

**Eötvös Loránd University**  
**Faculty of Humanities**

## **Summary of PhD Thesis**

**Ákos Lencsés**

# **Statistical Data Management and Regulations in Hungary**

**Doctoral School of Literary Studies**

**Head of the Doctoral School: Dr. István Lukács, University Full Professor**

**Doctoral Programme of Library Studies**

**Head of the Doctoral Programme: Dr. habil. Péter Kiszl, Institute Director**

**Members of the Board**

**Dr. Gábor Erdődy, University Full Professor, Chair of the Board**

**Ágnes Barátné Dr. habil. Hajdu, Head of Department, Associate Professor**

**Dr. Máté Bibor, Junior Assistant Professor**

**Dr. Pál Kerekes, Honorary Associate Professor**

**Dr. habil. Péter Kiszl, Institute Director, Head of Department, Associate Professor**

**Dr. Éva Laczka, Honorary University Full Professor**

**Dr. Zsuzsanna Tószegi, Honorary Associate Professor, Secretary of the Board**

**Supervisor: Prof. Dr. György Sebestyén prof. em.**

Budapest, 2019

# Contents

<b>INTRODUCTION</b> .....	<b>4</b>
Main points of the theses.....	5
The ever changing focus of statistics .....	7
Sources of the history of Hungarian statistics.....	8
Population censuses in Hungary.....	10
Metrics of the literature of statistics in Hungary, 1868-2016.....	11
Statistical libraries in the 21st century .....	13
<b>SUMMARY</b> .....	<b>15</b>
<b>BIBLIOGRAPHY</b> .....	<b>17</b>

# Introduction

Interpreting the surrounding environment is one of the most important aspects of humanity. The importance of interpreting resulted in a continuous development of methods describing the environment regarding social, physical, economical, demographical aspects. Numbers have an ever increasing importance describing situations and trends.

Even in the ancient times, censuses were a common need of public administration: many sources survived from military, tax and other different kind of censuses. During the Middle Ages the focus was widened from economic-based censuses to natural science studies, geographical and political descriptions, and many others. In a limited way, statistics were used in these new areas, and numbers had a great importance to verify the correctness and objectivity of the author.

During the 19th century, numbers became more and more important, and new statistical methodology was developed. These new developments offered the possibility to analyse data on their own – people became able to learn directly from data, the primer source, and not only from published works. This caused an ever evolving demand on objectivity. On the other hand, the need to learn statistical methods, the way to produce information from data, was a rather new phenomenon for scientists. The actors of official statistics also had to adjust to the new developments: the roles of official statistics were not limited to analyse statistical data anymore, but to publish the raw data, the metadata, provide the tools and places to learn how to use statistics, and help the spread of statistical literacy.

During the 20th century, these processes were mainly done via books and yearbooks published by the National Statistical Offices (NSOs), and of course by the libraries and information centres of statistical institutions and universities. In the 21st century, these tasks appeared in the virtual world. Libraries need to evolve their own roles regarding statistical literacy and also to embrace the new digital tasks, e.g. data archiving, perpetual access, and managing data storage.

The thesis focuses on the history of the Hungarian official statistics, regarding data management, data policy, sensitive data, and the statistical publication portfolio.

The most important issues of official statistics were entirely different during the centuries. In the 19th century data production, in the 20th century data processing, in the 21st century data protection are the main concerns of official statistics. Even the concept and subject of official statistics have been changed during the years. Originally only economics and related fields were involved, later natural science and social science (especially sociology and psychology) also joined the fields of interest, later followed by almost all the academic fields.<sup>1</sup>

The connection between official statistics and the statistical publications, the metrics of statistical publications are not a very well researched field of statistics. The thesis attempts to show the development of official statistics by focusing on sensitive data management. On the other hand, the thesis presents a possible research method to analyse the activity of official statistics by using the metrics of statistical publications.

## Main points of the theses

The theses focuses on the following topics:

1. Sensitive data management as an independent field of official statistics studies. In the history of Hungarian official statistics, sensitive data management has certain landmarks. The first landmarks are connected to outstanding statisticians (in the pre-statistical period) and population censuses (in the era of official statistics).
2. Nationality and religious affiliation are different sub-topics of sensitive data management. These sub-topics are related, however the main landmarks are connected to different historical contexts.

