GIStorical Studies

4

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The Impact of Ottoman Rule on the Population and Settlement Structure of Southern Transdanubia (1540s–1780s)

based on hGIS investigations

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Introduction

The following study focuses on a debated aspect of 16th c. Ottoman occupation in Hungary – the question of depopulation, economic potential and the problems of measuring these (İnalcık, 1954; Fodor, 2018: 236–286). The key problem is that is hard to measure either original population numbers and continuity, or the recovery after the expulsion of Ottoman forces (1699), since the first real census was executed only in 1785. Neither Ottoman sources, nor medieval Hungarian sources did count either exact population, or all household heads. Thus comparing different types of conscriptions executed originally for taxation (and not for demographic) purposes with the later official censuses is a real challenge. In the following pages we try to highlight these above outlined difficulties of measuring population decline, persistency and recovery rate in case of source types that differ and change over time. However, from the Ottoman era we could rely not exclusively on Ottoman conscriptions – mufassal and cizye defters, but conscriptions of the Hungarian Kingdom (dicalis, portalis conscriptiones) too, as the state organizations survived, and tried to maintain authority over areas occupied by the Ottomans – though to decreasing scale. This means that we have two source types for certain areas, but these are are not equivalent, neither regarding conscription methods, nor their content (neither absolute numbers nor the names in them), thus hardly comparable. This study is a methodological attempt to compare and evaluate them.

1. Sources

1.1. The Ottoman *mufassal defter*s

From the first half of the 15th century to 1590/1592, the Ottoman treasury regularly compiled a series of *mufassal defter*s to assess the income that could be earned. Provinces (*vilayet*) were conscripted at *nahiye* (district) level within the sanjaks (*liva*). The tax, the settlement names, during the reign of Süleyman the Great (1520–1566) were not conscripted regularly, but usually before the peace treaties following the Habsburg-Ottoman campaigns (1546, 1552, 1558/59, 1565/67), so that the included localities could be used in border disputes. Later conscriptions were made in approximately every 10 years (1569, 1579, 1590/92). Inventories contained not only the data of newly conquered territories, but the tax and population data of the regions already surveyed were also refreshed and administrative reorganisations were regularly updated (Sz. Simon, 2018: 53–72).

The land recorded in the sanjak conscriptions became the property of the Ottoman treasury, i.e. the private property of the Sultan. Contrary to what one might think, the land included in the sanjak conscriptions was not generally limited to the line of the Ottoman outposts. There were several reasons for this. Initially, the conquerors left troops only in defensible places, and the total occupation was therefore limited to the castles and their immediate surroundings, or to the routes of former raids (Sudár, 2020: 15–18.). In parallel with the Turkish administration, the jurisdiction of the former Hungarian counties and the territorial rights of the original estate owners often persisted.

On the other hand, the timar system based on the sanjak-level conscriptions, which allocated the taxes of the Hungarian settlements as tribute to the military and officials, sometimes even crossed the boundaries of the Hungarian defense lines. It is because the conquerors' practice of possession was also their strategy of conquest, which they could use to conquer new territories without military campaigns, even in peace. The Ottoman treasury priced all the settlements that it had the basic information about - name of the settlement, approximate location - as service estates, no matter they were inside or outside the Ottoman line of demarcation; thus not only the conquered territories but the claimed territories reached but not conquered were entered in the defters, and, as treasury property these could be distributed as property for the *spahi*s (Sz. Simon 2014: 261–272.) The conscripted area incorporated 90% of the present-day territory of Hungary.

Despite the fact that the both settlements occupied earlier and the newly registered ones became equally taxable in the Ottoman system, the terms used in the conscriptions made a distinction between them. The taxes of the settlements within the military frontier were determined by counting the number of taxable household heads as tax units (*hane*), based on the value of the three-year

average yields. Total state tax was made up of the *resm-i kapi (gate tax)*, and the tithes of wheat, wine, beehive, flax, cabbage, hemp, onions, pigs, the meadow tax and the garden tax. These places surveyed in detail in the defters always contained the population by name, including those exempted from taxation (judges, priests, baština holders, *müsellem* or other servants), presumably in an attempt to record the total taxable population.

Newly conquered, but not yet surveyed settlements near the military border were registered with a lump sum, in the absence of knowledge of the average yields. In this case, the entire population was not listed. Thus, data of the settlements recorded in this way were not suitable for studying the economic and demographic aspects, but the Hungarian administration usually also had a list of these settlements, since they were subjected to double taxation. The comparison of parallel conscriptions compiled nearly at the same time provides interesting research opportunities.

Finally, in the interior of the Kingdom of Hungary, the Ottomans assigned only a small, nominal tax amount next to the names of the settlements listed as claim areas. The list of taxpayers is completely missing, as the places were recorded without taxpayers (*hâli ez-raiyyet*). However, they were not empty (were not *deserta* or *mezraa*): in the Hungarian conscriptions, these places were generally listed as taxed only by Hungarian authorities.

This was the system that ensured the dynamics of conquest. The Ottoman landowners responsible for expansion (the Sandjakbey, the Spahis) were given in their *dirlik*, in addition to the central areas conscripted in detail, peripheral settlements too, without taxpayers. [1] Collecting the taxes of the settlements allocated to them was both the task and the vital interest of these timar-owners – to cover their own salaries. [2]

1.2. The Hungarian *portalis conscriptiones*

In the Kingdom of Hungary, one of the tasks of the regularly convened parliaments was to vote on a tax for border defence. As a consequence, Hungarian surveys provide a more frequent insight into the actual situation than the Ottoman tax conscriptions. The conscriptions, conducted by the counties, were based on the districts often designated by the name of the executing officials. The castles, unlike the *nahiye* centres of the Turkish tax conscriptions, also played a role in taxation in the Hungarian system.

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[1] Garrisoned soldiers, civil servants and the sultan himself hardly ever owned estates along the frontier zone!

[2] In this study The defters of Mohács sanjak and its successor sanjaks are evaluated: BOA TT.d. 441, 443, 412, 646, 1012, 503. Translation by: Sz. Simon, Éva – Hegyi, Klára – Demeter, Gábor – Záros, Zsolt: Oszmán összeírások gyűjteménye (collection of Ottoman conscriptions) https://adatbazisokonline.hu/adatbazis/oszman
Visualization: https://mnl.gov.hu/mnl/ol/terkepek Last accessed: 13.04.2022.

Within each district or judicatus,[3] the conscriptions generally followed the geographical order of settlements, thus showing the route of the tax collectors.[4] The data recorded were not uniform, despite precise instructions from the Chamber. In some cases, detailed conscriptions were compiled, down to the recording of serfs' names, while others were more concise, indicating only the number of estates used as a tax unit. The *portalis conscription*s for Somogy county typically recorded the names of the landlords who held land in each settlement, the number and size of their estates (whole, half, quarter *porta*), the number of poor nobles liable to tax from the 1540s onwards, and the number and status of those exempt from tax (*iudex*, freeman, peasant, poor, deserta land, newly built house). Some conscriptions mention events that brought about changes in the fate of the communities (destruction by Turkish or imperial armies, displacement of inhabitants, epidemics, fires, new settlers), or factors that prevented the collectors from the levying taxes. In the case of settlements conquered by the Ottomans, the fact of taxation was recognized by the word '*subiecta*'.

The conscriptions compared with the sources available from the Ottoman side, show how the territory of the conquested zones changed. In Borsod County, for example, the number of villages that can still be recorded and the tax collected in the *dica/portalis* conscriptions towards the end of the 16th century (1544, 1546, 1549, 1564, 1574, 1602) is decreasing, whereas more and more villages are marked as 'conquered' (*turcis subiecta*). Where the *dicator* could, he also enumerated these villages and their tax capacity, but it is highly likely that these figures were obtained by rumours or guesswork and the dicator himself did not visit these villages (Hegyi – Sz. Simon and Tuza, 2023).

One of the most important questions is to what extent the comparative analysis of the two sources (and the maps of *condominium* based on them) provide relevant data to study demographic changes and economic potential (see **Figure 14** for the two source types).

2. Problems of measuring population and economic potential in the 16–17th c.

So the questions we intend to investigate are: How to measure population number? How to measure continuity? How to measure recovery in the 18th century? What is the relationship between Ottoman and Hungarian tax-units? How to measure economic potential? This study focuses mainly on the problems and do not give a general solution to these questions.

The parallel existence of Ottoman and Hungarian sources on taxation offer a possibility to illustrate the extent of the condominium and its temporal changes. Portalis/Dicalis conscriptions *do not* contain

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[3] In the conscriptions, the larger manors within the districts were generally treated as units, subdivided into judicial districts (judicatus).

[4] However, it was often the case that several neighbouring villages were grouped together if their part-owner was the same. Thus, the names of individual villages may appear more than once in the same conscriptions.

all households – they use the term *porta*, which is a tax unit in fact. (It does not equals with household). Some of these conscriptions contain data even on social differentiation (exempted, poor, landless households, and households under taxation), but some of gives only the number of tax units. Therefore a great amount of data had to be excluded and only households under taxation were the basis of our time-series analysis and comparison with Ottoman sources.[5]

Ottoman defters use the term *hane* – which is a tax unit too, so neither this registers *all* households, even if it includes persons exempted from taxation. The key question is the relation between Ottoman and Hungarian tax units. Are they equal in term? If yes, why do not their numbers (and the lists containing the names of tax-payers) match? If not, what is the relationship between them? Does the relationship change in time and space?

The area under the survey of the two authorities was not the same (**Figure 1-2**). The de facto area of Somogy county where the Hungarian authorities had power to collect the tax was continuously shrinking, finally it was merged to Zala County in 1596. The changes in Ottoman military and administrative boundaries can be illustrated well by the history of the Mohács sanjak. The first Ottoman conscription completed in 1546 covered the triangle of the Danube-Drava-Balaton. The Ottoman army was garrisoned in Dombó, Szász, Máré, Pécs, Siklós castles and the fortress of Görösgal on the western border behind Szigetvár on the Hungarian side (Hegyi, 2007: 1216-1304). The area to be taxed extended well to the north and west of this. In the north, it consisted of sporadically clustered settlements as far as Lake Balaton, while in the west the administrative boundary of the sanjak extended to Babócsa and Segesd castles in Hungarian hands. This also meant that the Ottomans had to collect the tribute from behind Szigetvár, which was in Hungarian hands and had been left out of the *defter*s. By the time the next list was drawn up, in 1552, the centre of the northern part, the castle of Koppány, had also fallen and became an Ottoman stronghold. In its surroundings, the villages that had previously remained unconquered were conscripted then. From this northern area, which had previously belonged to the Mohács sanjak, the independent Sanjak of Koppány was created. As a result of the reorganisation of the administration, the independent Görösgal sanjak was also established in the West (**Figure 1**), where most of the conquests took place, leaving Szigetvár in the background. Thus in 1565 the settlements in the outskirts of the Hungarian Kanizsa castle as targets of future conquest were already distributed as timar estates! In 1566, when Szigetvár fell into Ottoman hands, the situation changed radically: the Mohács sanjak was dismembered and the Sanjak of Pécs was created in the consolidated areas, while the Sanjak of

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[5] At the present stage of research the Ottoman database does not contain the names of family heads only hane numbers.

Szigetvár was created from the western frontier zone, consisting partly of claim areas and was tasked with the future conquest.

As **Table 1** indicates, there were always some thousand „missing" hane in the Ottoman defters, which were taxed without counting real hane numbers – these were the unconsolidated fringes of occupied areas. It is also noteworthy that after the fall of Szigetvár (1566), the hane number conscripted by Ottomans have doubled and taxation covered the whole of Southern Transdanubia not only the previously mentioned Sanjaks.
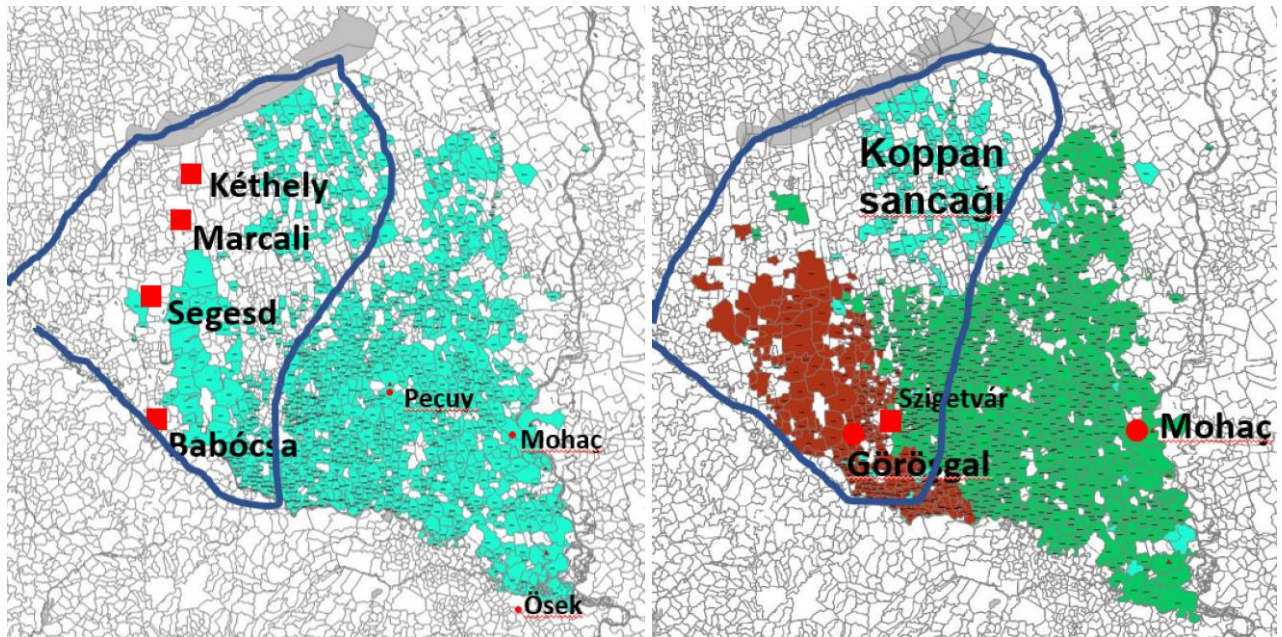
Figure 1. The location of the Hungarian (Somogy county, blue) and the Ottoman administrative units (Mohaç Sancağı, green) in 1546, with the Hungarian forts / The first reorganization of Ottoman administrative units in 1552 (Mohaç, Görösgal ve Koppan Sancağı)

The first Ottoman attack took place in 1543. After the capture of the capital, Buda (1541) the landowners of Somogy sided with King Ferdinand (Szakály, 1969: 23). Therefore the Tatar army and Ulema bey of Bosna flanking the Sultan's army ravaged the area. In Ocrober 1543 and in the spring of 1544, Kasim bey of Mohács again devastated the southern and western parts of Somogy County. A contemporary letter reported the burning of nearly 60 towns and villages (Szatlóczky, 2022: 63). In 1546, Kasim again marched through Somogy County.

