



SOCIETY OF ACTUARIES

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# International News

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## Update on the SOA International Experience Study

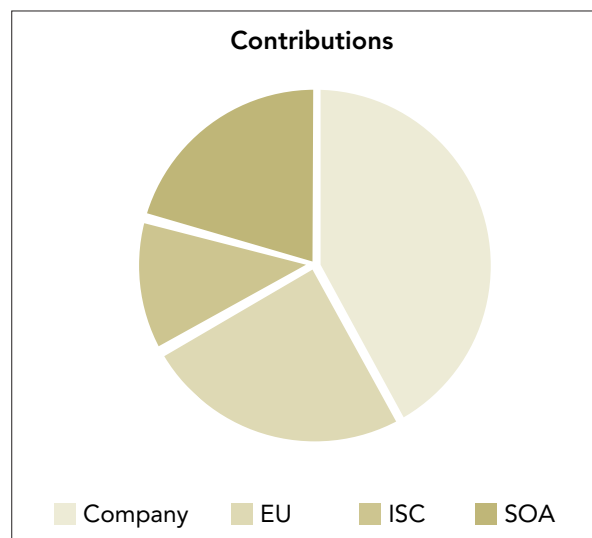
William Horbatt, Dieter Gaubatz, Phil Lehpamer, Nasir Whaind, Fouzia Boussetta<sup>1</sup>

**T**he Society of Actuaries International Experience Study (IES) initiative is in its seventh year.

During that period, considerable progress has been made expanding experience studies into less developed parts of the world. This article presents the most recent preliminary results from Argentina, the Caribbean, the Philippines, Poland and Vietnam.

### BACKGROUND

The IES started under the umbrella of the SOA International Section Council (ISC), in response to its members' desire for credible actuarial experience outside more developed countries. The SOA Research Department formally joined the effort by providing funding and staff resources. In addition, several companies have provided financial support for the development of an experience study tool programmed in Microsoft Access/Excel. The European Technical Assistance Programme for Vietnam also provided financial support for the Vietnam study. The graph below shows the distribution of funding by source, although it ignores the countless hours devoted by volunteers in countries and within the IES working group.



The vast majority of the funds (82 percent) were invested in the development of the Microsoft Access/Excel "tool." The balance was spent on travel expenses, marketing and assisting country actuaries in performing studies.

<sup>1</sup> The authors are members of the SOA International Experience Study Working Group (IESWG)

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### APPROACH

The IES has evolved into a country model in which the SOA and the country actuaries jointly share responsibilities to successfully complete a mortality and persistency study of insured life experience. Local actuaries, either the local actuarial society or an "ad hoc" working group, determine the parameters of each study. Then each participating company populates Microsoft Access tables with company specific serial-tim policy data. The SOA provides each company with a copy of, as we refer to it, the IES "tool." It is written in Microsoft Access/Excel. This tool produces summary reports from the company inputted data. These reports are confidentially compiled by the SOA. The resulting aggregate data is returned to the local actuarial group for their review. The IES tool is provided to each participating company at no charge under the single condition that permission is given to publish the combined results of the study.