---

<sup>1</sup> Pléh, Csaba, „Gondok (?) az adatokkal”, *Magyar Tudomány* 179, 1. (2018): 148–152.

3. The landmarks of data management of Hungarian official statistics are the following:
  - a) The Hungarian Statistical Office (1848-49), the first official statistical institution in Hungary; the activity of Elek Fényes.
  - b) The Statistical Committee of the Hungarian Academy of Sciences. The realization of the impossibility to proceed a relevant and correct statistical census with no official mandate. The first semi-official statistical publications in Hungarian.
  - c) The foundation of the Hungarian Central Statistical Office in 1867; the activity of Károly Keleti, the first director of the statistical office. The first population and agricultural census proceeded by an official institute in Hungary.
  - d) Gypsy census of 1893. The first well described conflict of official statistics and municipal administration in Hungary.
  - e) Expulsion of German citizens and the nationality data of 1941 population census. Breaking the data protection principle. A great loss of truth in the official statistics and data protection.
  - f) Religious affiliation data management in the 2001 and 2011 population censuses, data protection issues in the digital world. The first census in Hungary where data protection was more important than data production and data processing.
4. Processing the metrics of statistical publications. Identifying the relevant statistical topics of different historical periods. The metrics are based on the numbers of published statistical tables and the variety and topics of statistical publications in the periods. Based on these metrics the following questions were examined:
  - Analysing the number of statistical tables published in the Statistical Yearbook of Hungary broken down by topics and sub-topics. Identifying the main trends and relevant topics of different periods of Hungarian official statistics.
  - Examining the main series published by the Hungarian Central Statistical Office. Collection metrics regarding the published works, results compared to the trends of the Statistical Yearbook of Hungary.
  - Text-mining of statistics published in newspapers.

5. Libraries of National Statistical Offices have important roles in archiving the published portfolio, but also provide new services regarding digitalisation, research support and research evaluation. Librarians working at libraries of NSOs need to redefine their roles in the following areas:
  - The role of libraries in the workflow of the statistical office.
  - Developing research support services for statisticians.
  - Managing Open Access and Open Data.
  - Managing data repository and institutional repository.

## The ever changing focus of statistics

Statistics have various definitions, all research area tried to develop its own definition. The definitions have been refined many times and are in continuous modification. Over time some different aspects appeared: descriptive statistics, mathematical statistics, and inferential statistics. Historically, descriptive statistics were the firstly developed area connected to public administration. Mathematical statistics and descriptive statistics are different but closely connected areas. For historical reasons, official statistics started to work with descriptive statistics, the two areas were almost totally overlapped in the 19th century in Hungary.

Mathematical statistics and descriptive statistics are divided by their methodology, however official statistics have different aspects. The definition of official statistics is based on the connection to public administration, and not to methodology. No matter if it is descriptive or mathematical statistics, if it is managed by any governmental institutions, it is part of official statistics.

In the 20th century, statistical areas were divided according to data processing, data collecting, and data analysis, metadata management or according to methodology. Data dissemination and data visualisation became part of definitions of statistical areas recently.

By analysing the metrics of Hungarian statistical literature, the thesis attempts to find the relevant statistical sub-categories of different political periods, and thus tries to offer a semi-definition for official statistics of different periods. Historical events, e.g. financial or demographic crises should also influence the composition of statistical publications.

## Sources of the history of Hungarian statistics

The literature of the history of Hungarian statistics is based on four monographs. Many other publications, articles are available, but almost all of them are based in these four books.

The monograph by Aladár György was published in 1885 and shows the very first two decades of the Hungarian Central Statistical Office.<sup>2</sup> György focuses not only on the newly formed office, but describes all the former attempts to establish an official institute for Hungarian statistics. The book reports on contemporary statisticians and publishes a kind of memoir of the first two decades of the Hungarian Central Statistical Office (1867-1885) and also the two-year long activity of the former Hungarian Statistical Office (1848-49). Some aspects of data collections and publication policy is also described in the book, however the main focus is on the structure of the statistical office.