The Hungarian border forts of Somogy and North Transdanubia were organised into a unified, centrally controlled and financed belt in 1547. At that time, the nobles of Transdanubia voted a special grant to be used for defensive purposes. The western claim areas of the Mohaç *sanjak* then reached the Hungarian internal defense line of Somogy (Babócsa, Marcali, Segesd, Kéthely: **Figure 1**). By the time of the first conscription (1546), the Ottomans had already begun to organise the Hungarian population into a military-peasant stratum, who did not pay tax and indicated among the hane-

numbers, but their name was recorded! In Baranya County the network of *müsellem* for border defence was established, in Somogy County they made the peasantry, who cooperated out of necessity or interest, owners of tax-free *baština*s, and expected them to provide news, disinform Hungarians and guide Ottoman troops. Finally in 1552, for financial and strategic reasons, on the proposal of the *beylerbeg* of Buda, the Görösgal *sanjak,* which was already considered capable of acting as a stronghold between the Hungarian castles of Szigetvár and Kaposvár and Kanizsa, was detached from Mohács sanjak (Dávid and Fodor, 2005: 260).
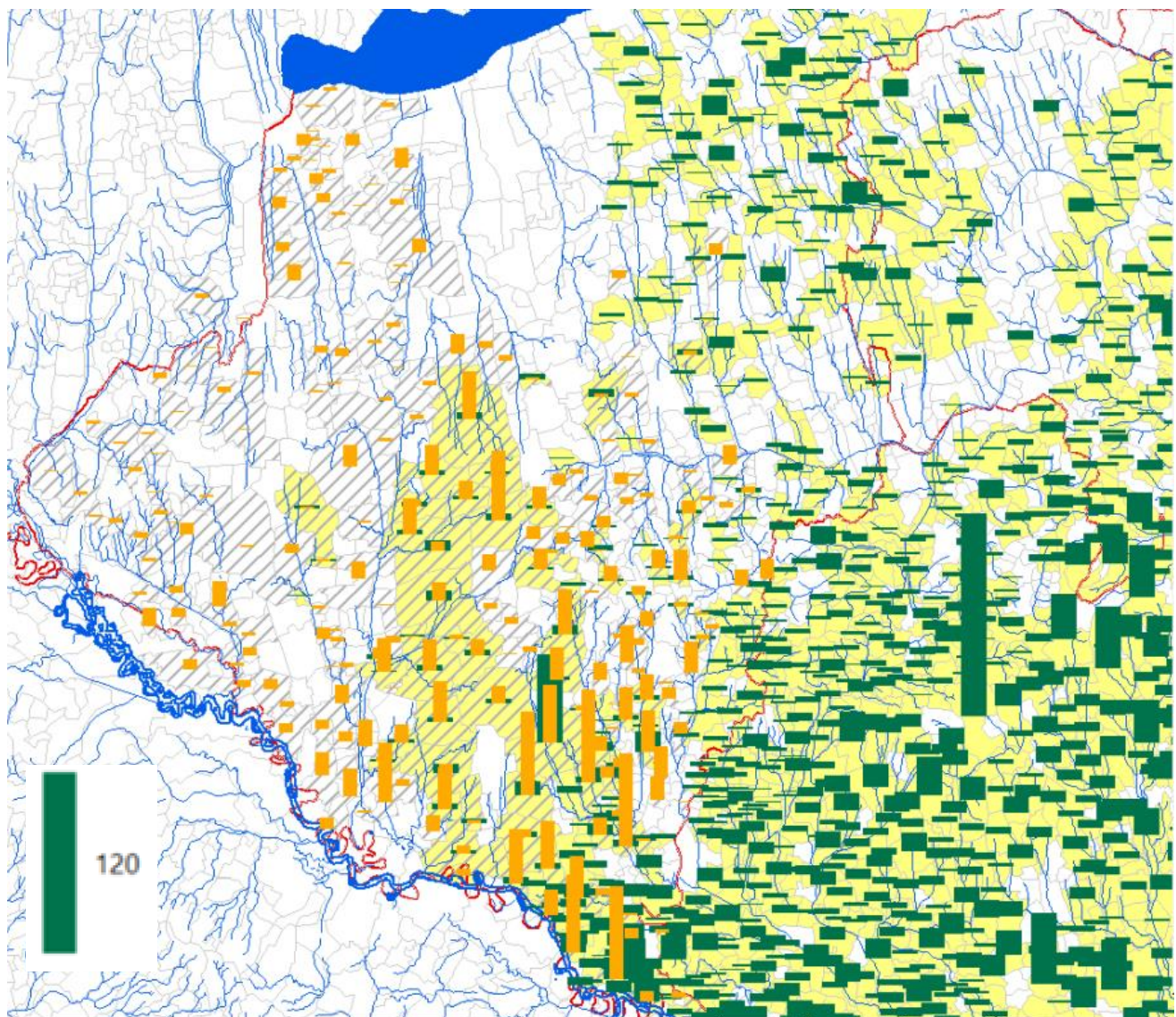
Figure 2. Situation before and after the first Ottoman campaign using the Hungarian consciptions of 1542 and 1545, before and after the pillaging (number of *porta* indicated by yellow), and based on the Ottoman conscription from 1546 (green columns, equal scaling with Hungarian *porta* nr.). Area under Hungarian taxation is indicated by hatching, area under Ottoman taxation is indicated by yellow colour fill. Note the extent of *condominium*.

Table 1. Increase in number of Ottoman hane, taxes and an estimation of tax units not conscripted/registered/missing, based on tax values

Year (defters)	*hane* indicated	total tax in *akçe*	tax without *hane* indicated	tax with *hane* indicated	tax per *hane*	number of missing *hane* calculated from tax values
1546	7,940	2,865,000	58,650	2,806,350	350	160
1552	9,460	4,575,600	223,000+700,000 Görösgal	3,653,000	390	570+1,800 (Görösgal)
1567	7,718	4,330,000	1,541,000	2,789,000	360	4,200
1579	**14,542**	**6,668,000**	**838,000**	**5,800,000**	**400**	**2,095**
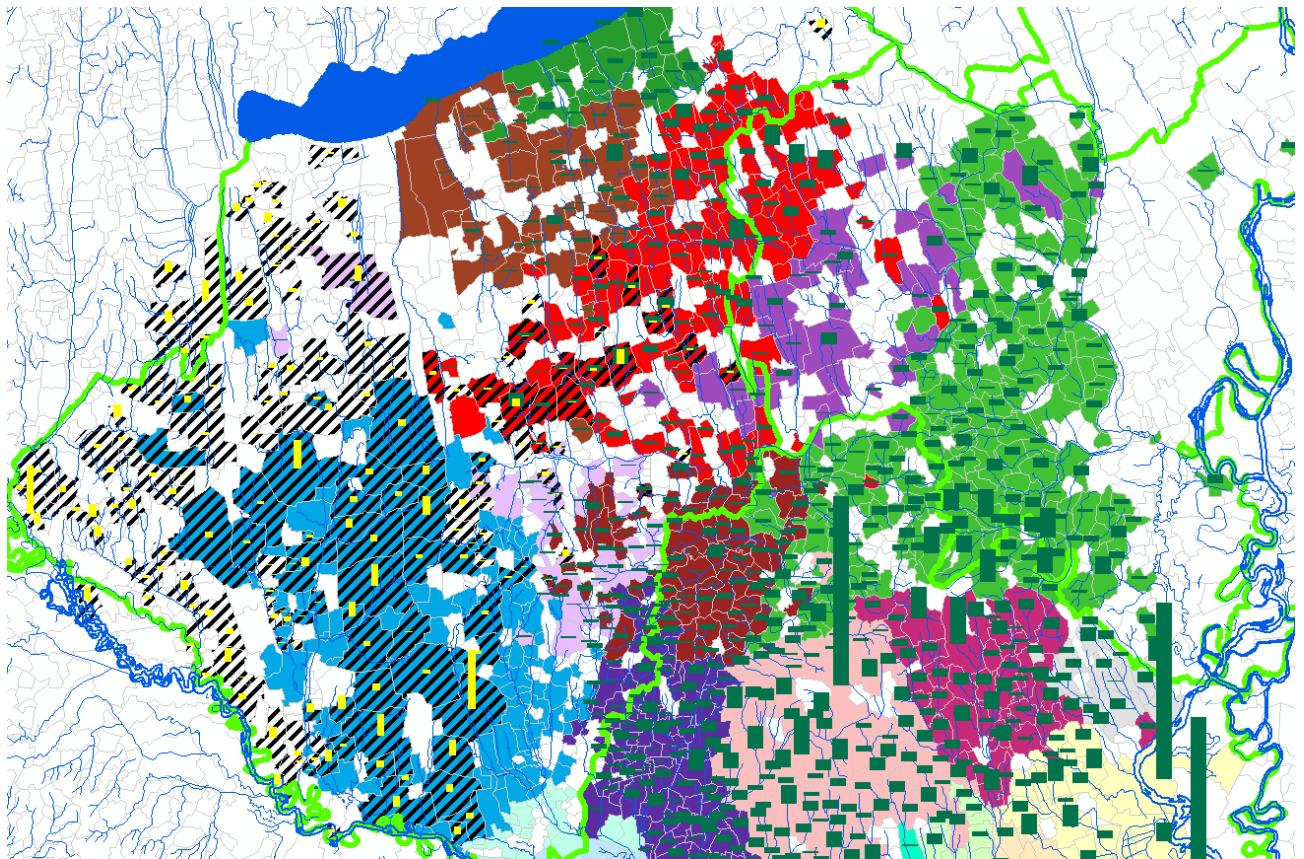
Figure 3. Situation in 1552 – *Porta* (yellow) and *hane* (green) numbers indicated by yellow and green columns, referring to numbers. Note the areas under double taxation in the centre. Areas taxed by Hungarian authorities are indicated by hatch, Ottoman *nahiye*s are indicated by solid colour fill. Note that in the border *nahiye* (light blue patch) exact *hane* numbers were not given (contrary to consolidated *nahiye*s), though the taxpayers can be enumerated individually as they were registered. However, at the present stage of research these data were not processed in our database.

The 1545 Hungarian conscription covered only the westernmost part of the area indicating low *porta* number after the pillaging, while the yellow columns in the centre shows the situation in 1542 before the Ottoman attack. It is worth comparing the *porta* (1542) and *hane* (1546) numbers in the middle part, where both units are available referring to a great decrease of tax units (economic potential) in the southern central zone.

The number of taxable peasant holdings reduced to 50% based on the 2 consecutive Hungarian conscriptions of 1542 (before the attack) and 1545 (after the campaign). The great run took place during harvest time, which caused heavy losses of income for peasants. Many peasants had to sell draft animals to feed themselves and this permanently reduced their economic capacity. The increase in number of poor and *deserta* porta in the next charts (**Figures 4-5-6.**) reflects this phenomenon.
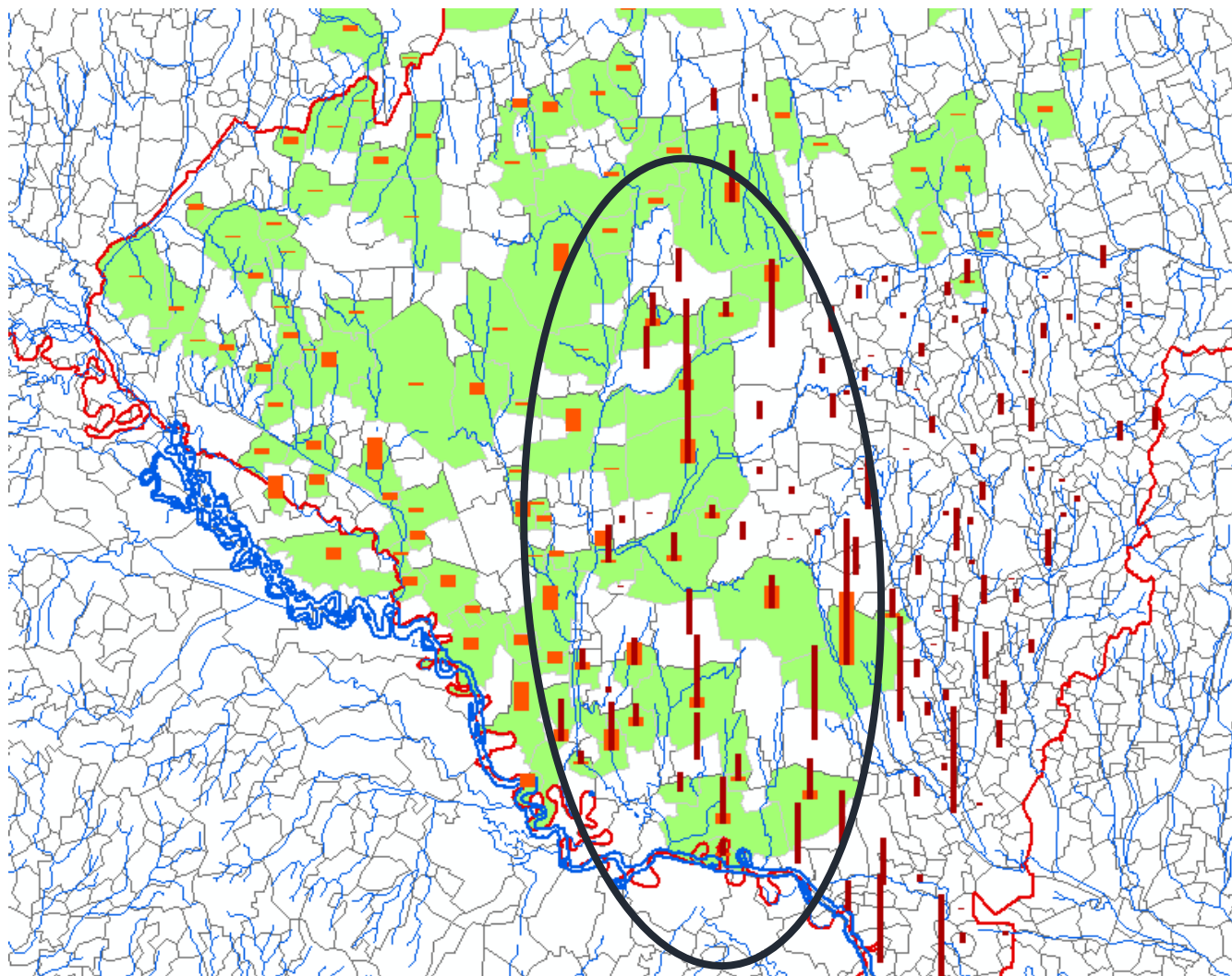

