## The Impact of Price Changes on Costs

by Russel L. Sutter, FCAS, MAAA

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"Have fun, satisfy customers, make money", a motto of Scott Adams, creator of "Dilbert."

The traditional role of the pricing actuary is to estimate an insurer's expected future costs for an upcoming policy year. Those cost estimates are then used to recommend the product's price. However, traditional actuarial techniques for estimating future costs do not reflect changes in customer behavior based on changes in the product's price. Effectively, the techniques assume customer behavior and product price are independent.

This paper will show that the pricing actuary has the process backwards. Instead of using expected costs to set price, the actuary would be better served by estimating future costs based on a selected price, and determining which future price/future cost combination is most attractive to the insurer.

The rationale behind this paper is that customer behavior is dependent on price. As such, price changes will have an impact on the insurer's retention of current customers, the insurer's attractiveness to new customers and the quality of those customers (from a loss cost perspective). Moreover, an insurer's expenses are not entirely variable with premium. The ability to attract and retain customers has an impact on the insurer's expenses and expense ratio.

This paper will present a model of an insurer in which a rate decision is to be made. The rate decision will be viewed from the traditional approach and from an approach developed in this paper.

#### The Current Situation

ABC Insurance Company has been writing a particular line of business in State X for several years and views the marketplace as reasonably competitive. Business through 1996 had produced profitable results. However, effective January 1, 1997, a law change in this state was enacted that the insurers at that time believed would be negligible to their losses. ABC has found that the law change has increased their losses significantly relative to prior years.

The State X regulators require all rate changes to be enacted on January 1 and to remain unchanged for the remainder of the year. As such, all companies who wish to adjust their rates must do so on January 1 or defer action for one year.

Exhibit 1 shows the rate level indications for ABC Insurance Company. The indications, developed by the pricing actuary, reflect a traditional ratemaking approach. Based on Policy Year 1997 data at year-end 1997, a 15.6% increase is indicated. The actuary has used a target rate of return of 15% on surplus in his indication, assuming ABC maintains a constant 2 to 1 premium/surplus ratio.

For simplicity, timing of data evaluation and actuarial analysis are assumed to be instantaneous. Year-end 1997 data is available on December 31, 1997. Rate decisions for ABC will be made and filed with the state that day. Also, trend and inflation are assumed to be zero. Loss costs were much higher in 1997 than in prior years, but only due to the law change. Future loss costs will be at similar levels to those seen in 1997.

The traditional ratemaking approach suggests that ABC can achieve its targeted profitability level in 1998 by taking a 15.6% rate change on January 1, 1998. There are probably few insurance companies, and few actuaries as well, who wholeheartedly believe this. Rate activity decisions are rarely made in such a vacuum. Company management certainly realizes that a 15.6% rate increase may have an impact on the current customers and the anticipated new customers in 1998.

Many actuaries believe that the 15.6% rate increase will in fact not produce the targeted profitability. But few attempt to explicitly calculate the impact. Rate level indications do not contain a feedback procedure, in which rate changes are factored into the projected costs. Under such an approach, the actuary for ABC would be able to give an opinion on the expected profitability of the company on 1998 policies given any rate change decision.

#### The New Approach

The rate level indications in Exhibit 1 reflect the 1997 policy year experience of ABC. Another way to look at this experience is provided in Exhibit 2. This exhibit shows the 1997 experience by class and by original effective date (OED) of the customer. The experience is sorted by each class/OED combination.

Each class/OED cell produces a contribution margin. This reflects the revenue of each cell (premium) less the cell's marginal costs (loss costs and variable expenses). The sum of all cells' contribution margins less the company's fixed expenses yields the underwriting profit or loss for ABC.

Under the new approach, the actuary forecasts the 1998 contribution margins of each class/OED cell (including cells for 1998 new business). The forecasts consider the pricing change, as that change will have a bearing on the volume of business in that cell, and the underlying loss costs of the cell's business.

To properly model contribution margins by cell, the actuary needs to make assumptions regarding:

- The impact of a rate change on customer retention
- The impact of a rate change on new business production
- The insurer's expense structure to properly assign expenses to variable and fixed components
- Possible adverse or favorable selection due to rate activity

The actuary may lack sufficient quantitative data to comfortably make these assumptions. Lack of data does not diminish the need for them. Qualitative or anecdotal evidence may exist, perhaps within other departments of the company, that may assist the actuary.

## **Critical Assumptions**

#### A. Customer Retention

Through the actuary's research of ABC's customer retention patterns, both in this state and product line as well as others, four general conclusions may be drawn.

- 1. Different classes of business have different retention patterns.
- 2. Retention improves as competitive position improves.
- 3. Retention improves as the customer's years with ABC increase.
- 4. Rate changes are inversely correlated with retention.

Item 1 notes that retention varies by class. Class is loosely defined; it reflects mutually exclusive distinctions, but does not necessarily have to reflect different rating variables. For example, Class A may be those insureds who have previously purchased another product with ABC. Class D may be business from a different distribution system.

Item 2 is fairly intuitive. ABC's customers will be less likely to leave ABC if ABC's rates are much lower than the competition.

Item 3 recognizes the loyalty and/or inertia of long term customers. New customers are more likely to leave than repeat customers.

Item 4 is separate and distinct from Item 2. Item 4 is based on the premise that today's price creates an expectation in the customer's mind regarding tomorrow's price. Rate changes reflect a variance from that expectation. That variance has an impact on retention.

Based on the four conclusions, the pricing actuary creates a chart of retention relativities for a given class. Exhibit 3 shows an example for Class A assuming average competitive position (Sheet 1), lower than average rates (Sheet 2), and higher than average rates (Sheet 3). The chart reflects the actuary's opinion that a new customer has an 85% probability of staying with ABC for another year if there is no rate change and ABC's rates are average competitively. Conversely, that probability rises to 92% for a customer who has been with ABC for 10 years.

Exhibit 3 also shows the actuary's perceptions regarding the sensitivity of retention to rate changes. Three observations worth noting are:

- 1. The retention distribution is not symmetric; a 5% rate increase will lower retention by a greater amount that a 5% rate decrease will raise it.
- 2. The retention distribution is not linear; a 10% rate increase will cause more than the twice the number of customers to leave compared to a 5% rate increase.
- 3. The retention distribution varies by customer tenure (i.e., how long the customer has been with the company). The longer the customer has been with the company, the less sensitive the retention is to rate action.

To aid in making these judgments, customer retention data for the company needs to be available. The company should monitor the retention of a group of customers based on when they became customers. For example, ABC may have added 1,000 new customers in 1992. Data should be kept that shows what happens to these customers. Some will cancel in 1992. Others will be non-renewed by the company in 1993. Still others will refuse the company's offer of renewal in 1993. Of the 1,000, perhaps 800 remain in 1993. The same monitoring process should be performed on these 800. Perhaps 660 are still active insureds in 1994, and so on.

Through this process, and by comparing the results of 1992 customers with those with other OEDs, the insurer will be able to design a customer life-cycle. This life-cycle model will show the company its customer's retention habits, giving the company insight as to when it is vulnerable to customer defection.

#### **B.** Competitive Position

Few computations within the insurance company are in a greater demand but measured with less precision that the company's competitive position. Company management often wants the position summarized in terms of one number, e.g., 10% below the competition. However, as any actuary who has done such a measurement in a competitive market knows, the 10% may be nothing more than an oversimplified average of both favorable and unfavorable positions for various customer segments.

Difficulty in its measurement does not lessen the need for understanding how a company's prices compare with others in the market. Few today would suggest that insurance customers are becoming less price sensitive. Understanding a company's position is necessary for accurately forecasting both customer retention and new customer volumes.

The ability to measure competitive position varies with the level of regulation in that state and line of business. Generally, more regulation makes it easier. Some lines may be so regulated that all companies may have to use the same rating plan and base rates (e.g., personal auto in Massachusetts). Knowledge of what the competition is charging may be easy to obtain. Other, less regulated lines may pose more problems.

Ideally, ABC Insurance would examine its rates versus those of every other insurer in State X writing that line of business. This would be overkill. Sampling techniques must be used or else ABC would be using excessive resources for the measurement. ABC needs to limit both the number of companies as well as the scenarios it tests.

One approach ABC may try is to monitor the rates of only the largest insurers in the state. It may pick the companies whose collective market shares exceed a certain threshold (perhaps 50%). It may wish to supplement that list with a still small but rapidly growing company, particularly if anecdotal evidence suggests that ABC is losing potential or existing customers to that company.

Since the line of business may have several hundred potential rate classifications, a sampling approach must be used on what to measure as well. Several (perhaps 10) scenarios of insureds' characteristics could be used and the rates compared on each scenario. The scenarios should reflect the profile of the company's current customers.

Perhaps more importantly, the scenarios should consider the target markets that the company is trying to attract. Disconnects between the target markets and the current profile should be analyzed. For example, if one target segment has a

particularly low penetration, competitive analysis may be insightful. The same insight may be gained if the company finds itself attracting non-target classes.

Obtaining competitor information is often a tedious process. If no formal exchange of manuals is in place between companies or other clearing house of such data, the company may need to resort to retrieving the documents from various state insurance departments.

Other evidence of competitive position should also be considered. If the company's new business production is down absent any rate change, the competitive position has probably deteriorated. Conversely, a surge in new business production absent any action by the company may be a warning. The competition may have deemed the prior rates inadequate and moved them up or shut off new production, leaving the company with a growing market share of inadequately priced business.

Rates for some lines of business within a state vary by territory. Since territory definitions often are not consistent across companies, another decision in the measurement exists. The company could look at the range of rates for a competitor in its territory. Alternatively, the company could look at rates for a representative town or even zip code.

Caution must used in creating a balanced measurement. It is often tempting to measure scenarios that correlate with special discounts given by the company. Such measurements may give company a false impression of its competitive position.

Through these measurements, the company should have a reasonable sense of its competitive position versus several leading carriers across a spectrum of scenarios, and perhaps by territory. Communication needs may require summarizing all of this data into a single number. This requires collapsing the results of each calculation. Positions by company may be weighted by market share. Positions by scenario may be weighted by the company's inforce distribution or desired distributions. Territory positions may be weighted by inforce by territory, but perhaps better by potential customer distributions by territory.

The actuary may use the detailed analysis of position by scenario, company, and territory to determine where rate activity may be most beneficial and/or least harmful. Raising rates 5% in a territory where the company is 20% below the market may be much less harmful than a 5% increase in another territory where rates are only average.

There are limitations on the competitive analysis. Underwriting practices are often not public documents. A competitor may appear to have a low rate, but that rate

may not be available to many applicants. In addition, schedule rating for commercial lines is very subjective; details of what qualifies for a competitor's credits are often not known.

ABC Insurance has performed a competitive analysis and, based on current rates, believes its competitive position to be average. Some competitors have slightly lower rates while others are slightly higher-priced. ABC's rates look competitive on some of its target niches, but only average or above average on others.

Complicating the process further, ABC Insurance must now predict the rate actions of the competitors. Knowledge of the current position is important, but ABC needs to make a decision about what to charge in the future, not the past. Judgments must be make as to whether the factors causing ABC to have a +15% indication are isolated to ABC or are common to all insurers.

The actuary at ABC Insurance, based on discussions with the claims department, concludes that the competition probably suffered from the law change as well. The actuary suspects his counterparts may be staring at similarly high indications. The actuary is now in the position of having to estimate what the competition would do on price given an inadequate rate. Based on prior rate changes by the competition in other states and lines when faced with inadequate rates, he estimates that, on average, the competition will raise rates by 5% on January 1, 1998.

#### C. New Business Production

First-time customers are more price-sensitive than repeat customers. While it may be difficult to retain a customer with an above-market price, it is even harder to attract a new one. In economics terminology, new business is more price elastic than renewal business.

The price elasticity of new business is not the same for each class (as defined earlier). It is suspected by some that those who purchase insurance via the Internet will prove to be more price elastic than those who purchase from an agent. The relative importance of the expenditure size to the customer also influences the elasticity.

The pricing actuary at ABC Insurance notices that 1997 new business production was 4,400 policies. As noted earlier, this was based on a competitive position believed to be average. The actuary must develop a model for new business production given varying competitive positions. Based on ABC's experiences in other states and discussions with the company's marketing department, the actuary concludes that the new business has a price elasticity near 2.00 (i.e., a 5% rate increase will cause nearly a 10% decrease in business production).

#### D. Adverse Selection

The combination of rating plans and underwriting is imperfect. Risks with different underlying loss costs still may qualify for the same rates. When there is a change in the attractiveness of those rates to the market, customers will react. The theory of adverse selection is that the customers with lower loss costs will have a better opportunity to obtain the lower rates. Hence, a higher than market rate will, over time, lead to a book of business with higher loss costs than the market average.

