## **Dmitry Khitrov**

## Population development in Russia (XVI-XIX centuries)

In this paper, three groups of questions are discussed.

First is the nature and the quality of our sources. Being a strong centralized monarchy, Russia in the early Modern Age had an advanced taxation system based on periodical calculations of tax-payers. The materials of these censuses, when they escaped destruction, can be used to reveal the general number of population, as well as its demographic characteristics, from the late XVII c. onwards.

An abundant historiography exists (mainly in Russian), discussing, calculating and recalculating the figures the censuses give us. In the second part of the paper, I will try to present the 'standart model' of population growth, as it was formulated in Soviet and post-Soviet historiography.

In the last chapter, several ideas concerning the possible updates to this model will be discussed.

## AN OVERVIEW OF SOURCES

1. Piszovye knigi, XVI – early XVII c.

Until the early XVII c., the system of censuses, called 'soshnoe pis'mo', was focused on recordind land, not people, as it was the primary object of taxation. Periodically (as a rule, once in 15-20 years) a decision was made to make a new 'overall description' ('valovoe pis'mo') of the country. A taxator ('pisetz') was sent to each district (uezd), with the staff varying from 3-4 to 25-30 assistants, depending on the size of the district and the rank of the pisetz. The work lasted for several month or even years, and resulted in the 'book of soshnoe pismo', or pistzovaya kniga, which functioned as the main taxation document until the new description was made. The descriptions were run by Pomestny prikaz (Estates Chancellery).

The first 'overall descriptions' were run in the late XV c., when the Grand Princes of Moscow were taking their last steps in unifying Russian princedoms, and then repeated periodically. Unfortunately, only few of the XVI c. documents survived, due to the series of devastating fires, especially the Great Fire of 1626, when nearly all the archives of Moscow were gone in one night. For now, we have several dozens of the books of XVI c., covering different parts of Russia and different years. The majority of them belong to the 'overall description' of 1592-1593, due to the fact that numerous copies were still in use in 1626, so Pomestny prikaz managed to obtain the copies from the local administration after the loss of originals.

In the same year, the new description was started. In the situation, when the inner parts of the country were severely devastated during the Time of Troubles (1604-1618), the taxation system had to transform. Some taxes were still collected from certain plots of ploughland, but the others, more important, were imposed upon a number of households, 'zhivushaya chet', which was different in different districts.

The books of 1620s-1630s are the first description of the whole territory of Russia. An abundant literature exist exploring them and recalculating their figures. Unfortunately, they cannot be used as a reliable source on demographic history. For many districts, the calculations give us the unbelievably low figures of population. Z.V.Dmitrieva (2003) compared the descriptions of the landownings of Kirillo-Belozersky monastery with the manorial documentation and revealed the great undercounting of population.

One more problem should be emphasized. Although the major task of the description was measuring the ploughlands and calculating the taxation indexes, the population was also recorded. For each household, the society and social status of the owner was marked, and also the 'men' (lyudi) were recorded. The long discussion in the historiography exists on the question which part of population does this cathegory include. Several answers were proposed: all the male population (Yu.V.Gotje, 1906), economically active male population (N.A.Rozhkov, 1899), household owners (V.O.Kluchevskij, 1905), heads of the families, i.e. married men (A.M.Andrijashev, 1914; A.M.Gnevushev, 1915; Shapiro et al, 1971). The recent works give us the most annoying answer; there was no unified system of recording the people, and sometimes all the approaches listed above could be used within one book (D.A.Khitrov, D.A.Chernenko, 2006; D.A.Chernenko, 2006, 2008). So, the number of households is the only reliable figure.

2. Perepisnye knigi, 1645 – 1710.

By the mid-XVI c., the majority of taxes were imposed upon the number of households, not the size of the ploughlands. So, the new census became essential, focused on detecting the quantity of population.

The first attempt was made in 1645-1646, but it was not successful. The new census coincided with the reforms of B.I.Morozov, which increased the taxation burden, so the people suspected that the unpopular government could go even further if it had the whole population recorded.

The new census was conducted in 1678/1679. It covered the major territory of the country and nearly all the groups of tax-payers. The nobles, the clergy and some other categories were not included, and also the Cossacks and the 'service class', the numerous soldiers in the Southern borders who insisted to be nobles, although had no estates. In Siberia, similar work was done 5 years later (Vodarsky, 1978).

The perepisnye knigi of 1678 are supposed to be among the most reliable sources of the period. As a rule, the taxes in Muscovy were never imposed upon a single tax-payer. The whole sum which had to be paid by certain community (a city or a village) was calculated, and the community was responsible for paying it. So, in the periods when the taxes were more or less stable (and that was the case of 1678), the community was interested in recording all its members, because the 'recorded' members could't leave without their neighbours permission. In 1710, Peter I tried to conduct the new census. But this attempt revealed the significant decrease of the number of tax-payers, which was obviously caused by the massive tax avoidance, so the government returned to using the books of 1678 (Shvatchenko, 2004; Shvejkovskaja, 1996).