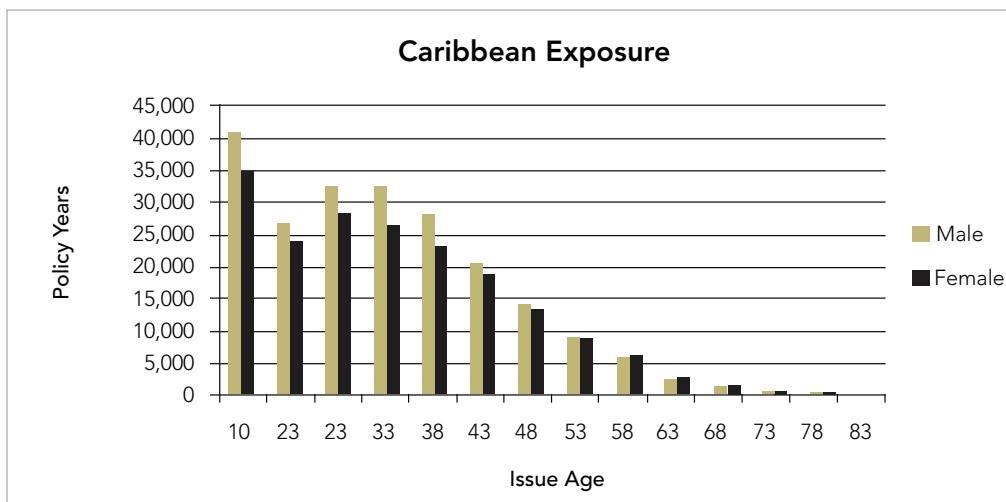
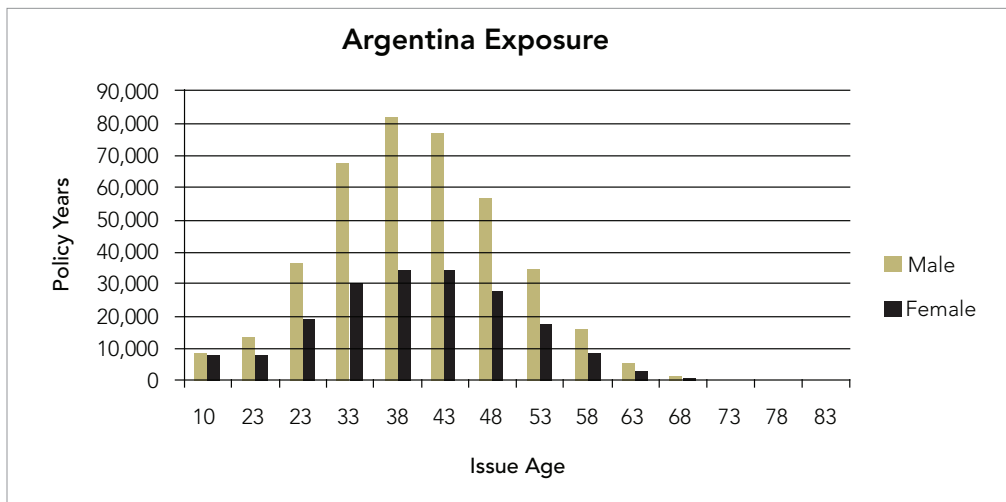
The SOA and IESWG volunteers support these efforts by assisting company actuaries when questions arise and in compiling and reviewing data. SOA Research Department standards are followed at all times. This includes guidelines such as prohibiting the release of any data that would be overly biased by an excessive proportion of the total exposure risk being provided from a single company's contribution. In fact, the study for one country (Brazil) was never published due to such data concerns.

A second version of the IES tool is now in Beta Testing. It is expected to be released shortly to participating companies.

that, for example, one policy in force for two years generates two units exposure.

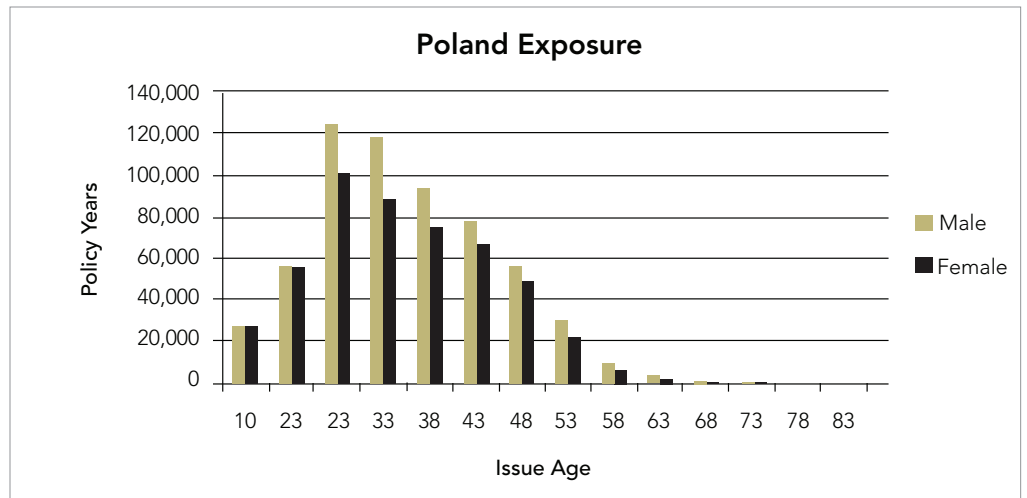
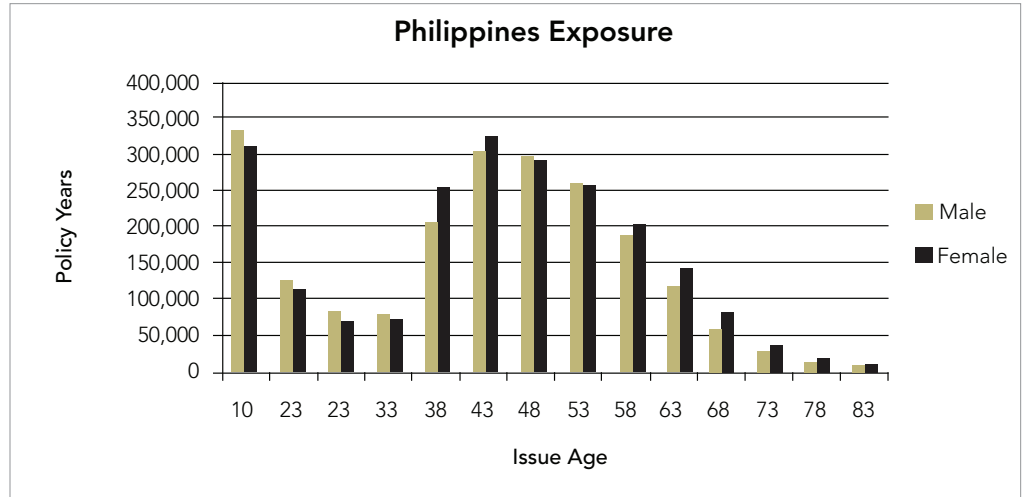
**EXPOSURE TO RISK**