The pricing actuary of ABC Insurance realizes that a deterioration in competitive position will not only lower new business production, but it may raise the average loss cost of that business. Moreover, it is suspected that a decrease in customer retention due to a rate change may be due to better than average risks defecting, thereby raising the average loss costs of the remaining book.

Unlike the quantifying of retention patterns and competitive position, estimating the impact of adverse selection is more judgment than computation. While a computation is possible, it is rare that no other factors are involved in calculating a change in loss costs.

Based heavily on intuition, the pricing actuary assumes that adverse selection exists when new business production and retention differ from the baseline scenarios. The actuary theorizes that the business lost has a 20% lower loss cost than the average for that class/OED combination. While this is substantial, the impact on the remaining book may be not as dramatic as first thought.

An example from Exhibit 2 may help illustrate this. In 1997 ABC Insurance wrote 1,000 new business policies for Class A. If ABC raises rates by 5% in 1998, the pricing actuary would expect new business production to decrease to 900 policies. The loss cost of the 900 policies would be expected to increase to \$613 as a result of adverse selection.

	Policies #	X	Loss Cost	=	Ultimate Losses
Expected	1000	x	\$ 600	=	\$ 600,000
Not Written	100	x	480	=	48,000
Written	900	x	\$ 613	=	\$ 552,000

Similar assumptions are used to forecast the loss costs of all other class/OED cells. Business expected but not retained is assumed to have a 20% lower loss cost than the average for that class/OED cell.

The reverse situation, favorable selection, may exist as well. A rate decrease by ABC or an increase by the competition may lead to an increase in new business production and renewal retention. Lower loss cost insureds who previously had an incentive to go to another carrier now are more likely to insure with ABC. This leads to a decrease in the average loss costs.

#### E. Expenses

The company's data in Exhibit 2 shows that it had expenses (other than loss adjustment expenses) totaling \$3.8 million in 1997. Based on written premium of \$11.9 million, the 1997 expense ratio was 31.8%.

Underwriting expenses do not all vary with premium or policy counts. Distinguishing between fixed and variable (and variable to which item) expenses is necessary to properly forecast future expenses given changes in rate level and production.

As noted, loss adjustment expenses are combined with losses. However, loss adjustment in this context is more narrowly defined, including only the claims handling function costs. Statutory loss adjustment expenses include provisions from other departments within the organization.

Expense analysis by the actuary suggests that two expense components, commissions and taxes, vary directly with premium. Commissions are 12% for new business and 7% for renewals; taxes are 3%.

Each policy also generates additional expenses for underwriting, policy issuance and processing, and policyholder service. These expenses vary significantly for new business versus renewal. Underwriting and policy issuance costs are much higher for new business. New customers also generate more service calls than renewal customers. The actuary estimates that the company incurs \$40 to \$70 for each new business policy (varying by class). Renewal customers cost only \$10 per policy to service for all classes.

The remaining expenses in the company are classified as fixed. These would include all expenses for information systems, human resources, actuarial, non-commission sales efforts, executive and other miscellaneous functions. While it is debatable whether these functions are truly fixed costs, they are "sufficiently fixed" such that a small change in the company's total policy count does not materially change their costs.

#### Comparing Methods

With this model complete, the actuary may now forecast 1998 premiums and underwriting income given any rate change. Those forecasts may be compared to the implicit results of the traditional approach.

Because of concerns over new business production, retention and sales force response, ABC Insurance is doubtful that it will raise rates by the full amount of the indications (15.6%). Nonetheless, company management wants to know a forecast of 1998 policy year results based on a lower rate change. The comparison of the two methods is provided below, showing underwriting losses (in \$000s) given various rate actions. Notice that the answer for the new approach varies by what the competition does.

	1998 Und	derwriting Ga	in/ (Loss)		
		New Approx	ach Assuming	Competitors	Increase of
ABC Rate Change	Traditional Approach	0%	5%	10%	15.6%
0%	(\$2,026)	(\$1,994)	(\$1,963)	(\$1,927)	(\$1,897)
5%	(1,513)	(1,535)	(1,470)	(1,419)	(1,367)
10%	(1,001)	(1,148)	(1,054)	(984)	(916)
15.6%	(428)	(789)	(685)	(584)	(482)

Another way to look at the model is to examine the new business production under each of the alternatives. The traditional approach does not explicitly forecast this, but implicitly assumes stable production.

		New Approx	ach Assuming	Competitor	s Increase of
ABC Rate Change	Traditional Approach	0%	5%	10%	15.6%
0%	4,400	4,400	4,823	5,245	5,583
5%	4,400	3,978	4,400	4,823	5,245
10%	4,400	3,555	3,974	4,400	4,823
15.6%	4,400	3,133	3,555	3,978	4,400

By comparing the two tables, two points should be noted:

- The new approach produces similar results to the traditional approach if competitor actions mirror company actions.
- The costs/benefits of not aligning with the competition are understated on the first table.

The second point is critical. A simple examination of the cell showing a 15.6% rate change for ABC versus no change for the competition shows an additional \$360,000 of underwriting losses when compared to the traditional method. But, that comparison masks a higher cost. New business production was nearly 1,300

policies less. These 1,300 policies would have created an underwriting loss in 1998. But these customers would be profitable for the company in future years. Those future profits are lost to ABC, and not recognized in the simplistic computations above.

Exhibits 4, 5 and 6 show forecasted 1998 policy year results based on different scenarios of ABC and competitor rate changes.

The tests above were based on the premise that the 1997 competitive position of ABC Insurance was average. The table below shows the sensitivity of the new method to the prior competitive position. If ABC Insurance has an existing competitive advantage, the damage from not aligning with the competition is much less.

		1998 Und	erwriting Ga (\$000s)	nin/(Loss)
		Position		
ABC Rate Change	Competitor Change	-10%	0%	+10%
0% 5% 10%	5% 5% 5%	(\$1,890) (1,365) (903)	(\$1,963) (1,470) (1,054)	(\$2,040) (1,600) (1,231)

The incremental benefit from a rate change is lower as prior competitive position deteriorates. Exhibits 7 and 8 show forecasted 1998 performance based on varying the 1997 competitive position.

#### Limitations

As with any model, the new approach described in this paper has limitations. A number of assumptions must made; many of these assumptions do not always have readily available data to support them.

The future cost estimation process presented in this paper should be looked at as one step in a larger process. That larger process is evaluating the change in the value of the company from a decision. Such a process requires the modeling of several future years of experience, based on results before and after the impact of that decision.

Note that the scenario in which ABC raised rates 15.6% while the competition did not adjust rates caused underwriting losses to be 84% higher than the traditional approach suggested. That is only part of the loss to ABC. A potentially bigger loss

comes from not writing business that will be profitable in the future. A multi-year approach will highlight those profits not realized.

#### Conclusions

The actuarial community does a thorough job of quantifying historical loss experience and projecting that experience to the future policy period. However too little attention is paid to other, very relevant components that have a bearing on rate adequacy. The pricing actuary needs to:

- Know the customers' behavior patterns,
- Know the competition's prices and rate action patterns, and
- Know his own company's operating costs

if he is to provide valuable insight to company management when decisions must be made.

## ABC Insurance Company

### Exhibit 1

# State X Rates Level Indications for Policy Year 1998

1	Current Level Earned Premium	11,945,917
2	Ultimate Loss and LAE	10,179,097
3	Loss and LAE Ratio (2) / (1)	85.2%
4	Fixed Expenses	2,100,000
5	Fixed Expense Ratio (4) / (1)	17.6%
6	Loss, LAE and Fixed Expense Ratio (2) + (4)	102.8%
7	Variable Expense Ratio	14.2%
8	Profit and Contingencies Ratio	-3.1%
9	Permissible Loss, LAE and Fixed Expense Ratio 1.00 - (7) - (8)	88.9%
10	Indicated Rate Change (6) / (9) - 1.00	15.6%

Profit and contingencies ratio is based on a 15% after-tax return on surplus, a 2-to-1 premium-to-surplus ratio, a 35% tax rate, an 8% investment yield, all expenses paid as premium is written, and losses paid two years after the policy effective date.

Data is assumed to be fully credible. Loss and premium trend are assumed to be 0%.

	nsurance Company K Policy Year 1997 Data		0	riginal Effec	tive Date of	Insured			_	xhibit 2 heet 1
Class	Maria - Delicies	<u>1997</u> 1,000	<u>1996</u> 840	1995 714	<u>1994</u> 516	<u>1993</u> 381	1992 242	<u>1991</u> 160	<u>1990</u> 91	<u>Total</u> 3,945
Α	Written Policies	685,000	575.400	489.090	335.653	248,215	157,793	98,387	56,291	2,645,829
	Written Premium Ultimate Loss and LAE	600,000	483.840	403,039	288,244	211,025	132,809	86,535	49,015	2,254,506
	Variable Expenses	152,750	65,940	56,049	38,723	28,636	18,204	11,435	6,542	378,279
	Contribution Margin	(67,750)	25,620	30,002	8,686	8,555	6,780	417	734	13,043
	Margin per Policy	(68)	31	42	17	22	28	3	8	3
В	Written Policies	700	588	500	361	267	170 138.069	112 86,088	64 49,255	2,761 2,315,100
	Written Premium	599,375	503,475	427,954	293,696 252,213	217,188 184,647	116,208	75,718	42,888	1.972.693
	Ultimate Loss and LAE	525,000	423,360	352,659 47,793	32,980	24,389	15,504	9,726	5,565	320,591
	Variable Expenses	128,406	56,228 23,888	27,501	8,503	8,153	6,357	644	802	21,816
	Contribution Margin Margin per Policy	(54,031) (77)	41	55	24	31	37	6	13	8
С	Written Policies	400	336	286	206	153	97	64	37	1,578
_	Written Premium	411,000	345,240	293,454	201,392	148,929	94,676	59,032	33,775	1,587,497
	Ultimate Loss and LAE	360,000	290,304	241,823	172,946	126,615	79,686	51,921	29,409	1,352,704
	Variable Expenses	85,650	37,884	32,201	22,202	16,419	10,438	6,542	3,743	215,078
	Contribution Margin	(34,650)	17,052	19,429	6,243	5,896	4,553	569 9	623 17	19,715 12
	Margin per Policy	(87)	51	68	30	39	47			
D	Written Policies	200	168	143	103	76	48	32	18	789
J	Written Premium	274,000	230,160	195,636	134,261	99,286	63,117	39,355	22,516	1,058,331
	Ultimate Loss and LAE	240,000	193,536	161,215	115,297	84,410	53,124	34,614	19,606	901,803
	Variable Expenses	55,100	24,696	20,992	14,458	10,691	6,797	4,255	2,434	139,422 17,107
	Contribution Margin	(21,100)	11,928	13,429	4,506	4,185	3,197	486 15	476 26	17,107
	Margin per Policy	(105)	71	94	44	55	66			
E	Written Policies	800	672	571	413	305	194	128	73	3,156
_	Written Premium	493,200	414,288	352,145	241,670	178,715	113,611	70,838	40,529	1,904,997
	Ultimate Loss and LAE	432,000	348,365	290,188	207,535	151,938	95,623	62,305	35,291	1,623,245
	Variable Expenses	109,980	48,149	40,926	28,293	20,923	13,301	8,361	4,783	274,716 7,036
	Contribution Margin	(48,780)	17,774	21,030	5,841	5,854	4,688	173 1	455 6	7,030
	Margin per Policy	(61)	26	37	14	19	24			_
F	Written Policies	700	588	500	361	267	170	112	64	2,761
	Written Premium	383,600	322,224	273,890	187,966	139,000	88,364	55,096	31,523 27,448	1,481,664 1,262,524
	Ultimate Loss and LAE	336,000	270,950	225,702	161,416	118,174	74,373 10,534	48,460 6,627	3,791	215,959
	Variable Expenses	85,540	38,102	32,387	22,407	16,570 4,257	3,457	10	283	3,182
	Contribution Margin	(37,940)	13,171	15,802 32	4,142 11	16	20	0	4	1
	Margin per Policy	(54)	22	32				•		0.007
G	Written Policies	600	504	428	309	229	145	96	55	2,367
	Written Premium	246,600	207,144	176,072	120,835	89,357	56,806	35,419	20,265	952,498
	Ultimate Loss and LAE	216,000	174,182	145,094	103,768	75,969	47,811	31,153	17,645 2,574	811,622 149,247
	Variable Expenses	60,990	25,754	21,891	15,178	11,224	7,135 1,859	4,499	2,574 45	(8,371)
	Contribution Margin	(30,390)	7,207	9,087	1,889	2,164 9	1,059	(233) (2)	1	(4)
	Margin per Policy	(51)	14	21	6	9	13		•	• •
Total	Written Policies	4,400	3,696	3,142	2,269	1,678	1,067	702	402	17,356
	Written Premium	3,092,775	2,597,931	2,208,241	1,515,472		712,437	444,215	254,154 221,303	11,945,917 10,179,097
	Ultimate Loss and LAE	2,709,000	2,184,538	1,819,720	1,301,420	952,776	599,634	390,706 51,443	29,433	1,693,293
	Variable Expenses	678,416	296,753	252,240	174,242	128,852 39,063	81,913 30,890	2,066	3,418	73,527
	Contribution Margin	(294,641) (67)		136,281 43	39,810 18	39,063		2,000	9	4
	Margin per Policy	Fixed Expen			2,100,000					
	See Sheet 2 for	input assumption	ns.				Net Underwr		oss)	(2,026,473)

