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Mar 31, 2010

Analyzing Insurance Stocks: The Income Statement

A few readers have e-mailed me asking that I show how to analyze a P&C insurance company. I thought that this might actually make a good post series.

When I started out in investing, insurance companies seemed really difficult for me to analyze. I found out that insurance companies aren't necessarily harder to analyze than any other company, but that there is a good deal of jargon to get used to.

I don't know how good I am at teaching this kind of thing, so **please** use the comments section or e-mail me suggestions or issues you have with the post. Once I have finished this series, I'll put all the parts into one big PDF, that way new investors can quickly grab the whole thing to study. My other goal is to eventually post guides for other industries; think banks, restaurants, retailers, and more.

The Income Statement

For the first part, we are going to look at the income statement. Now, I prefer to look at actual cases, so we will be analyzing Fremont Michigan Insuracorp (OTC:FMMH) for the rest of the series. I think it is useful to learn from companies like Fremont, because they are smaller and tend to have fewer moving parts. You can access the company's latest 10K by clicking here.

One of the most confusing aspects of P&C insurance companies is how they make money. It is not as simple as just looking straight at the revenues line on an income statement. Instead, P&C insurance companies generate revenues in three ways: underwriting, investment/dividend income, realized gains.

Fremont Michigan Insuracorp 10K 2009 Statement of Operations

Take a moment to look at the income statement line by line. One of the things that will stand out is how revenues are related to net income. You can see that each year, revenues grow, but net income actually decreased in 2008. This sometimes happens with insurance companies, they get a little loose with their underwriting standards and write too many policies without anticipating what they will do to the bottom line. As an investor though, you can sometimes use these periods to find an undervalued insurer. Say they had been writing policies for some kind of unprofitable line and decide to quit – that is an avenue for earnings to change.

Underwriting

When you think of the insurance, underwriting is probably what comes to mind. Underwriting is the act by which insurance companies take on risk. In exchange for that risk, they are paid premiums, usually on a fixed basis. The job of an insurance company is to take on the right kinds of risk, priced appropriately, so that they wont have to pay out too often or at rates that exceed their premiums.

This is why insurance is such a difficult business. In the past, Warren Buffett has noted that most insurance companies often relax their standards during a soft market (a time when insurance premium prices decline) and take on large volumes of risk that are priced too low. This narrows the margin of safety an insurance company has. If accidents happen at a higher rate than expected, an insurance company can easily go belly up. We've seen a lot of that in the past.

Premiums

Whenever you enter into a policy, say for auto insurance, you are paying a premium every month. That monthly premium allows you to get coverage by the insurance company. Now, to get to net premiums we have to go through a few steps.

In general, when Fremont writes an insurance policy, it goes under gross premiums written. But, as you can see, that does not appear on the company's income statement. What happens is, most insurance companies will actually buy some reinsurance for a premium. Basically, this reduces the amount of total risk they are taking on because the reinsurance company will cover some of it — this practice is called ceding premiums.

Gross Premiums Written – Ceded Premiums = **Net Premiums Written**

Still, that does not get us to net premiums earned. To get there:

Net Premiums Written / 12*10 = **Net Premiums Earned**

A reader pointed out to me that the example I gave is a generalization, here is his approach which is better:

> I think a more accurate equation, which inherently must involve the balance sheet, is:
>
> Net premiums earned = net premiums written – increase in the unearned premium reserve (UEPR)
>
> When an insurer writes a policy, it immediately posts a liability (the UEPR) against the cash received of 100% of the premium. Releases from the UEPR become earned revenue.
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> Simple example: insurer writes a 12 month policy on December 1, 2010 for $1200 and collects all cash upfront and purchases no reinsurance on this policy. The balance sheet would show $1200 in cash and an unearned premium reserve of $1200. Assuming premium is earned pro rata over the life of the policy, at 12/31/10, the UEPR would reduce to $1100 and earned premium (the top line revenue item) on this policy would be $100, the amount of the release.
>
> The 2010 income statement on this one policy would be calculated as follows:
>
> Net premiums earned = net premiums written of $1200 minus $1100 (the increase in the UEPR from 0 to $1100 at year end) = $100

What you are doing is assuming that the insurance company will have 10 months of the same result over 12 months. Insurance companies earn premiums pro rata over the life of the policy. Different policies have different lengths, auto insurance is generally shorter at 6 months while commercial lines may be 1 year in length.

