

*Józef Pocięcha**

**PROFESSORS KAZIMIERZ ZAJĄC
AND ANDRZEJ IWASIEWICZ
EMINENT STATISTICIANS OF KRAKOW**

In the year 2012 Krakow witnessed the death of two eminent professors of statistics: Professor Kazimierz Zajęc, (PhD, habilitated) and Professor Andrzej Iwasiewicz, (PhD, habilitated). Professor Kazimierz Zajęc, the older of the two and well-known across Poland, was born in 1916 in the town of Krosno in a worker-peasant family. He attended Public Secondary School in Krosno, where in 1937 he was awarded a Secondary School Diploma. After graduating from the school took one year of military service in the Reserve Officer Cadet School in Kielce and obtained the military rank of reserve corporal. In 1938 he began studies at the Academy of Trade in Krakow.



Professor Kazimierz Zajęc

He survived World War II in Krosno. He found a teaching position in the local Public School of Trade, where he taught accounting. At the same time he ran secret teaching courses and was involved in the activities of the Polish Red Cross, organizing aid for Polish officers interned in POW camps. He was sworn in as a soldier of the Home Army – Krosno Circuit, under the pseudonym of "Konrad". He served as adjutant to the commander of the Krosno-Centre outpost. He was promoted to the rank of captain by his commander in the Home Army

Professor Zajęc studied at the Trade Academy in Krakow in 1938–1939 and 1945–1945/46, tying his post-war studies and scientific interests with Professor Jerzy Fierich, the then Head of the Department of Economics. In 1946, while still a student, he took a job as an assistant teacher-volunteer in the Department of Economics and after graduation in 1947 he became an assistant lecturer.

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Immediately after graduation he enrolled for PhD studies at the Warsaw School of Economics, attending Professor Edward Lipinski's doctoral seminar in economics in 1947–1948. In 1949 he submitted a PhD dissertation to Professor Lipinski, but as it was a work in the vein of classical economics, and as a manifestation of non-Marxist "bourgeois economics" it could not be admitted for defence at the onset of the Stalinist era. In 1950, in the face of harassment of Prof. J. Fierich who was viewed as a proponent of the unjust bourgeois economic theory, along with him he tendered his resignation from the Department of Economics, which had become the Department of Marxist Economics. He then moved to the newly established Department of Statistics. That was the beginning of the Department of Statistics at the Higher School of Economics in Krakow where he worked in the years 1954–1961 as a deputy professor.

The "October 1956" breakthrough brought about a departure from the "period of errors and distortions" of the Stalinist years. There was a return to statistical research. Kazimierz Zajac, MEcon, who for his doctoral thesis carried out previously prohibited statistical analysis of workers' wages stood in the forefront of young research statisticians. On 26 June 1958, Kazimierz Zajac was awarded the degree of Candidate (Doctor) of Economic Science and his dissertation was supervised by Professor Jerzy Fierich, PhD, Eng. Five years after receiving his degree of doctor of economic science, Professor Zajac earned a habilitation with his habilitation thesis titled "Econometric Methods of Research into Household Budgets" (1963). Its extended and modified version titled "Econometric Analysis of Household Budgets" was published by the Polish Scientific Publishers PWE (1966). In 1965, following Professor Jerzy Fierich' death, he became Head of the Department of Statistics, which he headed until his retirement in 1986. He received the title of associate professor in 1971, and the title of full professor in 1976.

To recapitulate the Professor's scientific achievements one should emphasise that he made a meaningful personal contribution to the development of statistical and econometric research methodology and empirical research, especially in the areas of social statistics, demography and statistical quality control. His extensive scientific activity spanned a long period of nearly 50 years, from the mid-1950s to the early twenty-first century. He pioneered statistical and econometric studies of the population's income and spending in Poland after the Stalinist period. In those years, the Professor was, and still continues to be, an undisputed authority in the field of research into people's standard of living. This theme of economic and social research threads through the entire period of the Professor's scientific activity resulting, among others, in such books as "Econometric Methods for Determining Consumption Areas" (co-author: B. Podolec) (1978) and numerous scientific papers.

The second research area developed by Professor Kazimierz Zajac involves demographic studies. He is one of the pioneers of micro-demographic historical research, as exemplified by his work titled "Study of the Natural Movement in the Town of Rymanów in the Light of Parish Records from 1850–1950" (1969). He is an undisputed authority in the field of historical demography. In turn, the combination of demographic studies and socio-economic research gave rise to a monograph titled "Demographic Growth Versus Economic Development" (1987) (co-author: A. Sokołowski) and many other of the Professor's studies on demographic and socio-economic development.

