

The Impact of the Insurance Economic Cycle on Insurance Pricing

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The insurance market has long been subject to pricing cycles. During the so-called 'soft market' pricing may produce breakeven profitability results or even operating losses for some companies. This is then followed by a 'hard market' where insurance prices are relatively high. Then pricing falls and a soft market slowly erodes profits, continuing the cycle.

Overview of The Soft Market

Soft markets occur in accordance with the economic tendency of commodity business to operate at or near breakeven when there is an excessive amount of product supply. Put another way, soft markets occur when the sum of the premium goals for all the companies operating in a given market or territory is greater than the amount of insurance desired by all potential insureds in that market. Since at least one underwriter will be unable to meet his premium target without lowering price, he will need to price below the market price. Other underwriters must follow suit, or risk failing to meet their premium goals. The result is a downward spiral of insurance prices.

The delay in filing rate decreases should slow this process. However, note that price is not the same as filed rates. For example, in commercial insurance, rates must be filed, but different companies that are part of a corporate group often have different rates, and the choice of the company to place a risk in is up to the underwriter. Further, commercial lines pricing features many rating plans (i.e., schedule rating, individual risk premium modification, and experience rating outside the bureau-mandated workers compensation plan) that allow underwriters broad flexibility in setting price. Personal lines prices generally are set by near-rigid adherence to a pricing manual, but broad flexibility exists in use of the classification system (for instance, does the agent report a sixteen-year-old male driver in the household for a good customer); there are different rates filed for different companies in a corporate group; and underwriters in standard companies may begin to accept more high-risk insureds. So, personal lines companies may also respond to hard and soft markets without making insurance department rate filings.

There are some ways in which filed rates go down as the market becomes softer and prices continue to decrease. Rates and deviations filed by companies eventually follow the market downward (as companies decide they need lower rates to be competitive and are willing to wait through the insurance department filing process) and upward (when the market is hard enough to allow a price increase long enough for the insurance department filing process to take place).

One would think that bureau rates and loss costs, since they are not driven by price competition, would not respond to the softness or hardness of the market. On the other hand, to the extent that there is a decline in case reserve adequacy during soft markets and an increase in case reserve adequacy in hard markets, the incurred losses that go into the bureau rate calculations are affected by the state of the insurance market.¹ Since there is some evidence that total reserve adequacy is affected by the strength of the market (see Boor [1]), one might suspect that reductions or increases in total reserve adequacy in some companies will be mirrored in the case reserves. So, the strength of the market will have an impact on bureau rates, although not as great an impact as on charged rates. So, in spite of price controls by insurance departments, rates do tend to go down in soft markets and up in hard markets.

Overview of The Hard Market

As prices plummet downward, the financial soundness of insurance companies weakens. Eventually, operating losses take their toll on the capital stock (policyholder surplus) of the insurance business. Since rating agencies and regulators constrain sales (written premium) as a ratio to surplus, the premium objectives of the underwriters of the weakened companies will be reduced. Provided the sum of all underwriter's goals is reduced below the amount of insurance desired, there will not be enough capacity to meet all customer's desires. This creates a hard market where prices are high and coverage may be difficult to find. The high profitability this generates in turn attracts many new entrants in addition to the fact that high profitability builds new statutory surplus. That in turn leads to the excess capacity which leads to a soft market, continuing the cycle.

¹Author's Note: At the time this was written, the most recent hard market was that of 1984-1986. Most of these observations on bureau rates come from that period. Since 1986, most of the bureau 'rates' have become loss costs. In the hard market of 2001-2003, large rate increases by rating bureaus were not generally observed.

Detailed Dynamics of a Market Cycle

Since the hard market was discussed last, let us begin with the hard market. This is the case wherein the sum of the premium goals (and in the case of marginal companies, restrictions on the maximum amount of premium to be written, due to statutory warnings and rating agency warnings on the maximum premium a given degree of injured surplus will support) is less than the total market price of all the insurance demanded by customers (the so-called 'premium available' in the market). Since that is the case, underwriters either need not, or in some cases can not, sell to all their potential customers. Therefore, some accounts, especially those with poor underwriting characteristics and/or difficult-to-work-with agency representation will be nonrenewed by their incumbent underwriters. Since other underwriters (in the subject company and other companies) are in one of those two situations and either have their premium goals met with high quality accounts or are subject to underwriting restrictions, the accounts may be 'orphaned' and unable to find coverage. This produces a situation where accounts are willing to accept higher prices for the benefit of having insurance coverage when it is hard to obtain. Thereby the reduced industry surplus contributes to an increase in prices.