Figure 4. Decrease of tax units based on the Hungarian tax conscriptions from 1542 (brown) and 1545 (orange) after the first Ottoman campaign
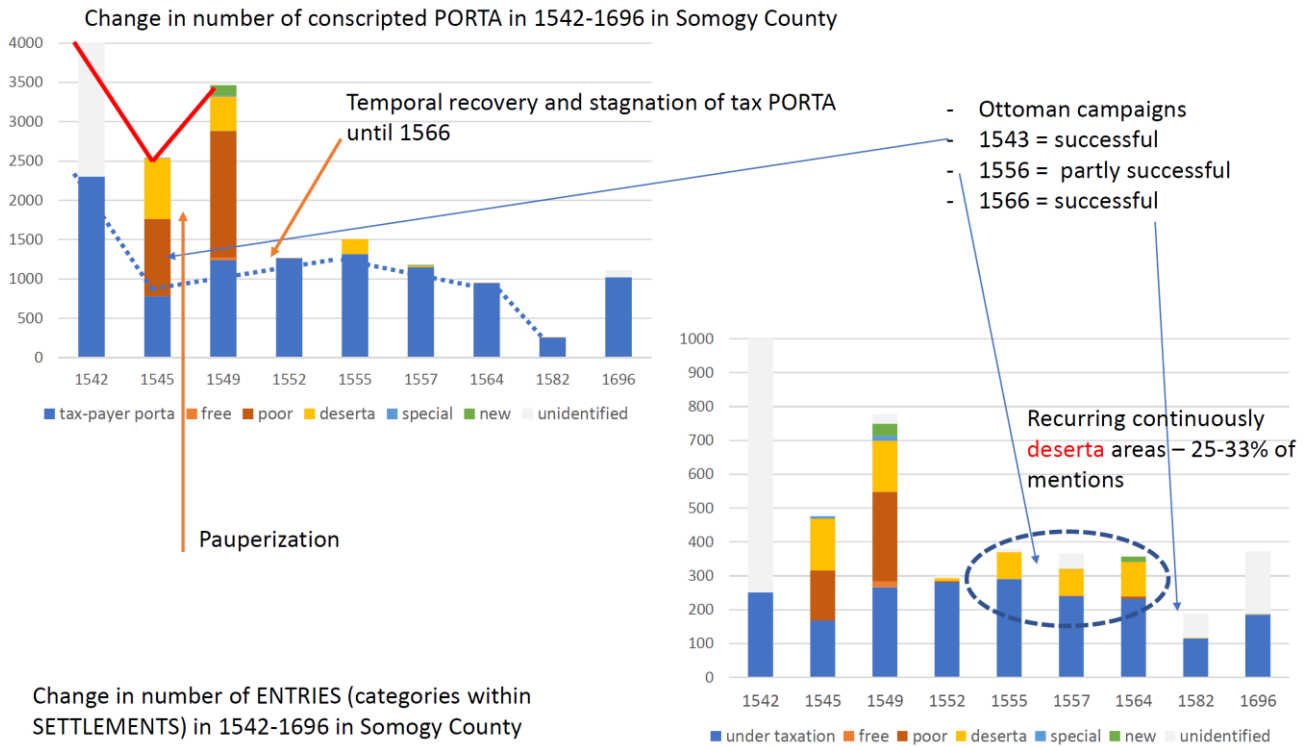
Figure 5. The status and economic power of the population in Somogy County in the 16th century and its connection with Ottoman campaigns.
LEFT: based on porta numbers;   RIGHT: based on data entry numbers
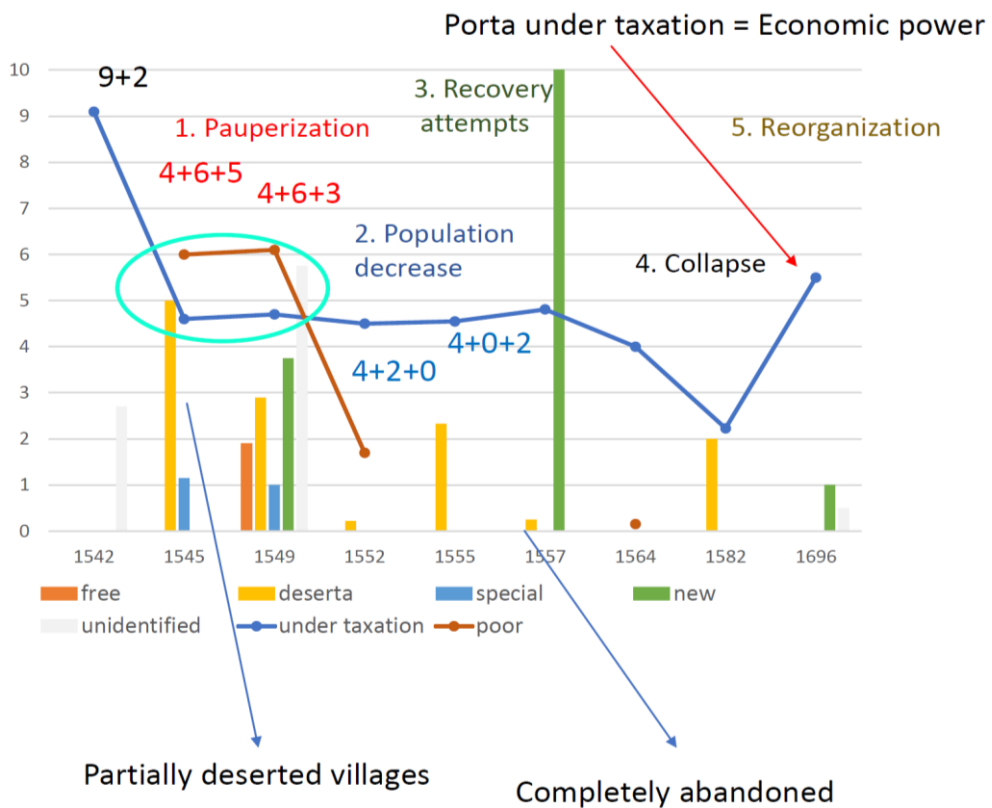

Figure 6. TOP: Changes in average settlement sizes (given in *porta* and its types) in the 16th century Somogy County; Note the stages of demographic (d)evolution based on the average number and types of porta. Blue line indicates the change in number of tax-payer porta representing economic potential decreasing from the average 9 before Ottoman attacks to 4 by the 1550s. Number of poor (red) increases from average 2 to 6. Average settlement size decreases from

11 units (of which are 9 tax-payer *porta*) to 4 tax-payers and 2 poor (later 4 taxpayers and 2 *deserta*). The changes reflect the decline in economic power first, followed by a demographic decline, which can be only assessed.
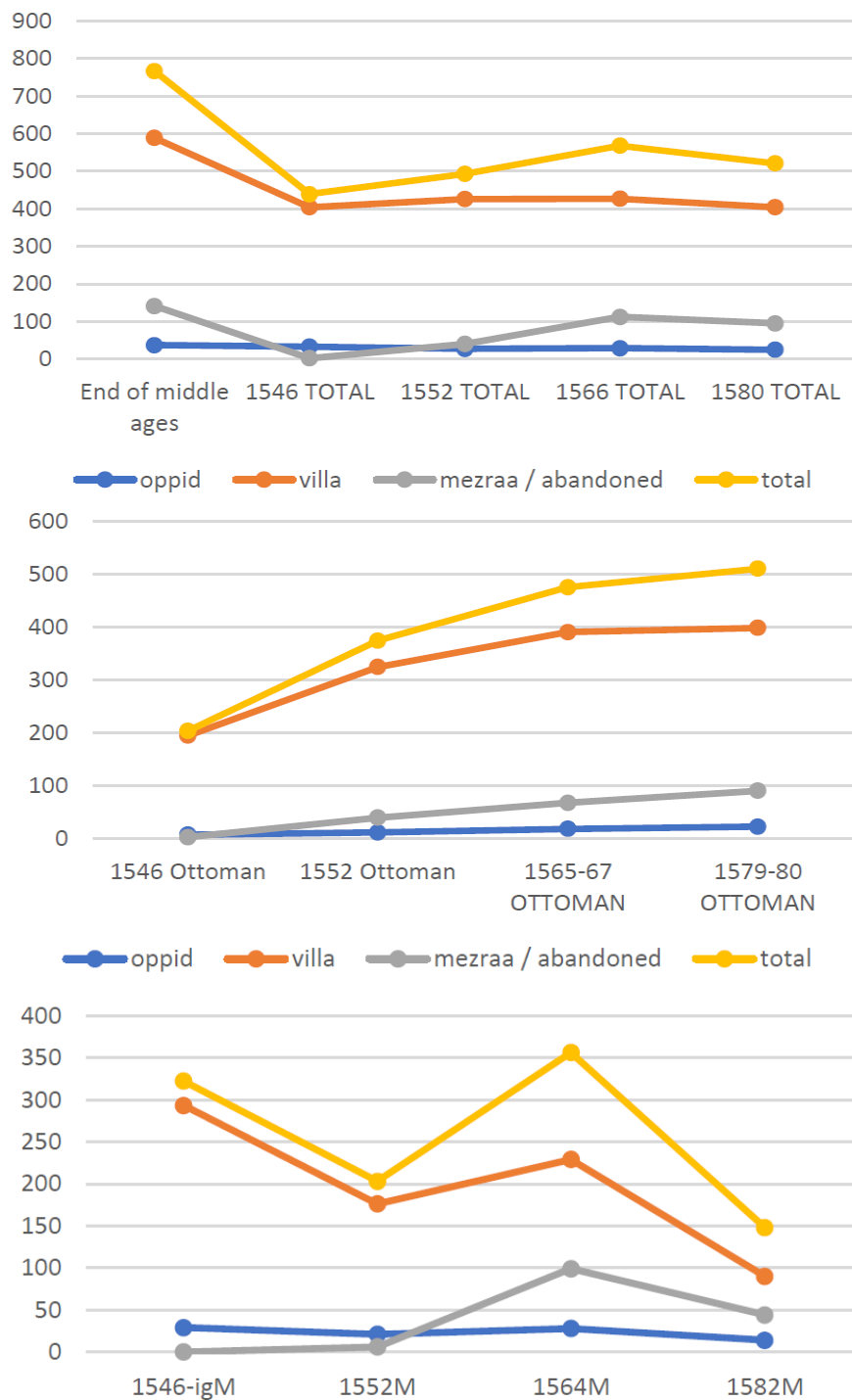