Net Underwriting Gain/(Loss)

Exhibit 2 Sheet 2

### State X Experience Relativities

## Assumptions for Rates, Loss Costs and Expenses by Class and Tenure

## # Years Insured by ABC Insurance

Loss Cost R	Relativities	Base Loss Co	st in PY 199	7 =	600				
Class	0	1	2	3	4	5	6	7	8
Α	1.000	0.960	0.941	0.931	0.922	0.913	0.904	0.895	0.886
В	1.250	1.200	1.176	1.164	1.153	1.141	1.130	1.118	1.107
С	1.500	1.440	1.411	1.397	1.383	1.369	1.356	1.342	1.329
Ď	2.000	1.920	1.882	1.863	1.844	1.826	1.807	1.789	1.771
Ē	0.900	0.864	0.847	0.838	0.830	0.822	0.813	0.805	0.797
F	0.800	0.768	0.753	0.745	0.738	0.730	0.723	0.803	0.797
G	0.600	0.576	0.564	0.559	0.753	0.730	0.723	0.718	0.709
Ŭ	0.000	0.070	0.004	0.000	0.555	0.540	0.572	0.337	0.551
Commission	ı %								
	0	1	2	3	4	5	6	7	8
Α	0.120	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070
В	0.120	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070
Č	0.120	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070
Ď	0.120	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070
Ē	0.120	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070
F	0.120	0.070	0.070	0.070	0.070	0.070	0.070		
Ġ	0.120	0.070	0.070	0.070				0.070	0.070
G	0.120	0.070	0.070	0.070	0.070	0.070	0.070	0.070	0.070
Tax %									
	0	1	2	3	4	5	6	7	8
Α	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030
В	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030
Č	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030
Ď	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030
É	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030
F	0.030	0.030	0.030	0.030	0.030	0.030	0.030		
Ğ	0.030	0.030	0.030	0.030		0.030		0.030	0.030
G	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030	0.030
Processina	Costs per Po	licv							
	0	1	2	3	4	5	6	7	8
Α	50.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
В	55.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Ċ	60.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Ď	70.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Ē	45.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
F	40.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	
Ġ	40.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00 10.00
_		, 5, 5				10.00	10.00	10.00	10.00
Premium Re	elativities	Base Premium	in PY 1997		685				
	0	1	2	3	4	5	6	7	8
Α	1.000	1.000	1.000	0.950	0.950	0.950	0.900	0.900	0.900
В	1.250	1.250	1.250	1.188	1.188	1.188	1.125	1.125	1.125
С	1.500	1.500	1.500	1.425	1.425	1.425	1.350	1.350	1.350
D	2.000	2.000	2.000	1.900	1.900	1.900	1.800	1.800	1.800
Ε	0.900	0.900	0.900	0.855	0.855	0.855	0.810	0.810	0.810
F	0.800	0.800	0.800	0.760	0.760	0.760	0.720	0.720	0.720
G	0.600	0.600	0.600	0.570	0.570	0.570	0.540	0.540	0.540
					· · · ·		- · - · <del>-</del>		

ABC Insurance - Retention relativities

	10	92.5%	92.4%	92.3%	92.2%	92.1%	92.0%	91.8%	91.6%	91.4%	91.1%	%6.06	%9.06	90.3%	%0.06	89.6%	89.3%	88.9%	88.6%	88.2%	87.8%	87.3%	86.9%	86.5%	86.0%	85.5%	85.1%	6	92.0%
5	6	91.9%	91.8%	91.7%	91.6%	91.5%	91.4%	91.2%	91.0%	<b>%</b> 2′06	90.4%	90.2%	89.9%	89.5%	89.2%	88.8%	88.5%	88.1%	82.6%	87.2%	86.8%	86.3%	85.9%	85.4%	84.9%	84.4%	83.8%	,	91.4%
	80	91.3%	91.2%	91.1%	91.0%	%6.06	8.06	%9.06	90.3%	%0.06	88.8%	89.4%	89.1%	88.8%	88.4%	88.0%	87.6%	87.2%	86.7%	86.3%	85.8%	85.3%	84.8%	84.3%	83.7%	83.2%	82.6%		%8.06
	_	90.8%	%9.06	90.5%	90.4%	90.3%	90.2%	89.9%	89.7%	89.4%	89.0%	88.7%	88.4%	88.0%	87.6%	87.2%	86.7%	86.3%	85.8%	85.3%	84.8%	84.2%	83.7%	83.1%	82.5%	81.9%	81.3%		90.2%
	9	90.1%	%0.06	86.68	89.8%	%9.68	89.5%	89.2%	89.0%	88.6%	88.3%	87.9%	82.6%	87.2%	86.7%	86.3%	85.8%	85.3%	84.8%	84.3%	83.7%	83.2%	82.6%	82.0%	81.4%	80.7%	80.1%		89.5%
rec	S	89.5%	89.3%	89.2%	89.1%	88.9%	88.8%	88.5%	88.2%	87.9%	87.5%	87.2%	86.8%	86.3%	85.9%	85.4%	84.9%	84.4%	83.8%	83.3%	82.7%	82.1%	81.5%	80.8%	80.1%	79.5%	78.8%		88.8%
Years with insurer	4	88.8%	88.6%	88.5%	88.4%	88.2%	88.1%	87.8%	87.5%	87.1%	86.7%	86.3%	85.9%	85.4%	85.0%	84.5%	83.9%	83.4%	82.8%	82.2%	81.6%	80.9%	80.3%	<b>49.6</b> %	78.9%	78.2%	77.5%		88.1%
85.0% Ye	ຕ	88.0%	87.9%	87.7%	87.6%	87.4%	87.3%	87.0%	86.6%	86.2%	85.8%	85.4%	85.0%	84.5%	84.0%	83.5%	82.9%	82.3%	81.7%	81.1%	80.4%	79.8%	79.1%	78.4%	<b>44.0%</b>	%6.92	76.1%		87.3%
<u>11</u>	7	87.1%	87.0%	86.8%	86.7%	86.5%	86.3%	86.0%	85.7%	85.3%	84.9%	84.4%	83.9%	83.4%	82.9%	82.4%	81.8%	81.2%	80.5%	79.9%	79.2%	78.5%	77.8%	77.0%	76.2%	75.4%	74.6%		86.3%
Base retention =	-	85.8%	85.6%	85.5%	85.3%	85.2%	85.0%	84.7%	84.3%	83.9%	83.5%	83.0%	82.5%	82.0%	81.4%	80.9%	80.3%	<b>49.6%</b>	79.0%	78.3%	<b>%9'12</b>	76.8%	76.1%	75.3%	74.5%	73.7%	72.8%		85.0%
ď	Rate chng	-5.0%	4.0%	-3.0%	-2.0%	-1.0%	%0.0	1.0%	2.0%	3.0%	4.0%	2.0%	%0.9	7.0%	8.0%	%0.6	10.0%	11.0%	12.0%	13.0%	14.0%	15.0%	16.0%	17.0%	18.0%	19.0%	20.0%		Baseline
Class A		0.0%																											

Developed based on analysis of ABC Insurance Company's historical retention patterns. Customers with ABC moe than 10 years are assumed to have the same retention as Year 10.

Exhibit 3	theet 2
ш	o,

Exhibit 3	7 1001		10	93.4%	93.3%	93.2%	93.1%	93.0%	92.9%	92.7%	92.5%	92.3%	92.0%	91.8%	91.5%	91.2%	%6.06	90.5%	90.2%	89.8%	89.4%	89.1%	88.6%	88.2%	87.8%	87.3%	86.9%	86.4%	,82.9%	92.0%
шо	)		6	92.8%	92.7%	92.6%	92.5%	92.4%	92.3%	92.1%	91.9%	91.6%	91.4%	91.1%	80.8%	90.4%	90.1%	89.7%	89.3%	88.9%	88.5%	88.1%	82.6%	87.2%	86.7%	86.2%	85.7%	85.2%	84.7%	91.4%
			8	92.3%	92.1%	92.0%	91.9%	91.8%	91.7%	91.5%	91.2%	%6.06	%2'06	90.3%	%0.06	89.7%	89.3%	88.9%	88.5%	88.0%	82.6%	87.1%	%9.98	86.1%	85.6%	85.1%	84.5%	84.0%	83.4%	80.8%
			7	91.7%	91.5%	91.4%	91.3%	91.2%	91.1%	80.8%	90.5%	90.3%	89.9%	89.6%	89.2%	88.9%	88.5%	88.0%	82.6%	87.1%	86.6%	86.1%	85.6%	85.1%	84.5%	84.0%	83.4%	82.8%	82.1%	90.2%
			9	91.0%	%6.06	80.8%	90.7%	90.5%	90.4%	90.1%	89.8%	89.5%	89.2%	88.8%	88.4%	88.0%	82.6%	87.2%	86.7%	86.2%	85.7%	85.1%	84.6%	84.0%	83.4%	82.8%	82.2%	81.5%	80.9%	89.5%
		ırer	2	90.4%	90.2%	90.1%	%0.06	89.8%	89.7%	89.4%	89.1%	88.8%	88.4%	88.0%	84.6%	87.2%	86.7%	86.2%	85.7%	85.2%	84.7%	84.1%	83.5%	82.9%	82.3%	81.6%	80.9%	80.3%	%9.62	88.8%
		Years with insurer	4	89.7%	89.5%	89.4%	89.2%	89.1%	89.0%	88.7%	88.3%	88.0%	84.6%	87.2%	86.8%	86.3%	85.8%	85.3%	84.8%	84.2%	83.6%	83.0%	82.4%	81.8%	81.1%	80.4%	79.7%	%0.62	78.2%	88.1%
	85.0%	۶	က	88.9%	88.7%	88.6%	88.4%	88.3%	88.1%	82.8%	87.5%	87.1%	86.7%	86.3%	85.8%	85.3%	84.8%	84.3%	83.7%	83.1%	82.5%	81.9%	81.2%	80.6%	79.9%	79.1%	78.4%	<b>%9</b> ′ <b>L</b> L	%6:92	87.3%
	11		2	88.0%	87.8%	87.7%	87.5%	87.4%	87.2%	86.9%	86.5%	86.1%	85.7%	85.3%	84.8%	84.3%	83.7%	83.2%	82.6%	82.0%	81.3%	80.7%	80.0%	79.3%	78.5%	77.8%	77.0%	76.2%	75.4%	86.3%
n relativities	Base retention =		<del></del>	86.7%	86.5%	86.3%	86.2%	86.0%	85.8%	85.5%	85.1%	84.7%	84.3%	83.8%	83.3%	82.8%	82.2%	81.7%	81.1%	80.4%	79.8%	79.1%	78.3%	<b>44.6%</b>	76.8%	76.1%	75.2%	74.4%	73.6%	85.0%
e - Retentior	æ		Rate chng	-5.0%	4.0%	-3.0%	-2.0%	-1.0%	%0.0	1.0%	2.0%	3.0%	4.0%	2.0%	%0.9	7.0%	8.0%	%0.6	10.0%	11.0%	12.0%	13.0%	14.0%	15.0%	16.0%	17.0%	18.0%	19.0%	20.0%	Baseline
ABC Insurance - Retention relativities	Class A	Competitve	Position R 1998	-10.0%																										ď

Developed based on analysis of ABC Insurance Company's historical retention patterns. Customers with ABC moe than 10 years are assumed to have the same retention as Year 10.

