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FRYDERYK JOZEF MOSZYNSKI – THE FIRST POLISH STATISTICIAN



Fryderyk Moszynski (1737–1817) received a thorough education, developed a great interest for mathematical sciences and was fluent in several foreign languages. His statistical activity was initiated at the times of the so-called Great Sejm of 1788–1791 (the longest Parliamentary Session in the Polish history).

On Moszynski's initiative the Sejm decided in its resolutions of June 22, 1789 to carry out the first-ever general census combined with smoke-counting. He also proposed a statistical method of measuring the army tax.

Moszynski was the author of constant record of natural population movement conducted in

cooperation with the church authorities.

Working on his own he collected a very valuable statistical material related to the Treasury incomes and expenses.

The statistical material collected by Moszynski was received very well both in Poland and abroad and described as "highly reliable" while the scholar himself was acclaimed as "an eminent statesman". His first attempt to estimate the population of Poland, which was partitioned at that time, with the use of "presumed calculation" (1 smoke–6 souls) is also worth mentioning.

Fryderyk Moszynski was born in Saxony in 1737. He spent his childhood and his early years in Dresden. He attended German schools where he received good, classical education and showed a strong interest in mathematical sciences.

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In 1754 he moved to Poland where he was given two starosties (estates) and the earldom by King August III. In the years 1762, 1767 and 1788 he was elected the deputy to the lower chamber of the Polish parliament – the Sejm. For several years he worked for the Commission of Crown Treasury where he made his name as an expert in tax and financial matters who was equally capable of acting in "the interest of the Treasury" and defending the interests of common citizens. In 1768 king Stanislaus August appointed him general – major, and at the same time, the deputy – commandant of the Cadet Corps; the latter post was held by Moszynski until the end of the existence of the institution.

Moszynski became particularly engaged in political activity during the so called "Great Sejm" (1788–1791) when he often expressed his opinions on tax and military issues. On March 9, 1789 in his extensive speech Moszynski pointed out inequalities in tax burden of different provinces and disproportion in the way the provinces were represented in the Sejm. His thesis was illustrated by precisely compiled calculation tables which were carried around among the deputies. The tables showed "an overall picture of Rzeczypospolita (the Republic of Poland) including not only smokes and the related proportion of souls, but also different incomes and distances of the state".

Moszynski claimed that the wealth of the state cannot be measured by the affluence of several aristocratic families and a couple of thousands of rich citizens but it rather should be measured by settlements and wealth of towns and country, prosperous trade and flourishing crafts". The statistical measure of imposing tax for military purposes, which was proposed by Moszynski in the Sejm, "was of absolutely unique character and it was used nowhere else either before or after that time". In order to calculate objectively the value of particular goods in a given poviat (district) Moszynski proposed a statistical method based on the following data:

 value of land and property in the poviat on the basis of deeds of sale recorded in district books in the last 11 years, what was representative enough for making calculations,

number of smokes obtained from treasure tariffs both alienated in the last
11 years and those which were not subject to purchase – sale transactions.

The information allowed the Treasure Commissions to make calculations based on the value of goods alienated thanks to the number of smokes, and provide a precise estimation of value of goods in a given poviat taking into account the proportion between the alienated goods and the total.

However, the statistical project of the new tax proposed by Moszynski was not approved by the Sejm largely due to self-interest of the gentry of the Wielopolska Province, and therefore the amount of tax was left to tax-payers to act at their own discretion.

Mosznski saw the reason for lack of capital in Poland in the outflow of cash which, in turn, resulted from the adverse trade balance. He discussed the issue in a booklet entitled "Remarks on Incomes and Expenses of the Republic of Poland" (1774). Faced with the general lack of confidence in paper money Moszynski provided a compromise solution i.e. issuing assurance notes or bonds. He proposed at the same time that the commission of experts should consider the possibility of using them as securities or paper money. He also saw the need to establish a bank and presented the profits which could be derived from it. Moreover, he postulated that the overdue taxes from the territories annexed by the three partitioning countries should be repaid to the Polish Sejm.

On 22 June 1789, at Moszynski's initiative, the Sejm passed an act of immense importance and greatly interesting for the history of statistics in Poland. It became known as "Inspection and Population Register" and it was in fact the first ever national census carried out in Poland. The census encompassed the rural and the urban population leaving aside the gentry and the clergy. It included the following categories: sex, occupation, social status and it even differentiated between sons (in two age groups – below and above 15 years of age) and daughters in families. It is worth noticing that censuses started being held on regular basis only in the 18 th century. In Sweden one took place in 1749, in Poland in 1789, in the United States of America in 1790 and in Holland in 1795.