The increase in prices at the beginning of the hard market has a curious impact. The price increases actually make the market harder. The reason is that when prices are increased, the sum of available-to-be-written premium increases proportionately to the price increase. The result is that the surplus of both the financially strong and the weakened surplus of financially marginal companies is called upon to support even more premium (although now writing premium is much more profitable). Since the regulatory IRIS tests and the statistical tests employed by rating organizations do not recognize the inherent expected profit (or in the case of a soft market, loss) in premiums written, the premium restrictions on marginal companies become even harsher relative to the premium available. So, the market becomes even harder.

Not all the profitability inherent in a hard market is reported immediately. Generally, the soft market will have left industry loss reserves at marginal levels (see Boor¹). So, much of the new profitability is absorbed into loss reserve strengthening rather than reported in income statements. However, eventually the industry will have reserves set at the more realistic set of indications, and then must report higher-than-average profits. The high reported profitability that is created makes the insurance business appear to be a good business to invest in. At that point, capital will be drawn into the insurance industry. Marginal players will sell stock, demutualize, or otherwise gain capital in accordance with the new-found profitability of the insurance business. Of course, those actions signal the end of the hard market, as the enhanced surplus of the insurance industry allows premium goals to increase, slowly but surely, beyond the premium demanded by customers.

That signals the beginning of the soft market. As more capital enters the market, surplus (capacity) allows greater premium volume for the marginal companies. They now wish to grow in markets they assume will remain profitable, and to grow they must lower price. So, the market price for insurance is reduced. At the beginning phase of the soft market, prices are still high enough for insurance companies to generate profits when investment income on premium and loss and loss expense reserve funds is considered. Therefore, at the start of the soft market, loss reserves stay strong.

Of course, just as the rise in prices caused the market to harden further, the reduction in prices that starts the soft market causes the market to be softer still. Say the soft market begins with \$100 billion of capital chasing \$200 billion in premiums. That would be in accordance with the so-called 'Kenney rule' of \$1 of surplus for every \$2 of premium. Suppose the market reduces prices by 25%. Then, that \$100 billion in capital is supporting \$150 billion in premiums, and, per the Kenney rule, the market is overcapitalized. That sets the stage for the soft market in earnest.

The further price deterioration this causes may cause many companies to price below discounted losses and expenses. In other words, those companies may actually lose money on their premium writings. However, the surplus and discount inherent in the loss reserves still earn investment income. So, they may still generate profits, solely through their investment departments. At a certain stage, many companies begin to reduce the adequacy of their loss reserves, which also creates the semblance of profitability even when the underlying business is unprofitable. Further, many companies may chose to sell securities and buy others at this point, as long as the stock or bond market is priced high enough to create a capital gain on the securities that are sold, creating more of a semblance of profitability.

Of course all the financial activities that generate only the appearance of profitability tend to consequentially continue the soft market. And, while profits from investing surplus can continue forever, reductions in reserve adequacy and the recognition of imbedded capital gains cannot. The reductions in reserve adequacy also weaken the industry's financial strength. Ultimately, the marginal companies reach a point where they must post operating losses.

That may herald the beginning of the hard market. At a certain time, some of the weaker players may become insolvent, or be forced by regulators to strengthen their reserves. When those things happen to many companies at once, it is sufficient to reduce the insurance industry's capital, and begin the hard market, completing the cycle. Notably, a hard market could also be caused by a quite unusually high level of catastrophes.

Underwriting Selection as a Way to Profit in a Cyclical Commodity Market

Economic theory indicates that the companies that will survive in a commodity business are those that have the lowest cost structure. One way to have a lower cost structure, and a way that is important with national accounts that pay their own actual losses rather than projected losses, is to have lower operating expenses. However, it is important to note that for guaranteed cost (i.e. non-deductible, non-retro) accounts that pay projected losses, overhead expenses amount to 15-20% of premium, commissions and premium taxes are 10-20% of premium, and losses and allocated loss adjustment expenses account for 60-75% of premium. So, for guaranteed cost accounts, control of loss costs is the primary key to profitability. By far the easiest way to control loss costs is to select insureds that are less prone to have losses.

