

## **SOA International Experience Study**

### **Vietnam 2009**

#### **Introduction**

The 2009 Vietnam experience study was undertaken as a joint research venture between the 9 Vietnamese insurance companies and the Society of Actuaries (SOA) International Experience Study (IES).

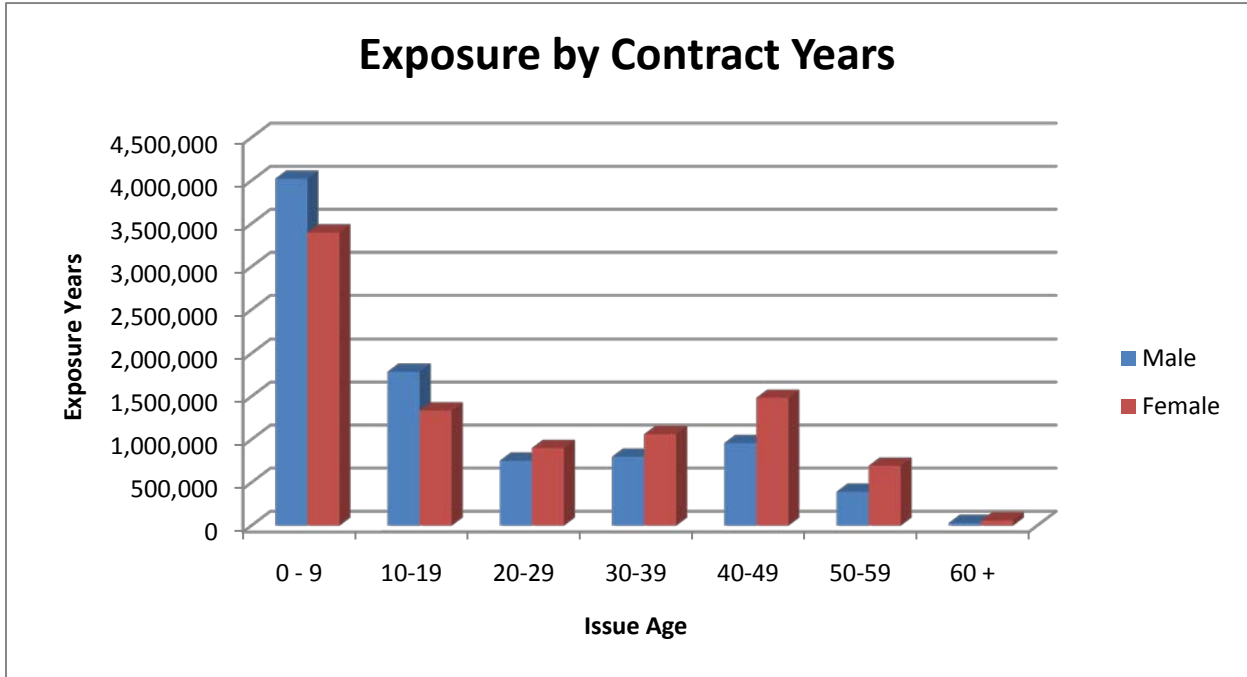
The 2009 Vietnam experience study includes both mortality and persistency studies of policies in force any time during the 2004-2008 study period. The study applies to the entire portfolios of the contributing companies and these companies represent the entire Vietnam individual life insurance market. Separate studies were performed based upon policy counts and insurance in force. Actual mortality was compared to expected mortality based upon the SOA 1975-80 select and ultimate mortality table.

Each of the contributing companies prepared a policy file of all policies in force during the study period that including policy, demographic and status information. These files were processed by each company using the SOA IES experience study tool and summary information was sent to the SOA Research Department for compilation. This report presents some of the summary information that was returned to the Vietnamese actuaries for their review.