Figure 6. BOTTOM series: The change in number of total settlements conscripted in the 16th century and the change in number of settlements conscripted by the Ottoman and the Hungarian authorities. Note the decreasing number of total settlements and the settlements taxed by Hungarians, and the increase in the number of settlements taxed by Ottomans.
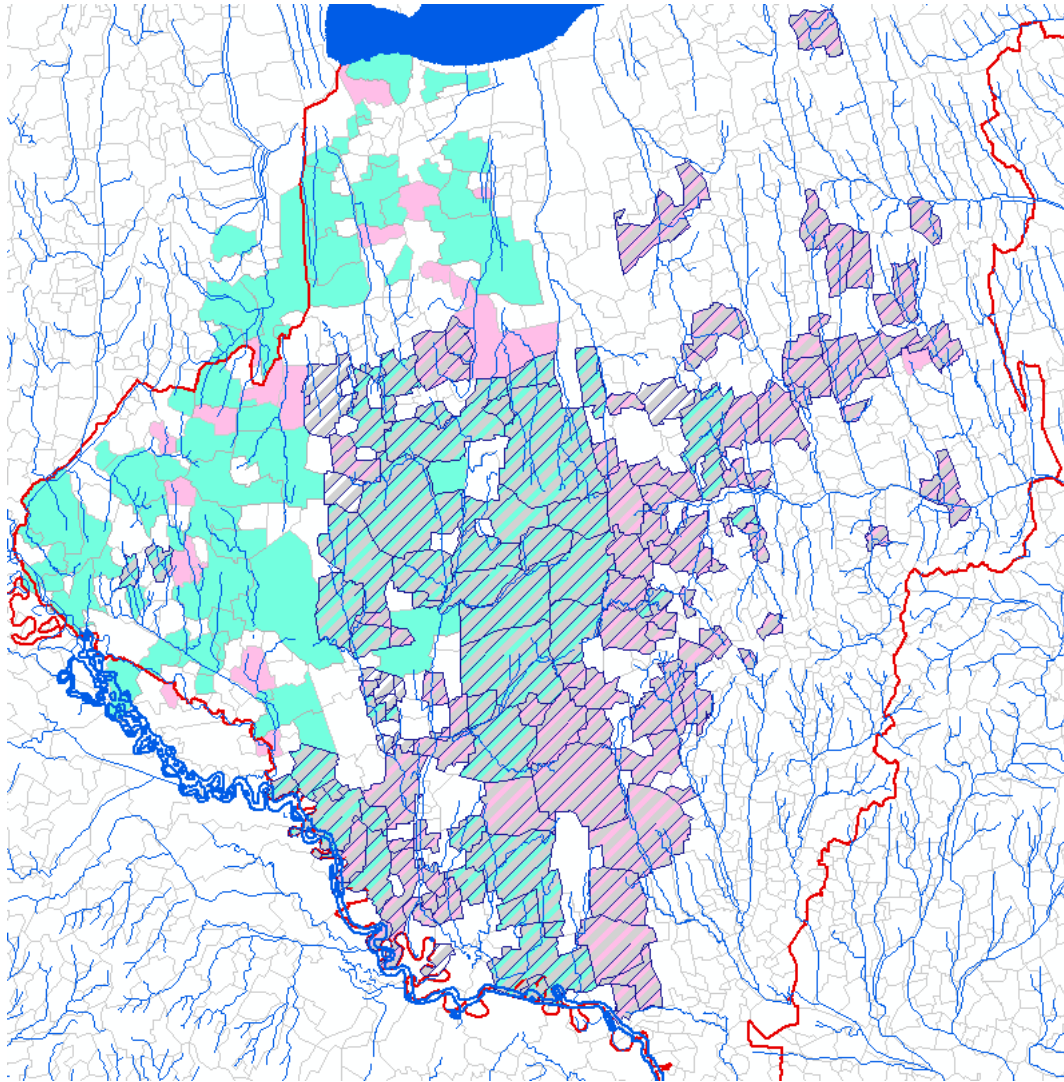
Figure 7. Retreat of Hungarian authorities between 1549 (grey-pink) and 1555 based on the tax registers. Solid green means settlements taxed by Hungarians in 1555 and not taxed by Turks in 1549. Green hatch means settlements taxed by Hungarians in 1555 also paying tax for the Turks already in 1549. Hatch means condominium – pink hatch was lost by Hungarians between 1549–1555. Note that the role of Hungarian fort line along Rinya river is clearly visible as still unconscripted by Ottoman authorities (green)

The second Ottoman attack in the region took place in 1555–1556. Nasuh bey of Koppany and the bey of Simontornya set fire on the *palanka* of Lak in July 1555. In the autumn of 1555, the armies of Tojgun Pasha of Buda (1553–1556) devastated the region. During the campaign, his troops captured several Somogy castles, including Babócsa, Korotna, Kaposújvár, Kaposmérő and Nagybajom (Szakály, 1975: 101-108; Solymosi, 1979: 74-78; Sudár, 2002: 355). The second attack led to a reorganization of Ottoman administration. After the conquest of Babócsa in 1555, they attempted to create a very short-lived, independent sanjak from these newly conquered territories of the western border (Fekete – Káldy Nagy, 1962: 315, 508; Dávid, 2005: 291. note 87).[6] The Ottoman area of taxation deeply penetrated into Somogy County by then (**Figure 8**). However, after 41 days

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[6] However its conscription has never been finished. In 1556 the Turks set fire on the castle and abandoned it.

13

of unsuccessful siege of Szigetvár, the Hungarian military administration recovered and was even strengthened. Hungarian taxation re-appeared on the territory of the Körös *nahiye* (**Figure 6,** bottom: increasing number of settlements), whereas the population itself around Szigetvár decreased considerably, partly due to flight and partly due to losses suffered during the campaign in the works of timber and dam building.
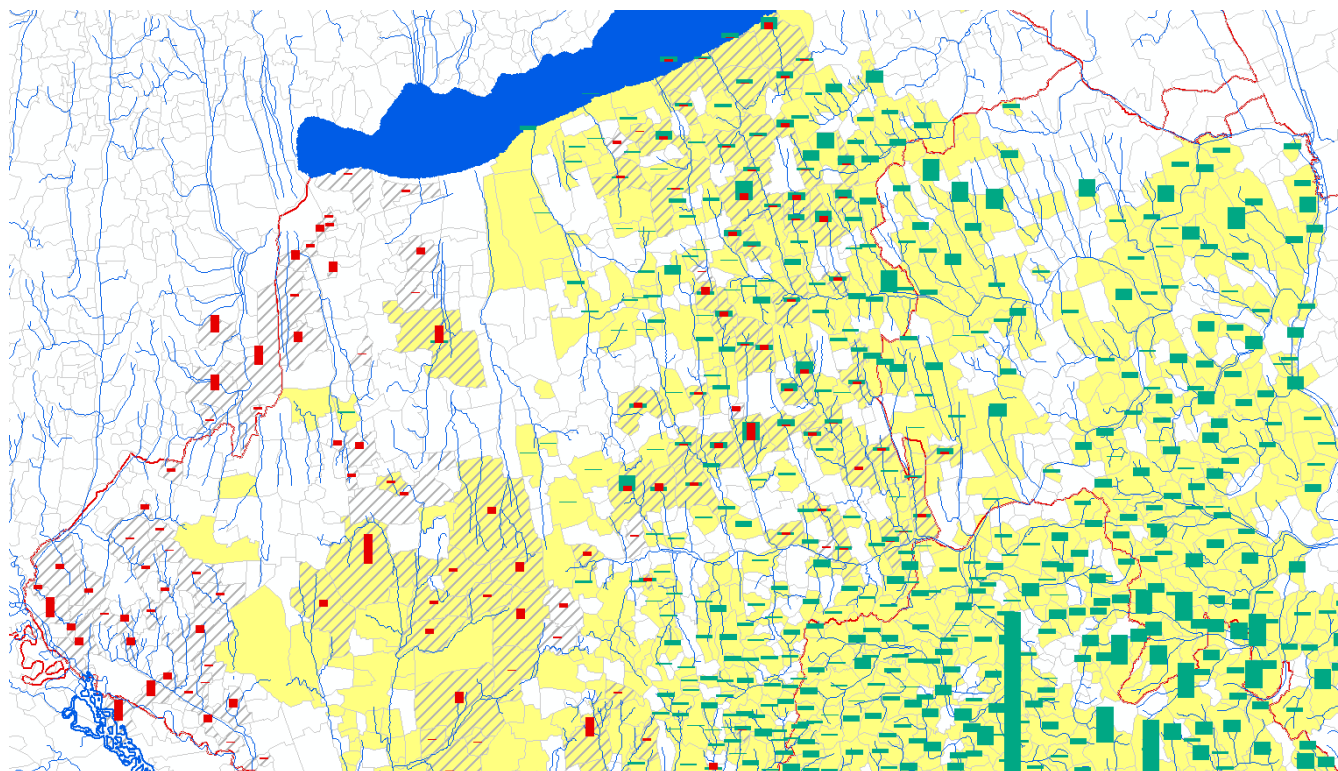

Figure 8. Ottoman (1552: yellow and green) and Hungarian taxation (1557: hatch and red) prior to and after the second Ottoman attack. Columns represent *porta* and *hane* numbers with equal scaling. Note the sometimes often numerous differences between Hungarian and Ottoman tax-subjects in the condominium

Finally, a third attack was made on the area in 1566 capturing the fort of Szigetvár. Ottoman taxation finally covered the whole of Somogy County, even reaching beyond it, but at the same time the Hungarian Kingdom still formulated demand on the region through the maintenance of taxation efforts, which often was symbolic of significance (in terms of *porta* nr. and money), similar to the symbolic Ottoman taxation in Zala County, which was in fact guarded by the Hungarian castle of Kanizsa. See the situation on **Figure 9**, showing the condominium based on the Hungarian tax conscription in 1564 prior to the Ottoman attack, and the Ottoman conscription in 1566. Compared to this, **Figure 10** illustrates the situation after the fall of Szigetvár. Note the retreat of Hungarian authority and the expansion of Ottoman demands. The campaign again resulted in a new administrative reorganization of Ottoman sanjaks (the third) (**Figure 11**).
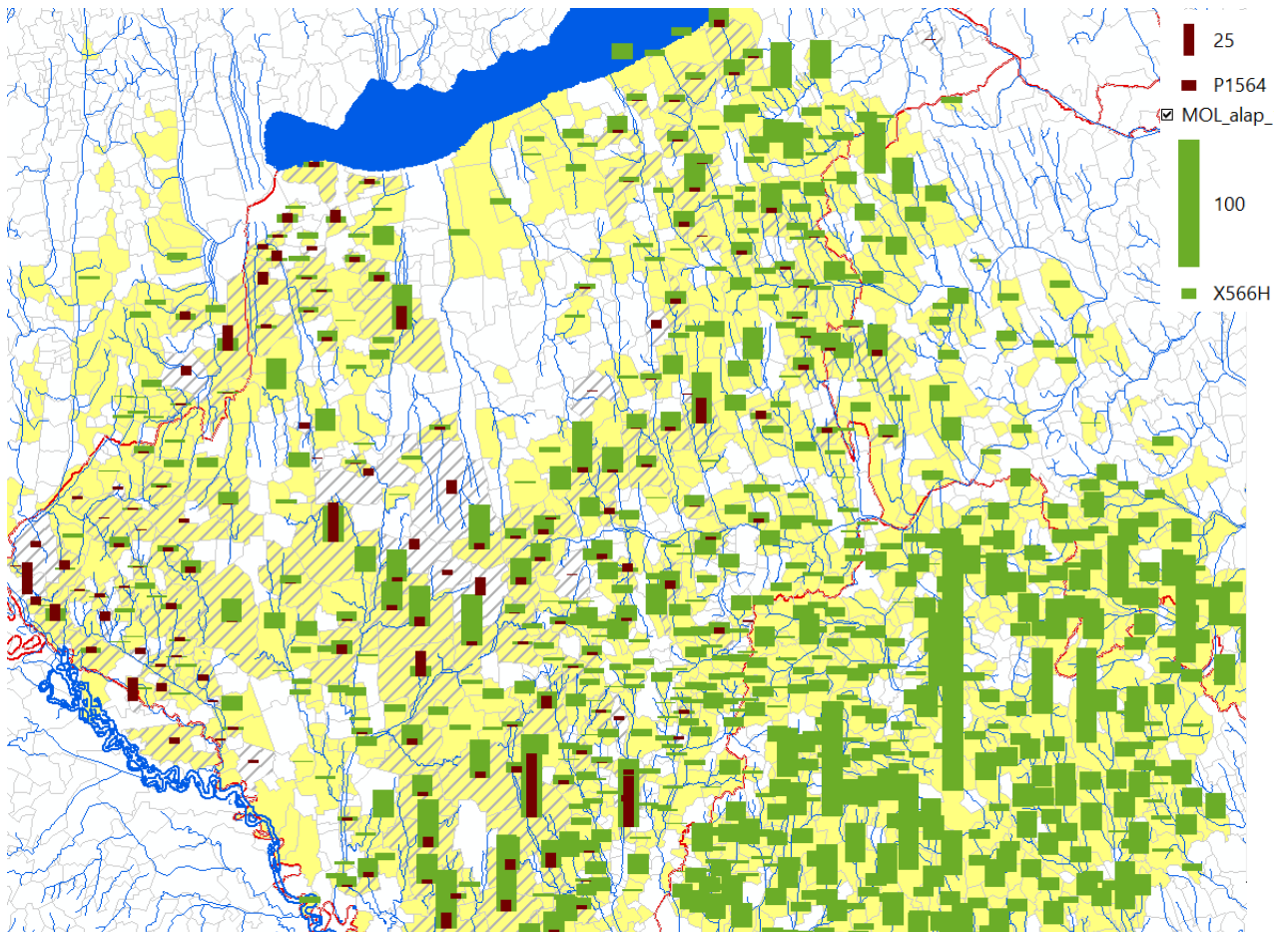
Figure 9. Number of *porta* (brown) conscripted by Hungarian authorities in 1564 (hatch) before the 3rd Ottoman attack, and *hane* (green) conscripted by the Ottomans in 1566. Ottoman area of taxation (of different types) is indicated with yellow
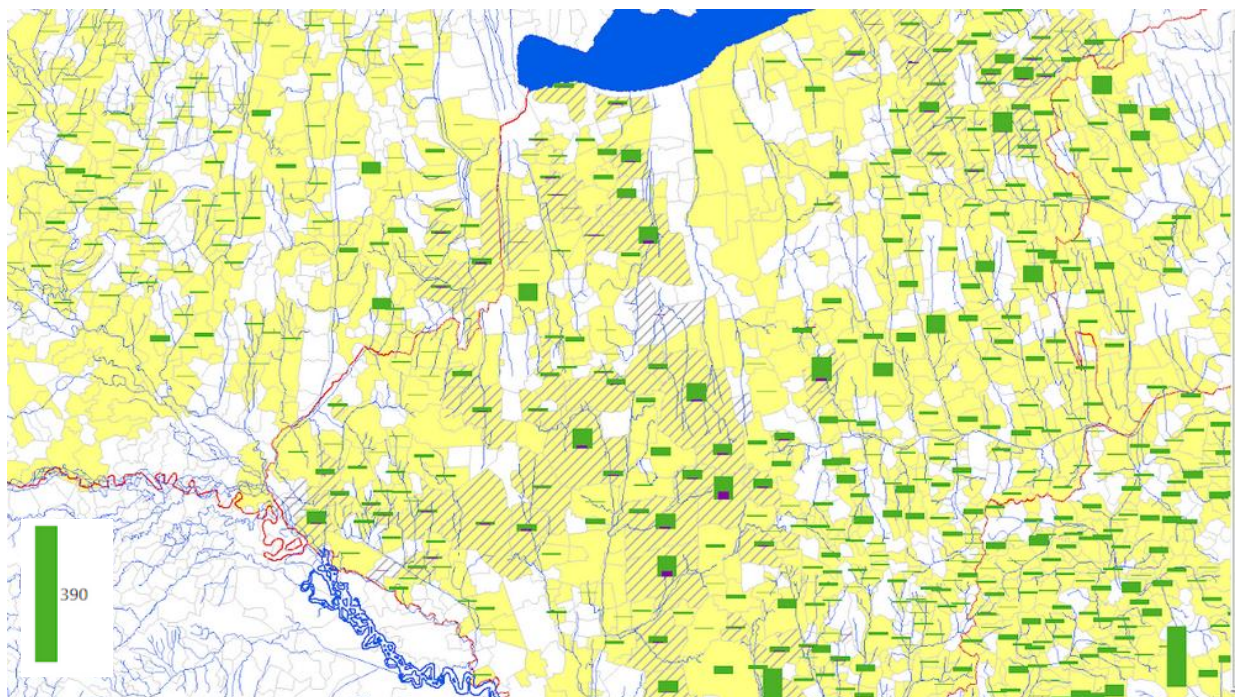