Fremont Premiums

Fremont appears to be growing by writing more policies. They recently announced a plan to expand beyond their local Michigan market, which might help propel growth prospects and diversify their risks out of just Michigan. For an insurer, this is a pretty good sign.

Loss and Loss Adjustment Expense

Accidents happen. If you write an insurance policy, you have to be ready for losses. These come under the Loss and Loss Adjustment Expense:

Fremont Loss and Loss Adjustment Expense

An insurance company will incur losses in two ways, paying claims and establishing a reserve. When you receive a check from the insurance company? That's paying a claim. The loss reserve? That is a liability on an insurance company's balance sheet. Basically, Fremont sets a pool of reserves for losses they think they will encounter. Premiums are often split between loss reserves and investments. When a claim is submitted, that amount is then paid out from the loss reserve.

Paid Claims + Reserve Charge = **Expenses**

Insurance comes in two forms, long tail and short tail. Short tail insurance has to be paid out more frequently, so the investment prospects are usually shorter. If you look at any great investor who has taken control of an insurance company, they tend to gravitate towards longer tail policies.

Besides paying out claims, an insurance company incurs underwriting expenses.

Commissions + Other Underwriting = **Total Underwriting Expenses**

Most insurance companies have to deal with agents and brokers who actually go out and acquire customers. They are paid commission fees for their work, typically a percentage of premiums. Other underwriting expenses are typically your administrative costs, technology, taxes, and office rent.

The Combined Ratio

Every industry has some go-to metric for figuring out how to compare one business to the other. For fast food it might be same store sales, for retail sales per square feet, but for insurance — I think it is the combined ratio. The combined ratio is this:

Expense Ratio + Loss Ratio = **Combined Ratio**.

Loss Ratio:

Losses and LAE incurred / Premiums

Expense Ratio:

Underwriting Expenses / Premiums

When looking at combined ratios, a 100% CR means the insurer is breaking even on their insurance operation. Below 100% means an underwriting profit and above 100% means an underwriting loss.

I can't stress this enough – when you are examining an insurance company you really want one that is a profitable underwriter. This is not a business where you want to get yourself involved in a turnaround. You want a turnaround? They usually end badly. Fairfax endured 7 lean years as a result of picking up some very difficult to turnaround distressed insurance operations.

Fremont Combined ratio

Overall, you can see that Fremont's underwriting operation is profitable. Their combined ratios are coming down below 100% and are not abnormally low which would indicate that they are under-earning.

Investment Income

Most insurance companies will have a lag time between when they collect premiums and have to pay out claims. In between, insurance companies will usually invest at least a portion of those collected premiums. The idea is to beat the time value of money effect; a dollar today is worth more than a dollar tomorrow. Investment income is made up of the dividend and interest income that an insurance company receives from its investments.

Remember that discussion about short-tail and long-tail insurance? Well that affects how long insurance companies are able to hold on to their reserves and deploy them into investments. Short-tail insurance is paid out more frequently so their investments usually have less time to compound. The opposite is true for long-tail insurance. This is one of the reasons Berkshire Hathaway is involved in reinsurance is the face that they are able to write policies on events that may never happen or wont happen for a long time. This long-tail insurance allows them to deploy premiums into investments and compound for a longer period.

Unfortunately, the insurance market takes this into account and prices insurance policies accordingly. Many forms of long-tail insurance have higher combined ratios than short-tail risk insurance.

Fremont Investment Income

Within investments are two other components:

1. Realized Gains (Losses):

As I said, most insurance companies operate some kind of investment portfolio. When the company actually makes a sale on one of their investments, they will record a realized gain (or loss) depending on the price they originally paid and the price they sold for.

