic studies relied on defterology and did not go far beyond the mere publication of lists without any contextualization. The defter of Smederevo (TTD 17 and TTD 18) did not allow the confirmation of how populated the territory of the Smederevo sanjak or individual nahiyas and cities were. In the seventeen nahiyas of the Smederevo sanjak covered by the inventory of 1741, 1,398 settlements were noted. For only 570 (40.8%) settlements the names of the heads of household were entered. The number of households in these settlements was 6316. In terms of the amount of money, 4,025,360 silver coins (akçe), or 74.6% of the total, were collected from these residents. Of the remaining 828 settlements (59.2%), which were listed as deserted (hali), only 1,370,816 silver coins (25.8%) were registered. If this disproportionality is connected with the fact that these were small places, it is perfectly logical. However, any attempt to determine the real number of inhabitants encountered a problem. The only way was to determine the average tax burden per household on the territory of the sanjak. This resulted in a coefficient of 637.3 silver coins. It is easy to determine with further calculation that another 2,150 should be added from the territory where names were not registered to the obtained sum of the population. The final number of households thus rises to 8,466. If the aforementioned formula is applied, as well as the multiplication coefficient 5 and the addition of 20%, we obtain the ideal cross-section of the population of 40,476.

25 According to the data from the defter, Kragujevac had a crew of 45 soldiers (mustahfiz and farisans) and according to the data from the hazine it had only 39 mustahfiz. Batočina (defter: 80 mustahfiz and farisans, hazine: 40 mustahfiz), Valjevo (defter: 36 mustahfiz; hazine: 40 mustahfiz). The difference of four soldiers in Valjevo is neglectable in the given chronological period. The much greater differences in Batočina and Kragujevac only indicate the additional decrease in the number of troops over the years. War circumstances surely requires larger crews. After the situation calmed down, farisans could have been removed from both forts.

26 TKGM. TADB. TTD. No. 18, str. 128-129, 131-132, 177-180, 261-265; Başbakanlık Osmanlı Arşivi, Bab-ı Deferi, Bașmuhaeebe, Belgrad Hazinesi, Dosya No. 6-13, 11/74, 13/86, 13/96


28 The inventory included 17 nahiyas in two separate notebooks. The inventory was not done in the four remaining nahiyas which were added to the Smederevo sanjak (Niš, Osad, Užice and Požega).

29 The largest percentage of the settlements with the recorded names were located in the Valjevo nahiya (91.5%) and the smallest in Resava (18.5%).
Unfortunately, the applied methodology is contentious. A certain ideal tax burden per household is obtained by simply dividing the sum of money with the number of entries. As the amount of taxes varied depending on the quality of the land and a number of other parameters, a regularity in cash sum per household could not be established. It ranged from 33.8 silver coins in the village of Klečka (nahiya Hram) to 5,900 in Jajinci (Belgrade).

The average value is an unreliable indicator which cannot be considered scientifically credible. Any attempt of establishing the number of inhabitants would have to be exposed to three unknown values, each of which can lead to a distorted picture of the real situation.

A special issue of the ethnic structure of the population cannot be easily solved. In the town of Belgrade itself there was no record of Serbian population. Besides Muslims there were some Jews. This very example illustrates the unreliability of defterology. It can be assumed that the Serbian urban population either fled the city due to the ravages of war, or acquired certain privileges, which was more likely. The analogy of Belgrade as a Muslim city should not be established in any case. Muslims could be found in the metropolitan areas that gravitated towards Bosnia, particularly in Valjevo. Their presence in the villages was sporadic. It was almost impossible to find groups of Muslim population in the rural area of Sanjak. The ethnic origin of both Muslims and Christians was not possible to determine in the border area. Indirect data supports the theory that a lot of Anatolian population was present in Belgrade, either as military troops or as merchants. Such information was not specified in the defter.