The second interpreter of the history of Hungarian statistics is Gusztáv Bokor, who published his work in 1896 (the 25th anniversary of the independent Hungarian Central Statistical Office).<sup>3</sup> His book focuses on the founding of the institute and the international relationships with the World Statistics Congress and other NSOs. The book also provides a deeper look into the first data collections of the institute compared to György's monograph. The works of György and Bokor give us a complete insight into the first three decades of the Hungarian Central Statistical Office.

The third monograph on Hungarian statistics was published in 1911 by László Buday (who later became director of the Hungarian Central Statistical Office).<sup>4</sup> Buday's book gives the deepest look into the institute's life, and could be perceived as a manual for all the statistical data collections and other activities of the office. After a brief, 8-page long introduction, all the censuses

---

<sup>2</sup> György, Aladár, ed., *Magyarország hivatalos statisztikája, történelme és fejlődése* (Budapest: Athenaeum, 1885).

<sup>3</sup> Bokor, Gusztáv, *A magyar hivatalos statisztika fejlődése és szerkezete* (Budapest: Országos Magyar Királyi Statisztikai Hivatal, 1896).

<sup>4</sup> Buday, László, ed., *A M. Kir. Központi Statisztikai Hivatal munkássága, 1871–1911* (Budapest: Magyar Kir. Központi Statisztikai Hivatal, 1911).

and data collections are listed, including all the official documents, questionnaires, regulations and law in connections with statistics. This 600-page long book was not written as a publication on the history of Hungarian statistics, however later became the primary source for historians.

Last but not least, the book edited by Dezső Dányi and Ferencné Nyitrai was published in 1998.<sup>5</sup> The publication intended to show the history of the Hungarian Central Statistical Office from the very beginning till the late 1990s. Four chapters, according to historical eras were defined. The book focuses mainly on the historical context of the statistical office; documents, questionnaires, data management principles are mentioned only slightly. However this book is the only complete history of the institute until now.

Beside these four books, many other articles and publications were prepared on the Hungarian Central Statistical Office; a bibliography published in 1992 listed more than 4000 records on the official statistics.<sup>6</sup> Among these publications one can find articles on different areas of official statistics (mainly methodological studies), and articles on the history of smaller statistical institutions, e.g. the history of the statistical office of Budapest<sup>7</sup> or the library of the Hungarian Central Statistical Office.<sup>8</sup>

None of the above mentioned publications focuses on the data dissemination policy or the data protection policy of the statistical office, though some of them briefly discuss these topics. Articles on libraries of NSOs and data archive policy of NSOs also rarely appear in the literature.

---

<sup>5</sup> Dányi, Dezső and Ferencné Nyitrai, ed., *Tanulmányok a magyar statisztikai szolgálat történetéből* (Budapest: Központi Statisztikai Hivatal, 1998).

<sup>6</sup> Csahók, István, *Válogatott bibliográfia a magyar hivatalos statisztikai szolgálat történetének tanulmányozásához*, 2 vol. (Budapest: Központi Statisztikai Hivatal Könyvtár és Dokumentációs Szolgálat, 1992).

<sup>7</sup> Thirring, Gusztáv, *Budapest székes főváros statisztikai hivatalának története, 1869–1894* (Budapest: Grill, 1894); Buziássy, Károly, *A fővárosi statisztikai szolgálat 75 éves fejlődése* (Budapest: Budapest Székesfőváros Statisztikai Hivatala, 1946).

<sup>8</sup> Ajtay, Kálmán, „Adalékok a Központi Statisztikai Hivatal Könyvtára történetéhez (1867–1944)”, in *A Központi Statisztikai Hivatal Könyvtárának évkönyve, 1956–57*, ed. Kovacsics, József (Budapest: Statisztikai K., 1958), 57–81; Nemes, Erzsébet, and Béla Rettich, „A könyvtári tájékoztatás eszközei - a könyvtárlajstromtól az integrált könyvtári rendszerig”, *Statisztikai Szemle* 82, 3. (2004): 280–295; Rózsa, Dávid, „Másfél évszázad - élő örökség. Mérföldkövek a Központi Statisztikai Hivatal könyvtárának történetéből”, *Tudományos és Műszaki Tájékoztatás* 60, 10. (2013): 411–420.

The thesis tries to focus mainly on these topics while describing the history of Hungarian statistics.