Figure 10. Area under Hungarian taxation (hatch and purple) in 1580; and area taxed (green) and claimed (yellow, without concrete hane numbers) by the Ottomans in 1582. The two parallel conscriptions again allow the researcher to delimit the zone of condominium (yellow+hatch combination)
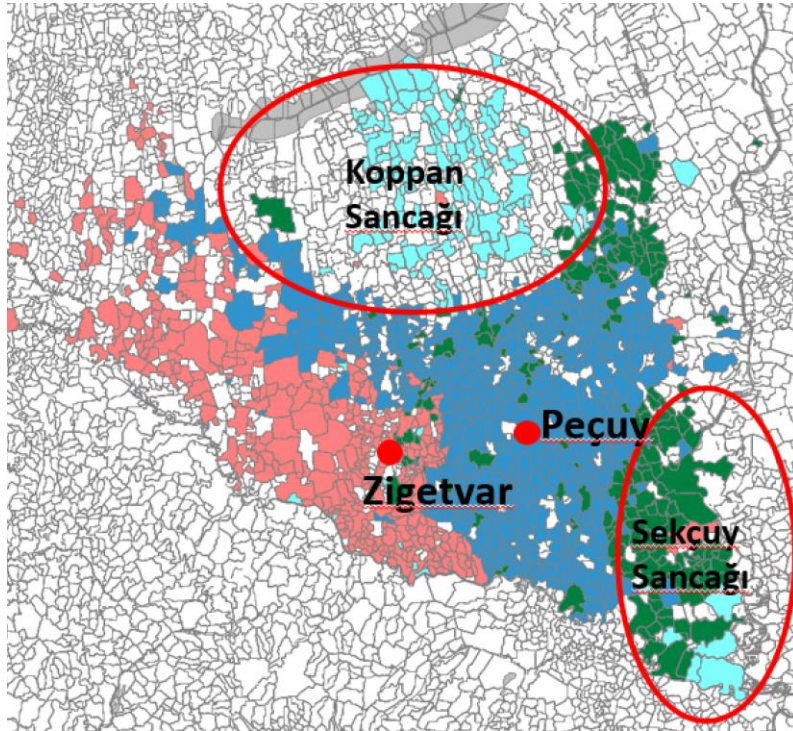
Figure 11. A reorganization of Ottoman administration in the region after 1566, the fall of Szigetvár

The Ottoman penetration halted for a while until the fall of Kanizsa in 1600. Therefore it is worth taking a look on economic, financial and demographic situation than can be derived from the data of the two conscription types.

(1) Our data prove that the share of local Ottoman incomes from condominium increased from the initial 4% to 13%. This meant the increasing significance (and taxability) of the condominium, the area that was also taxed by Hungarian authorities (**Figure 13**).

(2) Tax per *hane* values in *akçe* were not smaller in the area of the condominium compared to values measured at settlements under consolidated Ottoman rule (**Figure 12**).

(3) The number of settlements conscripted by the Hungarians decreased, whereas the share of settlements conscripted by Hungarians and also taxed by the Ottomans increased from 30% to 90% (**Figure 13**). So the extent of condominium grew, the area taxed by solely the Hungarian authorities decreased.

(4) Economic power (i.e average *porta* numbers per settlement) per settlement in the total Hungarian sample decreased (since the number of settlements also decreased that meant the fall of total income as well), but the average *porta* number in the condominium was similar to the value measured in the total Hungarian sample. Thus there was no difference in their economic performance (often symbolic taxation), especially after 1566. The average *hane* number per settlement in the Ottoman sample was oscillating between 7.5–6 and 8.

Surprisingly, the *hane* numbers in the condominium increased quickly after fall of Szigetvár (1566), from average 7.5 to 11 and by 1582 it reached 22. Regardless of the ratio between *porta* and *hane* as measurement units, the doubling of *hane* numbers might refer to population increase (unless its measurement changed). The Hungarian settlements became smaller/poorer on the long run (**Figure 12**).
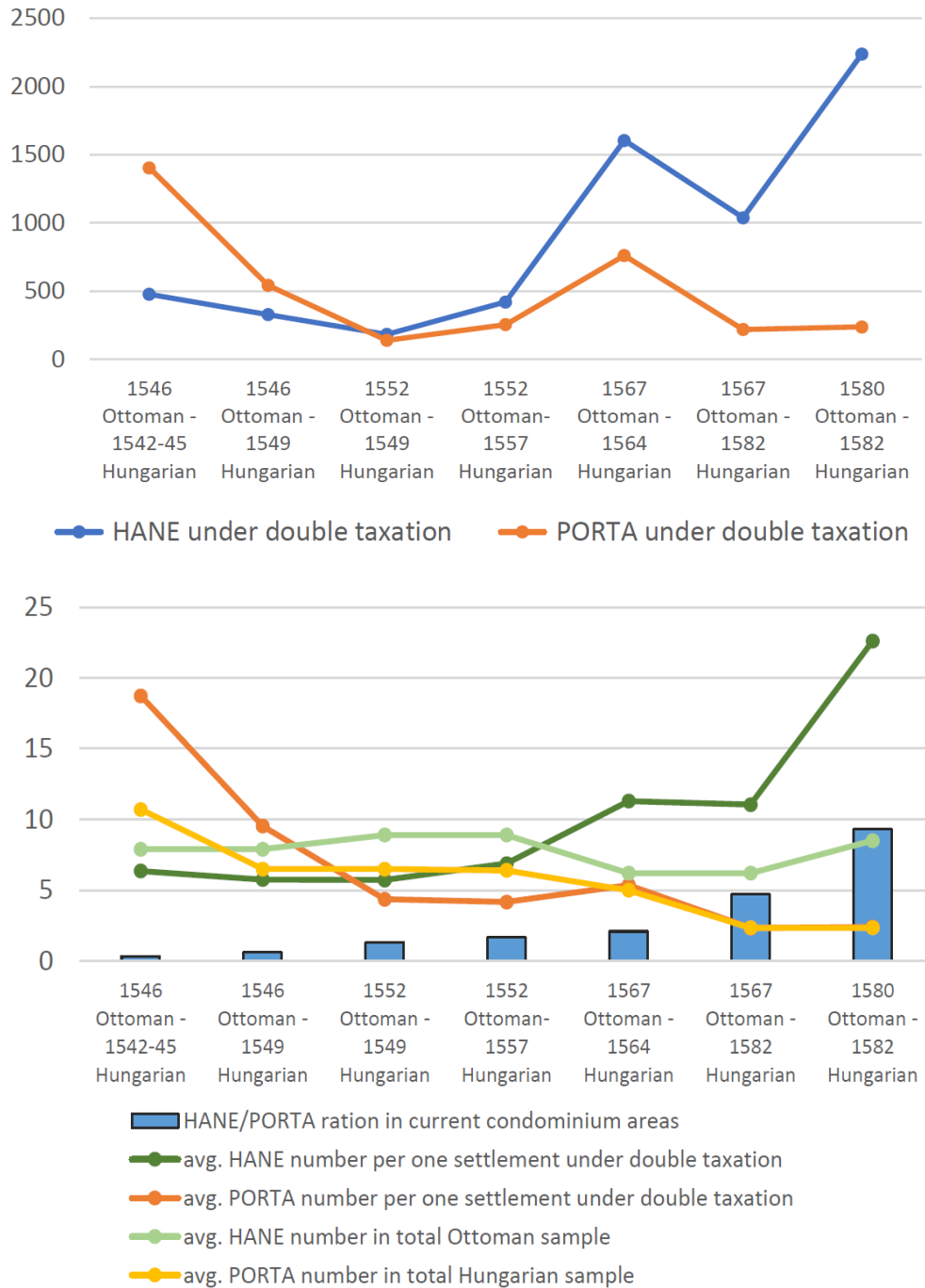

Figure 12. Some economic features of the condominium I.

(5) The ratio between the *porta* and *hane* was not constant, it varied in time, (the values measured in the settlements of the condominium can be compared to each other since the set of settlement was common) and probably in space too (**Figure 13**), thus we neither can conclude on demographic situation, nor on the relationship between the Hungarian and Ottoman tax units.

(6) Even the set of conscripted persons in Ottoman and Hungarian documents might differ in the same settlement (**Figure 14, Table 2**)! This makes the reconstruction of population numbers and economic levels even more complicated!

(7) Therefore it is better to compare Ottoman tax-conscriptions to other Ottoman *defter*s, and Hungarian ones to other Hungarian ones. In this case at least the proportional changes in economic performance might be calculated.
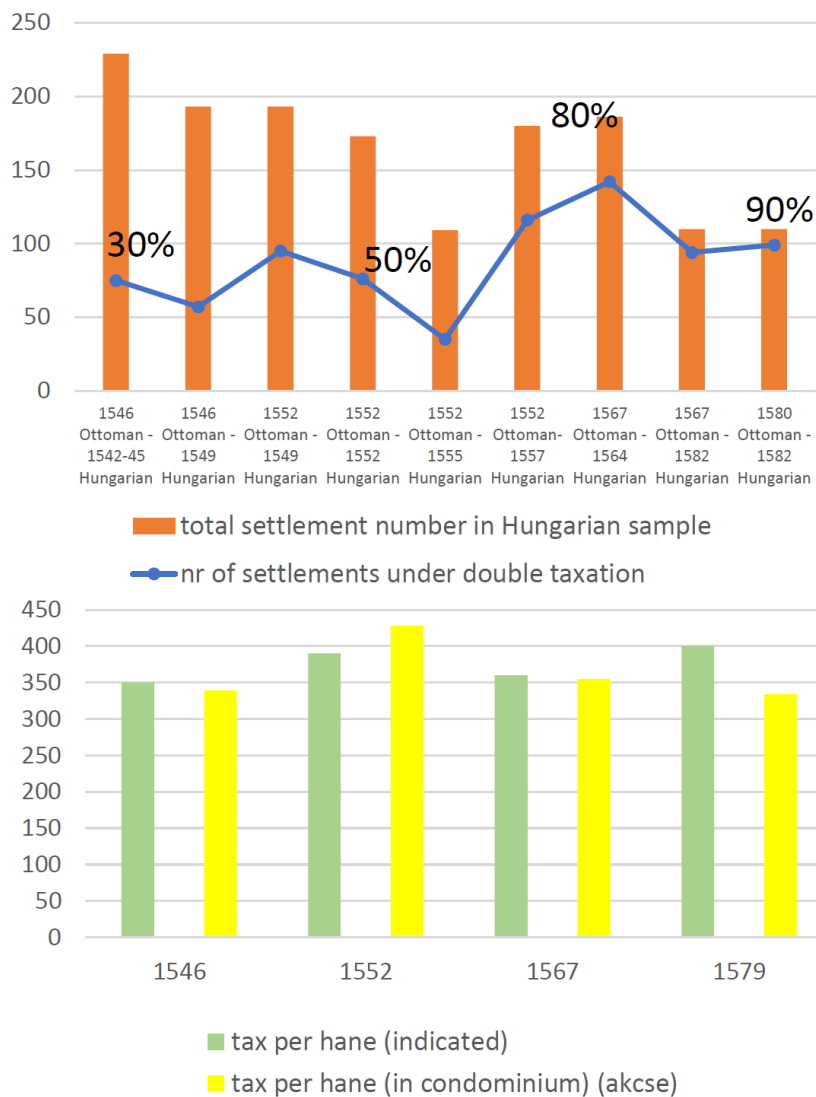

Figure 13. Some economic features of the condominium II.

Table 2. Different set of tax payers in consecutive (1549/1552) Ottoman and Hungarian tax conscriptions. Note that while the total number of conscripted are similar (26 vs. 30), there are only 8 common names in the two conscriptions

Beczeffalwa Becsfalva	HUNGARIAN CONSCRIPTION E 554_Fol.Lat._1349_16-17	Position		OTTOMAN CONSCRIPTION BOA_TT.d_443_132
1.	Mattheus Bak		8.	Baka Máté
			9.	Baka Benedek a fia
2.	Michael Chyany			
3.	Eliás Nagy		27.	Pál Éliás
4.	Stefanus Pethew			
5.	Stefanus Chyany			
6.	Gregorius Nagy			
7.	Stefanus Jancho			
8.	Egidius Byro		19.	Egyöd Petre
9.	Gregorius Byro			
10.	Gregorius Warga		13.	Varga Gergely
11.	Fabianus Marton			
12.	Benedictus Kys		10.	Kis Benedik
			11.	Kis Dimitre a fia
13.	Andreas Karachyon		28.	Karacs Andriás
			29.	Karacs János a fia
14.	Dionisius Wegh			
15.	Petrus Pal			
16.	Thomas D?	Messor		
17.	Emericius Thoth	Messor		
18.	Michael Bewythe	Messor		
19.	Stefanus Racz	Messor	18.	Rác István
20.	Georgius Borsodi	Messor		
21.	Petrus Kys	Messor	30.	Kis Petre
22.	Catherina Bak	Messor		
23.	Gregorius Thoth özvegye	Messor		
24.	Gregorius Bertalan	Messor		
25.	Joannes Sypos	Messor		
26.	Georgius Bakos	Messor		
27.	Bartholomeus Kerews	Messor		
			1.	Szakál András
			2.	Szakál Dienös a fia
			3.	János Gergel
			4.	János Tomás a fia
			5.	Pál Benedek?
			6.	Pál István a fia
			7.	Nagy Imre
			12.	Szakál Gergely
			14.	Tót Anbrus
			15.	? Mihál
			16.	Vég Gergel
			17.	Vég Ferenc a fia
			20.	Szántó István
			21.	Szántó Ferenc a fia
			22.	Borsodi Gál
			23.	Borsodi Gergely
			24.	Borcsa? Tomás
			25.	? Tomás
			26.	? Benedek a fia

Figure 14. Identification process of names from Ottoman and Hungarian (Latin) documents for the same settlement in the same era. Note that only 14 names are identical because the Ottoman conscription contains 41 tax payers, the Hungarian conscription of *porta* has only 16 records. This means that the units of Ottoman and Hungarian taxation differed!