ABC Insurance - Retention relativities

;	10	<b>%9</b> .06	90.5%	90.4%	90.3%	90.3%	90.2%	%0.06	88.8%	89.5%	89.3%	89.1%	88.8%	88.5%	88.2%	87.9%	87.5%	87.2%	86.8%	86.4%	86.0%	85.6%	85.2%	84.8%	84.3%	83.8%	83.4%	,	92.0%
,	Ō	90.1%	%0.06	86.6%	89.8%	89.7%	89.6%	89.4%	89.2%	88.9%	88.6%	88.4%	88.1%	87.7%	87.4%	87.1%	%2'98	86.3%	85.9%	85.5%	85.1%	84.6%	84.1%	83.7%	83.2%	82.7%	82.2%		91.4%
	ω	89.5%	89.4%	89.3%	89.2%	89.1%	89.0%	88.8%	88.5%	88.3%	88.0%	87.7%	87.3%	80.78	86.6%	86.3%	85.9%	85.4%	85.0%	84.5%	84.1%	83.6%	83.1%	82.6%	82.0%	81.5%	80.9%		%8.06
	7	88.9%	88.8%	88.7%	88.6%	88.5%	88.4%	88.1%	84.9%	84.6%	87.3%	86.9%	86.6%	86.2%	85.8%	85.4%	85.0%	84.5%	84.1%	83.6%	83.1%	82.6%	82.0%	81.5%	80.9%	80.3%	79.7%		90.2%
	9	88.3%	88.2%	88.1%	88.0%	87.8%	87.7%	87.5%	87.2%	86.9%	86.6%	86.2%	85.8%	85.4%	85.0%	84.6%	84.1%	83.6%	83.1%	82.6%	82.1%	81.5%	80.9%	80.3%	79.7%	79.1%	78.5%		89.5%
ırer	2	87.7%	84.6%	87.4%	87.3%	87.2%	87.0%	86.8%	86.5%	86.1%	85.8%	85.4%	85.0%	84.6%	84.2%	83.7%	83.2%	82.7%	82.2%	81.6%	81.0%	80.4%	79.8%	79.2%	78.6%	77.9%	77.2%		88.8%
Years with insurer	4	87.0%	86.9%	%2'98	86.6%	86.5%	86.3%	86.0%	85.7%	85.4%	85.0%	84.6%	84.2%	83.7%	83.3%	82.8%	82.3%	81.7%	81.2%	80.6%	80.0%	79.3%	78.7%	78.0%	77.3%	<b>16.6%</b>	75.9%		88.1%
85.0% Ye	က	86.3%	86.1%	86.0%	85.8%	85.7%	85.5%	85.2%	84.9%	84.5%	84.1%	83.7%	83.3%	82.8%	82.3%	81.8%	81.3%	80.7%	80.1%	79.5%	78.8%	78.2%	77.5%	76.8%	76.1%	75.3%	74.6%		87.3%
11	2	85.4%	85.2%	85.1%	84.9%	84.8%	84.6%	84.3%	84.0%	83.6%	83.2%	82.7%	82.3%	81.8%	81.3%	80.7%	80.1%	%9.62	78.9%	78.3%	%9'22	%6.92	76.2%	75.5%	74.7%	73.9%	73.2%		86.3%
Base retention =	-	84.1%	83.9%	83.8%	83.6%	83.5%	83.3%	83.0%	82.6%	82.2%	81.8%	81.3%	%6 O8	80.4%	79.8%	79.2%	78.7%	78.0%	77.4%	76.7%	%0.92	75.3%	74.6%	73.8%	73.0%	72.2%	71.4%		85.0%
B	Rate chng	-5.0%	4 0%	%0°:-	-2.0%	-10%	%0°C	1 0%	%0.0	30.5	4 0%	5.0%	%0.9 90.9	%0.2 2.0%	%0.8 %0.8	%0 6	10.0%	11.0%	12.0%	13.0%	14 0%	15.0%	16.0%	17.0%	18.0%	19.0%	20.0%		Baseline
Class A Competitve	Position	10 0%																											

Developed based on analysis of ABC Insurance Company's historical retention patterns. Customers with ABC moe than 10 years are assumed to have the same retention as Year 10.