Yet another field of statistical research, closely linked to socio-economic and demographic research, involved the development of methodology and application of taxonomic procedures. This is reflected in many of the Professor's publications, prepared mainly in collaboration with his younger colleagues. An example of this is the book titled "Taxonomic Methods in Socio-Economic Studies", (1988), (co-authors: J. Pociecha, B. Podolec, A. Sokołowski). One must not overlook the Professor's research in the field of statistical quality control methods reflected in a number of scientific papers on this issue, and above all in the book titled "Statistical Quality Control Methods", (1973), (co-authors: J. Cyran, J. Steczkowski).

Professor Kazimierz Zajac's historic achievement is his contribution to the training of the scientific faculty of his parent university and of Polish statisticians and econometricians. At his school in Krakow, Professor Zajac supervised dissertations of 24 doctors, and he also acted as a supervisor at other Polish universities. In addition, he reviewed more than 80 doctoral dissertations. The Professor made a major contribution by promoting independent academics. He supervised 22 habilitations and submitted more than 60 reviews of habilitation theses. His reviews of postdoctoral theses were received by many of today's habilitated doctors of economic science. He also submitted 70 promotion opinions on awarding the title of full professor or professor. There is no exaggeration in saying that the vast majority of currently active or already retired Polish professors of statistics, econometrics and related fields were at least at one stage of their research career either promoted or evaluated and motivated for work by Professor Zajac. The Professor enjoyed great authority and commanded respect of the national scientific community of Polish statisticians and econometricians and the persons who, in his time, were assessed by him expressed gratitude for the kindness and constructive advice which they received.

During many years of work at his Alma Mater, Professor Zajac served many diverse functions and was instrumental in contributing to its development. Already in 1954–1958 he was Vice-Dean of the then Faculty of Commodity Science at the Higher School of Economics and in 1964–1968 served as Deputy

Dean of the then Faculty of Production and Trade in Goods. In 1980–1986 he served as Dean of the Faculty of Trading Economics of the Krakow Academy of Economics. The fact that Krakow's school of economics underwent intense development between the 1960s and 1990s in terms of its scientific and didactic potential, what found a formal expression in the change of its name from the Higher School of Economics to the Academy of Economics, can be largely attributed to Professor Zajac's work in top positions at the University.

Through his expertise and organizational work, Professor Kazimierz Zajac, PhD, habilitated, made an impact on the development of both the theory and practice of statistical research in Poland. Among the many functions held outside the university one should mention his chairmanship in 1975–1979 of the Section of Historical Demography of the Committee of Demographic Sciences at the Polish Academy of Science and his chairmanship of the Section of Statistics of the Statistics and Econometrics Committee of the Polish Academy of Sciences in 1978–1981. From 1978 he chaired the Commission of Economic Sciences at the Polish Academy of Sciences in Krakow and since 1990 he also chaired the Commission of Statistics and Demography at the Krakow branch of the Polish Academy of Sciences. As chairman of the bodies he sat on the editorial and programme boards of scientific journals such as: "Poland's Past Demographics", "Demographic Studies", "Statistical Review". In 1986–1990 he was elected a member of the Central Admissions Committee of the Prime Minister, thus contributing to the promotion of the development of independent scientific staff in the field of statistics and econometrics. Professor K. Zajac also made a meaningful contribution to the Central Statistical Office. Between 1965–1995 he was a member of the Scientific Council of the Central Statistical Office, contributing to the demarcation of lines of research and the development of methodology and practice of public statistics in Poland. For many years he was a member of the Scientific Council of "Statistical News". One should also acknowledge his role in the Polish Statistical Association, where, for many years, he was a member of the Association's Main Council.

The Professor always attached great importance to the learning process. He authored or co-authored many books on statistics, among them the outstanding textbook "An Outline of Statistical Methods", PWE, Warsaw, which has gone through five editions so far and which helped educate a host of students at his university in Krakow and at many other Polish universities. The Professor was known and respected by his students as an interesting lecturer. He could speak of statistical methods and their applications in a manner that won them attentive audiences, who, not infrequently, chose them as the subject of their specialization and Master thesis topics. Professor Zajac promoted a vast number of graduate students who, even after so many years, remember him as a distinguished professor of the Cracow University of Economics. Professor

Zając was also a long time professor at the Jagiellonian University, teaching sociology and psychology students, and at the Pontifical Academy of Theology. Professor Kazimierz Zając, died on 6 May, 2012 and was buried at the Salwator cemetery in Krakow.

The other eminent scholar whose academic career was connected with Krakow is Professor Andrzej Iwasiewicz. He was born in 1935 in Augustów but after the war he moved with his family to Solic-Zdroj (now Szczawno Zdroj).



Professor Andrzej Iwasiewicz

There, working and studying, he graduated from a secondary school and was awarded a Secondary School Diploma with Honours.