## Population censuses in Hungary

Population censuses are the hearth of all national statistical systems. The high value of censuses is based on regularity (usually conducted once in every decades) and the comprehensivity (usually carried out with all citizens). Census data therefore are not estimated but gives the most exact description of society.

During the years questionnaires varied intensively: some of the questions disappeared, and many new ones popped up. Most sensitive data are related to religious affiliation, ethnicity and unemployment. The 2011 Hungarian population census also brought heavy debates regarding these issues.

Besides ethnicity and religious affiliation, health status and employment are also listed as sensitive data during the population census.<sup>9</sup> The dissertation focuses on the history of ethnicity and religious affiliation in the Hungarian population censuses. Other academic fields have different definition for sensitive data with a much wider range of data types, e.g. political involvement, sexual orientation, criminal record, addictions, or even salary and family status.<sup>10</sup> The dissertation refers to these topics, but focuses strongly on official population censuses carried out by the Hungarian Central Statistical Office.

---

<sup>9</sup> „A népszámlálás kérdései. Központi Statisztikai Hivatal”, Access: 5/1/2019, [https://www.ksh.hu/nepszamlalas/a\\_nepszamlalas\\_kerdesei](https://www.ksh.hu/nepszamlalas/a_nepszamlalas_kerdesei).

<sup>10</sup> Károly, Szilágyi, András Jóri, and Máté Dániel Szabó, *Az információs szabadság elektronikus kézikönyve* (Budapest: Educatio, 2008), <https://www.tankonyvtar.hu/hu/tartalom/tkt/informacioszabadsag/index.html>.

The lack of trust regarding statistics is based on many different reasons. In the literature there are heavy debates on the importance of statistical literacy<sup>11</sup> (which could be a measure of democracy as well<sup>12</sup>), the openness of statistical data and transparency of NSOs.<sup>13</sup> Looking at the history of Hungarian statistics, it is quite clear how deeply the lack of transparent data management can undermine the trust of society. The examples, such as the question of nationality at the censuses of the Austrian-Hungarian Empire, the gipsy census of 1893 or the German nationality and the 1941 censuses, all make statisticians aware of the importance of data protection.

It is also worth to study non-sensitive data collection methodology as well. The history of Hungarian library statistics tells how important is to manage the data collection in an official level. The lack of official censuses makes impossible to collect correct time series for library statistics. It is an immense need to have dedicated rules for official institutions regarding statistics, including not only the how-to-do but the reasons behind the census. Contemporary statisticians can learn a lot from the history of statistics.

## Metrics of the literature of statistics in Hungary, 1868-2016

Bibliometrics and scientometrics became independent fields of science in the 1970s. The main methods of these fields are the quantitative analysis of publications and citations to gain knowledge regarding scientific output of institutions and different aspects of scientific fields.

There is no known study on the quantitative analysis of literature of statistics in Hungary, though there are direct links between values and needs of society, and statistical publications. The methods of bibliometrics can help us to trace the changes of statistical publications: what statistical fields had more publications in different historical periods.

---

<sup>11</sup> Zoi Nikiforidoua, Aspasia Lekkab, and Jenny Pangepc, „Statistical literacy at university level”, *Procedia - Social and Behavioral Sciences*, 9. (2010): 795–99.

<sup>12</sup> Achim Schiller, and Joachim Engel, „The importance of statistical literacy for democracy”, in *Challenges and Innovations in Statistics Education* (Szeged: University of Szeged, 2018).

<sup>13</sup> Joan Garfield, „Research on Statistical Literacy, Reasoning, and Thinking”, in *The Challenge of Developing Statistical Literacy, Reasoning and Thinking* (Dordrecht: Kluwer Academy, 2004), 397–409.

According to statements from the office, the fundamental principle of the Hungarian Central Statistical Office was the equity of all statistical fields. In reality, however, economy or demography had different importance for decision makers and these needs are mirrored in the statistical publications.

