Abstract
The article attempts to establish basic demographic parameters for the inhabitants of Wieliczka in the 18th century. The aim of the research is to investigate whether the nature of Wieliczka family farms was similar to the results obtained in other cities and regions located in Polish lands and areas of western Europe. The research was based on the 1788 census of the inhabitants of St. Clemens parish in Wieliczka, and the Wieliczka register books.

Abstrakt
W artykule podjęto próbę ustalenia podstawowych parametrów demograficznych dla mieszkańców górniczego miasta Wieliczki w XVIII wieku. Celem badań jest sprawdzenie, czy charakter wielickich gospodarstw domowych był podobny do wyników uzyskanych w innych miastach i regionach położonych na ziemiach polskich i obszarach Europy Zachodniej. Badania zostały zrealizowane dzięki analizie spisu mieszkańców parafii św. Klemensa w Wieliczce z 1788 roku oraz analizie wielickich ksiąg metrykalnych.

* This work was created as a result of a research project, number 2018/29/N/HS3/00711, entitled Ludność miasta Wieliczki w latach 1591–1788. Studium historyczno-demograficzne protoindustrialnego miasta górniczego, financed by the National Science Center.
Introduction

Since the 1960s, the European model of marriage has been an interesting subject for demographers as well as for researchers whose interest is economic and cultural history. Until the end of the 20th century, scientists concentrated mainly on establishing the model’s features and its geographical scope. It was only at the beginning of the 21st century that two concepts on how to determine the time and reasons behind the creation of the European marriage model, as well as the way it was formed in the West and in Europe, were framed. A real breakthrough was made by Tracy Dennison and Sheilagh Ogilvie’s article that attempted to determine whether the EMP could contribute to economic growth. The article, which comprised over 4,700 observations from 39 countries, was discussed internationally. Consequently, research on the topic intensified. The main features that char-

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1 European Marriage Pattern (EMP).
2 John Hajnal, “European Marriage Patterns in Perspective,” Population in History, eds. David V. Glass, and David E. C. Eversley (1965): 101–143; Hajnal, “Two Kinds of Preindustrial Household Formation System,” Family Forms in Historic Europe, eds. Richard Wall, Jean Robin, and Peter Laslett (Cambridge 1983): 65–104.
3 Tine De Moor and Jan Luiten Van Zanden, “‘Girl power:’ The European Marriage Pattern and Labour Markets in the North Sea Region in the Late Medieval and Early Modern Period,” The Economic History Review 63, no. 1 (2010): 1–33; Michael Mitterauer, Why Europe? The Medieval Origins of Its Special Path (Chicago–London 2010).
4 Tracy Dennison and Sheilagh Ogilvie, “Does the European Marriage Pattern Explain Economic Growth?,” The Journal of Economic History 74, no. 3 (2014): 651–693.
5 Sarah G. Carmichael, Alexandra de Pleijt, Jan Luiten Van Zanden and Tina De Moor, “The European Marriage Pattern and its Measurement,” The Journal of Economic History 76, no. 1 (2016): 196–204; Tracy K. Dennison and Sheilagh Ogilvie, “Institutions, Demography, and Economic Growth,” The Journal of Economic History 76, no.1 (2016): 205–217; Radoslaw Poniat, “A New Approach to the European Matrimonial Model,” Historyka. Studia metodologiczne 45 (2015): 193–199; Joerg Baten, Mikołaj Szoltysiek, and Monica Campestrini, “‘Girl Power’ in Eastern Europe? The Human Capital Development of Central-Eastern and Eastern Europe in the Seventeenth to Nineteenth Centuries and its Determinants,” European Review of Economic History 21, no. 1 (2017): 29–63; James Foreman-Peck and Peng Zhou, “Late Marriage as a Contributor to the Industrial Revolution in England,” The Economic History Review 71, no. 4 (2018): 1073–1099; Graziella Bertocchi and Monica Bozzano, “Origins and Implications of Family Structure Across Italian Provinces in Historical Perspective,” Cliometrics of the Family. Studies in Economic History, ed. Claude Diebolt et al. (Cham: Springer Nature, 2019): 121–147.
acterize EMP and enables comparison of household structure for the western type were as follows: the late age of marriage among women, the large number of single women living in definite celibacy, and the domination of nuclear households. The main features of the Eastern model were as follows: the early age of marriage among women, the low percentage or complete lack of single women and the domination of multiple marriages. Recent documentation regarding the structure of households in Central and Central-Eastern Europe was published by Mikołaj Szołtysek. In Poland, the topic is best described by educational centers in Silesia and in Greater Poland. Others investigating the topic and publishing numerous works on the matter are the centers in Białystok and Krakow. The studies need,

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6 A household is a group of people living together and maintaining themselves jointly. Most often the closest family (plus possibly relatives, students, servants and bailiffs). A house is a building in which several households can be found.

7 Peter Laslett, “Family and Household as Work Group and Kin Group: Areas of Traditional Europe Compared,” *Family Forms in Historic Europe*, eds. Richard Wall, Jean Robin and Peter Laslett (1983); Maire Ni Bhrolchain, “East-West Marriage Contrasts, Old and New,” *European Population 2* (1991): 461–479; Michal Kopczyński, *Studia nad rodziną chłopską w Koronie w XVII–XVIII wieku* (Warszawa: Wydawnictwo Krupski i S-ka, 1998): 23–27; David S. Reher, “Family Ties in Western Europe: Persistent Contrasts,” *Population and Development Review* 24, no. 2 (1998): 203–234; Tamás Faragó, *Different Household Formation Systems in One Country at the End of the Eighteenth Century: Variations on John Hajnal’s Thesis*, conference paper, “The Population of the Carpathian Basin at the Millennium,” on November 9th 2000; Karl Kaser, *Macht und Erbe: Männerherrschaft, Besitz und Familie im östlichen Europa (1500–1900)* (Vienna: Böhlau-Verlag, 2000); Some new studies question this dichotomous division. Mikołaj Szołtysek, Bartosz Ogórek, “How Many Household Formation Systems Were There in Historic Europe? A View Across 256 Regions Using Partitioning Clustering Methods,” *Historical Methods: A Journal of Quantitative and Interdisciplinary History* 52, 2019.

8 Mikołaj Szołtysek, *Rethinking East-Central Europe: Family Systems and Co-Residence in the Polish-Lithuanian Commonwealth* (Peter Lang, 2015).

9 Marek Górny, *Mieszkańcy parafii pepowskiej w 1777 roku. Analiza księgi status animarum* (Wrocław 1994).

10 Mieczysław Kędelski, “Struktura ludności chrześcijańskiej miasta Poznania w latach 1777–1800 w świetle spisów,” *Roczniki Dziejów Społecznych i Gospodarczych*, 53 (1992): 15–36.

11 Cezary Kukło, *Kobieta samotna w społeczeństwie miejskim u schyłku Rzeczypospolitej szlacheckiej. Studium demograficzno-społeczne*, (Białystok: Wydawnictwo Uniwersytetu w Białymstoku, 1998).

12 Alicja Falniowska-Gradowska, “Szlachta województwa krakowskiego w świetle spisów parafialnych z lat 1790–1792,” *Ojczyzna dalsza i bliższa. Studia historyczne ofiarowane Feliksowi Kiryko w sześćdziesiątą rocznicę urodzin*, eds. Jacek Chrobaczyński, Andrzej Jureczko, and Michał Śliwa (Kraków, Wydawnictwo i Drukarnia “Seccesja” 1993): 497–504; Konrad Wnęck, “Socjotopografia rodzin Krakowa w końcu XVIII wieku,” *Rodzina, gospodarstwo domowe i pokrewieństwo na ziemiach polskich w perspektywie historycznej – ciągłość czy zmiana?,* ed. Cezary Kukło (Warszawa, Wydawnictwo DiGi 2013): 209–241; Mateusz Wyżyga, *Parafia Raciborowice od XVI do końca XVIII wieku. Studium o społeczności lokalnej* (Kraków, Księgarnia Akademicka 2011); And also for the later period: Lidia Zyblikiewicz, *Kobieta w Krakowie w 1880r. w świetle ankiet powszechnego spisu ludności: studium demograficzne* (Kraków: Historia Iagellonica, 1999).
however, to be intensified to systematically fill in the gaps in knowledge which still exist.\textsuperscript{13}

With reference to the research presented in the previous work, this article attempts to contribute to the European discussion on EMP.\textsuperscript{14} The work aims at establishing the basic parameters for the mining population of the city of Wieliczka, situated 14 km from Krakow.\textsuperscript{15}

The city was granted city rights in 1290. The first mention of the parish church of St. Clemens in Wieliczka is in Gregory IX’s bull from 1229. A brick church, which survived until 1782, was built in the fourteenth century. Wieliczka parish belonged to the diocese of Krakow and bordered 11 other parishes.

Worth mentioning is the fact that until recently, the only information on the number of the population at the end of the 18th century was 3,000 people.\textsuperscript{16} It was, however, incorrect, as it is now known the number was 1/6 lower. The aim was to determine whether the character of households in Wieliczka was similar to one of the other cities and Polish regions in western Europe. The first part is to discuss household size and structure in relation to gender, age and marital status, as well as the average age of marriage.

As part of this goal, the most important information on the source and methods that were used in the study will be given at the beginning. Next, the structure of the mining city residents according to Peter Laslett’s typology of family households will be outlined. The next part will give the results of research on the structure of households in the city and research on the age of the residents of Wieliczka at the time of marriage. I will then present comparisons with other cities and regions of the country, before summarizing the results with data for selected areas located in Europe.

\textsuperscript{13} Struktury demograficzne rodziny na ziemiach polskich do połowy XX wieku: przegląd badań i problemów, ed. Piotr Guzowski and Cezary Kuklo (Instytut Badań nad Dziedzictwem Kulturowym Europy 2014); Cezary Kuklo, “Rodzina staropolska na tle europejskim. Podobieństwa i różnice rytmów rozwoju,” Przeszłość Demograficzna Polski (hereafter: PDP), 26 (2005): 27–45; Cezary Kuklo, “O potrzebie intensyfikacji badań nad strukturami demograficznymi rodzin na ziemiach polskich do początku XX wieku.,” PDP 37 (2015), 1: 7–36.