The significance of defterology for historical geography is undoubtedly great. The continuity of stability of certain settlements can be credibly traced. The changes in the status can also be noticed; certain places were recorded as mezra (abandoned villages), while there are many toponyms that today correspond to parts of larger settlements, but they were noted as independent villages in the defter. The former village of Vučidol in the nahiya in Požarevac, today part of the village Petka, is an example of such a case. An additional difficulty in the process of ubication is the non-vocalism of the Arabic alphabet, the maladjustment of the scribe’s ear to the specificities of the Serbian language and several copies of the defter. Because of all these reasons a toponym would often be changed beyond recognition. A particular problem arose when comparing toponyms from extensive and summary defters. Using the example of the Belgrade nahiya with 68 settlements from the extensive defter, we can determine the difference of 8 additional toponyms noted in the summary defter. In the further studies of ahkam defters it is possible to follow the requirements of individual sipahis for adding certain villages to the defter and giving them the fief. Besides considering possible abuses, it can be established that after the inventory was made, there were further metanastastic movements of population in the area under scrutiny. The derdest defter confirmed this assumption. Although it was developed in

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30 Because of this the estimated number of households of 2,150 can range from 232 to the incredible 40,556. TKGM. TADB. TTD. No. 17, p. 216; No. 18, p. 42.
31 TKGM. TADB. TTD. No. 18, p. 18-40.
32 Ahkam defters noted complaints from Belgrade which were submitted by merchants originally from Istanbul. Başbakanlık Osmanlı Arşivi, Bab-ı Asafi, Divan-i Hümayun Sicilleri, Rumeli Ahkam Defterleri, No. 2, Hükümlü No. 33; The presupposition about the origin of dahijas should definitely be critically analyzed. Asma Moalla indicates their Anatolian origin. Moalla 2004.
33 Recorded as Üç Dol. A fairly big village (33 households) near (nezd karye-i) the village Petka, TKGM. TADB. TTD. No. 17, p. 87.
34 These are the following settlements: Brusnik, Kneževac, Repište, Beli Potok, Topčićoj, Oršljan, Baćevac and Hranilovac. Trčković 1968: passim.
accordance with the data from the summary defter, there were numerous additional entries on the last pages.\footnote{TKGM. TADB. TTD. No. 417, p. 90-91.} Relying solely on extensive defters without no comparative studies of other kinds of defters and without a comprehensive analysis of ahkam defters, it is not possible to establish completely the number of toponyms and types of settlements.

Economic studies, particularly the ones conducted through cliometric research, represent the most sensitive paradigm of the (un)reliability of defters. Reaching for the issue of the profitability of production, the real burden on the local population and the quantities and types of products grown in a specific geographical area, Ottoman scholar often fell into the Pythagorean trap of numbers. As the two mentioned defters, TTD 17 and TTD 18, recorded five types of grains that were included in the tax burden, it is illustrative to focus on their mutual relationship in the analysis. Wheat (gendüm), barley (şu’r), rye (çavdar), oats (erzen) and millet (yulaq) were grown on over 95% of the territory according to the defter. With some variation that may be attributed to flaws in the calculation of scribes themselves, there was a trend of a mutual proportion among the mentioned crops in the following order: 14 - 10 - 6 - 2 - 2. This means that for every 14 keyls of wheat 10 keyls of barley were recorded. As the number increased, the same pattern was followed. Per every 28 keyls of wheat came 20 keyls of barley. Given that the value of the keyl was 7 silver coins for each of these grains, it is easy to calculate the changes in cash. Rarely was any of the five grains omitted, which is why it seemed almost unbelievable that all five crops could thrive throughout the entire territory in almost every village of the Smederevo sanjak. Even less likely were the chances that the production could stand in perfect proportion in the given territory taking into account the mountainous regions. Furthermore, with some reservation, we could establish the mutual proportional relationship of other tax liabilities. Per 14 keyls of wheat, or 34 keyls of grain (with a total of 238 silver coins), 75 buckets (műd) of şire were taken, or 375 silver coins, then 120 silver coins as a levy on hemp and cabbage (öşr-i kendir ve kelem) 250 silver coins as a levy on corn and beans (öşr-i mısır mea fasulye) and 60 silver coins as a levy on hives (öşr-i güvare) etc. It was not possible to establish the same proportionality when levies increased. Certain levies increased to a greater or lesser extent, which varied. Although three tax levies (hemp and cabbage, hives and corn and beans) could not be compared in accordance with the prescribed amounts, regardless of how different their sum was, they increased or decreased by the coefficient of 140. It was extremely important to establish the principle of the profitability of production. Given that it took 300 kg of wheat per year per person (for food, seed and tax), the minimum burden per household of 14 keyls of wheat could help determine the estimated annual production of 2867.2 kg per household, or 573.4 kg per person. Although the calculation applied the parameters of 1/8 income tax, profitability also appeared in the burden of 20% of the assumed production.\footnote{When calculating the following proportions of units of measurement were applied: 1 LUKNO = 7 keyls; 1 keyl = 20 OKA. The proportion of units of measure is based on the Kanun for the Smederevo sanjak from the Extensive Defter of the Smederevo Sanjak from 1574-1595. It is well known that the value of one okka is 1.28 kilograms. See: Bojanić 1974: 86; More details in: Kiel 1987: 115-133; Alexander 1999: 55-70.} When doing further research it should be borne in mind that the tax burden per household ranged from 34 up to 1700 keyls and therefore the total production of these grains per household could be expressed in the range from 6960 kg to a staggering 348,160 kg. Unfortunately, the production of corn and beans was given only in cash equivalents and was not divisible by 7 like other grains, which prevented the conversion to kilograms. The possibility should be taken into consideration that the
universal value of grains of 7 silver coins actually represented 7/8 of non-taxable registration, which was entered into the defter for convenience of administration, and that it had nothing to do with monetary values. On the basis of all this it can be concluded that the adopted pattern of levies was filled out in order to fit the predefined amount of cash. In the developed subsistence-cash economy, where the levies were apparently paid in cash, the distributions of certain items in certain categories was less important. The table with tax burden represented fiction in order to satisfy the form. In the further studies of defters the question of social stratification should not be overlooked. That would explain the enormous variations in the numbers, which presumably occurred as a consequence of unequal land ownership, which the defters did not record.