A		nsurance Company X Policy Year 1998 Data		5% Change	for ABC, 59	6 for Compe	tition, 0% C	ompetitive F	Position in 1	997		Exhibit 4
A Initial Expected Policies Rate Charge Society 50% 50% 50% 50% 50% 50% 50% 50% 50% 50%		,				Original Effe	ctive Date of	Insured				
Revised Expender		1-8-1-5 1- 8.										
Revised Exp Policies   1000   830   709   610   445   332   213   142   582   4 383   Written Premum   719,265   596,861   510,034   416,781   342,321   227,155   136,469   136,487   428,335   240,734   2	A											4,435
Written Premum												4 202
Unimate Loss and LAE   600,000   480,057   492,112   342,332   247,329   180,046   762,247   485,535   2460,734   180,046		·										
Variable Expenses   157,888   67,995   58,095   47,775   34,876   26,040   15,937   10,880   3,023   140,919   342,239   34,040   322   34,04				-,								
Contribution Margin per Policy   (39)   48,589   48,587   28,684   22,027   18,340   6,065   34   40   32   149,999   18,340   32   149,999   18,340   32   149,999   18,340   32   149,999   18,340   32   149,999   18,340   32   149,999   18,340   32   149,999   18,340   32   149,999   18,340   32   149,999   18,340   32   149,999   18,340												
B Initial Expected Policies   700   54   44   49   55   28   34   40   322												
Raise Change Revised Exp. Policies Properties Revised Exp. Policies Properties Revised Exp. Policies Properties Revised Exp. Policies Revised Exp. R												
Raise Change Revised Exp. Policies Properties Revised Exp. Policies Properties Revised Exp. Policies Properties Revised Exp. Policies Revised Exp. R	_											
Revised Exp. Policies   700   550   479   412   301   225   1.44   696   55   2.973   Written Premium   629,344   503,897   430,774   352,130   527,135   192,047   116,744   75,20   44,731   2,604,320   Ullimate Loss and LAE   525,000   405,466   339,624   289,235   209,041   154,526   98,137   64,496   353,131   Contribution Margin per Policy   (41)   76   90   57   64   771   33   45   52   333,131   Contribution Margin per Policy   (41)   76   90   57   64   771   33   45   52   33   331,131   Contribution Margin per Policy   (41)   76   90   57   64   771   33   45   52   33   13,131   Contribution Margin per Policy   (41)   76   90   57   64   771   33   45   52   33   13,131   Contribution Margin per Policy   (41)   76   90   57   64   771   33   45   52   33   13,131   Contribution Margin per Policy   (41)   76   90   57   64   771   33   45   52   33   1,648   Rais Change   5.0%   5	В											3,022
Written Premium												
Ultimate Loss and LAE												
Variable Expenses 132,902 55,994 47,889 39,336 28,724 21,453 13,117 8,710 5,026 133,131 Margin per Policy (41) 76 90 57 64 71 38 45 25 24 34 3				,							, .	
Contribution Margin per Policy (41) 75 90 5.7 44 71 3.8 4.5 5.2 70 128.810 Margin per Policy (41) 76 90 5.7 44 71 3.8 4.5 5.2 30 1.848 Rate Change Revised Exp. Policies 4.00 3.06 263 226 1.65 1.23 7.9 5.2 3.0 1.648 Rate Change Revised Exp. Policies 4.00 3.06 2.63 2.26 1.65 1.23 7.9 5.2 3.0 1.648 Revised Exp. Policies 4.00 3.06 2.63 2.26 1.65 1.23 7.9 5.2 3.0 1.522 Whiten Premium LAE 3.00.00 261.004 218.914 1.850 1.251 1.850 1.251 1.850 1.251 1.850 1.251 1.850 1.251 1.850 1.251 1.850 1.251 1.850 1.251 1.850 1.251 1.850 1.251 1.850 1.251 1.850 1.251 1.850 1.251 1.850 1.251 1.850 1.251 1.25												
Margin per Policy				42,416								
Rate Change Revised Exp. Policies 400 301 2277 222 1622 1711 78 50% 50% 50% 1622 Written Premium 41,31,550 324,481 277,688 227,133 168,594 134,916 Variable Expenses 88,733 38,453 30,340 24,929 18,215 Variable Expenses Contribution Margin (17,183) Margin per Policy (43) 293 110 10 1111 1111 1111 1111 1111 1111		Margin per Policy	(41)	76	90	57						
Rate Change Revised Exp. Policies 400 301 2277 222 1622 1711 78 50% 50% 50% 1622 Written Premium 41,31,550 324,481 277,688 227,133 168,594 134,916 Variable Expenses 88,733 38,453 30,340 24,929 18,215 Variable Expenses Contribution Margin (17,183) Margin per Policy (43) 293 110 10 1111 1111 1111 1111 1111 1111	_											_
Revised Exp. Policiaes   400   301   257   222   192   121   78,8   52   30   1,675,243   Ultimate Loss and LAE   380,000   281,094   218,914   186,564   134,918   99,787   63,404   41,869   22,819   1,390,189   23,819   23,819   1,390,189   23,819	С											1,648
Written Premum   431,550   324,461   277,888   227,133   124,016   75,428   50,107   28,926   17,05   243   243   24												
Ultimate Loss and LAE   380,000   261,094   218,014   186,564   134,918   99,787   63,404   41,889   22,819   1,390,129   Contribution Margin   (17,183)   27,913   28,413   15,640   12,825   10,618   3,702   2,891   1,916   88,738   Margin per Policy   (43)   93   110   77   79   79   70   71   79   70   71   79   70   71   79   70   71   79   70   71   70   70   71   70   70   71   70   70		•						-				
Variable Expenses   88,733   35,453   30,340   24,929   18,215   13,612   8,319   5,527   3,190   228,319   Margin per Policy   (43)   93   110   71   79   88   48   3,702   2,891   1,916   86,736   64   53   53   53   53   53   53   53   5												
Contribution Margin per Policy (17, 183) 27,913 28,413 15,840 12,825 10,618 3,702 2,891 1,916 86,736 53 Margin per Policy (143) 93 110 71 79 89 84 48 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8												
Margin per Policy												
December					,							
Rate Change 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0%		3 2 2 3	` '					-			•	55
Revised Exp. Policides   200   137   117   101   74   55   36   24   174   757   1758   Written Premium   287,700   196,843   168,573   138,050   100,966   75,516   45,965   30,559   176,831   1061,825   1061,825   107,831   1061,825   107,831   1061,825   107,831   1061,825   107,831   1061,825   107,831   1061,825   107,831   1061,825   107,831   1061,825   107,831   1061,825   107,831   107,831   107,832   1	D	Initial Expected Policies				103	75	56	36	24	14	769
Written Premium         287,700         198,643         188,673         138,050         100,968         75,516         45,965         30,559         17,653         1,061,625           Ullimate Loss and LAE         240,000         158,239         122,092         60,762         38,639         25,425         14,537         855,979           Variable Expenses         57,155         21,031         18,029         14,815         10,835         8,104         4,952         3,292         1,902         140,115           Contribution Margin         (9,455)         17,373         17,640         9,842         8,049         6,650         2,374         1,862         12,155         55,530           Margin per Policy         (47)         127         151         97         109         120         67         78         89         73           E         Initial Expected Policies         800         688         587         504         3.88         274         176         116         67         3,580           Rate Change         50,06         5.0%         5.0%         5.0%         5.0%         5.0%         5.0%         5.0%         5.0%         5.0%         5.0%         5.0%         5.0%         5.0%							5.0%	5.0%	5.0%	5.0%	5.0%	
Variable Expenses 57,155 21,013 18,029 14,815 10,835 80,762 38,839 25,425 14,837 865,979 10,010 10,		•		_								757
Variable Expenses												
Contribution Margin Margin Policy (47) 127 151 97 152 6.850 2.374 1.842 1.215 55,530 73    E Initial Expected Policies Revised Exp. Policies Polici		_								,	-	
Barrian   France												
E Initial Expected Policies Rate Change								•				
Rate Change Revised Exp. Policies Revised Exp. Revised Revis		Margin per i olicy	(41)	121		31	103	120	07	70	09	/3
Revised Exp. Policies	E	Initial Expected Policies			587	504	368	274	176	116	67	3,580
Written Premium         517,880         434,881         371,477         303,507         221,534         165,393         100,506         66,715         38,484         2,220,338           Ultimate Loss and LAE         432,000         349,933         292,874         249,296         180,099         133,080         84,487         55,507         31,1690         1,808,986           Variable Expenses         113,679         50,204         42,886         35,286         25,758         19,229         11,776         7,817         4,509         311,141           Contribution Margin         (27,819)         34,724         35,717         18,924         15,679         13,085         4,243         3,391         2,285         100,229           Margin per Policy         (35)         52         62         38         44         49         25         30         35         52         28           F         Initial Expected Policies         700         616         525         451         329         245         157         104         60         3,187           Rate Change         5.0%         5.0%         5.0%         5.0%         5.0%         5.0%         5.0%         5.0%         5.0%         5.0%         5.0% </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>5.0%</td> <td>5.0%</td> <td>5.0%</td> <td>5.0%</td> <td></td>								5.0%	5.0%	5.0%	5.0%	
Ultimate Loss and LAE												
Variable Expenses         113,679         50,204         42,886         35,286         25,756         19,220         11,776         7,817         4,509         311,141           Contribution Margin         (27,819)         34,724         35,717         18,924         15,679         13,085         4,243         3,391         2,285         100,229           Margin per Policy         (35)         52         62         38         44         49         25         30         35         28           F         Initial Expected Policies         700         616         525         451         329         245         157         104         60         3,187           Revised Exp. Policies         700         601         514         442         322         241         102         59         3,138           Written Premium         402,780         346,091         295,542         241,410         176,173         131,504         79,898         53,028         30,584         1,757,010           Ultimate Loss and LAE         336,000         278,500         233,006         198,291         143,222         105,812         67,164         44,119         25,185         1,431,299           Variable Expenses												
Contribution Margin (27,819) 34,724 35,717 18,924 15,679 13,085 4,243 3,391 2,285 100,229 Margin per Policy (35) 52 62 38 44 49 25 30 35 28    F Initial Expected Policies 700 616 525 451 329 245 157 104 60 3,187 Rate Change 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0%												
Margin per Policy				•								
F												
Rate Change 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0%			(,				• •		20	50	33	20
Revised Exp. Policies         700         601         514         442         322         241         154         102         59         3,135           Written Premium         402,780         346,091         295,542         241,410         176,173         131,504         79,898         53,028         30,584         1,757,010           Ultimate Loss and LAE         336,000         278,500         233,006         198,291         143,222         105,812         67,164         44,119         25,185         14,31,299           Variable Expenses         88,417         40,624         34,691         28,557         20,840         15,556         9,533         6,327         3,649         248,193           Contribution Margin         (21,637)         26,967         27,845         14,562         12,111         10,136         3,202         2,582         1,750         77,518           Margin per Policy         (31)         45         54         33         38         42         21         25         30         25           G         Initial Expected Policies         600         540         460         395         288         215         137         91         52         2,779           Rate Change<	F	Initial Expected Policies			525	451	329	245	157	104	60	3,187
Written Premium         402,780         346,091         295,542         241,410         176,173         131,504         79,898         53,028         30,584         1,757,010           Ultimate Loss and LAE         336,000         278,500         233,006         198,291         143,222         105,812         67,164         44,119         25,185         1,431,299           Variable Expenses         88,417         40,624         34,691         28,557         20,840         15,556         9,533         6,327         3,649         224,193           Contribution Margin         (21,637)         26,967         27,845         14,562         12,111         10,136         3,202         2,552         1,750         77,518           Margin per Policy         (31)         45         54         33         38         42         21         25         30         25           G         Initial Expected Policies         600         540         460         395         288         215         137         91         52         2,779           Rate Change         5.0%         5.0%         5.0%         5.0%         5.0%         5.0%         5.0%         5.0%         5.0%         5.0%         5.0%         5.0%							5.0%	5.0%	5.0%	5.0%	5.0%	
Ultimate Loss and LAE Variable Expenses 88,417 40,624 34,691 28,557 20,840 15,556 9,533 6,327 3,649 248,193 Contribution Margin (21,637) 26,967 27,845 14,562 12,111 10,136 3,202 2,582 1,750 77,518 Margin per Policy (31) 45 54 33 38 42 21 25 30 25  G Initial Expected Policies 600 540 460 395 288 215 137 91 52 2,779 Rate Change Fevised Exp. Policies 600 527 450 387 282 211 135 90 52 2,734 Written Premium 258,930 227,544 194,244 158,630 115,741 86,380 52,474 34,821 20,080 1,148,845 Ultimate Loss and LAE 216,000 183,105 153,143 130,297 94,093 69,504 44,110 28,971 16,536 935,758 Variable Expenses 62,840 28,027 23,926 19,732 14,397 10,745 6,598 4,379 2,525 173,169 Contribution Margin (19,910) 16,412 17,176 8,601 7,251 6,131 1,765 1,471 1,020 39,917 Margin per Policy (33) 31 38 22 26 29 13 16 20 357 19,105 Written Premium 3,247,414 2,630,449 2,248,312 2,488,312 2,488,312 2,488,312 2,488,312 3,441,456 2,489,329 2,488,312 2,488,312 2,488,312 2,488,312 2,488,312 2,488,312 2,488,312 2,488,312 3,441,456 2,5185 3,649 248,193 3,649 2,5185 1,431,299 2,525 173,699 3,575 3,699 3,799 3,7											59	3,135
Variable Expenses 88,417 40,624 34,691 28,557 20,840 15,556 9,533 6,327 3,649 248,193 Contribution Margin (21,637) 26,967 27,845 14,562 12,111 10,136 3,202 2,582 1,750 77,518 Margin per Policy (31) 45 54 33 38 42 21 25 30 25  G Initial Expected Policies 600 540 460 395 288 215 137 91 52 2,779 Rate Change 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0%												
Contribution Margin Margin (21,637) 26,967 27,845 14,562 12,111 10,136 3,202 2,582 1,750 77,518 Margin per Policy (31) 45 54 33 38 42 21 25 30 2												
Margin per Policy         (31)         45         54         33         38         42         21         25         30         25           G         Initial Expected Policies Rate Change         600         540         460         395         288         215         137         91         52         2,779           Rate Change         5.0%<												,
G Initial Expected Policies 600 540 460 395 288 215 137 91 52 2,779 Rate Change 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0%												
Rate Change 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0% 5.0%		margin per r energ	(0.)		•	55	30	72	21	25	30	25
Rate Change Revised Exp. Policies 600 527 450 387 282 211 135 90 52 2,734 Written Premium 258,930 227,544 194,244 158,630 115,741 86,380 52,474 34,821 20,080 1,148,845 Ultimate Loss and LAE 216,000 183,105 153,143 130,297 94,093 69,504 44,110 28,971 16,536 935,758 Variable Expenses 62,840 28,027 23,926 19,732 14,397 10,745 6,598 4,379 2,525 173,169 Contribution Margin (19,910) 16,412 17,176 8,601 7,251 6,131 1,765 1,471 1,020 39,917 Margin per Policy (33) 31 38 22 26 29 13 16 20 15  Total Initial Expected Policies 4,400 3,716 3,171 2,724 1,986 1,481 949 629 363 19,420 Rate Change Revised Expected Written P 4,400 3,628 3,100 2,667 1,947 1,454 933 619 357 19,105 Written Premium 3,247,414 2,630,449 2,248,312 1,837,620 1,341,738 1,002,011 609,061 404,392 233,325 13,554,320 Ultimate Loss and LAE 2,709,000 2,116,724 1,772,575 1,509,397 1,090,784 806,245 511,989 336,454 192,136 11,045,304 Variable Expenses 701,612 299,329 255,835 210,431 153,643 114,773 70,232 46,631 26,904 1,879,357 Contribution Margin (163,198) 214,396 219,901 117,792 97,311 81,027 26,840 21,307 14,284 629,659	G	Initial Expected Policies	600	540	460	395	288	215	137	91	52	2,779
Written Premium         258,930         227,544         194,244         158,630         115,741         86,380         52,474         34,821         20,080         1,148,845           Ultimate Loss and LAE         216,000         183,105         153,143         130,297         94,093         69,504         44,110         28,971         16,536         935,758           Variable Expenses         62,840         28,027         23,926         19,732         14,397         10,745         6,598         4,379         2,525         173,169           Contribution Margin         (19,910)         16,412         17,176         8,601         7,251         6,131         1,765         1,471         1,002         39,917           Margin per Policy         (33)         31         38         22         26         29         13         16         20         15           Total Initial Expected Policies Rate Change         4,400         3,716         3,171         2,724         1,986         1,481         949         629         363         19,420           Revised Expected Written P Written Premium         4,400         3,628         3,100         2,667         1,947         1,454         933         619         357         19							5.0%	5.0%	5.0%	5.0%		
Ultimate Loss and LAE 216,000 183,105 153,143 130,297 94,093 69,504 44,110 28,971 16,536 935,758 Variable Expenses 62,840 28,027 23,926 19,732 14,397 10,745 6,598 4,379 2,525 173,169 Contribution Margin (19,910) 16,412 17,176 8,601 7,251 6,131 1,765 1,471 1,020 39,917 Margin per Policy (33) 31 38 22 26 29 13 16 20 15  Total Initial Expected Policies A,400 3,716 3,171 2,724 1,986 1,481 949 629 363 19,420 Rate Change Revised Expected Written P 4,400 3,628 3,100 2,667 1,947 1,454 933 619 357 19,105 Written Premium 3,247,414 2,630,449 2,248,312 1,837,620 1,341,738 1,002,011 609,061 404,392 233,325 13,554,320 Ultimate Loss and LAE 2,709,000 2,116,724 1,772,575 1,509,397 1,090,784 806,245 511,989 336,454 192,136 11,045,304 Variable Expenses 701,612 299,329 255,835 210,431 153,643 114,739 70,232 46,631 26,904 1,879,357 Contribution Margin (163,198) 214,396 219,901 117,792 97,311 81,027 26,840 21,307 14,284 629,659											52	
Variable Expenses         62,840         28,027         23,926         19,732         14,397         10,745         6,598         4,379         2,525         173,169           Contribution Margin         (19,910)         16,412         17,176         8,601         7,251         6,131         1,765         1,471         1,020         39,917           Margin per Policy         (33)         31         38         22         26         29         13         16         20         15           Total Initial Expected Policies         4,400         3,716         3,171         2,724         1,986         1,481         949         629         363         19,420           Rate Change         Revised Expected Written P         4,400         3,628         3,100         2,667         1,947         1,454         933         619         357         19,105           Written Premium         3,247,414         2,630,449         2,248,312         1,837,620         1,341,738         1,002,011         609,061         404,392         233,325         13,554,320           Ultimate Loss and LAE         2,709,000         2,116,724         1,772,575         1,509,397         1,090,784         806,245         511,989         336,454												
Contribution Margin Margin Margin Profices         (19,910)         16,412 (33)         17,176 (33)         8,601 (32)         7,251 (32)         6,131 (32)         1,765 (33)         1,471 (32)         1,020 (39,917)           Total Initial Expected Policies Rate Change Revised Expected Written Premium (32,47,414 (2,630,449)         4,400 (3,628)         3,100 (2,667)         1,947 (1,945)         1,454 (1,945)         933 (19,420)         619 (357)         19,105           Written Premium (10,100)         3,247,414 (2,630,449)         2,248,312 (1,337,620)         1,341,738 (1,002,011)         609,061 (404,392)         233,325 (13,554,320)         11,045,304           Variable Expenses Variable Expenses (163,198)         701,612 (299,329) (255,835)         210,431 (156,43) (147,739) (156,43) (147,739) (163,430)         10,200 (117,792)							•					
Margin per Policy         (33)         31         38         22         26         29         13         16         20         15           Total Initial Expected Policies Rate Change         4,400         3,716         3,171         2,724         1,986         1,481         949         629         363         19,420           Revised Expected Written P Written Premium         4,400         3,628         3,100         2,667         1,947         1,454         933         619         357         19,105           Written Premium         3,247,414         2,630,449         2,248,312         1,837,620         1,341,738         1,002,011         609,061         404,392         233,325         13,554,320           Ultimate Loss and LAE Variable Expenses         701,612         299,329         255,835         210,431         155,643         114,739         70,232         46,631         26,904         1,879,357           Contribution Margin         (163,198)         214,396         219,901         117,792         97,311         81,027         26,840         21,307         14,284         629,659												•
Total Initial Expected Policies Rate Change         4,400         3,716         3,171         2,724         1,986         1,481         949         629         363         19,420           Revised Expected Written P Written Premium         4,400         3,628         3,100         2,667         1,947         1,454         933         619         357         19,105           Written Premium         3,247,414         2,630,449         2,248,312         1,837,620         1,341,738         1,002,011         609,061         404,392         233,325         13,554,320           Ultimate Loss and LAE         2,709,000         2,116,724         1,772,575         1,509,397         1,090,784         806,245         511,989         336,454         192,136         11,045,304           Variable Expenses         701,612         299,329         255,835         210,431         153,643         114,739         70,232         46,631         26,904         1,879,357           Contribution Margin         (163,198)         214,396         219,901         117,792         97,311         81,027         26,840         21,307         14,284         629,659												
Rate Change Revised Expected Written P		margin per r oncy	(55)	٠.	30		20	25	13	10	20	15
Rate Change Revised Expected Written P	Total	Initial Expected Policies	4,400	3,716	3,171	2,724	1,986	1,481	949	629	363	19.420
Written Premium       3,247,414       2,630,449       2,248,312       1,837,620       1,341,738       1,002,011       609,061       404,392       233,325       13,554,320         Ultimate Loss and LAE Variable Expenses       2,709,000       2,116,724       1,772,575       1,509,397       1,090,784       806,245       511,989       336,454       192,136       11,045,304         Variable Expenses       701,612       299,329       255,835       210,431       153,643       114,739       70,232       46,631       26,904       1,879,357         Contribution Margin       (163,198)       214,396       219,901       117,792       97,311       81,027       26,840       21,307       14,284       629,659		Rate Change										
Ultimate Loss and LAE 2,709,000 2,116,724 1,772,575 1,509,397 1,090,784 806,245 511,989 336,454 192,136 11,045,304 Variable Expenses 701,612 299,329 255,835 210,431 153,643 114,739 70,232 46,631 26,904 1,879,357 Contribution Margin (163,198) 214,396 219,901 117,792 97,311 81,027 26,840 21,307 14,284 629,659												
Variable Expenses 701,612 299,329 255,835 210,431 153,643 114,739 70,232 46,631 26,904 1,879,357 Contribution Margin (163,198) 214,396 219,901 117,792 97,311 81,027 26,840 21,307 14,284 629,659												
Contribution Margin (163,198) 214,396 219,901 117,792 97,311 81,027 26,840 21,307 14,284 629,659												
······-g···· p····· y (e.) 60 11 <del></del> 50 50 28 54 40 33												
			(51)		• •	<del></del>	30	550	23	<del>, ,</del>	₩.	33