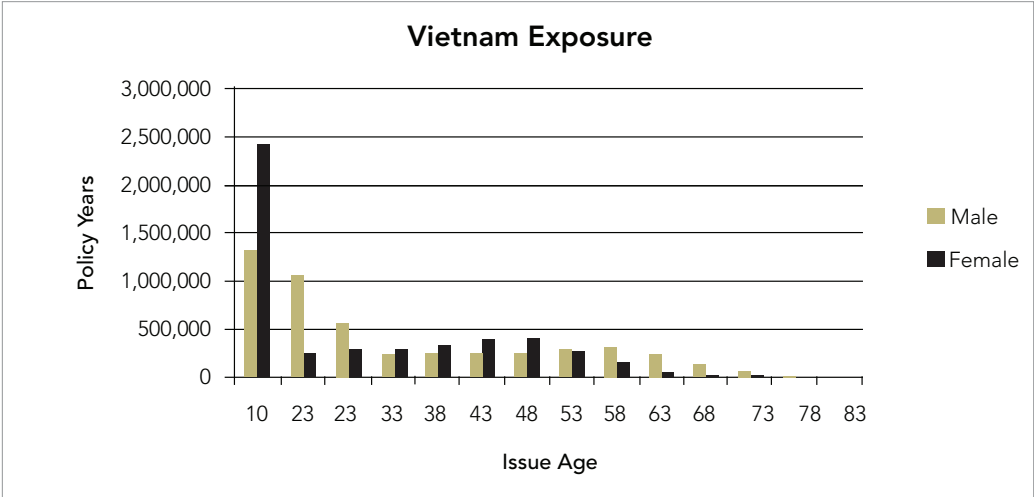
The graphs below show the exposure to risk based on age at issue and gender for each country. Exposure is expressed in contract years so



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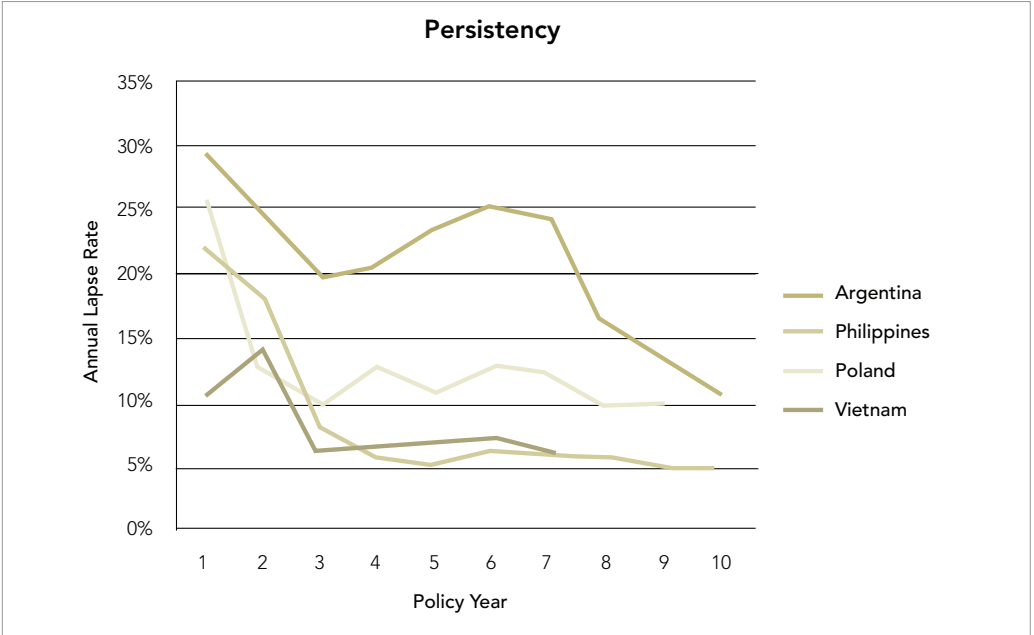


