

....CPS BULLETIN....

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Introduction

In the past few years we have seen an increase in merger activity among fraternal benefit societies. A number of fraternal societies have recently either merged or considered a fraternal partner. When a merger is being contemplated, it is important that the interest of both sets of policyholders be considered. As we shall explain, the Annual Statement basis is not always the most appropriate basis to compare the values of the interest of these two sets of policyholders. In this, the first of a two-part article, we will discuss the theoretical financial considerations that should be part of the process.

Regular readers of the **CPS Bulletin** will know that our second article usually focuses on a computer related topic that we feel will be of interest to our readers. This issue's article talks about the quiet music revolution that has been accelerated by the availability of hardware such as Apple Corporation's iPod together with software such as MP3 technology and Napster. The digitalization of music means a move away from CDs and even DVDs towards the acquisition of music via the Internet. Now, you can get music just like any other item of information.

We hope that you enjoy receiving this newsletter. If you have any comments or suggestions on how we can improve **CPS Bulletin**, please contact us by visiting our company web site at www.cpsincorp.com. ❖

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Would you be my Partner?

There is consolidation going on among fraternal benefit societies. Many smaller societies are experiencing financial pressures owing to, among many factors, declining membership, rising expenses and falling interest rates. Some observers believe that in a decade or so there will only be 40 or so fraternal societies remaining out of over 100 currently.

A few societies are leaving the insurance business altogether, concentrating instead on fraternal activities. Most of the fraternal societies who feel, however, that they can no longer go it alone are looking for a merger partner. Rarely are mergers combinations of equals. Usually a larger, stronger society will take over a smaller society and will become the surviving entity. In this article, this society will be referred to as "The Acquirer".

A merger is a major event in the life of a society and it is important that the terms are equitable to both parties, especially when there is a large difference between the solvency levels of the two. It is not always The Acquirer that will have the higher solvency level. Often the smaller society has the higher solvency level but wishes to merge before further losses deplete that advantage. In these instances, it is important to consider what would be an appropriate distribution that is satisfactory to both sides.

In this two-part article we will discuss the considerations that should be taken into account during the process. This issue of **CPS Bulletin** will focus on the theoretical issues that will come into play. The second part, which will appear in our September issue, will translate these theoretical considerations into a practical approach.

In the US, a society's financial picture is given by the Annual Statement together with the actuarial memorandum accompanying a cash flow analysis. There are a number of reasons why the annual statement is not a good guide to assessing merger considerations. Some of these are obvious, such as:

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- The solvency level does not directly address different business mixes. For example, some societies have significant annuity business, others have none.
- The annual statement values the liabilities based on the original basis of the policies. A fraternal may have liabilities valued on bases ranging from American Experience at 2½% to 1980 CSO at 6%. However, a person now aged 75 is likely to be subject to the same mortality whether his policy was based on American Experience or 1980 CSO. Also, a fraternal's investment policy will not significantly differentiate between buying assets for liabilities valued at 2½% and those valued at 6%.
- Societies may have assets (including real estate and bonds) that are valued at Book Value in the annual statement. The market value of these assets, however, may be higher or lower than the book value. This would be important in a merger, where assets may be sold for their market value and cash transferred.

Some considerations are less obvious, such as:

- The approach to be employed in dealing with the AVR, IMR and any additional liabilities taken after a cash flow analysis.
- The marketability of some assets, such as real estate and bonds. In particular, privately placed bonds or bonds bought many years ago with very long maturities or those which are now graded a "6" by the SVO may be less marketable.
- The value of the society's marketing arm.
- Valuation of elements normally considered immaterial for the purpose of the annual statement such as a small book of Canadian business.

In Europe and in Canada, the prevailing methodology uses "embedded values" or "EV". EV can also stand for economic value of a business. The standard approach to valuing a business would be to examine future profits (less the cost of required capital, which for a fraternal, would normally be zero). Future profits would be the value of income from investments plus premium income less the liability increases, benefits payout and future expenses. All these items are then

discounted at an appropriate rate.