\textsuperscript{14} Steven Ruggles, “Reconsidering the Northwest European Family System: Living Arrangements of the Aged in Comparative Historical Perspective,” Population and Development Review, 35 (2009): 249–273; M. Szołtysek, Rethinking...\textsuperscript{15}

\textsuperscript{15} The difference made on the basis of an e-map of Rynek Kraków (Krakow Market Square) – Rynek Wieliczka (Wieliczka Market Square); https://maps.google.com.

\textsuperscript{16} Zbigniew Wojas, “Wieliczka od połowy XVII wieku do roku 1772,” Wieliczka, dzieje miasta (do roku 1980), eds. Stanisław Gawęda, Antoni Jodłowski, and Józef Piotrowicz (Kraków 1990): 181.
Sources and Methods

The 1788 census for part of St. Clement’s parish in Wieliczka will be analyzed.\(^{17}\) After birth, marriage and death certificates, the census is the second most important source of information on the demographical situation of Wieliczka in the modern era.\(^{18}\) It is of note that no article has previously been written on the use of such early material in demographical research on Polish areas under Austrian occupation.

Analysis of the source document allowed us to establish there were 3,519 people residing in the area in 1788. In the second half of the 18th century, Wieliczka had declined in importance since its heyday 300 years previously.

In 1772, under the First Partition Treaty, the town was located on lands taken away and ruled by the Habsburg Monarchy. As a mining town, the dominating craft and family structure most probably differed greatly from the other cities which comprised the Commonwealth before the partitions. Society was homogeneous as far as religion and ethnicity are concerned. Until 1525, Jewish people\(^{19}\) were forbidden to settle in the area. The ban was introduced twice\(^{20}\) over the town’s history and was relaxed only in 1867.\(^{21}\) It was proved, however, that there were four Jewish families living in Wieliczka at that time, which was against the law. Those families can be easily distinguished because they were the only ones for whom neither a name nor surname or age were provided. This gave solid proof that the families were of the Jewish faith. Lutherans lived in Wietkowice and the remaining Jewish people on the parish territory lived mainly in the village of Klasno.

The Wieliczka records have been preserved since 1591 for baptisms and weddings, and since 1746 for deaths. The birth rate for marriages in the period considered is 4.22. The material has only one gap in 1673–1699 (loss of the full record book).

\(^{17}\) Census of St. Clement’s parish in Wieliczka, no file number, Archive of St. Clement’s parish in Wieliczka.

\(^{18}\) Jakub Pieczara, “Staropolskie księgi metrykalne parafii św. Klemensa w Wieliczce jako źródło do badań nad historią lokalną,” Małopolska – Regiony – Regionalizmy, XIX (Kraków 2017): 48.

\(^{19}\) Józef Piotrowicz, “Dole i niedole Wieliczki za panowania ostatnich Jagiellonów i królów elecyjnych (do “Potopu” Szwedzkiego),” Wieliczka: dzieje miasta (do 1980).

\(^{20}\) Maurycy Horn, Regesty dokumentów i ekscerpty z Metryki Koronnej do historii Żydów w Polsce (1697–1795), vol. 2: Rządy Stanisława Augusta (1764–1795), pt. 1: 1764–1779 (Wrocław 1984): 87.

\(^{21}\) Anita Palimąka, “Zmiany w sytuacji prawnej Żydów na ziemiach zaboru rosyjskiego w pierwszej połowie XIX wieku (do 1862 r.),” Śląskie Studia Historyczno-Teologiczne 42, no. 1 (2009): 120–136.
Preliminary results from comparing the information in the census with the records of the city’s inhabitants in 1788 indicate a very good quality of information in the census.

**Source Analysis**

The census of the Wieliczka parish includes the town itself as well as 30 villages and colonies. It was conducted in 1788 and written in *kurrentschrift*. It seems most plausible to link its creation to a change in the census system in the Habsburg Monarchy. This is due to the presence of the nobility in the census, which appeared in the Austrian registration in 1784–1787. Currently, these censuses are considered to be the first “modern” censuses that actually counted the entire population. They were created to serve primarily military purposes. Nevertheless, to obtain certainty, the Wieliczka census should be compared with those taken in Hungary.

What is more, on the basis of the handwriting it may be concluded that the data was collected by at least 2 people. The census was carried out according to the numbering on the buildings in the city. One house could be occupied by one or more families. Subsequent households, visited right after another, were divided by a line. The line offers certainty that no doubling took place and provides a clear guideline as to how the people were assigned to a given household. A household hierarchy could be observed in the data: heads of families (husband, wife, father-widower, mother-widow), sons (seniority rule), daughters, stepsons, stepdaughters, head’s parents, head’s sibling, head’s wife’s parents, head’s wife’s sibling, serving women (maid, servant), serving men (farm worker, home help), journeyman, students, debt collectors and their families. Most frequently the head was a married man with children, a married man with no children, or a widow with children. The census comprises a few columns, i.e., house no. (if inhabited by more than one family, first the house no. was given and then the number of families), first and last name, age, qualifications (family connections and profession) and a column with a symbol for the later summing up of the number

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22 The current phase of research allows for the conclusion it was taken in June–July. A more precise period for the creation of the census might be established upon detailed study of other villages and areas.

23 Péter Őri and Levente Pakot, “Census and Census-like Material Preserved in the Archives of Hungary, Slovakia and Transylvania (Romania), 18th–19th Centuries.” MPIDR Working Paper WP-2011-020, (December 2011), (Max Planck Institute for Demographic Research, Rostock, 2011): 8–11.

24 Most probably on the basis of the data gathered earlier and copied into a neat form. The first house is number 1 and the last 332.

25 The full typology will be given later in the paper.

26 The columns are written in German and will be translated for the purpose of the paper.
of people at each site. Detailed entries on each person included the following data: head, always given by last and first name, then their age, marital status, nationality and profession. Wife, sons and daughters were listed by their first names and in a few cases their profession was also given. Next to a stepson or stepdaughter’s name a notation of his/her son was given; the head’s parents or siblings were given by name together with the relation to the head, and sometimes their civil status was also written (e.g. the head’s brother, head’s sister, single woman; mother, head widow). In an analogic way, the wife’s family as presented; women servants were given only by their names, in contrast to men, who were given by their last and first name and in some cases also their place of origin. Journeymen and students’ data were provided in the same way as the servants, although their profession was included. Debt collectors were named by their first and last name, and their marital status and profession were also given. In the cases where a debt collector was the head of the family, the data was provided according to the pattern of a regular city dweller’s household.

Source Credibility

Establishing the credibility of the source is of great importance, as further studies are to be based on that data. Three conversion factors were used in order to establish whether there were large concentrations of age groups. They all discussed the same number, but the analysis was to be different. The first method of studying the census value is by using Whipple’s index, i.e., an analysis of age rounding in which years finishing with 0 or 5 would be more frequent than expected.\(^\text{27}\) It is calculated in the following way:\(^\text{28}\)

\[
\text{Whipple's index } = \frac{\sum (\text{Age25} + \text{Age30} + \ldots + \text{Age60})}{\left(\frac{1}{5}\right) \times \sum (\text{Age23} + \text{Age24} + \text{Age25} + \ldots + \text{Age62})} \times 100
\]

The result of the equation for Wieliczka was 100.9 which, according to the international framework, means the census is precise.

\(^{27}\) R. Poniat, “Starość ludzi luźnych. Aspekty demograficzne i ekonomiczne,” Ludzie starzy i starość na ziemiach polskich od XVIII do XXI wieku, t. 1: Aspekty społeczno-kulturowe, eds. Agnieszka Janiak-Jasińska, Katarzyna Sierakowska, and Andrzej Szwarc (Warszawa: Wydawnictwo DiG, 2016): 134.

\(^{28}\) Jacob S. Siegel and David A. Swanson, The Methods and Materials of Demography. California: Elsevier Academic Press, 2004.
Table 1. Whipple’s index data quality, comparison

| Whipple’s index | Quality of data | Deviation from the ideal data (%) |
|----------------|----------------|----------------------------------|
| <105           | Highly accurate| <5                               |
| 105–110        | Fairly accurate| 5–9.99                           |
| 110–125        | Approximate    | 10–24.99                         |
| 125–175        | Poor           | 25–74.99                         |
| >175           | Very poor      | ≥75                              |

Source: Yusuf Bello, “Error Detection in Outpatients’ Age Data Using Demographic Techniques,” *International Journal of Pure and Applied Sciences and Technology* 10, no. 1 (2012): 27.

Another method for the census evaluation is the converted Whipple’s index, which allows for an easier analysis of results. The ABCC method was suggested by A’Hearn, Baten and Crayen\(^\text{29}\) and enables an estimation of the percentage of people who provided their age correctly. The range is 0–100; the number 100 represents a perfect result. The equation is as follows:

\[
\text{ABCC} = \left(1 - \frac{\text{IW} - 100}{400}\right) \times 100
\]

if \(\text{IW} \geq 100\) then the ABCC index always equals 100\(^\text{30}\)

The ABCC index for the Wieliczka census equals 99.77, which means the data are very solid\(^\text{31}\).

The last tool to verify the accuracy of the age groups is Myers’ index\(^\text{32}\), which gives age concentrations for years finishing with any number.

As it transpires from Table 2 with the Myers’ index analysis, no bigger groups of age ending with 0 or 5 exist. A concentration of no. 2 for men and 3 for women is visible, though. These are not, however, dominating differences that would influence the credibility of the study. Most importantly, the result confirms the previous analysis based on Whipple’s and the ABCC indexes\(^\text{33}\). It can, therefore,

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\(^{29}\) Brian A’Hearn, Jörg Baten, and Dorothee Crayen, “Quantifying Quantitative Literacy. Age Heaping and the History of Human Capital,” *Journal of Economic History* 69, no. 3 (2009): 788.