Fixed Expenses 2,100,000

Net Underwriting Gain/(Loss) (1,470,341)

ite X	surance Company Policy Year 1998 Data	10% Change for ABC, 5% for Competition, 0% Competitive Position in 1997  Original Effective Date of Insured									Exhibit 5	
			4007			1994	1993	1992	1991	1990	Total	
ISS		1998	<u>1997</u>	<u>1996</u>	<u>1995</u> 623	454	339	217	144	83	4,435	
	Initial Expected Policies	1,000	850	725	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	4,400	
	Rate Change	10.0%	10.0%	10.0% 680	586	429	321	206	137	79	4,154	
	Revised Exp. Policies	920	795	512.682	419.693	306,931	229,587	139,779	92.959	53.723	3.047.522	
	Written Premium	693,220	598,948		331,759	240.041	177,643	112,948	74,317	42,493	2,394,148	
	Ultimate Loss and LAE	561,600	464,204	389,143		34,981	26,166	16,039	10.667	6,164	417,748	
	Variable Expenses	149,983	67,844	58,072	47,832	31,909	25,779	10,792	7,975	5,066	235,626	
	Contribution Margin	(18,363)	66,900	65,466	40,102		25,779	52	58	64	57	
	Margin per Policy	(20)	84	96	68	74	00	32	30	•	3,	
В	Initial Expected Policies	700	574	490	421	307	229	147	97	56	3,022	
	Rate Change	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%		
	Revised Exp. Policies	644	537	460	396	290	217	139	93	54	2,830	
	Written Premium	606,568	505,583	433,011	354,607	259,416	194,103	118,207	78,633	45,454	2,595,581	
	Ultimate Loss and LAE	491,400	391,843	328,670	280,309	202,881	150,187	95,517	62,864	35,953	2,039,624	
	Variable Expenses	126,405	55,926	47,898	39,424	28,841	21,580	13,215	8,791	5,082	347,162	
	Contribution Margin	(11,238)	57,813	56,442	34,874	27,694	22,337	9,475	6,978	4,420	208,796	
	Margin per Policy	(17)	108	123	88	96	103	68	75	82	74	
С	Initial Expected Policies	400	308	263	226	165	123	79	52	30	1,648	
_	Rate Change	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%		
	Revised Exp. Policies	352	288	247	213	156	117	75	50	29	1,52	
	•	397,848	325,546	279.109	228,731	167,430	125,344	76,371	50,827	29,394	1,680,60	
	Written Premium Ultimate Loss and LAE	325,440	252,309	211.854	180,807	130,942	96,984	61,712	40,634	23,249	1,323,93	
		80,797	35,435	30,380	25,003	18,302	13,702	8,388	5,582	3,228	220,81	
	Variable Expenses	(8,389)	37,802	36,875	22,921	18,186	14,658	6,272	4,611	2,916	135,85	
	Contribution Margin Margin per Policy	(0,303)	131	149	108	117	126	84	92	101	8	
				400	400	75	56	36	24	14	76	
D	Initial Expected Policies	200	140	120	103	75	10.0%	10.0%	10.0%	10.0%	, ,	
	Rate Change	10.0%	10.0%	10.0%	10.0%	10.0%		34	23	10.07	71	
	Revised Exp. Policies	176	131	112	97	71	53			17,939	1,044,66	
	Written Premium	265,232	197,300	169,448	139,021	101,862	76,324	46,541	30,998	14,189	823,68	
	Ultimate Loss and LAE	216,960	152,914	128,617	109,893	79,663	59,056	37,608 4,997	24,781 3,328	1,926	135,40	
	Variable Expenses	52,105	21,039	18,069	14,873	10,898	8,166	3,936	2,888	1,824	85,58	
	Contribution Margin	(3,833)	23,347 178	22,762 202	14,255 147	11,301 159	9,103 171	115	126	138	12	
	Margin per Policy	(22)	170	202	14.							
Ε	Initial Expected Policies	800	688	587	504	368	274 10.0%	176 10.0%	116 10.0%	67 10.0%	3,58	
	Rate Change	10.0%	10.0%	10.0%	10.0%	10.0%		167	111	64	3.39	
	Revised Exp. Policies	736	643	551	474	347	259		67.673	39,106	2,213,69	
	Written Premium	499,118	436,316	373,406	305,642	223,500	167,164	101,765	54,102	30,932	1,738.9	
	Ultimate Loss and LAE	404,352	338,159	283,428	241,603	174,792	129,343	82,231	7.876	4,551	305,6	
	Variable Expenses	107,988	50,066	42,847	35,308	25,819	19,311	11,844	•		169,1	
	Contribution Margin	(13,221)	48,091	47,131	28,730	22,889	18,510	7,690	5,695	3,623		
	Margin per Policy	(18)	75	86	61	66	71	46	51	57		
F	Initial Expected Policies	700	616	525	451	329	245	157	104	60	3,18	
-	Rate Change	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%		
	Revised Exp. Policies	658	576	493	425	310	232	149	99	57	2,9	
	Written Premium	396.642	347,249	297,077	243,108	177,736	132,912	80,900	53,789	31,079	1,760,4	
	Ultimate Loss and LAE	319,872	269,129	225,492	192,172	139,002	102,840	65,371	43,002	24,582	1,381,4	
	Variable Expenses	85,816	40,485	34,636	28,556	20,877	15,612	9,581	6,370	3,681	245,6	
	Contribution Margin	(9,046)	37,634	36,949	22,380	17,857	14,459	5,948	4,417	2,816	133,4	
	Margin per Policy	(14)	65	75	53	58	62	40	45	49		
			540	460	395	288	215	137	91	52	2,7	
G	Initial Expected Policies	600	540 10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	_,,	
	Rate Change	10.0%	505	432	372	272	203	131	87	50	2,6	
	Revised Exp. Policies	576	228,305	195,253	159,746	116,768	87,305	53,132	35,321	20,405	1,156,6	
	Written Premium	260,410	176,944	148,204	126,276	91,321	67,552	42,933	28,238	16,140	906,6	
	Ultimate Loss and LAE	209,088	27,880	23,844	19,694	14,396	10,763	6,619	4,400	2,542	172,2	
	Variable Expenses	62,101		23,205	13,776	11,052	8,990	3,580	2,683	1,723	77,7	
	Contribution Margin Margin per Policy	(10,780) (19)	23,481 46	54	37	41	44	27	31	34		
		4,400	3,716	3,171	2,724	1,986	1,481	949	629	363	19,4	
ota	I Initial Expected Policies Rate Change	4,400	•							240	18,2	
	Revised Expected Written P	4,062	3,475	2,975	2,564	1,875	1,403	901	599	346	13,499.	
	Written Premium	3,119,038	2,639,246	2,259,985	1,850,548	1,353,644	1,012,739	616,696	410,199	237,100		
	Ultimate Loss and LAE	2,528,712	2,045,502	1,715,407	1,462,819	1,058,640	783,605	498,321	327,937	187,537	10,608,4	
	Variable Expenses	665,196	298,675	255,747	210,691	154,114	115,299	70,684	47,015	27,175	1,844,5	
		(74,870)	295,069	288,831	177,038	140,889	113,835	47,692	35,247	22,388	1,046,1	
	Contribution Margin	(/4,0/0)	200,000	97	69	75	81	53	59	65		

169

2,100,000

(1,053,880)

Fixed Expenses

Net Underwriting Gain/(Loss)