The EV approach bypasses the problems mentioned above. It does, however, create new questions.

- The business may be very different after the acquisition when the asset and expense structure of The Acquirer are used. Are we valuing the business as it is right now or after the acquisition? The answer is, it depends. If you are The Acquirer and you wish to determine what value the additional business has, then you will value the business as it will be, once you have reconfigured it to your business model. The result of this calculation may be the value that the policyholders being acquired might feel that they should get. On the other hand, one could argue that the value the policyholders of the society being acquired can reasonably expect, would be the value of the business as is. In practice, both valuations should be done so that one can view the position from both sides.
- What is the appropriate discount rate? This is difficult to pinpoint. A starting point would be the market interest rate, as indicated by long bonds plus a risk/volatility premium. The answer ultimately will be a mixture of art as well as science.
- This EV approach does not put a value on goodwill or on profits from future business. These have to be considered separately.

The EV approach is not very different from the approach taken in the standard cash flow studies that are often performed by the Appointed Actuary in conjunction with the preparation of the annual statement. The cash flow studies have the advantage of examining a number of scenarios, thus providing a sensitivity analysis for the discount rate.

Adopting the EV approach does not mean abandoning the annual statement valuation. On the contrary, The Acquirer will wish to project into the near future, say the next 5 years, and determine what their annual statement will look like at the end of that period, both if the merger takes place and if it does not. However this will be one of the inherent considerations, not the sole one.

In the next issue we shall take this approach further and put it into practice. ❖

The Apple of Your Eye.

If you have been, like so many of us, watching from the sidelines and wondering why the iPod is so popular and what it can do for you, we have an exciting story to tell you in this issue of the **CPS Bulletin**.

The battle that is being fought over the airwaves is not merely for the best personal music player but for the GOE – the Gadget Of Everything, that Holy Grail ubiquitous item that will do everything (except maybe the dishes) and will be the one item that everyone will want to carry.

Let's look at what the iPod can do and then look at some competition.

- The iPod stores music (latest versions can store more than 15,000 songs) and plays MP3 and AAC files (more on this later) that may be downloaded from your computer (where your CDs are stored using the free iTunes Software). With USB 2.0 and FireWire support, you can transfer music from an entire CD to an iPod in just 5 seconds or less.
- Store photos and connect the iPod to a projector or TV for full-color slideshows with music
- Use it as an organizer and calendar (you can even download your Outlook data into it).
- Use it as a voice recorder
- Functions as an alarm clock
- Play games (such as solitaire)
- Store files (say as a means of transferring files between computers)
- Coming soon: Play video clips
- To cap it all – no more tangles! Apple's iPod will soon be available with wireless headphones that use a Bluetooth connection to transmit sound digitally from your iPod to your ears, sans wires. It will even allow you to control basic playback functions (Volume, Play/Pause, FF, and Rewind) from the right headphone. Want to talk to the person sitting next to you on the train for a moment? Just tap the big button in the middle of the right headphone to pause your music; tap it again to resume.

- Possible add on for swimming and snorkeling enthusiasts: A waterproof iPod case or a self-contained wireless underwater listening apparatus that plays 128MB of MP3 music at depths of up to 10 feet.

What is the closest competition? Unexpectedly, it is coming from cell phones.

Verizon, for instance, now has a phone (Motorola e815) that will also

- Play music (although storage is limited to something like 50 songs)
- Send and receive e-mail
- Browse Web Sites
- Watch live weather reports, current news updates, sports highlights, etc with its VCAST option.
- Play video clips
- Functions as an alarm clock

Nokia's N91 cell phone (due out in 2006) will include a 4GB hard drive and a full-fledged music program for all sorts of nifty music/cell phone tricks. The N91 includes an FM radio tuner, like several previous Nokia models, but while you listen to the N91, the broadcaster has the option of sending you interactive data! Moreover, Nokia has already lined up a partnership with Infinity Broadcasting for Visual Radio (VR), and the company is considering licensing VR to automotive manufacturers for inclusion in the dashes of vehicles.