The Hungarian rule could be maintained on areas which were owned by the greatest Hungarian landlords of the county, who settled in castles with their forces in Habsburg service. The were not only soldiers of high rank, but administrators responsible for collecting the state tax. Therefore the old elite was personally interested in the maintenance of the state administration and taxation. Not only state taxes meant supply for the castles, but feudal taxes too could serve as reinforcement and the military force was also used as an instrument to collect the landlords' tithe. The large landholders often focused only on their own villages, they did not levy tax on village of other noblemen. The main landlords were the following in the region, with their estates (with their private castles turned into state-financed forts): Báthory András (in Babócsa, Marcali, Segesd); Allya Mátyás (Csákány); Magyar Bálint (Fonyód, Szigliget); Várday Zsigmond (Szenyér); Csányi Ákos (Kanizsa); Szalay Kelemen (Berzence) (**Figure 15**).

The data from the series of Hungarian conscriptions (1542, 1549, 1557, 1564) before the fall of Szigetvár show a stagnation of *porta* numbers[7] after the sudden fall as the consequence of the mentioned first Ottoman raid. However the 50 percent of decrease in economic capacity does not necessary mean a 50% decrease in population!

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[7] Porta is an economic unit. One porta may mean a peasant with full *sessio*, or 2 peasants with half *sessio*, or 3 peasants with 1/3 *sessio* (under ¼ sessio the term 'poor' was used often).
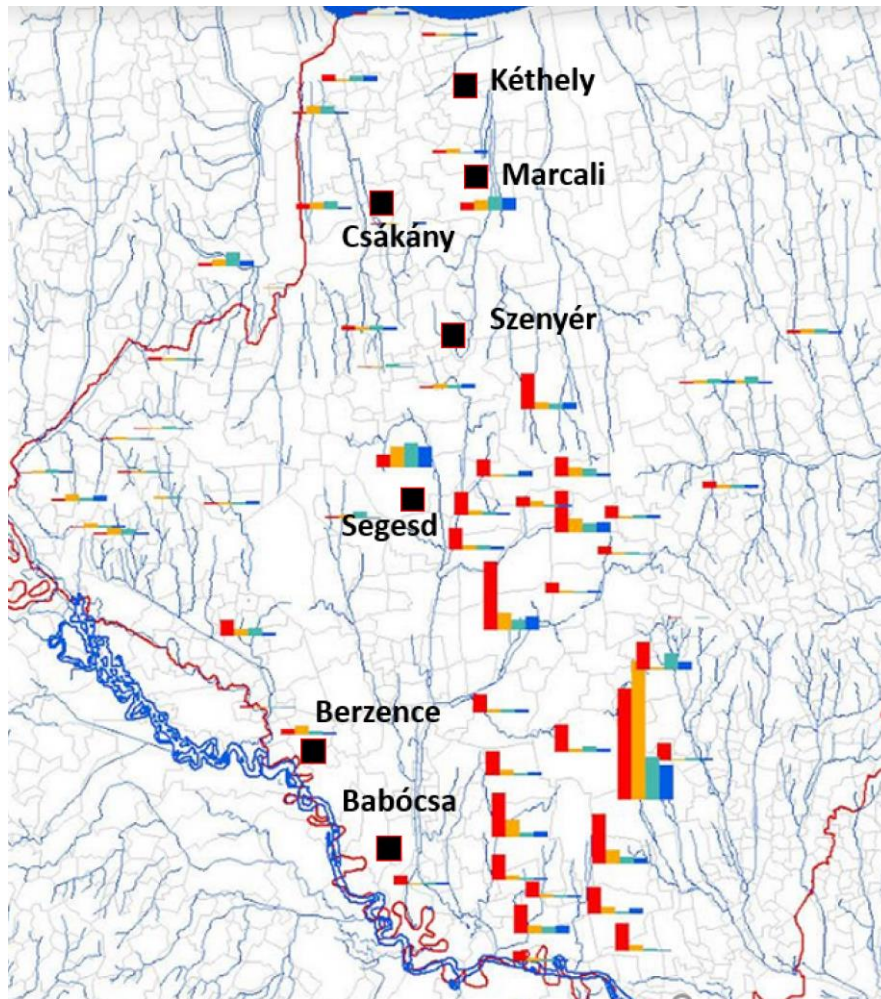
Figure 15. The fall of porta number / population or the weakening of the economic power of settlement located in front of the main Hungarian line of forts (1542-1549-1557-1564)

Comparing the *hane* number records in Ottoman *defter*s and the Hungarian *portalis* taxation, it seems that in the 1540s Hungarian taxation was more effective in Somogy County. A larger area of the county was in Hungarian hands and the Ottomans recorded a lower tax base per settlement, which would indicate a lower level of efficiency of their tax collectors.

However, the situation was more complicated than that. The rolls of non-taxable persons recorded in the defters between 1546 and 1556 contain dozens of Hungarian military peasants (*Müsellem* or tax-free serfs on *baština*). Adding their numbers to the taxpayers the difference between the population figures in the Hungarian and Ottoman conscriptions does not as significant as it seemed at first sight. (For example, the *porta* data for Kálmáncsehi in the Hungarian conscriptions are as follows: 1542: 110; 1545: 50; 1549: 200 *porta*. The Turkish *defter* of 1546 recorded 78 *hane*, but twice as much heads of families. This ratio is confirmed from other regions: **Figure 19**). On this basis, if not exact figures, but approximate proportions can be assessed when examining the demographic conditions of the condominium. *So, it would be useful to count not only tax units, but all the people listed in the registers in the long run – that would enable us to estimate demographic changes, while*

the number of tax units allows us to measure changes only in economic power. This would be a future task of our project.

The same similarity is borne out by the location of the area covered by the conscriptions. In 1552, the places listed in the *defter*s and *dicalis conscriptio* overlap, and the same settlements were missing from both lists. By 1552, Hungarian taxation had been reduced to a smaller extent in line with the Turkish advance. This resulted in a temporary shrinkage of the territory of the condominium. As a result of Tojgun Pasha's campaign in 1555, the entire area of the county came under Turkish rule, and only areas that had previously remained unincorporated (Somogyvár, the Lak area) were left out of the lists. It can be assumed that these areas were sparsely populated, which is confirmed by the fact that in the 1570s the Ottomans settled Vlahs here. By this time, the effectiveness and extent of Hungarian taxation had also declined, with the number of *hane* far exceeding the number of *porta*s. A turnaround occurred after the unsuccessful Ottoman siege of Szigetvár in 1556. Hungarian taxation was revived by the strengthening of the military economy of Szigetvár and the weakening of the Turkish defences. The northeastern territories that had been lost to the Hungarians earlier (the territory of the *Nahiye* of Kőrös) became again under to Hungarian taxation. By 1565 the territory of the condominium had expanded as both states increased their area conscripted/under taxation.

Figure 16 illustrates the shrinking authority of the Hungarian administration between 1564-1582 (after the fall of Szigetvár), whereas the Turks crossed the county to the west (they continued to conquer in Zala). Note that the map also indicate not only territorial decrease for the Hungarian administration, but a decrease of *porta* numbers (1564: green; 1582: purple). One reason for this is that Kanizsa, Palota (fiscal frauds - György Zrínyi, Transdanubian district chief captain, Benedek Thúry) collected the tax for themselves, so these regions no longer appear in the state conscriptions! Another reason is the general law, issued way earlier, that settlements under Ottoman taxation might pay only 50% of their tax for the Hungarian authorities that way lifting the burden from peasantry. Thus a decrease in number of porta to 50% may also refer to these phenomena, besides real decrease in numbers!

As a concequences of the above written, the Ottoman defter of 1579/80 indicates way higher *hane* numbers than the subsequent (1582) Hungarian *portalis conscriptio,* while 40 years earlier it was the opposite. This does not necessary mean that a change in the relationship of the two measurement units took place (this could happen too, see **Figure 19**), but weakening/strenghtening authority can also be a reason. This is another point to count the names of conscripted instead of tax units in case of a research purely of demographic interest.
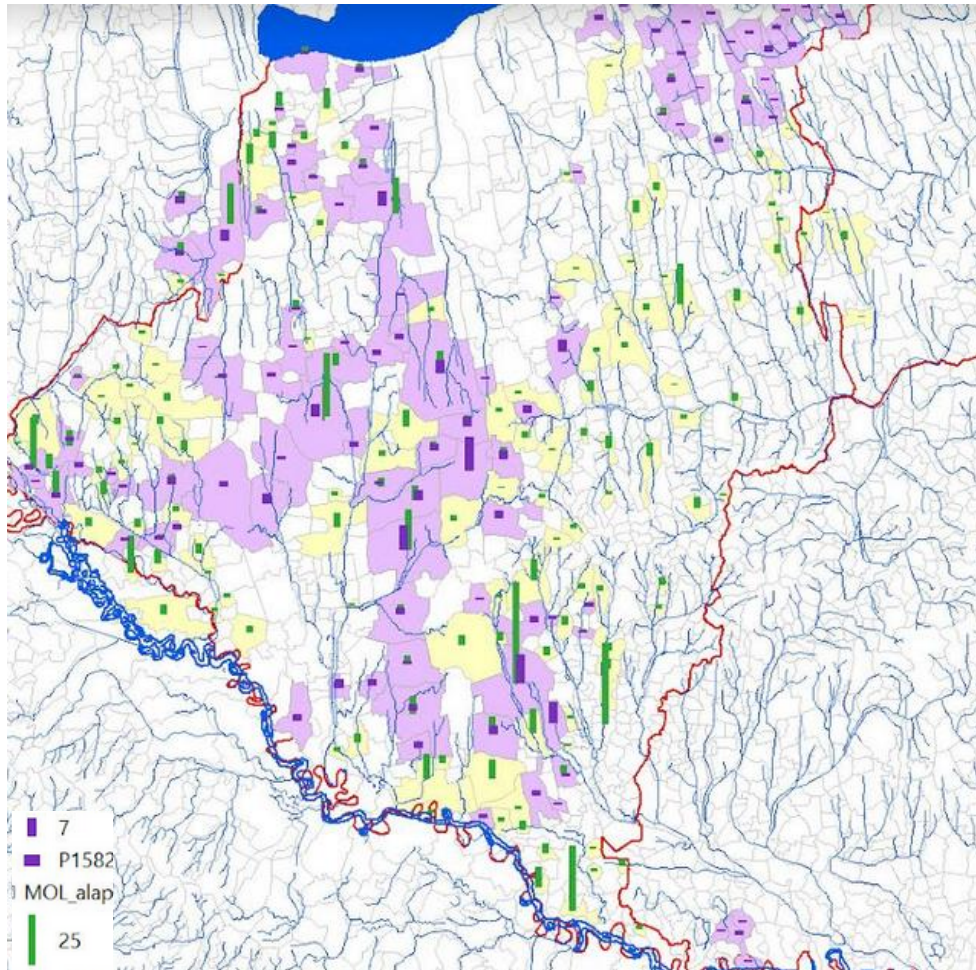
Figure 16. The shrinking authority of the Hungarian administration between 1564 (yellow/green) and 1582 (purple)

According to the Hungarian tax registers there were hardly any settlements that could be continuously taxed throughout the 16-17th centuries. The only area continuously taxed by Hungarian authorities was the territory of the Ottoman Görösgal *nahiye*, established behind Szigetvár. But does this mean real depopulation? To explain the phenomenon the following explanations can be regarded as relevant:

1) Presence of large Hungarian landowners: the Hungarian nobles with the most important strongholds in the area had estates here. They were able to maintain Hungarian taxation with their military forces as discussed earlier.

2.) In the Hungarian provinces, the number of *porta* (serving as basis as central state tax) was kept low by financial manoeuvres in order to serve the purposes of local war economy, whereas the eastern provinces were no longer included in this system.

3) The *müstahfız tımarı (salary timar)*,[8] did not destroy the surroundings of frontier castles, as the estates were rented out in economically prosperous, more distant (eastern, safe) locations.

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[8] Allocated to infantry units in garrisons in lieu of wages.

It is also worth comparing the last Ottoman defter of 1579/80 with the last Hungarian conscription from a hundred years later, just before the end of the Ottoman wars, in 1696 (**Figure 17**). This leads us to the conclusion that

(1) there was a further decrease of *porta* numbers conscripted in 1582 and 1696, but the reasons (demographic driven or pauperization, or further weakening of the power of Hungarian authorities after the fall of Kanizsa in 1600) are uncertain.

(2) The territorial expansion of the Hungarian authorities at the end of the 17th c. may exclude the third explanation above, rendering the former two valid.