In 1957, he graduated from the Higher School of Economics in Krakow majoring in commodity science. After three years in industry, in 1960 he became an assistant lecturer in the Department of Chemistry, where, in 1967, he co-founded the Laboratory of Applied Mathematical Statistics in Experimentation. He was also the mentor of the already highly active Student Research Society of Chemistry and Commodity Science. In 1973 he moved from the Department of Chemistry in the Institute of Commodity Science to the Department of Statistics of the then Institute of

Economic Accounting Methods and then to the newly created Department of Statistical Quality Control Methods headed by engineer Professor Jan Steczkowski, PhD, habilitated. In 1993, after Professor Steczkowski's retirement he became the head of the Department and held that office until his retirement in 2005.

Professor Iwasiewicz's scientific and didactic achievements are associated with the following areas of statistics:

- statistical methods and their application in chemical experimentation. This found its expression in the co-authorship of the following books: "Statistical Methods in Chemical Experimentation" (1970), "Statistical Methods for Chemists" (1986) and co-authorship of the work titled "Statistical Methods in Applied Chemistry" published jointly by PWN and Elsevier Publishers in 1990.

- methods of statistical quality control, on which he published numerous scientific papers and a monograph titled "Statistical Quality Control During Production. Systems and Procedures" (1985),

- quality management, which he dealt with after 1990, publishing a range of scientific papers, and most of all the book titled "Quality Management, Basic Issues and Methods" (1999).

Professor Andrzej Iwasiewicz was a long time lecturer and researcher of Krakow's school of economics and significantly contributed to its development. In 1993–1996 he was the Dean of the Faculty of Management of the Cracow Academy of Economics and also a member of many Faculty and Senate committees. He also served in a number of scientific bodies such as the Commission of Economic Sciences of the Polish Academy of Sciences in Krakow and under that mandate he was the editor-in-chief of "*Folia Oeconomica Cracoviensia*". He was a member of the Commission of Statistics and Demography at the Krakow branch of the

Polish Academy of Sciences and a member of the Economic Committee of PAU. Professor Iwasiewicz was involved in public affairs. In the early 1980s he joined the Solidarity movement, having been elected in 1981 a member of the first board of NSZZ Solidarity at the Academy of Economics in Krakow. During martial law, for many years – along with his wife – he cooperated with a Dutch charity, which, through their very intermediation, sent medicines and medical equipment to Poland. In recognition of his scientific, educational and social activities Professor Iwasiewicz was awarded the Gold Cross of Merit (1981), Knight's Cross of OOP (2002) and the Medal of the National Education Commission (1995).

Above all, those who worked with him remember him as an inquiring person with analytical mind and original ideas. At the same time he was a man of high personal culture and cheerfulness, a man serving people with help and advice, courageous and righteous. He died on 19 June, 2012 and was buried at the Salwator cemetery in Krakow.

SELECTED WORKS OF K. ZAJĄC AND A. IWASIEWICZ

- Zajęc K. [1963], *Ekonometryczne metody badania budżetów domowych*, Zeszyty Naukowe WSE w Krakowie, seria specjalna: Monografie nr 3, Kraków.
- Zajęc K. [1966], *Ekonometryczna analiza budżetów domowych*, PWE, Warszawa.
- Zajęc K. [1969], *Studium nad ruchem naturalnym miasta Rymanowa w świetle ksiąg parafialnych z lat 1850–1950*, „Przeszłość Demograficzna Polski”, KND PAN, Wrocław.
- Zajęc K. [1971], *Zarys metod statystycznych*, PWE, Warszawa.
- Cyran J., Steczkowski J., Zajęc K. [1973], *Statystyczne metody kontroli jakości produktów*, PWE, Warszawa.
- Podolec B., Zajęc K. [1978], *Ekonometryczne metody ustalania rejonów konsumpcji*, PWE, Warszawa.

- Sokołowski A., Zając K. [1987], *Rozwój demograficzny a rozwój gospodarczy*, PWE, Warszawa.
- Pociecha J., Podolec B., Sokołowski A., Zając K. [1988], *Metody taksonomiczne w badaniach społeczno-ekonomicznych*, PWN, Warszawa.
- Czermiński J., Iwasiewicz A., Paszek Z., Sikorski A. [1970], *Metody statystyczne w doświadczałnictwie chemicznym*, PWN, Warszawa.
- Iwasiewicz A. [1985], *Statystyczna kontrola jakości w toku produkcji. Systemy i procedury*, PWN, Warszawa.
- Czermiński J., Iwasiewicz A., Paszek Z., Sikorski A. [1986], *Metody statystyczne dla chemików*, PWN, Warszawa.
- Czermiński J., Iwasiewicz A., Paszek Z., Sikorski A. [1990], *Statistical Methods in Applied Chemistry*, PWN, Warszawa, Elsevier-Amsterdam.
- Iwasiewicz A. [1999], *Zarządzanie jakością: podstawowe problemy i metody*, PWN, Warszawa.