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Defterology studies enabled the infiltration of the ideas of social history in modern Ottoman studies and a certain turn from the dominant method of positivist historiography. By introducing peripheral scientific disciplines, from cliometrics to historical demography and geography, Ottoman studies followed historiographical trends by shifting its focus from the center towards the periphery. Although the very direction of research remains dominant because of the acceptance of post-structuralism, especially with a linguistic turn, defterology found itself in the problem of its own method. The rejection of the epistemological value of the unity of method opened up new possibilities for the studies of defterology, which were abandoned by a significant number of Ottoman scholars due to the capricious nature of historical sources. The affirmation of postclassical defterology does not imply the avoidance of the problems with fictitious archival materials, nor does it establish a certain deviation from previous results. The new term aims to delimit epochs, which are clearly defined in the profession and which must be seriously taken into account in the studies of the classic or transitional periods. On the one hand, all existing studies indicate a different approach to the defters of the administration itself in accordance with the fiscal transformation. These processes indicate social stratification and provide an opportunity for both the studies of the social action from the position of different social roles and the political representation and political initiatives in, as it is popularly determined, proto-political communities. The reaffirmation of defterology is the result of the new possibilities of new defters. The problem of the approach occurs with defters created after the classical model although they chronologically belong to postclassical defterology like defters from the Smederevo sanjak from 1741. The existing studies indicate that the fictivity of entered parameters is highly certain. This poses the challenge of credibility as a limiting factor in future defterological studies

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Указивањем на опште проблеме студија дефтерологије у савременој османистици рад има за циљ упознавање са принципима посткласичне дефтерологије, која се везује за транзициони период Османског царства. Представљањем постојећих научних достигнућа и фокусирањем на саму процедуру пописа дефинисан је приступни оквир изучавања османских пописних књига - дефтера. Посткласична дефтерологија дефинисана је кроз процес фискалне трансформације и посебне параметре који карактеришу постојећа историографска истраживања. Студијом случаја дефтера за Смедеревски санџак из 1741. указује се на класичан модел посткласичне методологије. Посебна пажња усмерена је на питање кредибилитета, које оптерећује савремени приступ дефтерологији. Проблем фактивности архивске грађе издвојен је као доминантна парадигма свих даљих социо-економских проучавања посткласичне дефтерологије. Посебно је истакнуто питање епистемолошке вредности дефтерологије, кроз демографске, топонимске и економске студије. Установљен је значајан степен непоузданости дефтерологских студија у проучавању поменутих питања. Код дефтера за Смедеревски санџак из 1741, за 59,2% од укупно 1398 топонима није могуће установити никакве податке о становништву. Сами порези прикупљани су увек у складу са јединственим обрасцем, те се, с обзиром да се односи на количина пет врста житарица није могао кретати у истој пропорцији на целој територији. Распон варијација у количинама произведених житарица указује на социјално раслојавање и значајне разлике у величини земљишног поседа, које дефтер није забележио. Изазов кредибилитета архивске грађе поставља се као ограничавајући фактор у будућим дефтерологским студијама.

Кључне речи: Османистика, дефтерологија, тахрир дефтери, Османско царство, XVIII век, Смедеревски санџак.