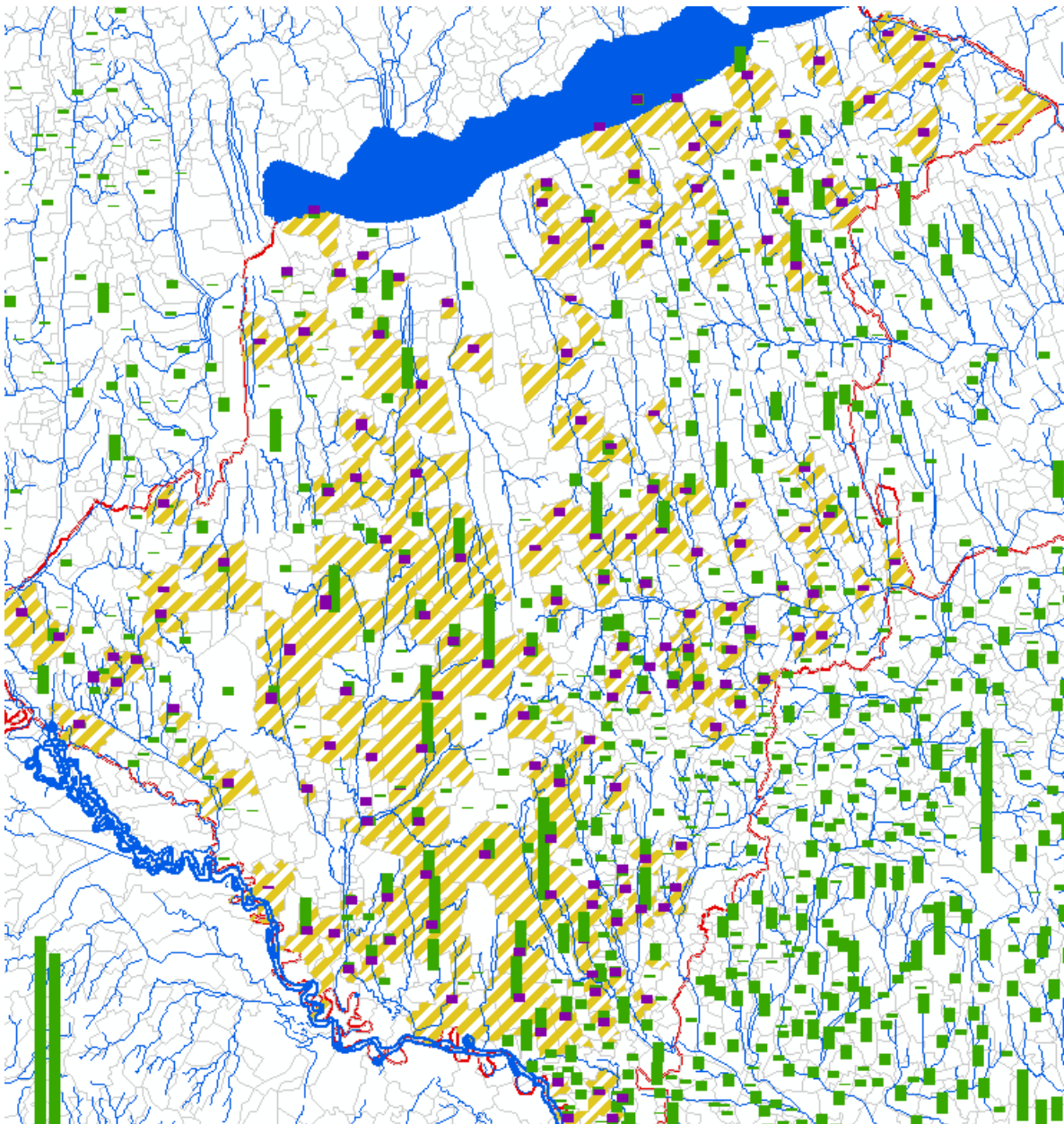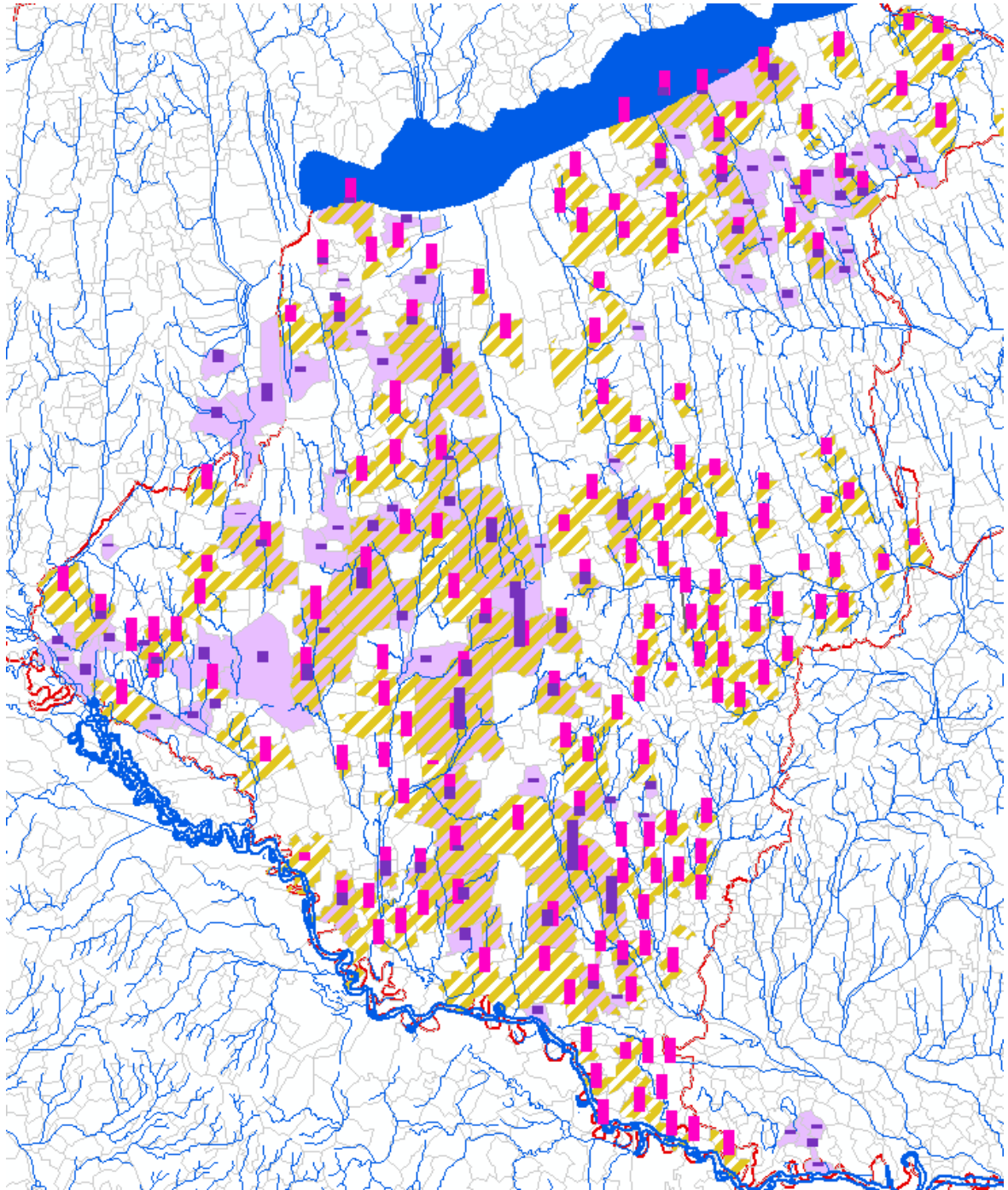(3) Porta and hane are still not equivalent units.

Figure 17. Differences of demographic picture/economic potential based on the last Ottoman and Hungarian tax conscription in the 1580s compared to the first post-Ottoman tax conscription in 1696. LEFT: Area of Hungarian taxation: purple/hatch (1696) given in porta numbers; Ottoman taxation: green (1580) *hane* numbers /

RIGHT: Area of Hungarian taxation: red/hatch (1696) given in *porta* numbers; Hungarian taxation: purple (1582)

It is evident that the comparison with the Ottoman data in 1580 would indicate a greater depopulation/decrease regarding both spatial aspects and numbers as *porta* and *hane* are not equal measurement units. Though the Hungarian tax conscriptions from 1582 has the same measurement unit as the one executed in 1696, but we have earlier pointed out the Hungarian authorities were unable to tax the whole of the population, thus the numbers given in 1580 are underestimated, and rather has symbolic significance, than economic relevance.

3. Repopulation – problems and rates

Finally it is worth investigating 2 further questions. How does *hane* as unit relate to *porta* as unit? For this we collected the data series of another region, in the northern condominium zone near Eger, as a comparison. And the second one: how did repopulation take place in the 18th century? How do data from 1696 and 1720 relate to each other? What regional patterns of growth can be identified between 1720[9] and 1785[10]? How can data be compared to each other when only *ONE* (1785) of the four conscriptions (1696, 1720, 1785, 1786) is a real population census, two are tax conscriptions (1696, 1720) and one is a survey of peasant population (1786)?[11]

Figure 18 confirms that 30% of settlements disappeared from Somogy during the 16th c. Further 40% disappeared in the 17th c. and 90% of the settlements abandoned at the end of the Middle Age will not recover any more, not even in the post-Ottoman era! The number of family heads in 1720 was at least four times greater than the number of *porta* at 1696. However, due to the intense repopulation efforts (migration from the north and from the south: from Croatia and even from Catholic Bosnia) one may not define any equations between *porta* and tax payer peasants, despite the small temporal difference between the two conscriptions – a ratio 1:2 or 1:3 may be suitable and it is confirmed by data from other territories.[12]

Regarding the investigations on the relationship between *porta* and *hane* and household, in the northern condominium the number of *porta* was more or less half of the peasant economies (while peasant economies may integrated the head of family and his adult son already having a wife according to the 1:2 ratio between economic units and families). The relationship on the long run is illustrated on **Figure 19**. The relationship between the Ottoman *hane* and Hungarian units can be summarized as follows: originally the *hane* number equaled to the *porta* number (during the first raid in 1554 this was conscripted), lated it moved towards the „peasant economic unit" (though the latter varied in size unlike the *porta*!) The average size of peasant landholdings was 0.5 porta before the Turkish era, then it fell to 0.2 – or stagnated but the tax was halved. By 1767 it again reached 0.5 sessio).

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[9] For settlement level data from 1720 see: www.adatbazisokonline.mnl.gov.hu and Acsády 1896.

[10] Volumes for the first census in 1785: *Az első magyarországi népszámlálás (1784–1787).* Bp., KSH, 1960; *II. József népszámlálásának községi adatai.* KSH Népességtudományi Kutató Intézetének Történeti Demográfiai Füzetei 15. Szerk.: Dányi Dezső, Faragó Tamás és László Géza. KSH NKI Bp., 1996; P*ótlás az első magyarországi népszámláláshoz 1786–87.* Történeti statisztikai tanulmányok 2. KSH, Bp. 1975.

[11] Data for 1786 at settlement level: National Archives of Hungary, A 39, A Magyar Kancelláriai Levéltár, (1770-1848), 3688/1786

[12] One porta equals with one sessio, but in general the peasants hardly have more than 0.5-0.66 sessio in 1720.
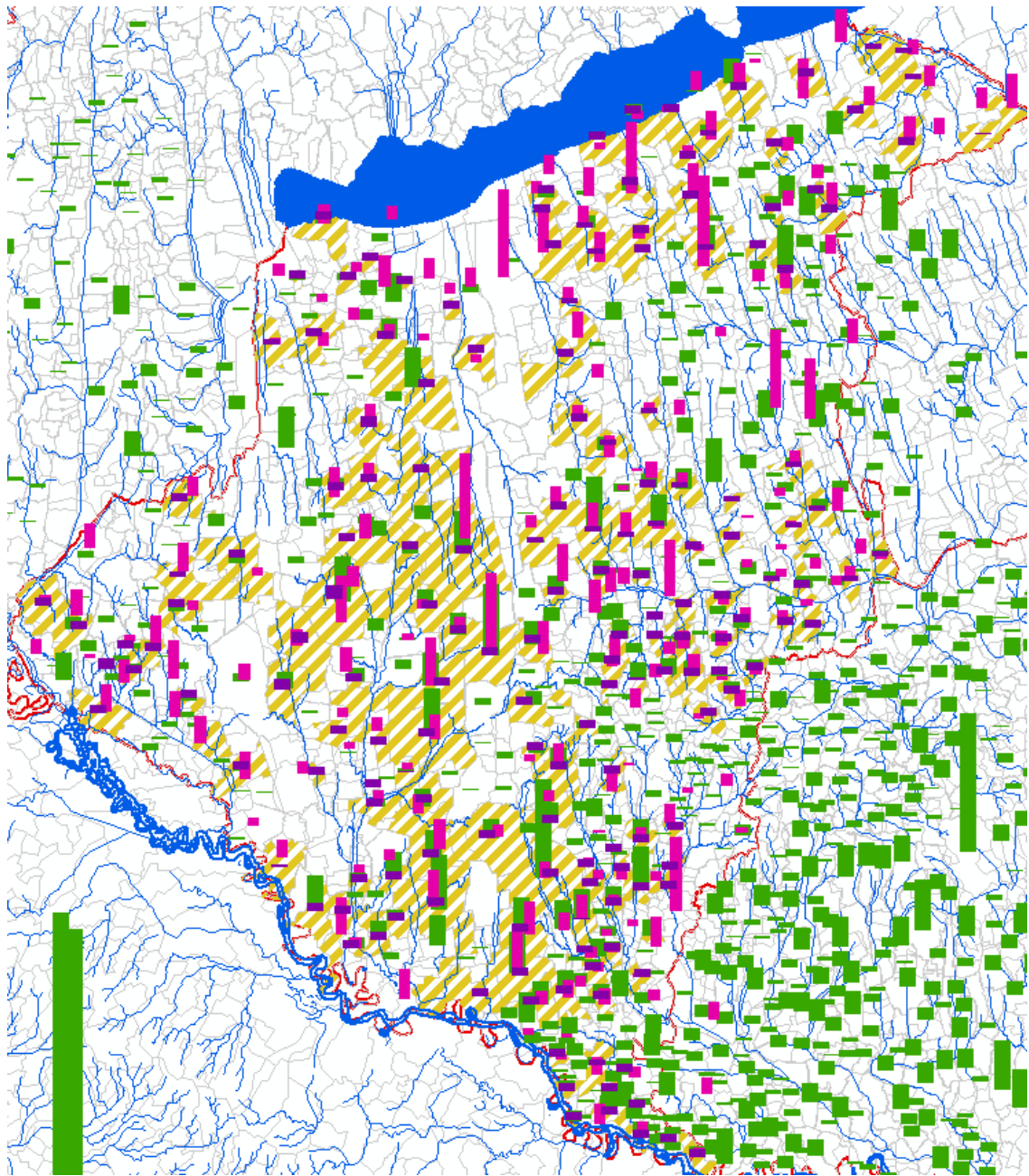
Figure 18. A compilation of data from 1580 (Ottoman *hane* numbers, green), 1696 (number of *porta*, purple; existing settlements in 1696 are indicated with hatch) and 1720 (number of conscripted tax-payer peasants – red). Note that *hane* numbers are closer to peasants' number in 1720 than to *porta* numbers