Our primer source was the Statistical Yearbook of Hungary from the very first issue, published in 1872 to the issue published in 2016. Other sources were also involved in the study, different kind of publication series published by HCSO. These series provide a better insight into the changes of statistical fields compared to the statistical yearbooks. Altogether 1085 volumes were involved in the study from 6 different series (including the Statistical Yearbook of Hungary volumes). The tables published in these volumes were all counted and placed into their own category. The list of categories is based on the table system of the HCSO.<sup>14</sup>

Results of the survey show that population and social statistics were not overrepresented between the World Wars, and economic indicators in the yearbooks were not published much more intensively in the Socialist Era. Neither economic, nor demographic crises caused direct changes in trends, however changes of political eras made a direct and prompt effect on the structure of the Statistical Yearbook of Hungary.

Statistical series show a different pattern compared to the Statistical Yearbook of Hungary. While the yearbook shows a real equity of statistical categories, more economical analysis were published in other series during the Socialist Era - and especially more analyses were published about industry compared to agriculture or general economy indicators.

The thesis attempts to analyse the corpus of newspapers to learn what fields of statistics were published in the news. The corpus is digitised fully, however it is not easy to identify the statistical information, especially regarding different fields. No exact trends were found, and the way of analysing newspaper corpus is needed to study more deeply. In the dissertation, the main focus was on the above mentioned official statistical publications, and these are the main sources of any future studies as well.

---

<sup>14</sup> „Táblák (STADAT) - Témastruktúra”, Access 28/1/2019., <http://www.ksh.hu/stadat>.

## Statistical libraries in the 21st century

Statistical libraries, as all the academic libraries in the 21st century, need to face many new challenges and opportunities, and provide new services for patrons. Services evolved in a rapid manner and with the vivid fluctuations of IT solutions, new and new approaches became necessary for librarians.<sup>15</sup>

The following brief list helps to summarize the possible new services of NSO libraries to find their role in the 21st century statistical offices.

### Traditional library functions

- preservation of official publications,
- cataloguing of official publications,
- distribution of official publications,
- information services regarding official publications and wider, statistical-related reference services.

### Library services in the digital era, research-related services:

- digitalization of archive official publications,
- bridge between the NSOs and the scientific community (universities, research institutions, etc.),
- connection between NSOs and scientific publishers,
- connection between NSOs and researchers,
- management of DOIs for the NSOs official publications,
- services regarding Open Access and Open Science,
- management of institutional repository and data repository.

For statisticians working at the statistical office, the library can fulfil the role of the direct link between users and statisticians. Libraries can be the place to see how researchers and users apply statistics in their work – in person or via publications. This can be a great help for statisticians to learn how to form statistics more user-friendly and how to develop the metadata system of the NSO's statistics.

---

<sup>15</sup> Kiszi, Péter, „Ki viszi át...? A könyvtárak társadalmi felelősségvállalása a digitális korban”, *Tudományos és Műszaki Tájékoztatás* 64, 1. (2017): 1–23.

The main focus of services at NSO's library is of course the statisticians of the statistical office – however services can be widened to the public, and interested users. An example is the agreement between the Association of Hungarian Librarians, the Alliance of Libraries and Information Institutes and the Hungarian Central Statistical Office, signed in July 2011 about the cooperation regarding the 2011 population census.<sup>16</sup>

Libraries have great responsibility in promoting Open Access and Open Science in the statistical offices. This role is the first step to form a link between the NSO and the academic sphere. In the digital era, libraries still have their traditional tasks (e.g. classification, preservation), but many new tools appear to fulfil these tasks. Repositories are the key tools for traditional services in the digital world. Using a repository, an NSO has the chance to reach a wider audience, publish in Open Access, has a long-time preservation system for full-text publications, and provide metadata for both statistics and publications. Repositories can also provide solutions for the preservation of publicly not available documentations, manuscripts, working papers, etc.

Storing and preserving publications are definitely tasks for libraries, however, librarians have the chance to participate in storing and preserving statistics as well by using a data repository – the experience and knowledge about 'traditional' repositories can make the librarians an integral part of the workflow in the NSOs.<sup>17</sup> Data repositories guarantee the preservation of statistical data during the decades, no matter if methodology or base year has been changed. Recent years, many methodological changes have caused unforeseeable difficulties for statisticians.<sup>18</sup>

To measure the NSOs commitment to Open Access, we have studied the availability of statistical yearbooks of European statistical offices, as the most important publication. As yearbooks are published by using public money, it would be a reasonable requirement to publish them Open Access. In these study, we have surveyed 31 European countries (as of early 2017) if the statistical yearbook is available free of charge immediately after publication, using no embargo

---

<sup>16</sup> „Együttműködési megállapodás”, *Statisztikai Szemle*, 9 (2011): 1018.