State X Policy Year 1998 Data Original Effective Date of Insured											
Class		1998	1997	1996	1995	1994	1993	1992	1991	1990	Total
	Initial Expected Policies	1,000	850	725	623	454	339	217	144	83	4,435
	Rate Change	15.6%	15.6%	15.6%	15.6%	15.6%	15.6%	15.6%	15.6%	15.6%	
	Revised Exp. Policies	800	753	646	558	409	307	198	132	76	3.879
	Written Premium	633,488	596,199	511,590	419,825	307,773	230,772	140,836	93,883	54,384	2,988,751
	Ultimate Loss and LAE	504,000	444,861	373,636	319,139	231,343	171,525	109,260	72,022	41,256	2,267,042
	Variable Expenses	135,023	67,149	57,620	47,563	34,869	26,145	16,060	10,706	6,202	401,336
	Contribution Margin	(5,535)	84,189	80,334	53,123	41,562	33,102	15,516	11,156	6,927	320,374
	Margin per Policy	(7)	112	124	95	102	108	79	85	91	83
В	Initial Expected Policies	700	574	490	421	307	229	147	97	56	3,022
	Rate Change	15.6%	15.6%	15.6%	15.6%	15.6%	15.6%	15.6%	15.6%	15.6%	0.544
	Revised Exp. Policies	560	508	437	377	277	207 195,104	134 119,101	89 79.415	52 46,014	2,641 2,544,134
	Written Premium	554,302 441,000	503,262 375,515	432,089 315,573	354,719 269,647	260,128 195,530	145,014	92.398	60,923	34,906	1.930.506
	Ultimate Loss and LAE	113,945	55,411	47,574	39.244	28,779	21.585	13,247	8,833	5,118	333,737
	Variable Expenses Contribution Margin	(643)	72,337	68.942	45,827	35,819	28,505	13,456	9.659	5,990	279,892
	Margin per Policy	(1)	142	158	121	129	137	101	108	116	106
С	Initial Expected Policies	400	308	263	226	165	123	79	52	30	1,648
C	Rate Change	15.6%	15.6%	15.6%	15.6%	15.6%	15.6%	15.6%	15.6%	15.6%	.,
	Revised Exp. Policies	280	273	234	203	149	112	72	48	28	1,398
	Written Premium	332.581	324,052	278,515	228,803	167,890	125,990	76,949	51,332	29,756	1,615,867
	Ultimate Loss and LAE	273,600	241,795	203,411	173,930	126,197	93,644	59,697	39,379	22,572	1,234,226
	Variable Expenses	66,687	35,133	30,196	24,908	18,277	13,716	8,415	5,613	3,254	206,199
	Contribution Margin	(7,706)	47,123	44,907	29,965	23,416	18,631	8,837	6,340	3,929	175,443
	Margin per Policy	(28)	173	192	148	157	167	123	132	141	125
D	Initial Expected Policies	200	140	120	103	75	56	36	24	14	769
	Rate Change	15.6%	15.6%	15.6%	15.6%	15.6%	15.6%	15.6%	15.6%	15.6%	050
	Revised Exp. Policies	140	124	107	92	68	51	33	22	13	650
	Written Premium	221,721	196,395	169,087	139,065	102,142	76,718	46,893 36,380	31,306 24,016	18,160 13,776	1,001,486 766,117
	Ultimate Loss and LAE	182,400	146,542	123,492	105,713	76,776	57,022	5,018	3,350	1,943	126,132
	Variable Expenses	43,058	20,880 28,973	17,976 27,619	14,831 18,521	10,893 14,472	8,182 11,514	5,495	3,350	2,440	109,238
	Contribution Margin Margin per Policy	(3,737) (27)	234	259	200	213	226	167	179	192	168
E	Initial Expected Policies	800	688	587	504	368	274	176	116	67	3,580
_	Rate Change	15.6%	15.6%	15.6%	15.6%	15.6%	15.6%	15.6%	15.6%	15.6%	
	Revised Exp. Policies	640	609	523	452	331	248	160	107	62	3,131
	Written Premium	456,111	434,313	372,611	305,738	224,113	168,027	102,535	68,346	39,588	2,171,382
	Ultimate Loss and LAE	362,880	324,068	272,134	232,413	168,458	124,888	79,546	52,431	30,031	1,646,850
	Variable Expenses	97,217	49.525	42,489	35,090	25,721	19,284	11,852	7,900	4,576	293,655
	Contribution Margin	(3,985)	60,720	57,988	38,235	29,933	23,854	11,136	8,015	4,981	230.876
	Margin per Policy	(6)	100	111	85	90	96	70	75	81	74
F	Initial Expected Policies	700	616	525	451	329	245	157	104	60	3,187
	Rate Change	15.6%	15.6%	15.6%	15.6%	15.6%	15.6%	15.6%	15.6%	15.6%	2,824
	Revised Exp. Policies	595	546	468	404	296	222	143 81,512	95 54,324	55 31,462	1,741,328
	Written Premium	376,925	345,655	296,444 216,506	243,185 184,862	178,224 133,965	133,598 99,299	63,237	41,674	23,867	1,317,003
	Ultimate Loss and LAE	295,680 80,339	257,915 40,022	34,324	28,359	20.784	15,580	9,581	6,385	3,698	239.072
	Variable Expenses	907	47,719	45,614	29,963	23,475	18,719	8,694	6,264	3,897	185,253
	Contribution Margin Margin per Policy	2	87	97	74	79	84	61	66	71	66
G	Initial Expected Policies	600	540	460	395	288	215	137	91	52	2,779
0	Rate Change	15.6%	15.6%	15.6%	15.6%	15.6%	15.6%	15.6%	15.6%	15.6%	
	Revised Exp. Policies	540	478	410	354	259	194	125	83	48	2,493
	Written Premium	256,563	227,257	194,837	159,797	117,089	87,755	53,533	35,672	20,657	1,153,159
	Ultimate Loss and LAE	198,720	169,570	142,298	121,473	88,012	65,225	41,531	27,366	15,670	869,865
	Variable Expenses	60,084	27,509	23,585	19,520	14,303	10,720	6,605	4,401	2,549	169,276
	Contribution Margin	(2,242)	30,178	28,955	18,804	14,774	11,810	5,397	3,905	2,438	114,018
	Margin per Policy	(4)	63	71	53	57	61	43	47	50	46
Total	Initial Expected Policies Rate Change	4,400	3,716	3,171	2,724	1,986	1,481	949	629	363	19,420
	Revised Expected Written P	3,555	3,292	2,825	2,440	1,789	1,341	864	576	334	17,016
	Written Premium	2,831,691	2,627,133	2,255,172	1,851,131	1,357,359	1,017,964	621,358	414,278	240,020	13,216,108
	Ultimate Loss and LAE	2,258,280	1,960,266	1,647,049	1,407,177	1,020,281	756,618	482,048	317,811	182,078	10,031,610
	Variable Expenses	596,354	295,629	253,764	209,515	153,626	115,211	70,778	47,189	27,339	1,769,406
	Contribution Margin	(22,942)	371,239	354,359	234,439	183,452	146,135	68,532	49,278	30,602	1,415,093
	Margin per Policy	(6)	113	125	96	103	109	79	86	92	83

Fixed Expenses 2,100,000

Net Underwriting Gain/(Loss)

(684,907)

,	Initial Expected Policies Rate Change Revised Exp. Policies Written Premium Ultimate Loss and LAE Variable Expenses Contribution Margin Margin per Policy Initial Expected Policies Rate Change Revised Exp. Policies Written Premium Ultimate Loss and LAE Variable Expenses Contribution Margin Margin per Policy Initial Expected Policies	1998 1,000 10.0% 1,120 843,920 657,600 182,588 3,732 3 700 10.0% 784 738,430 575,400 153,885 9,146	1997 850 10.0% 807 608,149 469,831 68,886 69,432 86 574 10.0% 545 513,349 396,593 56,785 59,971	1996 725 10.0% 691 520,557 393,863 58,964 67,730 98 490 10.0% 467 439,662 332,657	Driginal Effect 1995 623 10.0% 595 426,140 335,785 48,567 41,788 70 421 10.0% 402	1994 454 10.0% 435 311,646 242,956 35,518 33,172 76 307 10.0%	1993 339 10.0% 326 233,114 179,802 26,568 26,745 82 229 10.0%	1992 217 10.0% 209 141,926 114,322 16,285 11,319 54	1991 144 10.0% 139 94,387 75,221 10,831 8,335 60	1990 83 10.0% 80 54,548 43,010 6,259 5,279 66	Total 4,435 4,403 3,234,388 2,512,390 454,467 267,531 61 3,022
<b>A</b>	Rate Change Revised Exp. Policies Written Premium Ultimate Loss and LAE Variable Expenses Contribution Margin Margin per Policy Initial Expected Policies Rate Change Revised Exp. Policies Written Premium Ultimate Loss and LAE Variable Expenses Contribution Margin Margin per Policy	1,000 10.0% 1,120 843,920 657,600 182,588 3,732 3 700 10.0% 784 738,430 575,400 153,885 9,146	850 10.0% 807 608,149 469,831 68,886 69,432 86 574 10.0% 545 513,349 396,593 56,785	725 10.0% 691 520,557 393,863 58,964 67,730 98 490 10.0% 467 439,662	623 10.0% 595 426,140 335,785 48,567 41,788 70 421 10.0%	454 10.0% 435 311,646 242,956 35,518 33,172 76 307 10.0%	339 10.0% 326 233,114 179,802 26,568 26,745 82	217 10.0% 209 141,926 114,322 16,285 11,319 54	144 10.0% 139 94,387 75,221 10,831 8,335 60	83 10.0% 80 54,548 43,010 6,259 5,279 66	4,435 4,403 3,234,388 2,512,390 454,467 267,531 61
,	Rate Change Revised Exp. Policies Written Premium Ultimate Loss and LAE Variable Expenses Contribution Margin Margin per Policy Initial Expected Policies Rate Change Revised Exp. Policies Written Premium Ultimate Loss and LAE Variable Expenses Contribution Margin Margin per Policy	10.0% 1,120 843,920 657,600 182,588 3,732 3 700 10.0% 784 738,430 575,400 153,885 9,146	10.0% 807 608,149 469,831 68,886 69,432 86 574 10.0% 545 513,349 396,593 56,785	10.0% 691 520,557 393,863 58,964 67,730 98 490 10.0% 467 439,662	10.0% 595 426,140 335,785 48,567 41,788 70 421 10.0%	10.0% 435 311,646 242,956 35,518 33,172 76 307 10.0%	10.0% 326 233,114 179,802 26,568 26,745 82	10.0% 209 141,926 114,322 16,285 11,319 54	10.0% 139 94,387 75,221 10,831 8,335 60 97	10.0% 80 54,548 43,010 6,259 5,279 66	4,403 3,234,388 2,512,390 454,467 267,531 61
,	Revised Exp. Policies Written Premium Ultimate Loss and LAE Variable Expenses Contribution Margin Margin per Policy Initial Expected Policies Rate Change Revised Exp. Policies Written Premium Ultimate Loss and LAE Variable Expenses Contribution Margin Margin per Policy	1,120 843,920 657,600 182,588 3,732 3 700 10.0% 784 738,430 575,400 153,885 9,146	807 608,149 469,831 68,886 69,432 86 574 10.0% 545 513,349 396,593 56,785	691 520,557 393,863 58,964 67,730 98 490 10.0% 467 439,662	595 426,140 335,785 48,567 41,788 70 421 10.0%	435 311,646 242,956 35,518 33,172 76 307 10.0%	326 233,114 179,802 26,568 26,745 82	209 141,926 114,322 16,285 11,319 54	139 94,387 75,221 10,831 8,335 60	80 54,548 43,010 6,259 5,279 66	3,234,388 2,512,390 454,467 267,531 61
,	Written Premium Ultimate Loss and LAE Variable Expenses Contribution Margin Margin per Policy Initial Expected Policies Rate Change Revised Exp. Policies Written Premium Ultimate Loss and LAE Variable Expenses Contribution Margin Margin per Policy	843,920 657,600 182,588 3,732 3 700 10,0% 784 738,430 575,400 153,885 9,146	608,149 469,831 68,886 69,432 86 574 10.0% 545 513,349 396,593 56,785	520,557 393,863 58,964 67,730 98 490 10.0% 467 439,662	426,140 335,785 48,567 41,788 70 421 10.0%	311,646 242,956 35,518 33,172 76 307 10.0%	233,114 179,802 26,568 26,745 82	141,926 114,322 16,285 11,319 54	94,387 75,221 10,831 8,335 60	54,548 43,010 6,259 5,279 66	3,234,388 2,512,390 454,467 267,531 61
	Ultimate Loss and LAE Variable Expenses Contribution Margin Margin per Policy Initial Expected Policies Rate Change Revised Exp. Policies Written Premium Ultimate Loss and LAE Variable Expenses Contribution Margin Margin per Policy	657,600 182,588 3,732 3 700 10.0% 784 738,430 575,400 153,885 9,146	469,831 68,886 69,432 86 574 10.0% 545 513,349 396,593 56,785	393,863 58,964 67,730 98 490 10.0% 467 439,662	335,785 48,567 41,788 70 421 10.0%	242,956 35,518 33,172 76 307 10.0%	179,802 26,568 26,745 82 229	114,322 16,285 11,319 54	75,221 10,831 8,335 60	43,010 6,259 5,279 66	2,512,390 454,467 267,531 61
	Variable Expenses Contribution Margin Margin per Policy Initial Expected Policies Rate Change Revised Exp. Policies Written Premium Ultimate Loss and LAE Variable Expenses Contribution Margin Margin per Policy	182,588 3,732 3 700 10.0% 784 738,430 575,400 153,885 9,146	68,886 69,432 86 574 10.0% 545 513,349 396,593 56,785	58,964 67,730 98 490 10.0% 467 439,662	48,567 41,788 70 421 10.0%	35,518 33,172 76 307 10.0%	26,568 26,745 82 229	16,285 11,319 54	10,831 8,335 60 97	6,259 5,279 66 56	454,467 267,531 61
	Contribution Margin Margin per Policy Initial Expected Policies Rate Change Revised Exp. Policies Written Premium Ultimate Loss and LAE Variable Expenses Contribution Margin Margin per Policy	3,732 3 700 10.0% 784 738,430 575,400 153,885 9,146	69,432 86 574 10.0% 545 513,349 396,593 56,785	67,730 98 490 10.0% 467 439,662	41,788 70 421 10.0%	33,172 76 307 10.0%	26,745 82 229	11,319 54 147	8,335 60 97	5,279 66 56	267,531 61
	Margin per Policy Initial Expected Policies Rate Change Revised Exp. Policies Written Premium Ultimate Loss and LAE Variable Expenses Contribution Margin Margin per Policy	700 10.0% 784 738,430 575,400 153,885 9,146	574 10.0% 545 513,349 396,593 56,785	98 490 10.0% 467 439,662	70 421 10.0%	76 307 10.0%	82 229	54 147	60 97	66 56	61
	Initial Expected Policies Rate Change Revised Exp. Policies Written Premium Ultimate Loss and LAE Variable Expenses Contribution Margin Margin per Policy	700 10.0% 784 738,430 575,400 153,885 9,146	574 10.0% 545 513,349 396,593 56,785	490 10.0% 467 439,662	421 10.0%	307 10.0%	229	147	97	56	
R	Rate Change Revised Exp. Policies Written Premium Ultimate Loss and LAE Variable Expenses Contribution Margin Margin per Policy	10.0% 784 738,430 575,400 153,885 9,146	10.0% 545 513,349 396,593 56,785	10.0% 467 439,662	10.0%	10.0%					3,022
	Revised Exp. Policies Written Premium Ultimate Loss and LAE Variable Expenses Contribution Margin Margin per Policy	784 738,430 575,400 153,885 9,146	545 513,349 396,593 56,785	467 439,662			10.0%				
	Written Premium Ultimate Loss and LAE Variable Expenses Contribution Margin Margin per Policy	738,430 575,400 153,885 9,146	513,349 396,593 56,785	439,662	402			10.0%	10.0%	10.0%	
	Ultimate Loss and LAE Variable Expenses Contribution Margin Margin per Policy	575,400 153,885 9,146	396,593 56,785			294	220	142	94	54	3,003
	Variable Expenses Contribution Margin Margin per Policy	153,885 9,146	56,785		360,054	263,401	197,085	120,023	79,841	46,153	2,757,998
	Contribution Margin Margin per Policy	9,146			283,711	205,345	152,012	96,679	63,629	36,390	2,142,415
	Margin per Policy		59 971	48,634	40,029	29,284	21,911	13,418	8,926	5,160	378.032
		12		58,372	36,313	28,772	23,162	9,926	7,286	4,602	237,551
	Initial Expected Policies		110	125	90	98	105	70	77	85	79
С		400	308	263	226	165	123	79	52	30	1,648
	Rate Change	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	
	Revised Exp. Policies	472	292	251	216	158	119	76	51	29	1,665
	Written Premium	533,478	330,547	283,397	232,245	170,002	127,269	77,545	51,607	29,845	1,835,935
	Ultimate Loss and LAE	411,840	255,367	214,423	183,001	132,532	98,163	62,462	41,128	23,532	1,422,449
	Variable Expenses	108,342	35,979	30,847	25,387	18,584	13,912	8,517	5,668	3,278	250,514
	Contribution Margin	13,296	39,201	38,127	23,856	18,887	15,194	6,566	4,811	3,035	162,971
	Margin per Policy	28	134	152	110	119	128	86	95	103	98
D	Initial Expected Policies	200	140	120	103	75	56	36	24	14	769
_	Rate Change	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	
	Revised Exp. Policies	236	133	114	99	72	54	35	23	13	780
	Written Premium	355,652	200,331	172,051	141,157	103,427	77,497	47,256	31,474	18,215	1,147,059
	Ultimate Loss and LAE	274,560	154,768	130,177	111,227	80,630	59,773	38,065	25,083	14,362	888,645
	Variable Expenses	69,868	21,362	18,347	15,102	11,065	8,291	5,074	3,379	1,956	154,444
	Contribution Margin	11,224	24,201	23,527	14,828	11,731	9,432	4,117	3,012	1,897	103,970
	Margin per Policy	48	182	206	150	162	174	118	130	141	133
Ε	Initial Expected Policies	800	688	587	504	368	274	176	116	67	3.580
_	Rate Change	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	-,
	Revised Exp. Policies	896	653	559	482	352	263	169	113	65	3,553
	Written Premium	607.622	443,018	379,142	310,337	226,933	169,732	103,329	68,712	39,707	2,348,533
	Ultimate Loss and LAE	473,472	342,258	286,866	244,536	176,914	130,915	83,231	54,760	31,308	1,824,260
	Variable Expenses	131,463	50,835	43,505	35,851	26,216	19,608	12,026	7,997	4,621	332,121
	Contribution Margin	2,687	49,926	48,771	29,950	23,803	19,209	8,071	5,955	3,778	192,151
	Margin per Policy	3	76	87	62	68	73	48	53	58	54
F	Initial Expected Policies	700	616	525	451	329	245	157	104	60	3,187
	Rate Change	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	
	Revised Exp. Policies	763	585	500	431	315	236	151	101	58	3,140
	Written Premium	459,936	352,583	301,640	246,842	180,466	134,954	82,143	54,615	31,556	1,844,737
	Ultimate Loss and LAE	360,192	272,391	228,227	194,504	140,690	104,090	66,166	43,525	24,881	1,434,667
	Variable Expenses	99,510	41,107	35,168	28,995	21,198	15,852	9,728	6,468	3,737	261,764
	Contribution Margin	234	39,084	38,246	23,344	18,579	15,012	6,248	4,622	2,937	148,305
	Margin per Policy	0	67	76	. 54	59	64	41	46	51	47
G	Initial Expected Policies	600	540	460	395	288	215	137	91	52	2,779
	Rate Change	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	
	Revised Exp. Policies	636	513	439	378	276	206	133	88	51	2,719
	Written Premium	287,536	231,812	198,252	162,200	118,562	88,646	53,948	35,864	20,719	1,197,538
	Ultimate Loss and LAE	226,368	179,088	150,001	127,809	92,430	68,373	43,455	28,581	16,336	932,441
	Variable Expenses	68,570	28,309	24,210	19,997	14,617	10,929	6,721	4,468	2,581	180,401
	Contribution Margin	(7,403)	24,415	24,041	14,395	11,516	9,345	3,772	2,815	1,801	84,696
	Margin per Policy	(12)	48	55	38	42	45	28	32	35	31
Total	Initial Expected Policies Rate Change	4,400	3,716	3,171	2,724	1,986	1,481	949	629	363	19,420
	Revised Expected Written P	4,907	3,528	3,021	2,603	1,904	1,424	915	609	352	19,263
	Written Premium	3,826,574	2,679,789	2,294,702	1,878,975	1,374,437	1,028,296	626,170	416,500	240,742	14,366,186
	Ultimate Loss and LAE	2,979,432	2,070,296	1,736,213	1,480,573	1.071.497	793,128	504,380	331,927	189,821	11,157,268
	Variable Expenses	814,226	303,263	259,676	213,928	156,481	117,071	71,769	47,737	27,592	2,011,743
	Contribution Margin	32,916	306,229	298,813	184,474	146,459	118,098	50,020	36,836	23,329	1,197,175
	Margin per Policy	7	87	99	71	77	83	55	61	66	62