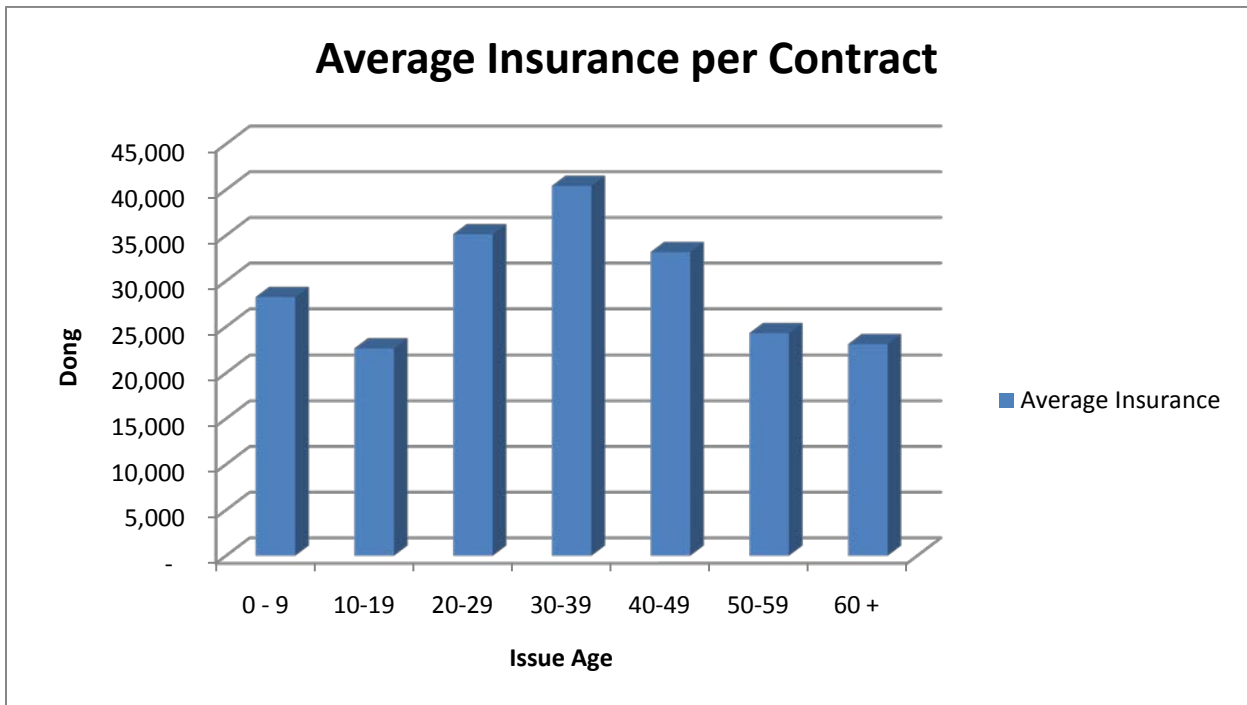
The study relied primarily upon the company actuaries to validate the quality of the data submitted although members of the SOA International Experience Study Working Group did review the data submissions for high level consistency. This study is the second study performed in Vietnam and although there were no known data issues it is still expected that data quality is likely to improve as subsequent studies are performed.