Fremont realized gains

You'll see that Fremont took some losses in 2008, most likely tied to the financial crisis. A number of insurance companies got into purchasing fixed income securities for yield without looking at their true nature. Some were involved in the dreaded toxic assets — I have not looked at what Fremont was selling back in 2008, but you could probably find out by accessing state insurance filings via the NAIC.

2. Unrealized Gains (Losses):

This is when the company's investment portfolio appreciates or declines, without any sales actually occurring. Due to the mark to market laws, an insurance company might report changes in unrealized gains every quarter depending on the stock market's performance. Keep in mind that changes in unrealized gains do not register in the income statement, rather, they are found in the balance sheet as a driver of shareholders equity via retained earnings.

Since many insurance companies use fixed income instruments to obtain dividend income, their portfolios are sensitive to changes to interest rates. If they are buying securities that are yielding close to current rates, and we see rates rise, the value of those securities will fall — forcing the insurance company to record unrealized losses.

Some insurers that are not profitable on their underwriting can still crank out a profit via investments. Fairfax Financial is well known for having this ability, it really requires a strong investment team at the helm. Unfortunately, the nature of investments is changing for some insurance companies. A recent article reported that many will cease to manage their investment portfolios in house. I like when insurers foster an in house investment operation because their incentives are often more aligned with the insurer. When you farm out your assets to Wall Street, you might get into products that require only a management fee (meaning performance does not matter) and the insurer will be taken for a stroll by Wall Street sales guys who only care about their commissions — not the well being of the insurer. I'd rather that insurance companies try to create a really good, value oriented investment operation in house. Guys like Tom Gayner and the folks at Hamblin-Watsa exemplify this best.

Conclusion

Hopefully, this has helped you understand some of the terminology and items that you will find on an insurance company's income statement. Once you see how the income statement works, you can look at it from a variable perspective. One of Fremont's criticisms is that their expenses could be lowered, this is a good point. If the company could reduce 2009 underwriting expenses by 5.9% net income would rise by almost 25%.

Let me know if I have been unclear in this walk through the income statement. My next post will focus on the balance sheet.

Category: Fremont Michigan, How to, Insurance, Insurance stocks, Value Investing

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Ankit Gupta · 6 years ago

Where did you learn this? I haven't gotten into insurance equities, banks, etc. because I didn't know where to go to learn about their financials.

Is there a good book that covers insurance companies and bank financials?

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Tariq Mod → Ankit Gupta · 6 years ago

With insurance companies, I picked it up mainly by reading a lot. There are some good annual reports (Fairfax Financial, Lancashire) that put together wonderful annual reports for a new investor.

Banks are more complicated. I learned banks mostly by focusing on some of the smallest banks that are traded. These tend to be less active and easier to analyze than say Citigroup.

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Ankit Gupta → Tariq · 6 years ago

Thank you very much Tariq. Keep up the good work with everything.

• Share ›

ben · 6 years ago

Great introduction. I think one part that wasn't clear was the calculation of net premiums earned. If I just bought a 6 month auto insurance policy and pay in full upfront, the gross premium written is the full amount of my payment, but none of it is earned yet. The insurance company earns the premium over the 6 month term of the policy. I'm not sure where you got the /12*10 formula from, can you explain? Thanks.

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Tariq Mod → ben · 6 years ago

Hi Ben, a reader pointed out to me that I may have been working off of a generalized example. Here is his more accurate approach, I edited the post above to include it as well:

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8 • Share ›

About Me

My name is Tariq Ali, I run Street Capitalist. I recently graduated from the University of Texas at Austin. There, I stumbled onto value investing via the school library. I read everything I could and now I'm here, writing out my thoughts and investment ideas.

I have a lot of heroes when it comes to investing, it seems like every investor has some kind of niche. Some, whose books and writings have had the biggest impact on me are: Warren Buffett, Benjamin Graham, Joel Greenblatt, Seth Klarman, and George Soros.

Have any questions? Want to stay in touch?
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