\(^{30}\) Ibid.

\(^{31}\) Data on other towns and cities is worth mentioning for the sake of comparison. In 1791 in Krakow, the IW was 167 men and 176 women and ABCC 83 and 81; in 1791 in Warsaw, the result for men was 260, and 245 for women, ABCC was 60 and 64.

\(^{32}\) Geeta S Pardeshi, “Age Heaping and Accuracy of Age Data Collected During a Community Survey in the Yavatmal District, Maharashtra,” *Indian Journal of Community Medicine: Official Publication of Indian Association of Preventive & Social Medicine* 35, no. 3 (2010): 391–395.

\(^{33}\) The results obtained can be used as a factor to know one’s age and numeracy level; A’Hearn, Baten, and Crayen, *Quantifying Quantitative Literacy...*, 787–795.
be concluded that the St. Clement’s parish census in Wieliczka is one of the most precise known sources in existence for the Polish lands at the end of 18th century, and can be used for the process of research on population.

Table 2. Myers’ index for the Wieliczka population in 1788, divided by gender (%)

| Gender/no. | 0  | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  |
|------------|----|----|----|----|----|----|----|----|----|----|
| F          | 2.31 | 1.24 | 1.30 | -5.51 | 0.04 | -1.05 | -0.18 | 0.29 | 0.20 | 1.36 |
| M          | 1.34 | -1.73 | 7.35 | -2.52 | -2.82 | -0.23 | -1.96 | 0.78 | 1.92 | -2.14 |
| Total      | 1.85 | -0.17 | 4.18 | -4.08 | -1.32 | 0.66 | -1.03 | 0.52 | 1.02 | -0.31 |

Source: own studies on the basis of St. Clement’s Parish Archive in Wieliczka, St. Clement’s Parish Census, Wieliczka, file number unknown.

Another type of data proving the credibility of the source comes from the gender ratio, that is, the masculinization ratio, which for the 0–4 age group might suggest undervaluation of the number of men (99.6 men per 100 women). The generally-adopted norm in the historical demography is 105–107 boys per 100 girls born. As value calculated on the basis of data gathered from a short period of time may fluctuate as a result of the economic situation present at a particular moment, the scope of the norm should be analyzed in the longer term. The greatest difference between the number of boys and girls concerns the age of 0–1; in the subsequent years, the number of boys is higher. The professional literature usually points to an underestimation of the number of girls in the younger age group, while our census gives a contrary tendency amongst the younger citizens. The abnormal number is the evidence of the source credibility.

To examine the evolution of the masculinization rate in the earlier period, baptisms of children were counted for the years 1778–1788. The masculinization rate was 107, so it was within the ideal norm. It remains to answer the question: What was the reason for the noticeable change in the comparison of children born with the age group 0–4? The most likely answer seems to be the higher mortality of boys than girls in the earliest period of life. However, this type of research requires in-depth source analysis using other research methods.

Methods

The main methods employed in the article are family household typology by Peter Laslett and its modification, devised by Cezary Kukło,\(^{34}\) together with Sin-

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\(^{34}\) Cezary Kukło, *Demografia Rzeczypospolitej Przedrozbiorowej*, (Warszawa, DiG 2009): 151–153.
gulate Mean Age At Marriage (SMAM) calculations and analysis, that is, of the average age at first marriage for men and women, considering the age group up to 50 years old. The population of Wieliczka will be also given according to its biological and economical age groups, along with marital status. It should be pointed out that national data give the average age of marriage; they were, however, calculated on the analysis of registry records that typically covered a longer period of observation. SMAM, however, only refers to the time when the registry was created. This method is very popular in the English-language literature. The final part shows the difference in the results related to using two different ways of calculating what may seem to be the same issue.

The following is used to calculate SMAM:

1. \[ A = 15 + \sum_{(a=15-19)}^{(45-49)} S_a \times 5 \]
   to calculate the proportion of single people of the same gender in a particular age group.

2. \[ B = \left( S_{45-49} + S_{50-54} \right) / 2 \]
   to calculate the proportion of single people for two age groups.

3. \[ C = 1 - B \]
   to calculate the proportion of people who have married at some point in life, not later than at the age of 50.

4. \[ D = 50 \times B \]
   to calculate the number of people who have never married.

5. \[ SMAM = (A - D) / C \]
   to calculate the average age at marriage.

By using these methods, the article will attempt to explain the demographic similarities and differences visible in the Wieliczka specification in addition to selected Polish and European cities in the available source literature.

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35 John Hajnal, “Age at Marriage and Proportions Marrying,” Population studies 7, no. 2 (1953): 111–136; Pier Paolo Viazzo, and Dionigi Albera, “The Peasant Family in Northern Italy, 1750–1930: A Reassessment,” Journal of Family History 15, no. 4 (1990): 461–482; Tamás Faragó, “The Lodger Population in the Traditional World of the Mid-Eighteenth-Century Carpathian Basin,” Continuity and Change 31, no. 1 (2016): 9–46; Tracy Dennison and Sheilagh Ogilvie, “Does the European Marriage Pattern...”: 651–693; Peter Gossage, “Family Formation and Age at Marriage in Saint-Hyacinthe Quebec, 1854–1891,” Histoire sociale / Social History 24, no. 47 (1991): 61–84; Mikolaj Szoltyszek, Rethinking...
Results

Wieliczka Inhabitants: Gender and Age Structure

The census included the age of the majority of the townspeople (3,505 people). Only in the case of Jewish people, a few clergymen and servants were no ages given (14 people). In the Old Polish group, young people constituted the majority, both in respect of economy and biology. Children under 14 constituted 1/3 of the inhabitants and the masculinity factor in the group was 106. The average age for the town was under 25.

Figure 1. Age pyramid of the inhabitants of Wieliczka, 1788

Source: own studies on the basis of St. Clement’s Parish Archive in Wieliczka, St. Clement’s Parish Census, Wieliczka, file number unknown.

The results in Figure 1 lead to the conclusion that people living in Wieliczka were of the progressive type, according to Gustav Sundbärg’s\textsuperscript{36} classification. It was clearly a growing, young society with the number of births exceeding that of deaths.\textsuperscript{37} The feminization rate was 105. The graph clearly shows a higher

\textsuperscript{36} Jerzy Zdzisław Holzer, \textit{Demografia} (Warszawa: Państwowe Wydawnictwo Ekonomiczne 1994): 144.

\textsuperscript{37} Cezary Kukło, \textit{Demografia…}: 136; J. Pieczara, \textit{Staropolskie…}; Studies of the parish register books also confirm the conclusions. The document is kept in the Archives of the Metropolitan Curia in Krakow (no file number) Wieliczka: Baptism book nos. 6, 7, 8 and Wieliczka: Deaths register nos. 2, 3, 4.
number of women over men at the age of 15–19, which is related to the inflow of servants and journeyman that arrived to learn a profession. A lower feminization rate between the ages of 40 and 44 is also evident, which may be confirmation of an increase of deaths among women due to complications in childbirth.\textsuperscript{38}

The demographical division of society into biological and economic groups, shown in tables 3 and 4, is also put to analysis.

Table 3. Society from biological viewpoint

| Age            | No.  | Percent |
|----------------|------|---------|
| 0–19           | 1,621| 46.0    |
| 20–59          | 1,745| 49.6    |
| 60 and older   | 141  | 4.0     |
| Unknown        | 12   | 0.4     |
| Total          | 3,519| 100.0   |

Source: own studies on the basis of St. Clement’s Parish Archive in Wieliczka, St. Clement’s Parish Census in Wieliczka, file number unknown.

Table 4. Society from economic viewpoint

| Age            | No.  | Percent |
|----------------|------|---------|
| 0–14           | 1,174| 33.3    |
| 15–64          | 2,274| 64.6    |
| 65 and older   | 59   | 1.7     |
| Unknown        | 12   | 0.4     |
| Total          | 3,519| 100.0   |

Source: own studies on the basis of St. Clement’s Parish Archive in Wieliczka, St. Clement’s Parish Census in Wieliczka, file number unknown.

An analysis of the criteria shows a low rate of elderly people (below 5%). Almost 65% of the whole population were in their productive years. At the same time, the high rate of young people suggests society would not have problems with an aging population in the future.\textsuperscript{39} It should be remembered that the high

\textsuperscript{38} Ibid, 239–240; Beatrice Marion Willmott Dobbie, “An Attempt to Estimate the True Rate of Maternal Mortality, Sixteenth to Eighteenth Centuries,” \textit{Medical History} 26, no. 1 (1982): 79–90.

\textsuperscript{39} According to Sundbärg’s classification in which proportions between the following groups 0–14, 15–49 and 50+ are made, the town’s structure indicates a progressive type with the following proportions: 33; 56; 11. As a rule, the progressive proportions should be about 40 : 50 : 10. Due to the town’s economic type, however, the result is not surprising, as a high percentage of people were servants and daily workers.
rate of young people results from the high number of infants and small children, many of whom died at an early age.\footnote{The results are similar to those given by Ewa Kaźmierczyk in her research on the inhabitants of Proszowice administrative county: E. Kaźmierczyk, “Struktura demograficzna ludności wyznania rzymskokatolickiego powiatu proszowickiego w końcu XVIII wieku,” PDP 39 (2017): 117–139.} In order to verify which region Wieliczka should be identified with, the values given in table 4 will be compared to the results of studies on the Polish Lithuanian Commonwealth.

|          | 0–14 | 65+ |
|----------|------|-----|
| Wieliczka| 33.3 | 1.7 |
| Region 1 | 35.8 | 3.5 |
| Region 2 | 36.9 | 3.6 |
| Region 3 | 37.5 | 3.1 |
| Region 4 | 40.6 | 3.7 |
| Region 5 | 37.6 | 2.2 |
| Region 6 | 38.4 | 2.2*|
| Region 7 | 38.7 (34**)| 2.9 (4.7**)|
| Region 8 | 37.8 | 2.4 |
| Region 9 | 43.7 | 1.5 |
| Region 10| 40.6 | 3.0 |
| Region 11N| 38.0 | 3.5 |
| Region 11S| 38.6 | 3.3 |

* Wieliczka and Region 6 present in Table 5 were intentionally highlighted in bold as Wieliczka should be included in that region.
** Parishes with a potentially underestimated number of youths and elderly people.