<sup>17</sup> Sebestyén, György, „Az információtudomány főbb trendjei az ezredforduló után”, *Tudományos és Műszaki Tájékoztatás* 62, 11–12. (2015): 415–428.

<sup>18</sup> Oblath, Gábor, „Ezentúl minden másképpen volt? - Gondolatok a GDP-adatok legutóbbi revízióiról”, *Statisztikai Szemle* 90, 6. (2012): 559–570. ; Hüttl, Antónia, „Mit mérnek a nemzeti számlák?”, *Statisztikai Szemle* 89, 10–11. (2011): 1098–1112.

period. Based on the survey, most of the NSOs are committed for Open Science. Another interest was if the statistical yearbooks are still published in print or only in online copy.

21 of the 31 offices still publish print version of the statistical yearbook. Many of the other 10 countries still publish statistical pocket-book or other kind of printed publications. Altogether more than 20 countries publish the statistical yearbook online, Open Access. Only 4 NSOs have embargo period for the online version, or no available online version at all; these are Hungary, Rumania, Switzerland, and Slovakia.

In the study, we also surveyed the libraries of NSOs: what services they provide for statisticians, what roles they have in the workflow of the NSO, and in what infrastructure they operate. Main indicators are if the library is independent department or not, has an independent web-page or not, operates a digital library or not, operates a repository and/or data repository or not, and the list of services for statisticians, including digitizing archive publications, and research assistance.

Though many of the NSOs have a library, a great part of these libraries provide only traditional services, and barely part of the NSO's workflow. Most of the libraries are not independent departments, have no web-page or openly available online catalogue, and operate only with one or two librarians.

## Summary

The dissertation describes the beginning of the Hungarian official statistics. The main focus of the literature is on the history of institutions, and not on the data management policy and regulations. The dissertation shows the history and recent trends of sensitive data management, with many examples from the Hungarian statistics and abroad, comparing the different trends of data management.

The historical summary shows the most important events and statisticians in the history of Hungarian statistics, and the paradigm changes of data management. The first and most important question in the history was the lack of official statistical institution in Hungary. As a consequence, the early years of statistics were organized by and around famous statisticians, and

made impossible to perform a correct census in the country. The history of Hungarian statistics gives a great example of the importance of official organizational structure.

Sensitive data management is entwined with population censuses. The dissertation focuses on the questions of nationality and religious affiliation, and shows the connection of trust in official statistics and sensitive data policy. These two data types came to the front in different eras: even if they are strongly connected, it is worth to study them independently.

The study also interprets the history of library statistics in Hungary, that proves the importance of the clear workflow and consistent methodology, and the utmost need of the institutional organization.

Second part of the dissertation focuses on the statistical publications, and shows the most important series. By counting all statistical tables published in the Statistical Yearbook of Hungary volumes and some more publications, the study tempts to assess the differences of published materials in different eras. Altogether 1085 volumes were processed, and the trends of the statistical yearbooks show a slightly different pattern compared to other publications.

Third part of the thesis shows the landscape of the statistical libraries in the digital era, including all potential digital services. In many cases NSO libraries provide only traditional services and are not part of the NSO workflow. The dissertation argues about the importance of libraries, digital services and the role of libraries as a link between NSOs and the academic field. Open Access, repositories, data repositories, metadata management are also discussed in these chapters. A study of 31 NSOs' publication policy has been processed, and shows that most of the statistical offices publish both print version of the statistical yearbook, and freely available online version with no embargo.

Taking into account the knowledge and experience of librarians regarding digital services, publication and data management, it is a pure waste of resources not involving libraries more deeply into the workflow of the NSOs. Librarians need to develop their lobby potential and work in a more visible way. Only a couple libraries give good example for digital services and active participation in the NSOs' workflow: Finland, Germany, Hungary, and Poland.