Note that since reducing underwriting selectivity generates more sales, the losses per insured exposure sold are an increasing function of sold exposures. In opposition, fixed expenses (overheads) per exposure sold are a decreasing function of exposures sold. However, since fixed expenses per unit sold are a small portion of premium, and do not decline as fast as losses per exposure sold increase, underwriting profitability per exposures assumed is a hump-shaped curve. That is, costs are high and profits are negative when few exposures are assumed. Profits are also negative when many units are sold. However, there is an area of moderate sales where profits are higher. Since the market price is commodity-like and fixed at each point in time, profits are best when sales are moderate and near the hump. When prices rise, larger amounts of exposures assumed generate profitability.

Paradoxically, one of the keys to selecting better insureds is price reductions. However, they must be selective price reductions that apply only to insureds with low loss potential. Care must also be taken to avoid price reductions that are so significant that they result in underpricing the low-loss cost insureds. However, once the market begins to give pricing credits to low-loss insureds, adverse selection can result from a company's best (lowest loss cost) customers obtaining insurance elsewhere at a better price. On the other hand, if an insurance company is the only insurance company recognizing low loss costs through price, that company will have its pick of profitable insureds to sell to. On the other hand, when all insurers target the same low loss cost insureds, there may be branding opportunities for a different insurer to make coverage available to 'the best of the worst' at a higher price.

Strategies for Response to the Cycle

There are two diametrically opposed strategies for responding to the cycle. One involves maintaining market share no matter what the cost; one involves maintaining profitability.

Riding the Cycle – Maintaining Market Share

This strategy involves attempting to maintain a constant market share through all phases of the cycle. It may be described as attempting to hold onto a given block of business by matching the market price, no matter how low the market price is. Of course, the negative aspect of this strategy is that it can produce a weak focus on profitability. As such, this strategy may be more suited for mutual insurance companies than stock companies which must answer to investors. On the other hand, since greater policyholder persistency can be expected, it is consistent with lower expenses. That is because some overhead expenses, such as much of the costs of risk selection, are one-time expenses associated with the first policy term. Unfortunately, only small portions of expenses are associated with the initial acquisition of a customer, except in direct mail operations, where they may be quite substantial. So this strategy has some benefits for stock insurance companies, and they may use some part of this strategy. However, companies following this strategy have to be very careful that its lack of focus on profitability does not produce insolvency or a greatly weakened surplus.

The Countercyclical Strategy – Conserving Capital

This strategy contains a focus on only selling business that will produce a profit. It involves writing minimal business in soft markets, and selling as much as possible in hard markets. Specifically, when the market is in its soft phase, a company following this strategy would only write the business that it can write at a profit. This 'conserves' the company's capital, since losses would eventually reduce the company's capital and surplus. Such a company would probably just write enough business in soft markets to maintain its infrastructure for the hard market. Then, when the market hardens and other companies have capital constraints, companies following this strategy have capital and surplus to spare. So, they are able to write a high volume of profitable business when the market is hard. In one hand, such companies should have high profitability per unit of premium. On the other hand, during soft markets these companies have low leverage on their surplus (i.e., a low premium-to-surplus ratio), and hence may still report low profits. But, that still may be better than suffering losses on underwriting. Also, companies following this strategy have to be very careful that they maintain their infrastructure during the soft market for use in the hard market.

It should be mentioned that in many cases, companies may use a combination of those two strategies. For example, countercyclical companies may chose to maintain some market share in the soft market, even though it is costly, just to maintain their infrastructure. Companies that follow the market may be forced to give up some business in the soft market to remain solvent.

Summary

The market cycle has been present in the insurance industry for a very long time. In fact, one of the reasons for the original insurance price regulation was to prevent ‘destructive competition’. Insurance companies must always consider it in pricing.

Bibliography

- 1) Boor, Joseph, 'A Macroeconomic View of the Insurance Marketplace', CAS Exam 5 Study Kit, 2000.