Source: own studies on the basis of St. Clement’s Parish Archive in Wieliczka, St. Clement’s Parish Census, Wieliczka, file number unknown; Mikołaj Szöltysek, Rethinking East-Central Europe: Family Systems and Co-residence in the Polish-Lithuanian Commonwealth: 834–835.

Undoubtedly, the data given in Table 5 allow for the conclusion that Wieliczka belonged to the West area, both in respect of geography and in demography. There is, however, a difference worth paying more attention to; that is, the percentage of people in both groups, which is lower in the mining city than in other areas. This may be down to several major reasons. First of all, results from the regions under analysis derive both from cities and villages; consequently, the possibility of a “blind comparison” without knowing the variables exists. Furthermore, Wieliczka was an economic city with a salt mine creating high demand for craft work, which consequently contributed to the intensive movement of people
of a productive age immigrating for employment reasons (servants, journeymen, miners, etc.), who might later decide to go back home or to migrate to another city.

Map 1. Territorial distribution of data in the Polish-Lithuanian Commonwealth with regions and clusters

The lower percentage of children aged 0–14 and the very low percentage of elderly people over 65 should be also noted. The lower number of children, in comparison with other cities, could be a result of the economic type of the city. This would also explain the higher number of people aged 15–64 (see Table 4). The percentage of elderly people has yet to be explained. The possibility of undervaluing the number of elderly people is taken into consideration; the argument, however, seems incorrect due to the credibility of the census.
Household Structure in Wieliczka

To start with, it is worth analyzing the population of both houses and households in Wieliczka. Houses in the census were numbered from 1 to 332; however, building no. 160 was not included and 5 houses were not inhabited. Therefore, the census involved the people living in 326 houses.

Figure 2. Comparison of the number of houses in relation to the number of Wieliczka residents in 1788

Source: own studies on the basis of St. Clement’s Parish Archive in Wieliczka, St. Clement’s Parish Census, Wieliczka, file number unknown.

Analysis of Figure 2 indicated the average number of people living in one house to be 10.6 and the median to be 9.5, with a deviation equaling 6.4. Therefore, the conclusion is that this town had an economic characteristic, inhabited by small families, most often involved in mining, and by bigger families, usually of craftsmen. In the majority of cases, the higher number of people living in one house consisted of one small household, probably financially independent. The results concur with previous findings.

The results show that in the hierarchy of large and small towns, Wieliczka came before the smaller towns of Miechów, Grodno, Radziejów and Olkusz, but itself was smaller than the parish of the Holy Cross in Warsaw, and slightly smaller than St. Mary’s parish in Krakow. Therefore, Wieliczka should be called a medium-sized city. There is a large disproportion between the population and the number of houses in Warsaw and Wieliczka, but if we take the example of comparing Wieliczka with Krakow, if a higher population of 2,000 is a big difference, then 30 houses are not much. These differences are reflected in both the median and average. In towns smaller than Wieliczka, you can see smaller results which, along with the decreasing number of inhabitants, decreased the
average and median. It is worth mentioning that among these cities with more than 1,000 inhabitants, the smallest classic variation coefficient was seen in Wieliczka. Therefore, the number of people living in one household seems to be more interesting and reliable.

Table 6. Population of houses in selected cities in 1788, 1791 and 1794

| City                          | Average | Median | Coefficient of variation | Number of people | Number of houses |
|-------------------------------|---------|--------|--------------------------|------------------|-----------------|
| Warsaw (Holy Cross parish)    | 20.0    | 15.0   | 80.1                     | 13,133           | 656             |
| Krakow (St. Mary’s parish)    | 15.1    | 13.0   | 75.3                     | 5,404            | 358             |
| Wieliczka                     | 10.6    | 9.5    | 60.4                     | 3,519            | 326             |
| Miechów                       | 8.6     | 7.0    | 67.9                     | 1,374            | 159             |
| Grodno                        | 7.2     | 5.0    | 128.1                    | 1,127            | 186             |
| Radziejów                     | 5.4     | 5.0    | 48.9                     | 563              | 104             |
| Olkusz                        | 5.0     | 5.0    | 42.1                     | 625              | 124             |

Source: P. Guzowski, R. Poniat, “Przeliczniki demograficzne w szacunkach zaludnienia miast w Królestwie Polskim w drugiej połowie XVI wieku,” Przeszłość Demograficzna Polski 37, no. 2 (2015): 84; Archive Parish St. Clement in Wieliczka, Census of St Clement parish in Wieliczka.

Figure 3. Comparison of the number of people living in one household in Wieliczka, 1788

Source: own studies on the basis of St. Clement’s Parish Archive in Wieliczka, St. Clement’s Parish Census, Wieliczka, file number unknown.
As the following chart shows, one household consisted mainly of 3, 4 or 5 inhabitants, with a less frequent occurrence of 2, 6 or 7 people. The number of large households with a higher number of people in one household decreased proportionally. In addition, households inhabited by 10 people existed, but consisted, however, of students and journeymen. To conclude, households in Wieliczka were inhabited by 4.7 people on average, and over 80% of the houses contained 6 or more people.

Until recently, it was believed that households in Central-Eastern Europe were large, accommodating 8–10 people, and up to 20 people in more affluent households. Recent studies, however, present a different tendency, which suggests that further research needs to be conducted. Undoubtedly, the death rate amongst residents was much higher in periods of epidemics and plagues, which reduced the number of inhabitants effectively. In a wider perspective, it did not influence the general number of inhabitants per household. It seems clear that households in villages with more labor requirements were generally bigger, and therefore the number of people was higher than in cities. Wieliczka, as a typical mining town, based its economy on work in the mining industry and on crafts. People from outside the city were also recorded. This confirms the earlier assumptions on the migration of daily and seasonal workers to Wieliczka. The previous data allow only for the conclusion as to what the household structure looked like in that town. The more established method for household classification by Peter Laslett needs to be employed in order to gain more detailed information. According to this method, households were divided into five main groups and subsequently into three sub-groups: single people; with no family structures; simple families; extended families, and complex families. The results allow comparison with the European results in a much greater scope.

41 Within the six households (13, 13, 13, 14, 14 and 21 people) there is a shelter, monastery, church, a blacksmith, doctor and councillor.
42 Maria Bogucka, “Rodzina w mieście polskim w XVI–XVII w. Wprowadzenie w problematykę,” Przegląd Historyczny 74, no. 3 (1983): 499; Peter Czap, “The Perennial Multiple Family Household, Mishino, Russia 1782–1858,” Journal of Family History 7, no. 1 (1982): 5–26; J. Hajnal “Two Kinds of Preindustrial Household Formation System,” Population and Development Review, (1982): 449–494.
43 M. Szołtysek, Rethinking...
44 Piotr Guzowski, Cezary Kuklo, and Radosław Poniat, “O metodach pomiaru natężenia epidemii i zaraz w preindustrialnej Europie w demografii historycznej,” in Epidemie w dziejach Europy. Konsekwencje społeczne, gospodarcze i kulturowe, eds. Krzysztof Polek and Łukasz Sroka (Kraków: Wydawnictwo Uniwersytetu Pedagogicznego, 2016): 130–133.
45 Mateusz Wyżga “Mobilność i migracje chłopów do miast polskich doby preindustrialnej. Z badań nad mikroregionem krakowskim,” PDP 37, no. 2 (2015): 95–128.
46 Peter Laslett, “Introduction: The History of the Family,” in Household and Family in Past Time, eds. Peter Laslett and Richard Wall (Cambridge 1972): 1–89.
Table 7. Number of households according to P. Laslett with modification by C. Kuklo, divided by gender

| Category                                                                 | Total | Percent | F Percent | M Percent |
|--------------------------------------------------------------------------|-------|---------|-----------|-----------|
| 1a. Single unmarried people                                               | 4     | 0.54    | -         | 4 100.0   |
| 1b. Single widowed people                                                | 2     | 0.27    | 2 100.0   | -         |
| 1c. Single people with unknown marital status                            | 1     | 0.13    | -         | 1 100.0   |
| 2a. Unmarried co-resident siblings without parents                       | 2     | 0.27    | -         | 2 100.0   |
| 2b. Other co-resident relatives                                          | 3     | 0.40    | 3 100.0   | -         |
| 2c. Unrelated co-resident persons                                        | 13    | 1.75    | 5 38.0    | 8 62.0    |
| 2d. Unrelated unorganized persons                                       | 4     | 0.54    | 1 25.0    | 3 75.0    |
| 3a. Simple families – childless                                          | 78    | 10.50   | -         | 78 100.0  |
| 3b. Simple families – married couple with children                        | 462   | 62.18   | -         | 462 100.0 |
| 3c. Simple families – widowers with children                             | 16    | 2.15    | -         | 16 100.0  |
| 3d. Simple families – widows with children                               | 57    | 7.67    | 57 100.0  | -         |
| 3e. Simple families – single parent                                      | 1     | 0.13    | -         | 1 100.0   |
| 4a. Extended families – ascendant                                        | 49    | 6.59    | 2 4.0     | 47 96.0   |
| 4b. Extended families – descendant                                       | 5     | 0.67    | 3 60.0    | 2 40.0    |
| 4c. Extended families – collateral                                       | 19    | 2.56    | 3 16.0    | 16 84.0   |
| 4d. Extended families – ascendant and descendant                         | 2     | 0.27    | -         | 2 100.0   |
| 4e. Extended families – ascendant and collateral                         | 14    | 1.88    | 1 7.0     | 13 93.0   |
| 4f. Extended families – descendant and collateral                        | 5     | 0.67    | 3 60.0    | 2 40.0    |
| 5a. Multiple families – ascendant                                        | 1     | 0.13    | -         | 1 100.0   |
| 5b. Multiple families – descendant                                       | 3     | 0.40    | -         | 3 100.0   |
| 5c. Multiple families – collateral                                        | 2     | 0.27    | -         | 2 100.0   |
| **Total**                                                                | 743   | 100.00  | 80 10.8   | 663 89.2  |

Source: own studies on the basis of St. Clement’s Parish Archive in Wieliczka, St. Clement’s Parish Census, Wieliczka, file number unknown.