3. Revizias, 1719-1858

In 1719, Peter replaced the major taxes collected from the households with the poll tax, and started the first 'revizia', the modern type of population census. It took 5 years to finish it and correct all the undercounts, and later the revizias were conducted in 1744, 1763, 1783, 1795, 1811, 1813, 1833, 1850 and 1858.

The materials of revizias were collected in the manner much closer to the methods of modern censuses then perepisnye knigi. In the primary documents, the age, marital status, and the composition of the family were recorded. The books of the previous revizia were used to mark the changes, which gives us the excellent material for the studies of mortality (Troitskaja, 1993) and, to some extent, migrations.

After the books were compiled, they were checked periodically, until the new revizia was announced. The 'dead souls' were not excluded from the taxation until the next revizia (which became the plot of Gogol's "Dead Souls", one of the most well-known novels of Russian classical literature), but

the 'missed souls' were searched and recorded. The special research by V.M.Kabuzan (1975) revealed that by 1724 the tax collectors found extra 21 % of population, if compared with 1719, but later the number of 'newly found' tax-payers never exceeded 5 %, which seems to be an excellent result for the early modern era.

4. Modern population censuses.

After the last revizia of 1858, the national population censuses were conducted in 1897, 1926, 1937 and 1939. The materials of all of them are published and widely used by the historians.

## THE GENERAL MODEL OF POPULATION GROWTH OF THE EARLY MODERN PERIOD

The first works, trying to estimate the population quantity in the early Modern period, appeared in the late XIX c. (Miljukov, 1892; Kluchevsky, 1905, Klochkov, 1912, and others). Both historians and demographers (Urlanis, 1941) agreed, that the deeper source-study of the materials of censuses was essential to obtain the real figures from these materials, as the methods of collecting and aggregating these data were far from modern.

The most detailed model of Russian demographic history of the period was developed by Ya. E. Vodarsky, V.M.Kabuzan and their research teamin the 1960s-1980s, in the Institute of Russian and Soviet History, Academy of Sciences of the USSR. It was the first quantitative model based on the systematic analysis of all the existing censuses, and also a large number of similar sources.

A large study was conducted to collect and evaluate the existing figures. The major datasets, such as the census of 1678 and the revizias, were discussed in the special monographs (Vodarsky, 1978; Kabuzan, 1963, 1971), and the aggregated materials were published in 16 volumes of 'Perepisi naselenia Rossii' (Perepisi, 1972). The numerous groups, not counted in the censuses (such as the nobles, the regular army, sometimes the clergy, the indigenous people of Siberia, etc) were calculated or estimated using the synchronous sources. The general model was presented in Vodarsky's 'Population of Russia within the last 400 years' (1971).

One characteristic feature of the approach used by Vodarsky was that he never used the general assumptions on the rate of population growth. All his calculations and estimations are source-based.

Another important aspect of Vodarsky's model is that his research was geographically-oriented. Alongside with the datasets, the maps were prepared, which was a very time-taking task without the GIS technology. Unfortunately, the results of this work were never published, and for now, are probably lost.

The general picture of population growth according to Vodarsky and Kabuzan in shown on the graph 1. Only the territory, covered by the first revizia of 1719, is included (i.e., Russia, Left Bank Ukriane, and Baltic countries).



Later, this growth slowed due to the demographic transition and to the losses of the two world wars (graph 2).



WHAT CAN BE ADDED TO THE 'SRANDART' MODEL BY THE MODERN WORKS

Although Vodarsky's model is well argumented and perfectly source-based, some of its aspects could be disputed.

1. The model by Vodarsky is based upon the estimations of the total population of Russia in the XVI c., which seem to be excessive. A.I.Kopanev (1962) estimated it as 12 mln before the Time of Troubles, using the figure of average population densiry for several inner districts and extrapolating it to all the territory of Russia. Modern estimations, based upon the size of the army of the Tzars in the largest military campaigns, such as the siege of Polotsk in 1563, are much lower – 4,5 to 5 mln (Kashtanov, 1994; Petrov, 2009).

2. This gives us some reasons to reconsider Vodarsky's estimations for 1678. The point is that calculating the total, he estimated the unrecorded population as 25 % of the total. No differences

between regions and social groups was made, although it should have been very significant. Perhaps the overall estimation for 1678 must be lower, too.

3. The GIS technologies provide us with the opportunity to construct the dynamic models of population growth. Analyzing them, we can come to the conclusion that there is no direct evidence of the high rate of unrecorded population in the inner parts of the country in 1678. With this correction, the total number of population in 1678 should be estimated as 8 -8,5 mln (instead of Vodarsky's 10,5 mln).

So, the period of rapid demographic growth seems to start in Russia later then in Central European region. This corresponds well with the rapid increase of internal and external power of Russian empire in the XVIII c.