## Results

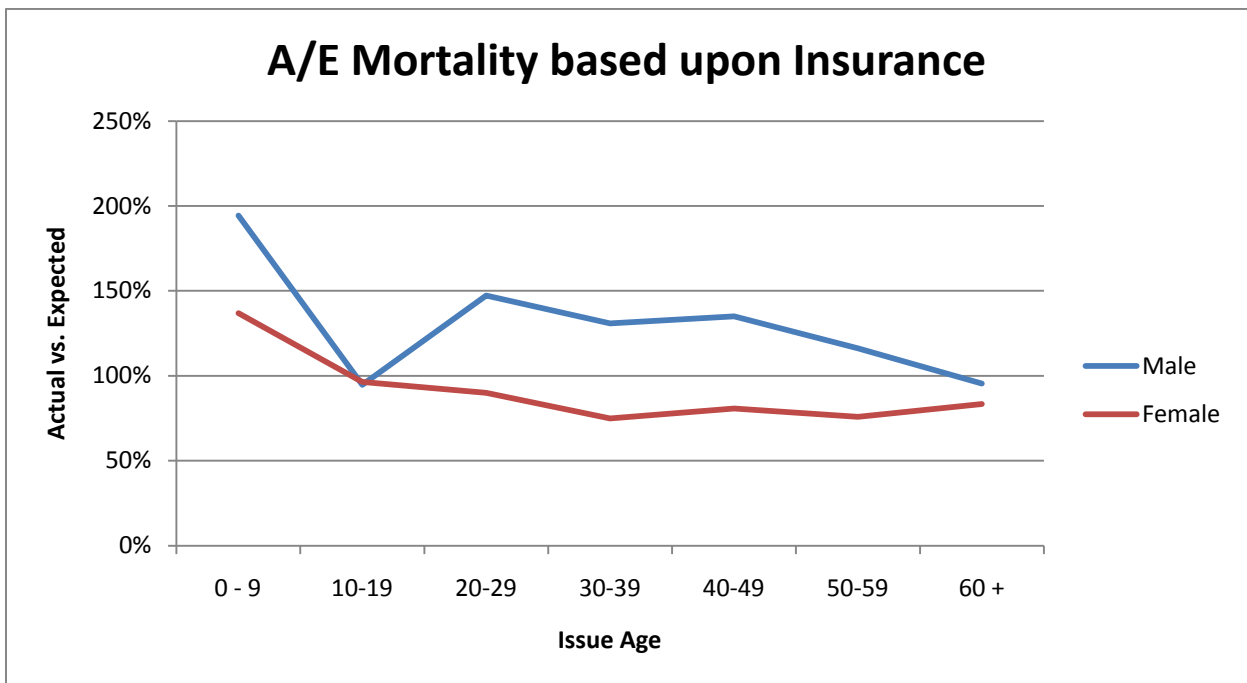
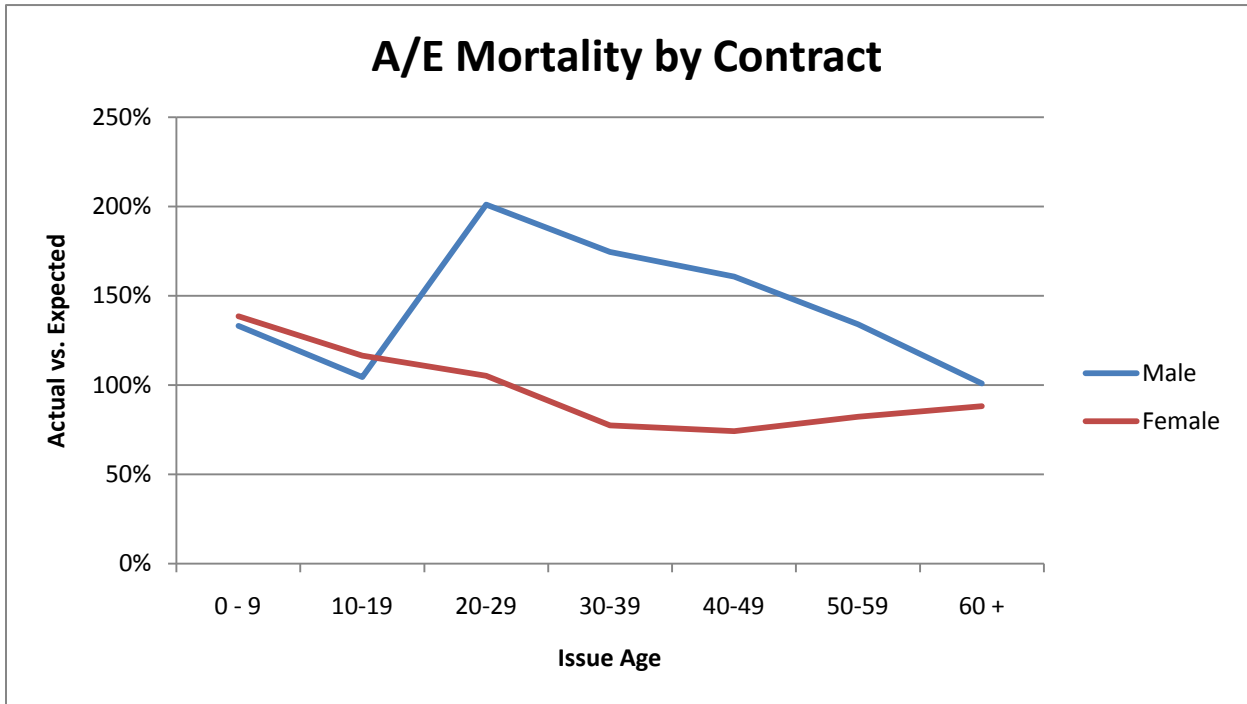
The graphs below illustrate results from the study. Additional detail is contained in the appendix to this report. The first graph shows the exposure to mortality risk based upon contracts. One contract year of exposure equals one contract in force for one year.



