



RETIREMENT INCOME UNIVERSITY

[A MONTHLY COURSE ON RETIREMENT ECONOMICS BY MOSHE A. MILEVSKY, Ph.D.]

LESSON 8:

Defined Benefit Pensions: Winners & Losers

MOST PROFESSIONALS IN THE financial services industry are now aware of the continuing decline of traditional private-sector defined benefit (DB) pensions. Each new company press release, government study or scholarly report continues to document that DB plans are being frozen, replaced and converted into defined contribution (DC) plans such as 401(k), 403(b) and other hybrid structures.

There are many ways to quantify this trend; one is the recently released survey by EBRI in which two-thirds of pension plan sponsors are thinking about freezing their DB plan. Likewise, the following statistic should provide a perspective for the younger crowd looking for their first job. According to Watson Wyatt, in the year 1985 a total of 89 out of the largest 100 companies in the U.S. offered a traditional DB pension to their newly hired employees. By the year 2002 this number dropped to 50 out of 100 companies, and in the year 2005 it was down to 37 out of 100. No matter how you look at it, one would be foolish to assume this

trend of reduced DB coverage in the private sector will halt or be reversed anytime soon. The only question is the magnitude and speed.

And, while there continues to be an intense public debate on which particular type of pension arrangement is better for the company's *employees* — DB or DC — there has been very little if any debate around what is better for the company's *shareholders*. Stop and think about this from the perspective of a business owner. If you were starting a large company from scratch today, would you set up a traditional DB plan or would you opt for a 401(k) plan for the employees?

You think you might know the answer to this question, but is there any way to test or quantify this? In an ideal world — or an economic laboratory environment — we would compare the market valuation of two identical companies with the same number of employees and in the same industry but with different pension arrangements. If the DB or DC plan were truly better for the shareholders this would be reflected in a market premium (or lack thereof) for one of the

two companies. In practice of course, much to the chagrin of the experimental economists, it is impossible to locate identical corporate twins with different color pensions.

There is however an indirect way to answer this question and that is by examining the market's reaction to changes in pension policy, or more specifically the announcement effect when companies shut down or freeze their DB plan. Bear with me here for a moment since the results have some interesting implications for your clients — even if they are not large business owners themselves.

Over the last few years, one of our Ph.D. candidates, Keke Song here at York University in Toronto, has spent quite some time in the local library archives digging up details on pension freezes and specifically the behavior of stock prices around these announcement dates. We are in the process of completing a detailed research study entitled "Do Markets Like Frozen DBs?" and I'll share some of the preliminary results with you.

Since December of 2001 we locat-



ed an average of one publicly traded company per month that announced intentions to freeze or shut down its DB plan and replace it with — or enhance — its DC plan. This one per month average is an underestimate of the magnitude of actual freezes, since there were many more companies also making this announcement about whom we were unable to get sufficiently accurate dates to be able to conduct the analysis.

Here is the bottom line from all of this number hunting. Over a window of 10 trading days before and after the announcement, the average increase in stock price for DB freezes was approximately 3.96 percent. These are pure returns. When you take into account the risk-adjusted out-performance of these stocks relative to the S&P 500 index, the announcement effect was approximately 4.2 percent. (Remember, if a stock price goes up 5 percent on a given date, but the market itself goes down 2 percent, the true value added relative to the market is 7 percent.)

As you can see from the chart below, if we expand the event window to 20 business days before and 20 business days after, the above-mentioned impact increases to almost 7.3 percent in

risk-adjusted returns. Remember that these numbers occur over a mere few weeks. Annualize them to get a sense of the overall magnitude of this effect. In aggregate, these DB closures added at least \$832 million in market value on the announcement date alone.

The market is effectively rewarding companies for freezing their traditional pension plans, even if they are substituting with an actuarially neutral DC plan that might cost the same in the short term. We are calling it the “billion-dollar cheer” — and the companies that still have unfrozen DB plans are observing the cheering very closely.

Why Are Markets Cheering?

Our hypothesis is that the reason markets are rewarding these companies — even as they deal with some disgruntled staff and increased contribution rates for 401(k) plans — is likely because of the capping of risk and not necessarily the reduction in compensation expenses or costs. They have taken this unquantifiable longevity risk off their corporate balance sheet and transferred it to, yes, your (or your client’s) personal balance sheet. The risk is now your responsibility. Here is another way to think about

it. If you — the employee — were a publicly traded company, your stock price would drop by an equal and opposite amount!

Although these results are preliminary, when we dig into the characteristics of the individual companies, we find that the cheering effect is much more pronounced for smaller companies compared to larger ones, which makes sense when you consider their limited ability to diversify longevity risk. Likewise, we found the cheering was greater for high-beta companies, which is financial jargon for higher risk. This was also the effect for highly leveraged companies. There is nothing very surprising here, but we now have some numbers to attach to the rumors.

OK, so aside from the interesting academic exercise, what are the practical implications of this? Well, first of all, if you happen to know about a company that is about to freeze or shutter its DB plan — and you are allowed to share this information — please give me a call. The stock is a strong buy!

On a more serious note, I think this further reinforces an important financial factoid for 21st century retirement planning. Very soon, the only group of new employees entering the labor force who will be able to rely with some measure of confidence on a DB pension plan to provide retirement income will be public sector employees who are part of state or local government plans. If your client is fortunate enough to be in this group, let him rejoice. While these plans are expensive to maintain — and my suspicion is that our collective income taxes will have to increase to support the longevity burden — they are ideal for retirees.

But, if your clients are working in the private sector, beware. Keep a close eye on the temperature of their pension. It might be slowly getting colder as stock returns get warmer. **B**

How Do Markets React to DB Pension Closures?