Table 7 shows a comparison of 742 households, inhabited by 3,519 people. As many as 663 of the households, that is 89% of the total number, were managed by a man. Women were in charge of 80 households, constituting 11% of the total number. Wieliczka was dominated by nuclear families, with the average age for women 48 and for men 41. Only in 12 cases (13%) were women in charge of an extended family. As far as the women’s situation is concerned, only 2 women lived alone, 9 (10%) were in charge of the household and the majority of them, 57, which is over 70% of the total, were widows living with their children only. This could, however, have been a temporary situation. As was typical for the patriarchal family model, men were breadwinners much more often. The results, shown in the table, prove families from Wieliczka to be closer to the West-European

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Cezary Kuklo, Demografia..., 153.
model than the East-European. The two tables below show the size of households in Wieliczka with greater precision. Table 8 gives the number of households by age, gender and marital status of the head, while Table 9 the size of households, taking into consideration the same criteria.

Table 8. Number of households in Wieliczka in 1788, by age, gender and the head’s status

| Head’s age | Women* | Men-married | Men-widowers | Men-bachelors | Men** |
|------------|--------|-------------|--------------|---------------|-------|
| –19        | 1      | 3           | –            | 1             | 4     |
| 20–39      | 14     | 299         | 4            | 12            | 315   |
| 40–59      | 53     | 268         | 13           | 1             | 282   |
| 60+        | 12     | 53          | 3            | 1             | 57    |

* 3 women in the list were bailiffs at 26, 30 and 37, while the others were widows, of whom 1 did not provide her age.
** 5 men did not provide their age in the list.

Source: own studies on the basis of St. Clement’s Parish Archive in Wieliczka, St. Clement’s Parish Census, Wieliczka, file number unknown.

Table 9. Size of households in Wieliczka in 1788, by age, gender and the head’s status

| Head’s age | Women | Men-married | Men-widowers | Men-bachelors | Men |
|------------|-------|-------------|--------------|---------------|-----|
| –19        | 5.00  | 2.66        | –            | 7.00          | 3.75|
| 20–39      | 3.07  | 4.60        | 6.50         | 3.16          | 4.57|
| 40–59      | 3.48  | 5.31        | 4.53         | 4.00          | 5.32|
| 60+        | 3.91  | 4.45        | 3.66         | 2.00          | 4.34|

Source: own studies on the basis of St. Clement’s Parish Archive in Wieliczka, St. Clement’s Parish Census, Wieliczka, file number unknown.

Even though the reference households were those managed by man 20+ and women aged 40–59, all the results are given for the sake of comparison. Upon analysis it transpired that the households managed by women were smaller even when, for the sake of theoretical considerations, one additional person (a possible husband) was added to the groups of women 20–39 and 40–59. The final number was still lower than that of households managed by a married man. It may suggest that semi-orphaned children were leaving home much earlier due to insufficient financial resources to support the whole family.\(^{48}\) A different situation may have

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\(^{48}\) Peter Laslett, “Family, Kinship and Collectivity as Systems of Support in Pre-Industrial Europe: a Consideration of the ‘Nuclear-Hardship’ Hypothesis,” *Continuity and Change* 3, no. 2 (1988): 153–175; Andrejs Plakans, *Kinship In The Past–An Anthropology Of European Family Life*
transpired once a husband was added to a household managed by women aged 60+, again for theoretical discussions only. It may even be suggested that this group of women enjoyed a very strong position and therefore did not pass the household onto one of their offspring, e.g., a son, and continued to manage it even after their husband’s death.

The average size of a household managed by men was 4.85, and by women 3.49.49 Table nos. 8 and 9 show the household to be bigger when managed by older women: the older the women, the bigger the household. This may have been due to the strong position of the husband (a clerk) for which reason the women may have been held in higher esteem by the townspeople. Therefore, instead of becoming a life annuitant, she remained at her previously-held position in the hierarchy. It needs to be stressed that such women were not left alone, similarly to the majority of elderly people on other territories studied so far. The opposite tendency was observed in the case of widowers. The older the man, the smaller the household in comparison to his earlier stages of life. This might have been connected with the man’s strong position and his adult children leaving the household earlier. As far as men managing full families are concerned, a different relation in observed. The households are small shortly after the wedding and grow significantly, by 75%, in subsequent life stages, that is, at the men’s age of 20–39 years old. This could be due to the birth of children after marriage, and the hiring of servants. The largest family size was noted at the men’s age of 40–59. This was when men had the largest number of children, possibly due to remarrying after his first wife’s death, and had a good position and therefore could hire more servants.50 The subsequent life-stage is characterized by a small number of household members, which could have resulted from children starting out in adult life and leaving the family.51

49 The research does not provide the age data for 1 female head and 3 male heads of families. This fact should not, however, influence the results.

50 Jacek Kochanowicz, “The Peasant Family as an Economic Unit in The Polish Feudal Economy of The Eighteenth Century,” in Family Forms in Historic Europe, eds. Richard Wall, Jean Robin, and Peter Laslett (Cambridge 1983): 153–166.

51 Jan Kok, “Principles and Prospects of the Life Course Paradigm,” Annales de démographie historique 1 (2007): 203–230; Tamara K. Hareven, ed., Transitions: The Family and the Life Course in Historical Perspective (Elsevier 2013); Alexander Chayanov, The Theory of Peasant Economy, eds. Daniel Thorner, Basile Kerblay, and R.E.F. Smith, Homewood, Ill., (USA: Irwin 1966); M. Szoltysek, “Life-Cycle Service and Family Systems in the Rural Countryside: a Lesson from Historical East-Central Europe,” Annales de démographie historique 1 (Berlin 2009): 53–94; Ewa Frątczak, “Modelowanie cyklu życia jednostki i rodziny: teoria i praktyka,” Monografie i Opracowania/Szkoła Główna Handlowa, 466 (1999).
It is therefore evident that a household’s size changed together with people’s passing through life stages.\textsuperscript{52}

The aim of the study was to present a wider view of other protoindustrial towns household structure. Therefore, our results were compared with those from other regions with a varied population. Apart from Wieliczka, smaller towns such as Olkusz and Radziejów can be found, medium-sized towns such as Kłobuck, Siemiatycze and Wieluń and bigger centers such as Krakow and Warsaw.\textsuperscript{53}

Table 10. Household structures in selected towns on the territory of the Commonwealth, according to Peter Laslett’s classification

| Town     | Years | Households in total | Total percent of households according to P. Laslett’s classification* |
|----------|-------|---------------------|---------------------------------------------------------------------|
|          |       |                     | I | II | III | IV | V + (VI) |
| Wieliczka| 1788  | 743                 | 0.9 | 3.0 | 82.6 | 12.7 | 0.8 |
| Krakow   | 1791  | 1,159               | 18.5 | 5.9 | 67.0 | 7.2 | 1.1 + (0.3) |
| Olkusz   | 1791  | 126                 | 11.9 | –   | 79.4 | 7.9 | 0.8 |
| Warsaw   | 1791  | 4,122               | 25.0 | 1.7 | 66.3 | 6.1 | 0.9 |
| Radziejów| 1792  | 124                 | 7.2  | 2.4 | 79.1 | 8.1 | 3.2 |
| Wieluń   | 1791  | 261                 | 18.4 | 1.2 | 71.6 | 6.2 | 2.2 + (0.4) |
| Siemiatycze | 1807 | 168                 | 6.5  | 2.4 | 76.8 | 7.1 | 7.2 |
| Kłobuck  | 1791  | 210                 | 1.1  | 6.2 | 78.4 | 9.6 | 4.7 |

* Peter Laslett, “Introduction: the History of the Family,” in Household and Family in Past Time, eds. Peter Laslett, and Richard Wall (Cambridge 1972): 31; For a description of farm types, see table 7.

Source: own studies on the basis of St. Clement’s Parish Archive in Wieliczka, St. Clement’s Parish Census, Wieliczka, file number unknown; Kuklo, Kobieta samotna...: 77–82; Kuklo, “Gospodarstwo domowe mieszan-rolników kłobuckich w końcu XVIII wieku,” in Celem nauki jest człowiek... Studia z historii społecznej i gospodarczej ofiarowane Helenie Madurowicz-Urbańskiej, ed. Piotr Franaszek: 161–165; Joanna Schmidt, “Wielkość i struktura gospodarstw domowych w Siemiatyczach w 1807 roku,” PDP 39, no. 1 (2017): 141–166; for a full household description see table 7, page 98.

Comparison of the family structures for both the Commonwealth and Wieliczka (Table 10) shows a considerable disparity in the number of households of single people. In Wieliczka only, the pattern is less visible. A huge change is, however,
visible when it is compared to the biggest cities, i.e., Warsaw and Krakow. In order to study the phenomena in Wieliczka, the economic situation would have to be analyzed, with possible studies concentrating even on emotional bonds. Further studies will constitute an attempt to reconstruct the histories of the families living in Wieliczka. Employing the reconstruction method, it should be possible to establish whether the eldest child inherited the household and therefore stayed in the family home. The table shows the domination of nuclear families which, in comparison to the whole country, was the most common in Wieliczka. The rate of extended families was higher, up to 5%. More than 52% constituted a family extended by one generation back, demonstrating that the managing parent stayed at home after passing the household onto a son.

### Wieliczka Inhabitants By Marital Status

Marital status is hugely important when studying a population. Therefore, the age structure of the population will be given by marital status. Figure 4 shows unmarried man (bachelors) and women (spinsters) living in the mining town.

