# The Role of Actuaries in Poland

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# 1. Introduction

The history of the actuarial profession in Poland has been an interesting reflection of the modern history of the country. The profession has been established at the beginning of this century and was represented by the internationally recognised Polish Institute of Actuaries, founded in the 1920s. After the end of WWII, actuarial profession was banned and, for nearly 50 years, almost forced into non-existence, to be revived only in 1990. Like every aspect of the Polish market related to the dynamic development of financial institutions, actuarial profession is currently experiencing rapid growth. It is also expanding, quickly widening its area of interests and applications.

# 2. Historical Development

The beginnings of the actuarial profession in Poland go back to the times when Poland regained independence after the First World War. Shortly after the war, Polish Institute of Actuaries was founded and its activities were a reflection of the fast development of the profession. In October 1920, the Institute published a paper on the accreditation of actuaries in Poland ("Memoriał dotyczący aktuarjuszów"), outlining both the process of registration of actuaries and the plans for actuarial education in Poland. In 1922, the Institute sponsored the publication of the first volume of an actuarial research journal *Actuarial News* ("Wiadomości Aktuarialne"). The publication of the journal was irregular and the second issue did not appear until 1933. The Institute was member of International Actuarial Association and Polish actuaries actively participated in the congresses of the IAA.

The then existing insurance companies and mutual funds operated according to the same principles as similar companies in Western Europe and actuaries fulfilled the same functions of calculating and approving reserves of the companies etc. These activities were interrupted by the outbreak of WW II and the return of the traditional insurance activity was made impossible by the changes of the political system in Poland. Many of the Polish pre-war actuaries perished during the war, and some left Poland. Actuaries, with their high professional standards, were not needed for the single state owned insurance company. The elimination of competition in the insurance market made actuaries superfluous. Only two PZU actuaries maintained some continuity of international contacts. No proper actuarial education was available, even though some higher education institutions did offer some, mostly introductory, courses in insurance applications of mathematics. Those were the Higher School of Commerce (Wyższa Szkoła Handlowa), where insurance mathematics was taught before the war. With the elimination of the profession, even the word *aktuariusz* disappeared from Polish encyclopaedias and dictionaries, for a long period of time.

Immediately after the war, through the initiative of the Mathematical Institute of the Polish Academy of Science, Poland did participate in the activities of the Committee for the Organisation of Actuarial Congresses but this co-operation was soon interrupted. Despite the lack of support from the insurance authorities, there was still enough interest and awareness of the actuarial tradition in Poland to maintain links with international actuarial organisations. A formal link with IAA was re-established only in 1956. There was, however, little access to actuarial literature and the development of new actuarial techniques did not find any

immediate application in Poland. At the beginning of 1980s, with the advent of a new political approach to the economy, the need for actuarial education was voiced again (cf. Stroinski, 1981, "Kształcenie aktuariuszy na świecie i w Polsce", *Wiadomości Ubezpieczeniowe*, pp. 18-21). However, the crackdown in December 1981 delayed the chances for a new beginning for another 9 years.

The renaissance of the actuarial profession was made by the new Insurance Law introduced on 28 July 1990. It required all life insurance companies to have their reserves calculated by a recognised and licensed actuary and all other insurance companies (non-life) to their reserves confirmed by an opinion of an actuary. The new law was introduced in a vacuum as, in 1990, there were no means for providing actuarial education to have actuaries trained, so they would meet the requirements of the new insurance law. In order to initiate the development of actuarial education, the Ministry of Finance invited me in the summer of 1990, immediately after the new insurance law came into existence, to teach a crush course in insurance mathematics to a group of employees of the Ministry. The Ministry financed this first oneweek course, with assistance provided by the Canadian Ministry of Foreign Affairs. Canadian assistance continued over the period of the following years and the first crush course taught practically single handily by the author developed into a succession of Actuarial Summer Schools organised at Warsaw University. A great number of foreign participants helped to teach in the Summer School but one cannot imagine the programme without participation of Philip Booth, Samuel Cox, Christopher Daykin, Charles Levy, John Mereu and Christian Partrat.

Actuarial Summer School in Warsaw, a three-level, intensive programme of actuarial courses, became not only an internationally recognised educational forum, which attracted as teachers many academic and professional actuaries from Western Europe and North America. It also became a forum for actuarial students from several countries in Central, Southern and Eastern Europe who came to Poland to learn about profession that could not be learned in their countries. The best testimony to the importance and usefulness of the Summer School is the fact that it survived the end of major external funding from Canadian International Development Agency and continues under excellent direction of Dr Wojciech Otto without a lot of international input. Among those who today run insurance companies in Poland, there are several students educated at Summer Schools over the period of the last eight years. Some of the former students returned to the Summer School as teachers to educate next generation of Polish actuaries. The Summer School programme was best suited for those who already had jobs or who were still at the university but were able to condense their studies into three five week intensive courses. It does not and should not replace a permanent full time degree programme in Actuarial Science and has always been meant to provide a transition form of actuarial education until permanent university degree programme is introduced.