Fixed Expenses 2,100,000

Net Underwriting Gain/(Loss) (902,825)

ABC Insurance Company State X Policy Year 1998 Data		10% Change for ABC, 5% for Competition, +10% Competitive Position in 1997  Original Effective Date of Insured									Exhibit 8	
					- •			4000	4004			
Class		<u>1998</u>	<u> 1997</u>	1996	1995	1994	1993	1992	1991	1990	Total	
Α	Initial Expected Policies	1,000	850	725	623	454	339	217	144	83	4.435	
	Rate Change	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%		
	Revised Exp. Policies	700	778	666	574	420	314	202	134	78	3,866	
	Written Premium	527.450	586,405	501.945	410,904	300,503	224,779	136,852	91,012	52,5 <b>98</b>	2,832,449	
	Ultimate Loss and LAE	456,000	456,534	382,709	326,269	236,066	174,700	111,076	73,084	41,787	2,258,225	
		114,118	66,423	56,856	46,831	34,248	25,618	15,703	10,443	6,035	376,275	
	Variable Expenses	(42,668)	63,448	62,381	37,804	30,189	24,462	10,073	7,485	4,775	197,948	
	Contribution Margin		82	94	66	72	78	50	56	62	51	
	Margin per Policy	(61)	02	3**	00			-	00	<b>-</b>	•	
	Initial European Delinios	700	574	490	421	307	229	147	97	56	3,022	
В	Initial Expected Policies	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	0,022	
	Rate Change		526	450	388	284	212	137	91	52	2.630	
	Revised Exp. Policies	490				253,984	190,038	115.732	76,986	44.502	2,408,879	
	Written Premium	461,519	494,995	423,943	347,181			-, -				
	Ultimate Loss and LAE	399,000	385,368	323,236	275,671	199,522	147,699	93,934	61,821	35,356	1,921,606	
	Variable Expenses	96,178	54,755	46,895	38,598	28,237	21,128	12,938	8,607	4,975	312,311	
	Contribution Margin	(33,659)	54,872	53,812	32,911	26,225	21,212	8,860	6,558	4,171	174,962	
	Margin per Policy	(69)	104	120	85	92	100	65	72	79	67	
С	Initial Expected Policies	400	308	263	226	165	123	79	52	30	1,648	
	Rate Change	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%		
	Revised Exp. Policies	220	282	242	209	153	114	74	49	28	1,370	
	Written Premium	248,655	318,728	273,264	223,941	163,924	122,719	74,772	49,762	28,778	1,504,544	
	Ultimate Loss and LAE	230,400	248,139	208,351	177,815	128,774	95,378	60,689	39,960	22,863	1,212,369	
	Variable Expenses	50,498	34,693	29,744	24,480	17,919	13,415	8,212	5,465	3,161	187,587	
	Contribution Margin	(32,243)	35,896	35,169	21,646	17,231	13,926	5,871	4,337	2,754	104,588	
	Margin per Policy	(147)	127	145	104	113	122	80	89	97	76	
	wargin per rolley	(147)								•		
D	Initial Expected Policies	200	140	120	103	75	56	36	24	14	769	
	Rate Change	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%		
	Revised Exp. Policies	110	128	110	95	70	52	34	22	13	634	
				165,899	136.110	99,729	74,726	45,567	30,348	17,563	928.881	
	Written Premium	165,770	193,169								750.282	
	Ultimate Loss and LAE	153,600	150,388	126,490	108,075	78,344	58,077	36,984	24,370	13,954	,	
	Variable Expenses	32,566	20,599	17,691	14,562	10,669	7,995	4,893	3,259	1,886	114,118	
	Contribution Margin	(20,396)	22,182	21,718	13,473	10,715	8,654	3,690	2,720	1,724	64,481	
	Margin per Policy	(185)	173	197	142	154	166	110	122	133	102	
Ε	Initial Expected Policies	800	688	587	504	368	274	176	116	67	3,580	
	Rate Change	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%		
	Revised Exp. Policies	560	630	539	464	340	254	163	109	63	3,122	
	Written Premium	379,764	427,179	365,586	299,241	218,819	163,664	99,634	66,256	38,287	2,058,430	
	Ultimate Loss and LAE	328,320	332,571	278,741	237,606	171,898	127,200	80.868	53,204	30,418	1,640,827	
	Variable Expenses	82,165	49,017	41,950	34,569	25,278	18,907	11,596	7,711	4,456	275,648	
	Contribution Margin	(30,721)	45,590	44,895	27,066	21,643	17,557	7,170	5,340	3,413	141,954	
	Margin per Policy	(55)	72	83	58	64	69	44	49	54	45	
	Margin per Folicy	(55)	,-		•	0-1	•	• • •		•		
F	Initial Expected Policies	700	616	525	451	329	245	157	104	60	3,187	
		10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	0,.0.	
	Rate Change		564	483	416	304	227	146	97	56	2.835	
	Revised Exp. Policies	543					130,129		52.663	30.428	1,662,307	
	Written Premium	327,019	339,977	290,855	238,017	174,014	,	79,206		•		
	Ultimate Loss and LAE	275,520	264,682	221,763	188,992	136,700	101,137	64,287	42,289	24,174	1,319,544	
	Variable Expenses	70,753	39,638	33,911	27,958	20,440	15,285	9,381	6,237	3,604	227,206	
	Contribution Margin	(19,254)	35,657	35,182	21,067	16,874	13,707	5,538	4,137	2,650	115,557	
	Margin per Policy	(35)	63	73	51	56	60	38	43	47	41	
G	Initial Expected Policies	600	540	460	395	288	215	137	91	52	2,779	
	Rate Change	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%		
	Revised Exp. Policies	510	494	423	364	266	199	128	85	49	2,519	
	Written Premium	230,571	223,524	191,164	156,401	114,323	85,476	52,019	34,581	19,978	1,108,037	
	Ultimate Loss and LAE	190,080	174,020	145,753	124,187	89,809	66,433	42,221	27,769	15,872	876,143	
	Variable Expenses	54,986	27,296	23,345	19,282	14,094	10,538	6,480	4,308	2,489	162,818	
		(14,495)	22,207	22,066	12,933	10,420	8,506	3,317	2,504	1,617	69,076	
	Contribution Margin	(14,493)	45	52	36	39	43	26	29	33	27	
	Margin per Policy	(20)	*5	32	30	33	40	20				
Total	Initial Expected Policies	4,400	3,716	3,171	2,724	1,986	1,481	949	629	363	19,420	
	Rate Change											
	Revised Expected Written P	3,133	3,402	2,913	2,510	1,836	1,373	883	587	339	16,975	
	Written Premium	2,340,748	2,583,976	2,212,657	1,811,794	1,325,296	991,531	603,782	401,609	232,135	12,503,527	
	Ultimate Loss and LAE	2,032,920	2,011,702	1,687,043	1,438,616	1,041,113	770,623	490,060	322,497	184,424	9,978,997	
	Variable Expenses	501,262	292,420	250,391	206,279	150,886	112,885	69,203	46,030	26,606	1,655,963	
	Contribution Margin	(193,434)		275,223	166,900	133,297	108,023	44,519	33,081	21,105	868,567	
	Margin per Policy	(62)	82	94	66	73	79	50	56	62	51	
		(-2)										
								Fixed Expens	ses		2,100,000	

(1,231,433)

Net Underwriting Gain/(Loss)