As for the software (the music) – it can come from a variety of sources such as Yahoo music.

The convergence with the iPod is uncanny.

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For those who merely want to play songs will want to know that the iPod can play AAC (Advanced Audio Coding) files, which are an advanced version of the MP3 format. MP3 is the current standard format for compressing a sound sequence into a very small file (about one-twelfth the size of the original file) while preserving the original level of sound quality when it is played. Inevitably certain frequencies of sound are eliminated during the encoding process.

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As a result of this processing, music is digitalized and can be sent electronically so that you and I are able to virtually instantaneously obtain sufficiently high quality music and may wave goodbye, for the most part, to CDs and other means of distributing music.

With all these iPod features why would anyone want anything else? Well, if you do not have and do not anticipate choosing between many thousands of songs you can get a more compact and cheaper microdrive player.

There are a number of MP3 players in a price range of between \$100-150 that have a mini hard drive of between 1 and 5 GB as opposed to 20GB- 60GB in a top of the line iPod with a price of \$300-\$400. And surprise..., even in the mini range one of the competitors is the iPod Mini. Other manufacturers are Zen Micro, Rio and Dell.

This is not tomorrow's world. It is today's. Happy listening.✧

About CPS

CPS Actuaries and Computer Programming & Systems, Inc.

CPS is an independent company with over 35 years of client service. We offer a wide range of computer and actuarial services, including the following:

- Actuarial valuations
- Annual and quarterly statement preparation
- Policy administration software
- NAIC compliant illustration software
- Web site hosting, instant messaging and e-mail
- Design, install and maintain local and wide area networks
- Hardware & software installation and upgrades

For more information regarding our services, please call us at **203-324-9203**, or visit our web site at **www.cpsincorp.com**

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Regulatory Update

Update on the Valuation Interest Rate

In our previous newsletter we foretold of a likely change in the minimum valuation interest rate starting in 2006. The April through June Moody's Index rates were 5.65%, 5.54% and 5.35% respectively, giving a mean for the year of 3.97% and triggering a fall in the minimum valuation interest rate to 4%. This will apply to policies issued after December 31, 2005 and will require endorsements to policies and changes to administration systems. The cash value interest rate will also be changing, from 5.75% to 5%; this change does not have to be enacted until January 1, 2007. Premium rates and annuity guarantees should also be reviewed. For a more complete discussion of the coming changes see **CPS Bulletin** of April 2005 or contact Allan @ 203 324 9203.

Small Face Amount Policies:

It appears likely that the NAIC will shortly be adopting an amendment to the Small Face (face amounts less than \$15,000) Life Insurance Policies Model Act. This will require insurers to disclose "clearly and prominently" where the cumulative premiums will exceed the face amount. It remains to be seen whether the states will adopt this format or go for stricter measures such as a higher face amount (for instance, Oregon currently defines small to be a face amount of less than \$20,000).

Bond Returns

The treasury will announce in August that the 30-year bond will again be issued after the February 2006 refinancing. This is good news for long term investors such as pension funds, insurance companies and fraternal who need long-term assets to match their long term liabilities. This will bring the US into line with Europe where recent 50-year bond issues have met with great success (source: Bloomberg radio; July 26, 2005)

Interest Rate Monitor

The following are some key interest rate benchmarks:

| <i>Benchmark</i> | <i>Current</i> | <i>3 Months Ago</i> | <i>1 Year Ago</i> |
|------------------|----------------|---------------------|-------------------|
| Fed Funds | 3.19% | 2.81% | 1.25% |
| Prime Rate | 6.25% | 5.75% | 4.25% |
| 30 yr mortg | 5.28% | 5.35% | 5.61% |

Source: www.bloomberg.com as of July 20, 2005.