Universities supported the development of actuarial education from early start. The most notable is here the involvement of the Faculty of Economics at Warsaw University that has organised the teaching and administration of 12 out of 13 Summer Schools and constructed the programme. Marian Wiśniewski and Wojciech Otto deserve the credit for most of this work.

Some other universities followed by offering various levels of actuarial courses that have helped to recognise the importance of the actuarial discipline.

Apart from the development of actuarial training, the newly established profession has its representation in the form of the Polish Society of Actuaries, founded in 1992 by the students of the Actuarial Summer School. The Society played a catalysing role in accelerating the development of actuarial profession in Poland. It provided a model for developing actuarial syllabus and represented the newly established profession in Poland and abroad. It introduced actuarial examinations and ran them for a few of years, until the examination system was taken over by the Ministry of Finance in co-operation with the Society. It also channelled the assistance from international professional bodies by encouraging and gratefully receiving book donations and establishing a Society's library.

# 3. The Insurance Act of 28 July

The new Insurance Act, introduced on 28 July 1990, required all life insurance companies in Poland to employ actuaries and the amendments to the Act, dated 8 June 1995, became more specific and required that all life insurers have their technical reserves calculated solely by an actuary. The non-life insurance companies were required to have the calculation of their technical reserves confirmed by an actuary. It was required that the amendments passed on 8 June 1995 be introduced by life insurance companies within one year for their announcement, and by non-life within three years from date of their announcement.

The Insurance Act defined the requirements that the candidates had to meet in order to be considered an *actuary*. The following qualifications were specified: full legal ability, residence in Poland, clean record for criminal offences against property and financial regulations, completed university education, passed actuarial exams, registration with the Insurance Supervisory Authority (name entered on a list of qualified actuaries). Actuaries who qualified abroad have the right to be entered on the list if the country where they qualified recognises Polish actuarial qualifications (on a mutual recognition principle). Deletion from the list takes place if the person applies for such a deletion, ceases professional activity for the period of five years, as well in case of a criminal offence against property or financial laws, loss of full legal ability or death. The Minister of Finance establishes the commission that sets and carries out actuarial exams. A representative of the Polish Chamber of Insurance is a member of the exam commission. The list of qualified actuaries is published in the Official Bulletin of the Ministry of Finance. There are 113 actuaries with licences to date.

#### 4. Traditional Roles of an Actuary

The distinct between traditional and non-traditional functions of an actuary is perhaps not the most suitable one for Poland, as the profession is still young here and, for the first Polish actuaries in this half of the century, as roles were "new". Nevertheless, it is still possible to talk about more and less traditional applications of insurance mathematics, as some of the calculations had to be performed even in environment where money come from and went into the state budget, (cf. Booth & Stroinski 1994).

The main areas that would require actuarial expertise are:

- Insurance and reinsurance supervision and development
- Pension funds supervision and development
- Other employee benefits calculation
- Social security planning.

Of these areas, so far, only the first one is more fully developed. Unfortunately, the reform of the social security system in Poland created a lot of work for lawyers but little for actuaries.

# 5. Non-traditional Roles of the Actuaries

The non-traditional areas of actuarial involvement include work in banks, investment companies, and health care services as well as in marketing and sales. These non-traditional areas employ more and more actuaries world-wide. At present time, to my knowledge, very few actuaries work in these areas in Poland. As the supply of qualified actuaries increases, more and more actuaries will no doubt seek employment in these non-traditional areas. Actuaries with good quantitative skills will likely be recognised as excellent appointments in all kinds of financial institutions or organisations that have long term financial liabilities or market long term financial products. For now, however, with the shortage of qualified actuaries in traditional areas and very few full-time consulting actuaries, it will be some time before the non-traditional areas of work for actuaries develop.

Actuarial involvement in the area of other employee benefits is now limited to actuarial opinion on reserves with respect to a rather modest range of employee benefits, like termination benefit, periodic jubilee awards, etc.

#### 6. Polish Society of Actuaries and Actuarial Exams

After a lull in its operation Polish Society of Actuaries increased membership and the management Board. PSA started to be active in internal assistance to actuarial profession and is working towards its international recognition. It is hoped that with maturing of the PSA membership its role will strengthen and the public service of the actuarial profession will become more apparent. The system of actuarial examinations, which firmly established Polish actuarial qualification needs to be changed again as it stifles the development of the profession. It is probably the highest time to introduce new subjects and to widen the scope of the actuarial exams to be more in line with actuarial professions elsewhere.

#### 7. Conclusions

In the eighty years of its history, actuarial profession in Poland went through bad and good times, from rapid development to a long period of latency. In 1990, fewer than ten years ago, even the most optimistic prognosis would have likely failed to predict the high level of the current development of the insurance market in Poland. It is regrettable that actuaries in Poland could not enjoy eighty years of uninterrupted professional development. But it has to be said that in the face of all difficulties and obstacles, Polish actuarial tradition remained a strong foundation on which the new generation of Polish actuaries can build their future. The new opportunities bring new challenges, but the profession is likely to grow in its importance, if it only manages to ensure high entry standards, as well as good professional practise standards.

#### References

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