When viewing this data, it should be kept in mind that both Poland and Vietnam are relatively young markets with private insurance developing over just one decade. On the other hand, Argentina and the Philippines are more mature with decades of experience. It should also be noted that the experience in the Philippines and Vietnam provides results from the

vast majority of the companies in their markets, while in Argentina, the Caribbean and Poland, only a smaller group of companies have agreed to participate in the study.

**PERSISTENCY**

The next graph shows persistency experience in terms of lapse rates by policy year.

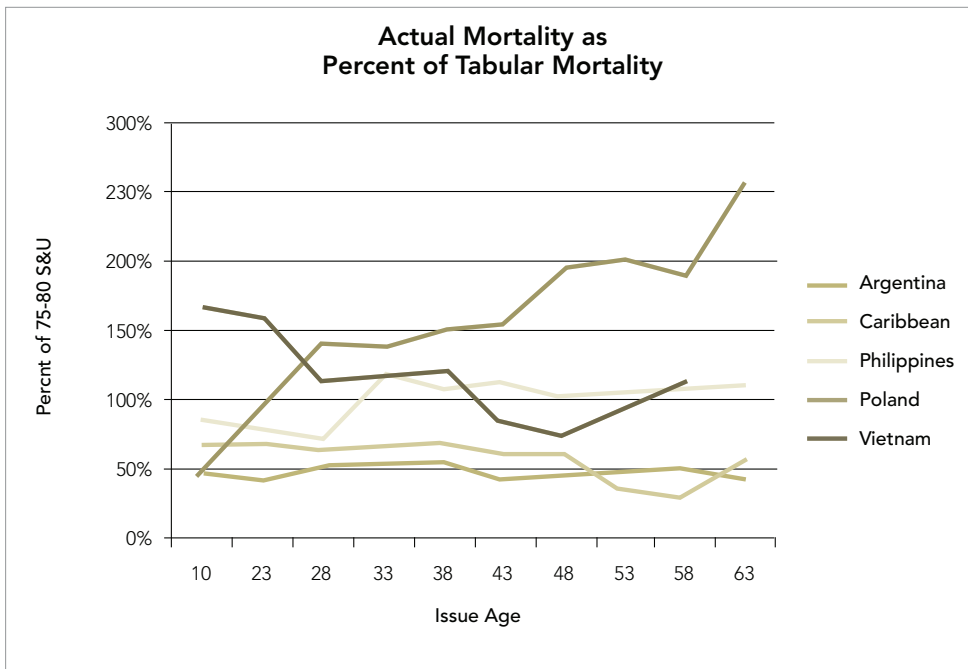


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Note that Argentina was impacted by the devaluation of its currency during their study period while both Poland and Vietnam have no data from before the privatization of insurance.

**MORTALITY**

The table below provides actual mortality experience, expressed as a ratio of the SOA 1975-80 Select & Ultimate table.



**FUTURE DEVELOPMENTS**

The IES anticipates that several additional countries will contribute data within the next year and that even more countries will elect to study their emerging experience annually on an ongoing basis. A number of companies have expressed a desire to participate in this initiative in the following countries:

- Brazil
- Estonia
- Hong Kong
- South Korea
- Taiwan

It is particularly encouraging that both the Philippines and Vietnam began their studies on their own initiative. Hopefully, their actions will encourage even greater participation from other Asian companies in the future.

Thanks

The International Experience Study would like to thank all the companies that have participated in studies to date, as well as organizations that contributed the funds to make the IES possible. Although it would be impossible to thank each individual, we would like to explicitly thank the following groups:

- SOA International Section Council
- SOA Research Department
- European Technical Assistance Programme for Vietnam (ETV2)
- ING
- MetLife
- New York Life
- Prudential Financial

Readers of this article are free to contact either Ronora Stryker of the SOA Research Department at [rstryker@soa.org](mailto:rstryker@soa.org) or William Horbatt, Chairperson for the study, at [Horbatt@ActuarialConsortium.com](mailto:Horbatt@ActuarialConsortium.com). □