The census of 1789 included not only the population number but also its social and occupational structure. Due to the fact that the census was of military and tax character it did not encompass "the privileged classes" i.e. the gentry and the clergy, however, it became a good basis for estimation of population of the Republic of Poland of the end of the 18th century. The Four Year Sejm ruled that from January 1, 1790 a constant record of the natural movement be carried out.

Over a decade earlier in 1777 a census of urban population on the territory of Poland was held, while in 1787 and 1792 the population of Warsaw was registered.

On the European arena the Belgian census of 1846, carried out under the supervision of an eminent scientist Lambert Adolphe Quetelet (1796–1874), was of fundamental significance. Quetelet's greatest work entitled "*Physique sociale*" (Social Physics) is considered to be the milestone of the written history of civilization.

The national Belgian census supervised by Quetelet and held in 1846 with the use of his methodology has become a pattern for other countries to follow. Quetelet acted as an initiator and co-organizer of the first International Congress of Statistics where he presented his proposal of unification of census methodology worldwide. During the Congress, held in Brussels in 1853, it was postulated that censuses should be carried out at regular ten – year intervals.

Censuses on the territory of Poland were dependent on decisions of the three countries which had partitioned Poland. On the territory under the Prussian rule censuses were held every 5 years starting from 1871, while on the territory under the Austrian rule they were held every 10 years starting from 1869. The only census carried out on the territory under the Russian rule took place in 1897.

Moszynski was very much engaged in his work on population census but at the same time he initiated the idea of setting up and keeping constant records of births and deaths by the church authorities. The idea was to constantly update the census data, and this time the registers were to encompass the gentry too.

Thanks to his statistical tables Moszynski became known as "the eminent statesman" both at home and abroad. Even T. Korzon, who was somehow reluctant to praise Moszynski's work, admitted that "his numbers of space and population were at the highest possible level of reliability; not only the ones obtained from official registers but also those based on speculation" (1 smoke -6 souls), and he accepted those as the basis for estimation of population of Poland in the period of the Partitions.

Fryderyk Moszynski was the pioneer of the Polish statistical thought of the second half of the 18th century. He was not only a scientist but also a man of action who took many bald initiatives; one of them led to establishing a well-organized system of population register and register of non-cash elements of the national economy. Thus, the general census of 1789, keeping constant records of the natural movement of the population and the inspection of smokes (separation of royal estates) gave a good foundation for registers and statistics – so much needed at that time and so much appreciated in the years to come.

For all his life Moszynski showed an interest in sciences and he managed to acquire a valuable collection of books, among them many books devoted to medals. In his last will he donated the whole collection to Liceum Krzemienieckie – a famous secondary school in Krzemieniec.

In the year 1804 Moszynski became a member of the Leipzig Academy of Science and Art. In 1810 when Tadeusz Czacki was accused of wasting funds for educational purposes Moszynski (after he had studied the files of the case) succeeded in helping Czacki to clear his name.

Fryderyk Józef Moszynski died on January 22, 1817 in Kiev during financial negotiations with Prot Potocki and he was buried in Dolsk.

Moszynski was married twice: in 1782 he got married to Barbara Rudzienska – the daughter of the governor of the Mazovian Province and later he married Salomea Ryszczewska – the daughter of Lubaczow castellan but none of the wives gave him a heir. Moszynski bequeathed his huge fortune to two grand-daughters of his brother August. According to his last will they both married Moszynski's distant relatives: Fryderyka got married to Ignacy Hilary Moszynski and Joanna married his son – Peter. A part of the fortune was also bequeathed to Joachim Moszynski. Finally, Moszynski donated half of a million zlotys to charity, granted pensions to his long-time officials and gave freedom to his servants.

REKAPITULACJA PROPORCJI TRZECH PROWINCJI RZECZYPOSPOLITEJ

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Obie prowincje	5 342	906 957	9 166 258	5 441 742	169	1 716	1 018	104	119	223
PROWINCJA W. X. LITEWSKIEGO										
W. Wileńskie										
Pow.: Oszmiań, Lidz., Wilko, Brasław. W. Trockie	834	70 815	1 009 818	424 890	84	1 211	509	3	10	13
Pow.: Gradzieński, Kowieński, Upitski	675	55 614	805 255	333 684	82	1 193	494	2	8	10
W. Zmudzkie	402	32 513	658 097	195 678	80	1 637	473	3	6	
W. Polockie	203	11 526	79 827	69 156	56	393	340	2	2	
W. Nowogródzkie										2000
Pow. Stonimski, Wołkowyski	536	56 148	535 094	336 888	104	998	628	2	6	1
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W. Brzeskie – pow. Piński	756	49 219	485 125	295 314	65	942	390	2	4	
W. Mińskie Pow.: Mozyrski i Rzeczycki	727	34 159	328 416	204 954	46	452	281	2	6	1
Razem W.X. Litewskie	4 288	318 813	4 012 667	1 912 878	74	936	446	18	44	63
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