The effect of Ottoman attacks on economic capacity can be summarized this way: before 1554 there were hardly any empty lands but there were landless peasants. After 1554 the size of abandoned lands increased, the number of landless decreased as they occupied the land of those who escaped and did not return. But by 1598 (after the fall of Eger in 1596) landless peasants dominated, though there weren't any abandoned economic units, and this means general empoverishment. In the 18th century the number of landless fell to zero, but there were some abandoned lands in 1731, which reflects the devastation of the third Ottoman raid in 1688.
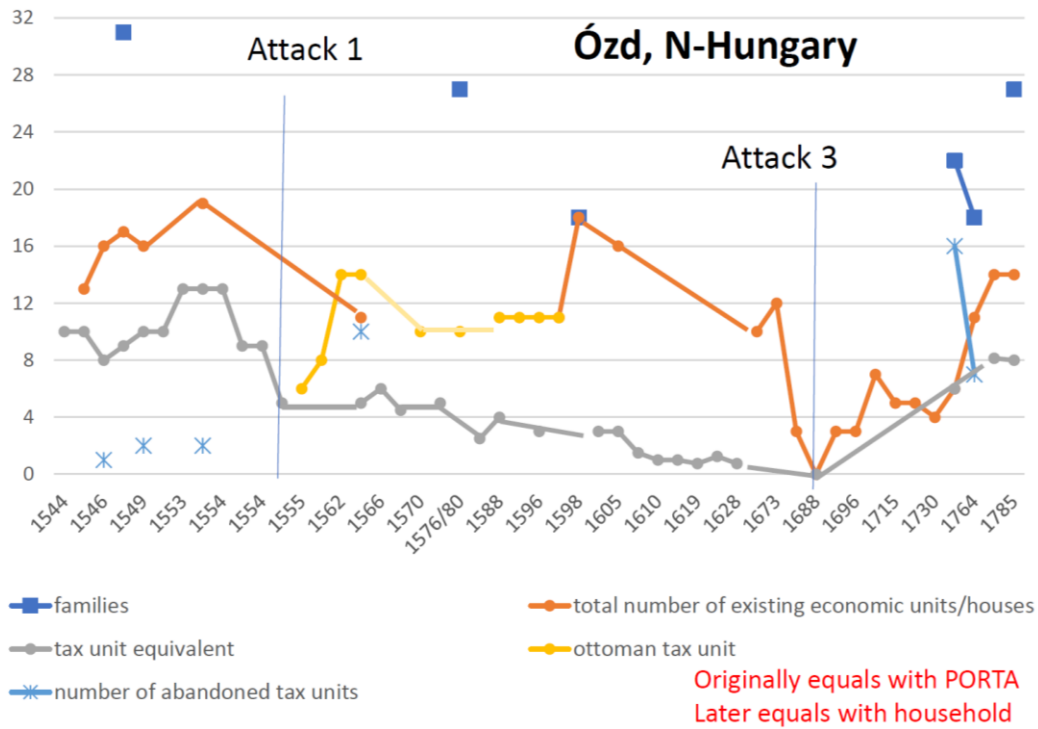
Figure 19a. Comparing data from tapu defter and portalis conscriptio in the northern condominium near Eger I.
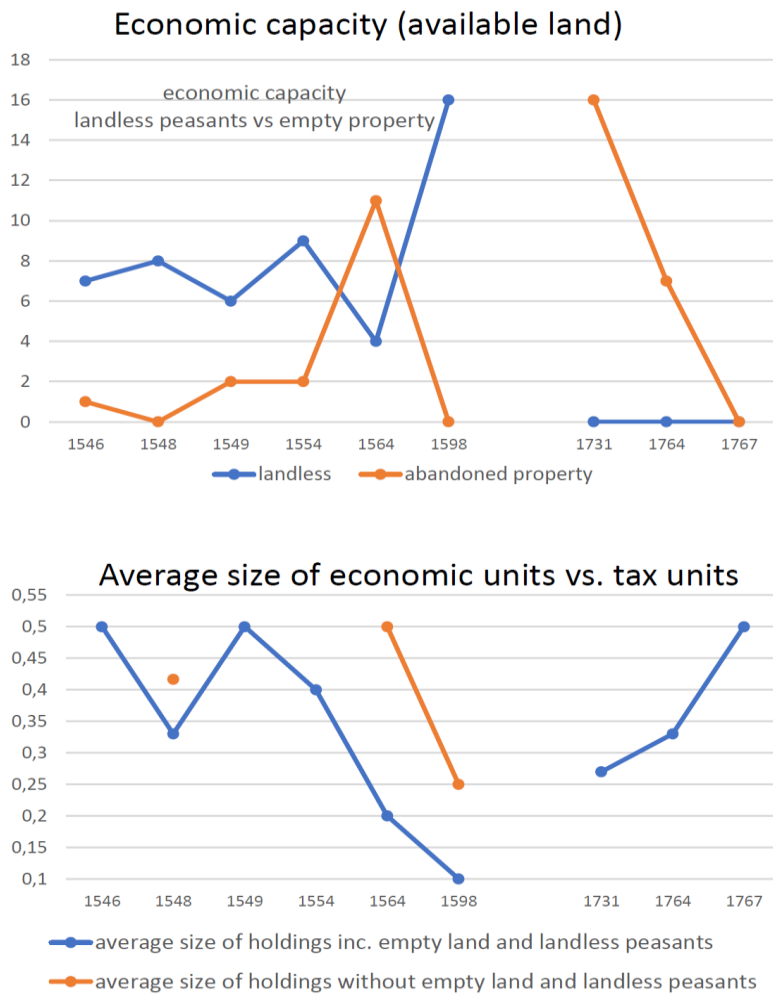

Figure 19b. Comparing data from tapu defter and portalis conscriptio in the northern condominium near Eger II.

And finally, as real population numbers are not indicated nor in 1696, neither in 1720, we used proxy variables to measure the regional differences of population increase. Data stored in GISta Hungarorum database were used for this purpose (**Figure 20**). The proxy of population increase was the ratio of the number of conscripted peasants in 1786 and 1720. Not surprisingly our region of investigation was among those that showed the greatest increase, though this increase had a diverse pattern within the region itself. Compared to this western regions unoccupied by the Turks did not show this increase due to their earlier overpopulation during the Ottoman era, when these regions functioned as refuge area.
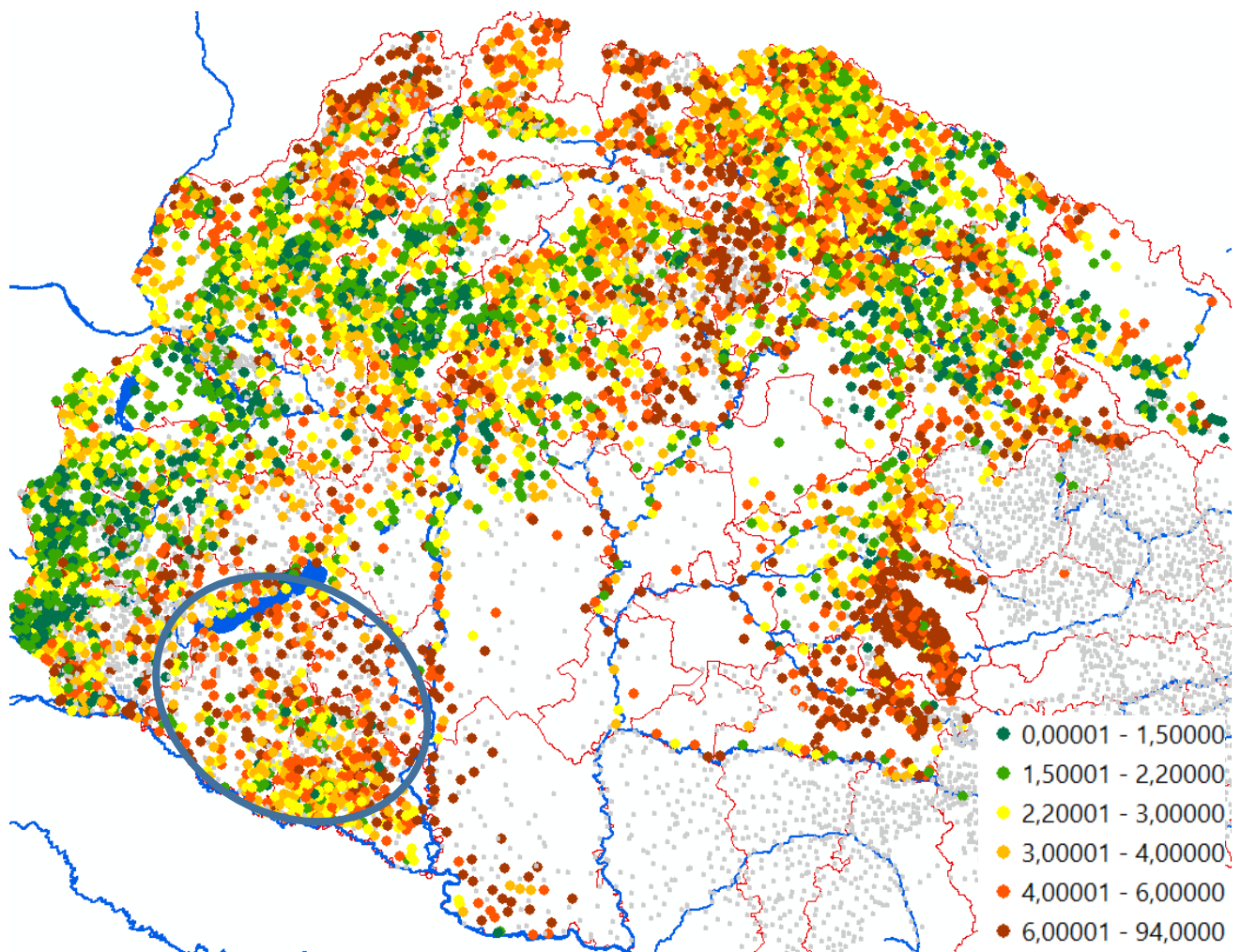

Figure 20. Proxy map illustrating regional differences in population increase (1720-1786). Number of conscripted peasants in 1786 measured to all conscripted in 1720 (landless serfs – *subinquilini* – are underestimated in the latter survey, but some non-peasant layers are included)

Sources

Başbakanlık Osman Arşivi, İstanbul, Tapu Tahrir defterleri (BOA TT.d.) 441, 443, 412, 646, 1012, 503.

Magyar Nemzeti Levéltár (National Archives of Hnugary), Budapest, Magyar Kamara Archivuma, Conscriptiones Portarum (E 158) 39. vol.

Literature

DÁVID Géza (2005), Szigetvár 16. századi bégjei. Pasák és bégek uralma alatt. Demográfiai és közigazgatás-történeti tanulmányok, Akadémiai Kiadó – Magyar–Török Baráti Társaság, Budapest.

DÁVID Géza and FODOR Pál (2005), „Az ország ügye mindenek előtt való". A szultáni tanács Magyarországra vonatkozó rendeletei (1544–1545, 1552), História – MTA Történettudományi Intézete, Budapest.

FEKETE Lajos – KÁLDY-NAGY Gyula (1962), Budai török számadáskönyvek, Akadémiai, Budapest.

FODOR Pál (2018), The Business of State. Ottoman Finance Administration and Ruling Elites in Transition (1580s-1615), Klaus Schwarz Verlag, Berlin.

HEGYI Klára (2018), The Ottoman Military Organization in Hungary. Fortresses, Fortress Garrisons and Finances, Klaus Schwarz Verlag, Berlin, 2018.

HEGYI Klára – SZ. SIMON Éva and TUZA Csilla (2023), Adóztatás és földbirtoklás a hódolt Magyarországon a 16-17. században, Budapest.

İNALCIK Halil (1954), Hicri 835 Tarihli Suret-i Defter-i Sancak-i Arvanid, *Türk Tarih Kurumu Yayınlarından*, XIV/1. Ankara.

SOLYMOSI László (1979), Nagybajom és pusztáinak története. A kora középkortól a jobbágyfelszabadulásig. Feudalizmus-kori történetünk fejlődésmenetének lokális vizsgálata, in: Mikóczi Alajos – Solymosi László (eds.), Nagybajom története, Kaposvár, pp. 11–325.

SUDÁR Balázs (2020), A mohácsi náhije és települései a 16–17. században, in: Haramza Márk – Kovaliczky Gergely – Bertók Gábor – Simon Béla – Galambos István – Türk Attila (eds.), Eke mentén, csata nyomában. A mohácsi csata kutatásának legújabb eredményei, Martin Opitz, Budapest.

SZATLÓCZKI Gábor (2022), Csurgó vára és városa a török időkben, Csurgó.

SZAKÁLY, Ferenc (1969), Tolna megye negyven esztendeje a mohácsi csata után (1526-1566), in: Puskás Attila (ed.), Tanulmányok Tolna megye történetéből, vol II, Tolna Megyei Tanács Levéltára, Szekszárd.

SZAKÁLY, Ferenc (1975), Kaposvár a török időkben, in: Kanyar József (ed.), Kaposvár. Várostörténeti tanulmányok. MSZMP, Kaposvár, pp. 101–108.

SZ. SIMON, Éva (2014), A hódoltságon kívüli „hódoltság". Oszmán terjeszkedés a Délnyugat-Dunántúlon a 16. század második felében, MTA BTK, Budapest.

SZ. SIMON, Éva (2018), A szülejmáni béke. A magyarországi oszmán összeírások és a magyar–oszmán békekötések összefüggései. *Aetas* 33, (2018) 4, pp. 53–72.