

Obituary of Teivo Pentikäinen¹

Prof. Teivo Pentikäinen died on 12 June 2006, aged 88. We have lost one of our great thinkers and a very devoted actuary who saw his role as standing up to defend basic principles and moral values whenever necessary. His career as an actuary was of the highest distinction, as well in administration and industry as in academics.

Teivo Pentikäinen was born in 1917 in Vyborg, then in Finland but nowadays in Russian territory. After the war service he graduated from the University of Helsinki in mathematics and he completed his Ph.D. thesis on additivity properties of algebraic function systems in 1947. During his whole carrier he taught at the University of Helsinki. He received an Honorary Professorship in 1977.

He was chief director in 1948 through 1962 of the insurance department of the Finnish Ministry of Social Affairs and Health (the body responsible for the insurance supervision and drafting legislation on both private and social insurance). He became the President and CEO (Chief Executive Officer) of the newly established pension insurance company Ilmarinen in 1962. He developed the company to become the biggest in the Finnish market. He retired from Ilmarinen in 1977.

Teivo Pentikäinen is known as the Father of the Finnish statutory earnings-related pension scheme, established in 1962 and run by private pension insurance companies and pension funds. He chaired the committee on whose work the legislation was based. His role in getting the social partners and politicians to agree on the scheme was decisive.

He also chaired the committee which made a total reform of the Insurance Company Act in 1952 with a new solvency system based on modern risk theoretical thinking and with marked practical consequences such as creation of the Equalization Provision System and reduction of the costs of outgoing reinsurance as a consequence of the improved risk-carrying capacity of the companies.

He was also the primus motor in a major reform of the Finnish motor liability insurance and workers' compensation insurance at the beginning of the 1960's. The reforms meant introduction of strict liability, abolishment of ceilings on compensation paid for bodily injuries, and a complete overhaul of the actuarial bases applied to the two lines.

Teivo Pentikäinen was one of the greatest contributors to the Theory of Solvency in the second half of the 20th century. He did pioneering work with respect to the scientific foundations for the establishment of the solvency needed, and the optimal size and form of reinsurance already in the 1950'ies.

At the beginning of the 1980's, the Finnish Ministry of Social Affairs and Health requested him to make a study on solvency of non-life insurance companies. He had developed a number of techniques based on simulating techniques in the meantime. He carried out his assignment together with many others. The publication appeared in 1982 and is entitled Solvency of Insurers and Equalization Reserves. The book received Clarence Kulp memorial award 1984 for the best risk theory book, granted by the American Risk and Insurance Association. The Finnish solvency requirements were fully reformed on the basis of that work.

Furthermore, he significantly contributed to the research on Risk Theory. With his many publications in international journals over 45 years he had a great influence on the work of many actuaries. He was the initiator and coauthor of the book Risk Theory, (London

¹ASTIN Bulletin, 2006, Volume 36, Number 2.

1969 with R.E. Beard and E. Pesonen) and its renewed version, Practical Risk Theory for Actuaries, (London 1994, with C. Daykin and M. Pesonen).

Prof. Pentikäinen was an active ASTIN member. He was among the ASTIN founders in 1957 and he contributed actively to ASTIN colloquia and the Astin Bulletin until the most recent years.

Prof. Pentikäinen received numerous awards recognizing and honoring his achievements both nationally and internationally. He was an honorary fellow of the Institute of Actuaries and the Actuarial Society of Finland.

Even while retired, Pentikäinen participated in the public debate about the insurance sector through his books, lectures, evaluations, and writings. He was an unyielding, at times even brisk, defender of the insurance ideology. Good readiness for this was provided by his broad knowledge which extended also to the details, continuous following of international developments, and top-notch capability of expression.

Pentikäinen's sharp-witted humour and quick intellect may have scared the unaccustomed other party to the discussion, but maybe precisely because of these characteristics he had a broad and faithful group of friends. In addition to these friends, also his family members and other close relatives mourn his passing.