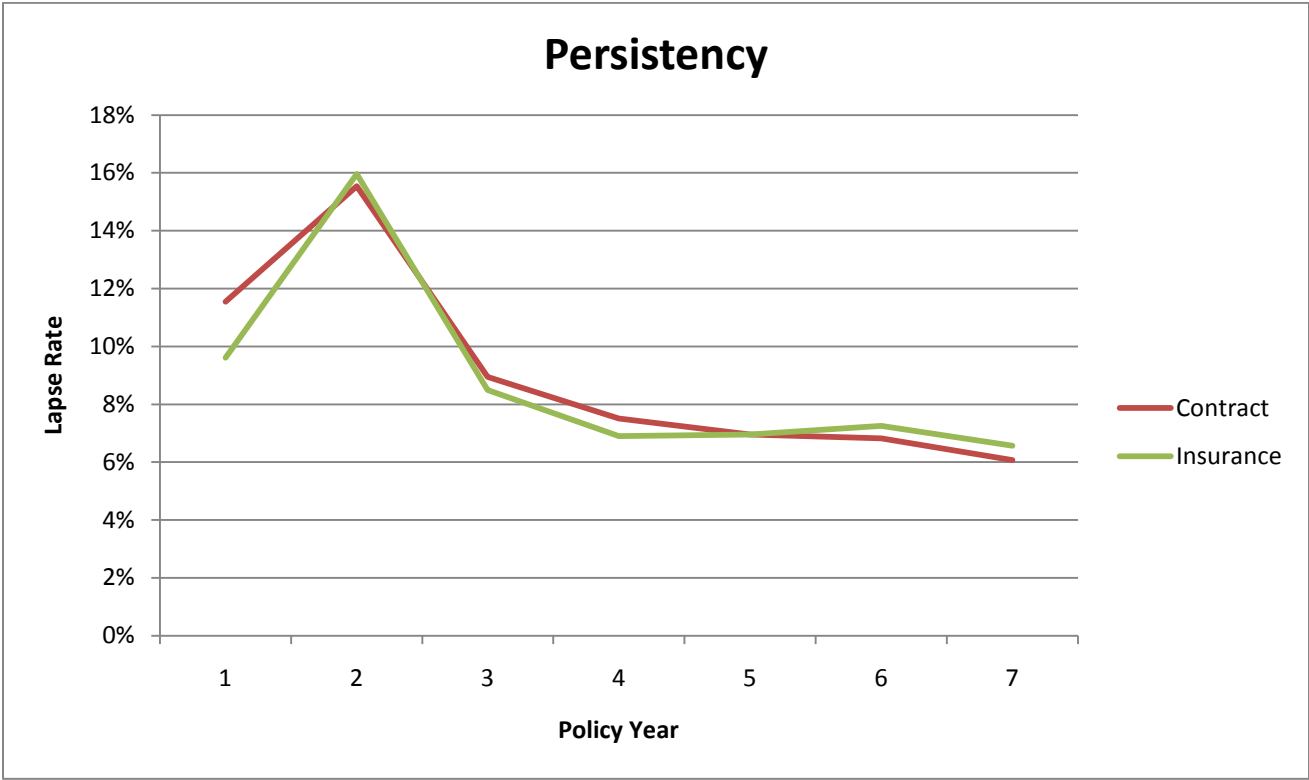
The next graph shows the average insurance per contract.