![Figure 4. Women’s marital status by age group, Wieliczka 1788](image)

*Source: own studies on the basis of St. Clement’s Parish Archive in Wieliczka, St. Clement’s Parish Census, Wieliczka, file number unknown.*

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54 Aneta Boldsrew, *Matka i dziecko w rodzinie polskiej: ewolucja modelu życia rodzinnego w latach 1795–1918* (Wydawnictwo Neriton, 2008); Dorota Żołądź-Strzelczyk, *Dziecko w dawnej Polsce* (Wydawnictwo Poznańskie, 2002).
On the basis of figures 4 and 5, it could be seen that there were more bachelors in the city than spinsters. The data clearly show the age when people married, the earliest being 15–19 and then at 20–24 followed another, more intensive, wave of marriages. The number of single people decreased significantly at 25–29, with women being much younger than men when marrying for the first time. As many as 80% of the women were married by the age of 29, whereas for men, the same percentage is observed at a later age, 34. With age, the number of single people decreased proportionally; interestingly, no single people aged over 65 were found. The number of widows increased gradually, starting as early as 30–34. The tendency is not as visible amongst men, which can suggest more chances for remarriage. After her husband’s death, a woman stayed in her household and ran it or transferred it to a son and remained with him. When examining widowhood, it could be observed that only every second woman and every fifth man aged 60+ was unmarried. This comprised 12 clergymen, monks at the Reformation Monastery, and 22 people whose marital status was unknown. The charts do not include the 6 priests at St. Clement’s church, as their age was unknown. Another feature allowing for comparison to the European marriage model is the number of women who had decided or were forced to, live in celibacy (spinsters aged 50+). Currently-accessible sources suggest 10–15% of women aged 50 and above.

55 James Foreman-Peck, “The Western European Marriage Pattern and Economic Development,” Explorations in Economic History 48, no. 2 (2011): 292–309; T. Dennison and S. Ogilvie, “Does the European...”: 651–693; Tine de Moor, and Jan L. Van Zanden, “Girl power...”: 1–33; Katherine A. Lynch, “The European Marriage Pattern in the Cities: Variations on a Theme by Hajnal,” Journal of Family History 16, no. 1 (1991): 79–96.
never married in the countries of western Europe. Notwithstanding the great accuracy of the Wieliczka census, its authors did not include full data on the marital status of all the people in a particular household. It is therefore impossible to establish whether e.g., Franciszka, aged 36, sister of the widow Konstancja Ruczkowska, was also a widow or a spinster. It could be only established that she was not a married woman, as this kind of information was always provided. The oldest widow was 48 years old and the two oldest widowers were 60. Therefore, a definite number of people living in celibacy cannot be given for Wieliczka; only a percentage estimation can be made. Few people decided to live alone: the number of men doing so was only 4% and the number of women only 2%.

**Age at Marriage**

The main aspect that influenced the different forms of household in Europe was age at marriage. John Hajnal proved that the age was higher in western than in Eastern Europe. While in western Europe age at marriage was over 26 for men and for women over 23, in the East it was an average of 26 for men and 21 for women. Results of the Wieliczka census analysis will be given in tables 10–12.

The research was based on 235 cases of a wife and husband from 640 such couples living in Wieliczka in 1788. The number contains people whose marriage certificates were in no doubt. In total, they comprised over 35% of all married couple living in the town. For the purposes of the research, people from the census were compared to those entered onto marriage certificates in Wieliczka parish in the 18th century. The first outcome allowed the age and marital status of those marrying to be verified. As assumed, the database created from the certificates was unreliable, and the age of the bride or groom could differ because the combination of this information with the census showed discrepancies. It is not clear whether untrue information was given on purpose or whether the priest estimated their age. Observations allow for the conclusion that in the second half of the 18th century, the ages of the bride or groom was closer to reality than those

56 Cezary Kukło, *Kobieta samotna…*: 60; Piotr Guzowski, “Geneza europejskiego modelu małżeństwa na przełomie średniowiecza,” *PDP* 31 (2012): 14.
57 Census of St. Clement’s parish in Wieliczka: 14.
58 Assuming women whose marital status was not provided were also spinsters, definite celibacy exceeded 5%.
59 John Hajnal, “Two kinds…”: 452; John Hajnal, “Age at marriage…”: 111–136.
60 It is believed the final result of the project will be to give 75–80% of all married couples living in the town. The next phase will concentrate on comparing marriage certificates to the census of the whole of St. Clement’s parish in Wieliczka. There are grounds to believe that inconsistencies in writing another name, a transformed name or surname, or place of living influenced the result in that part of the study. Upon comparison of all the sources available, doubts as to the actual existence of a particular person can be resolved.
written in the first half of the century. The age difference between all the spouses, notwithstanding previous marital status, was on average 5.10, with a median of 4.

**Figure 6. The number of brides and grooms compared with the age difference between them**

![Bar chart showing age differences between betrothed individuals](image)

Source: own studies on the basis of St. Clement’s Parish Archive in Wieliczka, St. Clement’s Parish Census, Wieliczka, file number unknown.

A negative value in the research means an older woman and a positive value an older man. Looking at Figure 6, it can be seen that there were only 13 cases where the woman was older than the man, which is only 5.54% of all the marriages. Interestingly, in none of the cases was the bride the same age as the groom. In 222 cases, i.e., over 94%, the man was older, with the majority of the men 2–5 years older. The median was 5, with an average of 4.95 and standard deviation 4.45. All the above proves patriarchy to be dominating in the mining town. In the following part groups of brides and grooms will be presented, with their division into marital status.

**First marriage: bachelor-maiden**

There were 197 cases of first marriage couple found in Wieliczka in the second part of the 18th century. The man’s average age was 27.1 and the woman’s was 22.0, with the median of 4 and the average of 5.05, and the standard deviation of 4.64.

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61 Siegfried Gruber, Mikołaj Szoltysek, “The Patriarchy Index: a Comparative Study of Power Relations Across Historical Europe,” *The History of the Family* 21, no. 2 (2016): 133–174; Karl Kaser, “Patriarchy After Patriarchy: Gender Relations in Turkey and in the Balkans 1500–2000,” *Studies on South East Europe* 7 (Münster: LIT Verlag, 2008); Göran Therborn, *Between Sex and Power: Family in the World, 1900–2000* (London, New York 2004).
Figure 7. Age difference between bride and groom at the moment of first marriage

![Age difference distribution chart]

Source: own studies on the basis of St. Clement’s Parish Archive in Wieliczka, St. Clement’s Parish Census, Wieliczka, file number unknown.

Figure 7 shows the most common age difference was from 2 to 5 years. There were only eight cases of woman being older than man. The higher number of older men getting married for the first time by both the spouses proved to be the same as study results for western Europe.⁶²

**Remarriages**

As far as remarriages of widowers are concerned, 30 such cases were included in the paper. In 15 cases, the new wives were widows while in the other 15, the women were spinsters. The average age for a widower at remarriage was 43.6 years old. The age difference between the remarrying widowers (42.7) and the widows (35.9) is worth mentioning, which is on average 6.73, with the median 4.5 and the standard deviation 11.43.

Where widows married bachelors, the average age of the widows was 25 and the bachelors 28.4. Therefore, the average age difference was −3.46, which means the woman was usually younger than her second husband. The median equals −5 with the standard deviation 4.59.

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⁶² Peter Laslett, *Family Life and Illicit Love in Earlier Generations: Essays in Historical Sociology* (Cambridge University Press 1977): 26–27; Richard Wall, “Leaving Home and the Process of Household Formation in Pre-Industrial England,” *Continuity and Change* 2, no. 1 (1987): 88–90.
Figure 8. Age difference between spinster and widower, widow and widower, widow and bachelor at the moment of remarriage

Upon analysis of Figure 8, it was concluded that in only 3 cases was the widow older than the bachelor. The average age difference was over 5 years, with the bachelor being older in most cases. The available documentation suggests more detailed research should be carried out. It was, however, the paper’s aim to only pay attention to the directions and issues the analysis concentrated on. The above chart suggests that only one widower was younger than his future wife, a spinster. The greatest difference was noted in two cases in which the widower was over 10 year older than his wife, for whom it was not her first marriage. In two other cases, the widower was over 30 years older than his future wife. Even though such a difference is significant, it is not an unusual occurrence in the whole country. In Wieliczka, the average age for widows at remarriage was 30.8 years old. The chart shows the age difference of widower-widow marriages. The remaining group to be discussed is that of widows who married bachelors. The research showed 13 cases, with the average age 25 for widows and 28.4 for bachelors. This surprising result is to be analyzed in further studies. Marriage certificates will be paired to find out the first marriage of a particular widow and establish the time lapse between the first husband’s death and the second marriage.

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63 Peter Laslett, “Characteristics of the Western Family Considered Over Time,” *Journal of Family History* 2 (1977): 89–115.
Table 11. Bride and groom age comparison with division into gender and marital status. Territory of the Commonwealth

| Time and place of marriage | Bachelor | Widower | Spinster | Widow |
|---------------------------|----------|---------|----------|-------|
| Wieliczka 1750–1788       | 27.1/27.6 | 43.6    | 22.0/24.0 | 30.8  |
| Warsaw (Holy Cross) 1770–1799 | 29.0    | 41.2    | 21.8    | 34.1  |
| Toruń 1793–1800           | 25.5     | n/a     | 22.3    | n/a   |
| Toszek 1791–1800          | 26.1     | 43.4 (52.9 *) | 22.5   | 46.9 (40.9 ***) |
| Poznań 1800–1815          | 29.0     | n/a     | 24.6    | n/a   |
| Brzeżany (Catholics) 1784–1800 | 26.0    | n/a     | 20.9    | n/a   |

* Results gained using SMAM.
** In brackets, age of widower at marriage to a widow.
*** In brackets, age of widow at marriage to a widower.