# Bibliography

- „A népszámlálás kérdései. Központi Statisztikai Hivatal”. Access: 5/1/2019.  
[https://www.ksh.hu/nepszamlalas/a\\_nepszamlalas\\_kerdesei](https://www.ksh.hu/nepszamlalas/a_nepszamlalas_kerdesei).
- Ajtay, Kálmán. „Adalékok a Központi Statisztikai Hivatal Könyvtára történetéhez (1867-1944)”. In *A Központi Statisztikai Hivatal Könyvtárának évkönyve, 1956-57*, ed. József Kovacsics, 57–81. Budapest: Statisztikai K., 1958.
- Aladár, György, ed. *Magyarország hivatalos statisztikája, történelme és fejlődése*. Budapest: Athenaeum, 1885.
- Bokor, Gusztáv. *A magyar hivatalos statisztika fejlődése és szerkezete*. Budapest: Országos Magyar Királyi Statisztikai Hivatal, 1896.
- Buday, László, ed. *A M. Kir. Központi Statisztikai Hivatal munkássága, 1871-1911*. Budapest: Magyar Kir. Központi Statisztikai Hivatal, 1911.
- Buziássy, Károly. *A fővárosi statisztikai szolgálat 75 éves fejlődése*. Budapest: Budapest Székesfőváros Statisztikai Hivatala, 1946.
- Csahók, István. *Válogatott bibliográfia a magyar hivatalos statisztikai szolgálat történetének tanulmányozásához*. 2 vol. Budapest: Központi Statisztikai Hivatal Könyvtár és Dokumentációs Szolgálat, 1992.
- Dányi, Dezső, and Ferencné Nyitrai, ed. *Tanulmányok a magyar statisztikai szolgálat történetéből*. Budapest: Központi Statisztikai Hivatal, 1998.
- „Együttműködési megállapodás”. *Statisztikai Szemle*, 9 (2011): 1018.
- Garfield, Joan. „Research on Statistical Literacy, Reasoning, and Thinking”. In *The Challenge of Developing Statistical Literacy, Reasoning and Thinking*, 397–409. Dordrecht: Kluwer Academy, 2004.
- Hüttl, Antónia. „Mit mérnek a nemzeti számlák?” *Statisztikai Szemle* 89, 10–11 (2011): 1098–1112.
- Kiszl, Péter. „Ki viszi át...? A könyvtárak társadalmi felelősségvállalása a digitális korban”. *Tudományos és Műszaki Tájékoztatás* 64, 1 (2017): 1–23.
- Nemes, Erzsébet, and Béla Rettich. „A könyvtári tájékoztatás eszközei - a könyvtárlajstromtól az integrált könyvtári rendszerig”. *Statisztikai Szemle* 82, 3 (2004): 280–295.
- Nikiforidoua, Zoi, Aspasia Lekkab, and Jenny Pangec. „Statistical literacy at university level”. *Procedia - Social and Behavioral Sciences*, 9 (2010): 795–799.

- Oblath, Gábor. „Ezentúl minden másképpen volt? - Gondolatok a GDP-adatok legutóbbi revízióiról”. *Statisztikai Szemle* 90, 6 (2012): 559–70.
- Pléh, Csaba. „Gondok (?) az adatokkal”. *Magyar Tudomány* 179, 1 (2018): 148–52.
- Rózsa, Dávid. „Másfél évszázad - élő örökség. Mérföldkövek a Központi Statisztikai Hivatal könyvtárának történetéből”. *Tudományos és Műszaki Tájékoztatás* 60, 10 (2013): 411–420.
- Schiller, Achim, and Joachim Engel. „The importance of statistical literacy for democracy”. In *Challenges and Innovations in Statistics Education*. Szeged: University of Szeged, 2018.
- Sebestyén, György. „Az információtudomány főbb trendjei az ezredforduló után”. *Tudományos és Műszaki Tájékoztatás* 62, 11–12 (2015): 415–28.
- Szilágyi, Károly, András Jóri, and Máté Dániel Szabó. *Az információszabadság elektronikus kézikönyve*. Budapest: Educatio, 2008. <https://www.tankonyvtar.hu/hu/tartalom/tkt/informacioszabadsag/index.html>.
- „Táblák (STADAT) - Témastruktúra”. Access 28/1/2019. <http://www.ksh.hu/stadat>.
- Thirring, Gusztáv. *Budapest székes főváros statisztikai hivatalának története, 1869–1894*. Budapest: Grill, 1894.