The next two graphs show the ratio of actual mortality to expected mortality based upon the SOA 1975-80 select & ultimate table. One graph is based upon contracts in force while the other is based upon insurance.



The final graph presents persistency bay policy years



Appendix A: Mortality Data

Mortality By Contract - Males

Age At Issue	Exposure	Actual Claims	Expected Claims	Actual / Expected
0 - 9	4,023,285	2,000	1,501	133%
10-19	1,787,982	1,458	1,394	105%
20-29	753,560	1,168	581	201%
30-39	800,687	1,549	888	174%
40-49	958,948	3,740	2,327	161%
50-59	392,804	2,496	1,861	134%
60 +	30,607	290	287	101%
Total	8,747,872	12,701	8,840	144%

Mortality by Contract - Females

Age At Issue	Exposure	Actual Claims	Expected Claims	Actual / Expected
0 - 9	3,397,775	1,201	867	138%
10-19	1,336,951	552	474	116%
20-29	901,467	394	374	105%
30-39	1,062,165	673	868	77%
40-49	1,485,154	1,849	2,493	74%
50-59	695,234	1,643	1,995	82%
60 +	59,239	263	298	88%
Total	8,937,984	6,573	7,369	89%

Mortality by Insurance – Males  
(Amounts in 1 million VND)

Age At Issue	Exposure	Actual Claims	Expected Claims	Actual / Expected
0 - 9	115,650,517	83,486	42,942	194%
10-19	40,766,344	30,199	31,904	95%
20-29	28,509,086	31,940	21,691	147%
30-39	35,947,939	50,355	38,454	131%
40-49	35,705,786	113,117	83,815	135%
50-59	10,870,332	55,854	48,096	116%
60 +	790,236	6,982	7,308	96%
Total	268,240,239	371,933	274,209	136%

Mortality by Insurance – Females  
(Amounts in 1 million VND)

<b>Age At Issue</b>	<b>Exposure</b>	<b>Actual Claims</b>	<b>Expected Claims</b>	<b>Actual / Expected</b>
0 - 9	93,912,723	33,263	24,293	137%
10-19	29,905,998	10,102	10,487	96%
20-29	29,600,880	10,705	11,900	90%
30-39	39,320,982	22,762	30,418	75%
40-49	45,337,227	58,915	72,955	81%
50-59	15,546,631	32,006	42,231	76%
60 +	1,283,024	5,276	6,321	83%
<b>Total</b>	<b>254,907,464</b>	<b>173,029</b>	<b>198,606</b>	<b>87%</b>

## Appendix B: Persistency Data

### Persistency by Contract

Policy Year	Exposure	Lapses	Lapse Rate
1	2,928,998	338,315	11.6%
2	2,899,619	450,667	15.5%
3	2,866,931	256,612	9.0%
4	2,807,872	210,657	7.5%
5	2,531,065	176,058	7.0%
6	1,893,609	129,142	6.8%
7	1,174,374	71,295	6.1%
Total	17,102,468	1,632,745	9.5%

### Persistency by Insurance (Amounts in Dong)

Policy Year	Exposure	Lapses	Lapse Rate
1	109,394,644	10,517,467	9.6%
2	91,860,660	14,666,064	16.0%
3	80,246,193	6,817,759	8.5%
4	76,409,171	5,271,684	6.9%
5	66,423,796	4,616,439	6.9%
6	49,876,648	3,619,665	7.3%
7	31,793,719	2,088,800	6.6%
Total	506,004,831	47,597,879	9.4%

## Appendix C: Contributing Companies

ACE

AIA

BaoViet

Cathy

Dai-Ichi

Great Eastern

Manulife

Prevoir

Prudential LLC