Source: own studies on the basis of St. Clement’s Parish Archive in Wieliczka, St. Clement’s Parish Census, Wieliczka, file number unknown; Archives of the Metropolitan Curia in Krakow, registers of baptism and marriages in Wieliczka 1706–1790; Cezary Kukło, Rodzina w osiemnastowiecznej Warszawie (Wydawnictwo UwB 1991): 175; Agnieszka Zielińska, “Śluby w parafiach katolickich w XIX wieku: z zagadnień demograficznych Torunia,” Czasz Nowożytne: periodyk poświęcony dziejom polskim i powszechnym od XV do XX wieku 21 (2008): 55; Danuta Daszkiewicz-Ordyłowska, “Rodzina w parafii toszeckiej w latach 1789–1877,” Śląskie studia demograficzne 5 (2001): 75–109; Mieczyław Kędelski, Rozwój demograficzny Poznania w XVIII i na początku XIX wieku (Poznań 1992); C. Kukło, Demografia…: 279.

Upon analysis of Table 11, it was concluded that the age of bachelors at marriage was not the lowest in comparison to other Polish cities. In a similar period under study, in Warsaw and Poznań, bachelors marrying were one year older than those from Wieliczka. In comparison to Toruń and Toszek, men from Wieliczka were more than one year older. The opposite tendency was noticed in the case of widowers, who remarried later. In the case of women, both spinsters and widows married for the first and subsequent time at quite an early age. Special attention should be paid to the early age of remarriage in the case of widows. It might be concluded that the prompt decision to remarry could have been caused by the possibility for procreation that the young widows still had.

Discussion

Having given relevant data on Wieliczka and chosen cities in the Commonwealth, the necessity to compare them to Europe seems to offer answers to the research question.
Table 12. People of the Commonwealth in the 2nd part of the 18th century. Age groups 0–14 and 65+ in chosen cities, regions and countries (percentages)

| Age          | 0–14  | 65+ |
|--------------|-------|-----|
| Wieliczka    | 33.3  | 1.7 |
| Proszowickie administrative county | 32.9  | 3.5 |
| Olkusz       | 35.5  | 3.4 |
| Krakow       | 22.4  | 4.0 |
| Warsaw       | 28.6  | 3.0 |
| Polish-Lithuanian Commonwealth | 38.4  | 3.0 |
| Sweden – 1750 | 33.0  | 6.0 |
| Westphalia – 1751 | 31.1  | 6.3 |
| France – 1775 | 33.3  | 4.4 |
| France – 1801 | 33.0  | 5.6 |
| Norway – 1801 | 38.7  | 5.7 |
| Schleswig-Holstein – 1803 | 31.1  | 4.0 |
| Italy – 1861 | 34.0  | 4.0 |

Source: own studies on the basis of St. Clement’s Parish Archive in Wieliczka, St. Clement’s Parish Census, Wieliczka, file number unknown; Cezary Kuklo, Kobieta samotna...: 45–46; Ewa Kazmierczyk, “Struktura...”: 122; Carlo M. Cipolla, Before the Industrial Revolution – European Society and Economy 1000–1700 (1993); Jean Bourgeois-Pichat, “Evolution générale de la population française depuis le XVIIIe siècle,” Population (French edition), (1951): 635–662; Rolf Gehrmann, Luezen 1720–1870. Ein historisch-demographischer Beitrag zur Sozialgeschichte des ländlichen Schleswig-Holstein (Neumünster 1984); Mikołaj Szoltysek, Rethinking...: 840.

Table 12 shows the results of research on Wieliczka and other areas under Polish rule, located close to Wieliczka: Proszowickie administrative county, Olkusz and Krakow, as well as the capital city of Warsaw. It gives the results of studies on the populations aged 0–14 and 65+ of Wieliczka and other Polish cities. Upon comparison, the conclusion may be drawn that in Wieliczka there were more children aged 0–14 than in bigger cities, e.g., in Krakow or Warsaw. The percentage in smaller cities is very similar. The opposite could be concluded when it comes to the 65+ age group. In Wieliczka there were 50% fewer people than in the other cities in the table when comparing the result to other European regions and countries. When it comes to children aged 0–14, Wieliczka was ranked the same as France at the beginning of the second half of the 18th century. Amongst the countries listed, the highest rates were noted for the Polish-Lithuanian Commonwealth and Norway. However, when comparing the 65+ age group, there was a difference in Wieliczka. It is yet not established whether this may have been caused by an error in calculation for this particular age group. Nevertheless, the youngest group ratio in the population of an economic city type is very similar to that of different European countries.
In further studies, age at marriage amongst the population of a mining city will be compared to the other parts of Poland. To provide such data, a different method has to be employed which limits misrepresentation of the results and allows the age data at first marriage in the mining city to be compared to those of other parts of the Polish Lithuanian Commonwealth.

Table 13. Comparison of Singulate Mean Age at Marriage (SMAM) by gender in Wieliczka and other parts of the Commonwealth

| Age        | Men | Women |
|------------|-----|-------|
| Wieliczka  | 27.6| 24.0  |
| Region 1   | 28.5| 25.1  |
| Region 2   | 28.9| 24.1  |
| Region 3   | 27.7| 22.3  |
| Region 4   | 26.1| 21.9  |
| Region 5   | 26.6| 22.1  |
| Region 6   | 27.9| 22.5  |
| Region 7   | 26.9| 20.7  |
| Region 8   | 23.0| 18.8  |
| Region 9   | 24.2| 20.7  |
| Region 10  | 22.7| 19.1  |
| Region 11N | 23.4| 20.1  |
| Region 11S | 19.8| 16.8  |

Source: own studies on the basis of St. Clement’s Parish Archive in Wieliczka, St. Clement’s Parish Census, Wieliczka, file number unknown; Mikołaj Szoltysek, *Rethinking...*; Notes: comments as to each region see map 1, page 94.

The data given in Table 13 allow for the conclusion that Wieliczka belonged to the “West” zone. The age at marriage was similar to that of Region 6, and spinster married later than women in Wieliczka. Prior to marriage, people would concentrate on earning a living in order to settle down and set up their household independently.64 The age at marriage for women was the highest in the whole southern part of the area under study. The results in Regions 1 and 2 were higher; however, people who were about to marry were the oldest there. Considering all the above it may be concluded that the St. Clement’s congregation was of mature age and already prepared to marry and start a family.

This part of the study brings to our attention the age difference between the future spouses, even though the same data was used.

64 Studies are still being conducted. The initial results, however, allow for such a theory to be suggested.
In the next part of the study, the age difference between the bride and groom will be compared. The disparity in the results derives from the different sources and methods employed to calculate age.

Table 14. Comparison of the average age at marriage with the division into gender and calculation method of the betrothed in the 2nd part of the 18th century

| Correlation          | Bachelors | Spinsters |
|----------------------|-----------|-----------|
| List – birth certificates | 27.1      | 22.0      |
| List – SMAM          | 27.6      | 24.0      |

Source: own studies on the basis of St. Clement’s Parish Archive in Wieliczka, St. Clement’s Parish Census, Wieliczka, file number unknown; Archives of the Metropolitan Curia in Krakow, baptism record books, 5, 6 and 7.

Employing the SMAM method of calculation is believed to allow for more precise results. Later in the study, the results may be compared with the larger number of results given by other European researchers working on the topic. The objective, however, was to point out the necessity to compare the outcomes of the studies, the benefit of which is to make a comparison with the larger number of areas studied in European academia.

The following comparison shows the results on the European scale. A cross-section presentation of regions in the Commonwealth will be given to show the disparity between the eastern and western types of households.

In comparison to the other European cities shown in Table 15, the percentage of nuclear families was much greater in Wieliczka. At the same time, more multiple structured families are less common. A surprising similarity may be observed for the whole western region of the Commonwealth and Norway in 1801. Mishino, in Russia, was the town for which the difference in result was the greatest. The complexity of households there was almost 85%, making the place one of a kind in the source literature. Equally high rates of households type IV and V may be observed in Urvaste, Estonia, Eastern Region no. 3 in the Commonwealth and, surprisingly, in Gratallops in Spain. The results prove diversity in household structures in all the regions; Wieliczka, however, has a model more similar to that of western Europe.

The two sources above (tables 14 and 15) give the main reasons for which Wieliczka is believed to be an example of the western type of marriage. To get a bigger picture, a comparison needs to be made using SMAM results, definite celibacy, and the number of extended and multiple households present in Wieliczka. The last table is to compare all this data, coupled with data on other countries in order to establish what type of family was present in Wieliczka.
Table 15. Structure of households in Wieliczka, compared to regions of the Commonwealth and selected European cities

| Town/Region         | Year | Area                      | Total no. of households | Total percent types of household according to P. Laslett’s classification |
|---------------------|------|---------------------------|-------------------------|-------------------------------------------------------------------------|
|                     |      |                           |                         | I       | II     | III    | IV     | V      |
| Wieliczka           | 1788 | Galicia                   | 743                     | 0.9     | 3.0    | 82.6   | 12.7   | 0.8    |
| Region – west       |      | Polish-Lithuanian         | 11,638                  | 1.7     | 0.3    | 78.0   | 11.2   | 8.9    |
|                     |      | Commonwealth              |                         |         |        |        |        |        |
| Region – east 1     |      | Polish-Lithuanian         | 10,001                  | 0.7     | 0.6    | 53.4   | 14.2   | 31.2   |
|                     |      | Commonwealth              |                         |         |        |        |        |        |
| Region – east 2     |      | Polish-Lithuanian         | 3,884                   | 3.4     | 0.4    | 72.5   | 10.8   | 12.9   |
|                     |      | Commonwealth              |                         |         |        |        |        |        |
| Region – east 3     |      | Polish-Lithuanian         | 1,131                   | 0.2     | 0.4    | 33.9   | 10.9   | 54.6   |
| San Bononio         | 1770 | Italy                     | ·                       | –       | 3.7    | 57.4   | 16.7   | 22.2   |
| Guillaumes          | 1788 | France                    | 225                     | 4.0     | 4.9    | 49.3   | 27.1   | 14.7   |
| Benimaclet          | 1788 | Spain                     | 254                     | 0.8     | 3.1    | 70.5   | 11.8   | 13.8   |
| Bourg-de-Bigorre    | 1793 | France                    | ·                       | –       | 6.7    | 50.0   | 28.8   | 14.5   |
| Urvaste             | 1797 | Estonia                   | ·                       | 2.7     | 0.6    | 41.2   | 15.5   | 40.0   |
| Gratallops          | 1800 | Spain                     | 218                     | 0.6     | 1.8    | 58.7   | 21.5   | 38.9   |
| Norway              | 1801 | Norway                    | ·                       | 2.1     | 2.1    | 75.0   | 13.9   | 6.8    |
| Corniglio           | 1808 | Italy                     | ·                       | 0.8     | 4.1    | 60.3   | 17.4   | 17.4   |
| Mishino             | 1814 | Russia                    | ·                       | 0.8     | –      | 7.0    | 11.7   | 72.6   |

Source: own studies on the basis of St. Clement’s Parish Archive in Wieliczka, St. Clement’s Parish Census, Wieliczka, file number unknown; Mikołaj Szołtysek, Rethinking...; Alain Collomp, Richard Wall, “From Stem Family to Nuclear Family: Changes in the Coresident Domestic Group in Haute Provence Between the End of the Eighteenth and the Middle of the Nineteenth Centuries,” Continuity and Change 3 (1988): 65–81; Antoinette Fauve-Chamoux, “Family Reproduction and Stem-Family System: From Pyrenean Valleys to Norwegian Farms,” The History of the Family 11, no. 3 (2006): 171–184; Pier Paolo Viazzo and Albera Dionigi, “The Peasant Family in Northern Italy, 1750–1930: A Reassessment,” Journal of Family History 15, no. 4 (1990): 461–482; Mikołaj Szołtysek and Barbara Zuber-Goldstein, “Historical Family Systems and the Great European Divide: the Invention of the Slavic East,” Demografía English Edition 52, no. 5 (2009): 5–47; Xavier Roigé Ventura, Familia i grup domestic: Estrategies residencials al Priorat, (Segles XIX e XX) (Lleida 1989); Isidro Dubert, “Geografia form rodzinnych w Hiszpanii w latach 1752–1860,” PDP 24 (2003): 75–102; Jose Manuel Perez García, “La familia campesina en la Huerta de Valencia durante el siglo XVIII,” Revista de Demografía Histórica 6, no. 2 (1988): 8–9; Note: for full description of types of households, see table 7.

On the basis of Table 16, similarities in the SMAM comparative result between Wieliczka, the north of Spain and southern France can be observed. A difference of a year can be also observed in the comparison of Wieliczka with Sweden or with the north of Italy. Both of the countries are, undoubtedly, western European. The biggest differences were observed in comparison to east-central Europe, that is, with Russia and Hungary, and with Denmark located in the northern part.
of Europe. The professional literature\textsuperscript{65} suggests that the most credible results are from the women living in Belgium and the Netherlands. Another factor is the percentage of women who decided to live in definite celibacy. In this analysis, Wieliczka needs to be compared with eastern European countries, i.e., with Russia, Hungary and Estonia. The variable of 2.0\% in comparison with Austria, which shows 38\% of women living in celibacy and Belgium, with a ratio of over 18\%, does not allow the claim that Wieliczka presents a fully European family model.\textsuperscript{66} A final element needs to be studied to provide conclusive results, namely,

\begin{table}[h]
\centering
\begin{tabular}{lccc}
\hline
Country/Region & Female SMAM & Female definite celibacy & Percent of complex households \\
\hline
Wieliczka (Poland) & 24.0 & 2.0 & 13.5 \\
England & 25.4 & 11.2 & 11.3 \\
Austria & 26.3 & 38.0 & 30.4 \\
Belarus & - & - & 53.5 \\
Belgium & 26.3 & 18.3 & 11.6 \\
Denmark & 29.2 & 6.0 & - \\
Estonia & 22.7 & 5.1 & 30.3 \\
France (central) & 25.8 & 11.1 & - \\
France (South) & 23.9 & 13.0 & 37.6 \\
France (North) & 25.8 & 11.5 & 10.4 \\
Greece & 22.1 & 7.4 & 8.4 \\
Spain (central) & 22.8 & 6.0 & - \\
Spain (South) & 22.7 & 8.0 & 4.7 \\
Spain (North) & 24.5 & 10.2 & 34.1 \\
The Netherlands & 27.1 & - & 12.5 \\
Germany & 26.1 & 9.4 & 7.0 \\
Russia & 17.5 & 3.2 & 43.0 \\
Sweden & 24.7 & 11.1 & 23.9 \\
Hungary & 19.8 & 4.5 & 28.9 \\
Italy (South) & 21.6 & - & 22.3 \\
Italy (North) & 24.9 & 11.5 & 36.4 \\
Ukraine & - & - & 42.8 \\
\hline
\end{tabular}
\caption{Comparison of the most vital variables concerning the European family model, based on Wieliczka and other European cities in the 18th century}
\end{table}

Source: own studies on the basis of St. Clement’s Parish Archive in Wieliczka, St. Clement’s Parish Census, Wieliczka, file number unknown; Tracy Dennison and Sheilagh Ogilvie, “Does the European Marriage Pattern Explain Economic Growth?,” CESifo Working Paper 4244 (2013): 8–10.

\textsuperscript{65} Tine de Moor and Jan L. Van Zanden, “‘Girl power…’; 1–33.

\textsuperscript{66} The percentage of definite celibacy in Denmark seems worthy of note, since it gained the highest result in the SMAM analysis. It provides a great example of the lack of uniformity in the typical European Model of Marriages.
the percentage of extended and multiple households. Upon analysis of the last variable, one may observe that Wieliczka presents the western family model. When compared to other countries, Wieliczka has worse results than the countries and regions of western Europe, such as Spain, northern France, Belgium or the Netherlands. The most complex households can be observed in the eastern part of Europe, which is in Russia, Belarus, Ukraine, in southern France and in northern Spain and Italy. The study has not, however, provided conclusive results that could answer the question asked at the beginning of this paper. It does, however, allow us to put forward a well based thesis.

To conclude the research, the mining town of Wieliczka did present features of a western European city. The census dated as of 1788 is a very detailed source. It was thoroughly analyzed and provides a reliable source of information. Residents of Wieliczka showed a progressive, developing type with domination of nuclear families, run by a man aged 20–39. The household consisted, on average, of 5 people. According to the studies, Wieliczka placed itself in the previously expected place, which is in the West area, Region 6. The results offer another information on the preindustrial population. Household structure is comparable to the western parts of the Commonwealth and those of western Europe. The age at marriage is similar to that in France, the Netherlands and England. This can, however, be the result of local traditions and habits that characterize a mining city. Wieliczka was dominated by nuclear households, another feature showing similarity to western Europe. The number of women living in definite celibacy is not concurrent with the western model and therefore, Wieliczka cannot be described as a city with a fully western-European model of marriages; the issue is ripe for development with further study. Currently, the conclusion is that Wieliczka shows a transitional EMP model, with features of both western and eastern characteristics. It allows for further arguments to be put forward. What is more, the marriage certificates proved to a great degree to be highly reliable, and assured the analysis of families living in Wieliczka, supported by the census, to be of high credibility. Therefore, it is believed the paper is only a starting point for further study on the demography of Wieliczka and, in the future, of the surrounding villages. There are still many questions to be answered, such as information on servants, relatives and professions they practiced as well as the aspect of protoindustrialization.

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67 Alain Collomp and Richard Wall, “From Stem Family...” 65–81; Mikołaj Szoltysiek and Siegfried Gruber, “Stem Families, Joint Families, and the European Pattern: How Much of a Reconsideration Do We Need?” Journal of Family History 37, no. 1 (2012): 105–125.

68 Mikołaj Szoltysiek, Rethinking...: 834–835.
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Population of Wieliczka in 1788 – Household Size and Structure

Summary

The article aimed to determine the main demographic parameters for the inhabitants of Wieliczka, a mining town, in the 18th century, and to compare the results obtained with the results of studies by European researchers. The analysis was carried out via a database created on the basis of a census in the parish of St. Clemens, and Wieliczka birth, marriage and death certificates. The main methods used in the study were Peter Laslett’s typology of family households and Cezary Kuklo’s modification of it, and the Singulate Mean Age At Marriage (SMAM). The population living in Wieliczka in 1788 was a young, growing society of the progressive type according to Gustav Sundbärg’s classification. The average number of people living in a household was 4.7. Nuclear families run by a male head dominated in Wieliczka. The issue of a small number of single-person households is interesting. In comparison with other cities, it was noticed that a larger percentage of children and young people lived in Wieliczka than in large national cities, i.e., Krakow and Warsaw. Also given are the age differences between bachelors and spinsters resulting from an analysis of metrics and the SMAM study. Finally, the results for Wieliczka were compared with the results from European countries, which led to the conclusions that the European marriage model is too radical to capture specific local demographics in Europe.
społeczeństwem młodym, rozwijającym się, reprezentującym typ progresywny zgodnie z klasyfikacją Gustava Sundbärga. Średnia liczba mieszkańców gospodarstwa domowego wynosiła 4,7 osób. W mieście górniczym dominowały rodziny nuklearne, na czele których stał mężczyzna. Interesująca pozostaje kwestia niewielkiej liczby jednoosobowych gospodarstw domowych. Porównując Wieliczkę z dużymi miastami, takimi jak Kraków i Warszawa, zauważono, że górnicze miasto zamieszkiwał większy odsetek dzieci i młodzieży. Przedstawiono także różnice wiekowe między grupami kawalerów i panien, wynikające z analizy wskaźników i zastosowania analizy SMAM. Ostatecznie, otrzymane rezultaty dla górniczego miasta zostały porównane z wynikami dla innych regionów i krajów europejskich, co pozwoliło postawić tezę, że Wieliczka reprezentuje przejściowy europejski model małżeństwa.