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The Sins of Our Fathers

by Leslie John Lohmann

Practicing abroad has forced me to examine what it was I used to do before I left North America and, more often, why. When still working in North America, I had already wondered why plan sponsors were required to provide flyspeck benefits from retirement plans when they were, in fact, providing better benefits of the same kind and for the same risk through other, more efficient, employee benefit programs.

I wondered why a retirement plan was forced to provide benefits unrelated to need and/or appropriateness when an employee left employment prior to normal retirement. Why were poorly capitalized entities forced to provide insurance products—lifetime annuities—when risk theory analysis shows virtually a 100 percent chance of ultimate insolvency?

Why do actuaries, especially my Canadian colleagues, insist that the act of charging a loading that is not pooled with all other similarly underwritten loadings, protects the overall system from insolvency? Why do American actuaries, who believe that full funding of all termination benefits payable from retirement plans would protect the overall system, fail to notice that the reports showing funded status prepared in the United States are more than a year after the fact?

In both jurisdictions, why is externally funding a small benefit more important than providing appropriate and adequate benefits at all possible ages of termination of employment? Why is it that relatively large severance benefits, for the same employee, need neither accrued benefit-cost recognition nor external funding? Why do the proponents of financial economics fail to see that the future benefits promised by the retirement plan do not create a true liability of the employer? And, finally, why are deferred executive benefits not subject to ERISA permitted to be contractually guaranteed while benefits funded under the rules of ERISA are virtually prohibited from being so?

In Japan, I discovered preretirement benefits from retirement plans that made sense. Employees participating in private plans get a lump sum based on the length of time they work and their pay when they leave. Typically, if a plan provides an annuity, it is not a lifetime annuity, but an annuity exactly equal¹ to the lump sum originally promised.

A further enhancement adopted in Japan is the difference based on reason for leaving; voluntary leavers see their benefit reduced while involuntary (other than disciplinary) get a full lump sum benefit equal to what an older employee would get at full retirement age based on the same service and pay.

Women get the same cash benefits from private retirement plans as men, given the same pay and working history. Japan permits "Book Reserve" plans, plans that we in North America consider unfunded. In Japan, these plans represent legally enforceable promises by the employer to the employee; there is even a degree of priority protection in bankruptcy/insolvency of the employer for the benefits promised by these

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 1 This is not perfectly true as the interest rate is sometimes different than the market rate for a security of similar duration.

plans. North American executives have similar plans, but they are prohibited from being offered to the rank and file. The popular belief is that such plans are less secure some way than those plans subject to the funding rules of IRC 412.

Are they less secure? Even in America, I think not. Anecdotally, one can point out that few executives in the airline industry have lost retirement or severance benefits similar to the material losses of the rank and file. Is the ongoing arrangement of the Vice President of the United States with his former employer externally funded? Is it guaranteed by the PBGC? Is he worried? The simple reality in North America is this: the less "funded" promised retirement benefits are, the more likely it is they will be fully honored by the employer.

How did we get where we are in North America? Like integral calculus, we have been subject to the adding of minuscule bits that seemed insignificant at the time, but now have added up to a monster. We have a defined benefit system that fails its beneficiaries, its sponsors and the public. In addition to the accumulated changes, current law does not reflect current beliefs about the promises, as reflected in the accounting rules.

DB plans grew from providing a retirement gratuity to employees becoming too old to work any longer. Originally only for senior employees, the gratuity was often a continuation of a portion of final pay. Rank and file employees eventually grew into similar arrangements. Employers saw no reason and had no legal imperative to provide severance benefits (what we now call "vesting") as part of the retirement plan promise; the retirement benefit was only available to those employees who reached an age where the employer was willing to let them go with a benefit. It was not guaranteed; it was not part of the employment exchange. Actuaries got involved when it was realized that financing and cash flow could be problems. We helped our insurance companies develop products that financed and guaranteed the accrued annuity values of these future annuity benefits.

In order to finance the plan and guarantee the benefits, the employer was encouraged to buy annuities from insurers. Since these were insurance products, they required minimum cash surrender values (MCSV). The surrender values, due to the design of the products, were generally vested in each employee at termination of employment. Premiums paid, since they were costs of employment and were irrevocable², were deductible business expenses. The approach satisfied the culturally North American standard of fairness. The standard became law after the Equitable Assurance Society scandal in the early 1900s, the subsequent Armstrong Investigation in 1905 and the establishment of legally required nonforfeiture values.

These products introduced the concept of a termination benefit based on the present value of the promised future retirement benefit. Since the MCSV was relatively small and considered "fair," few ever questioned the rationale of keeping the same approach when trusts were introduced.

IRS rules solidified the approach. While other approaches were legal prior to ERISA, a tax deduction would only be available to companies that used essentially the insurance product approach; the future retirement benefit had to have minimum nonforfeitable values³ after a certain period of employment. Payments to the trust had to be irrevocable until all accrued benefits were provided to the beneficiaries of the trust. Without tax deductibility, few retirement plans for rank and file employees would have been funded in advance.

Then, as now, the plan sponsor's only legal obligation was to make minimum contributions as they became due. A legally enforceable promise to pay what we now consider "deferred wages" was never made. The future benefit remained a gratuity. The promise of the retirement plan trust was legally severable from the plan sponsor's liabilities. ERISA codified the essence of these rules, while recognizing that the retirement benefit was (and still is) a gratuity.

Have employees benefited? Have actuaries protected participants? For one thing, ERISA pretty much prevented the benefits promised by retirement plans from becoming "pay for performance." Even severance plans are specifically defined as "welfare plans" avoiding any reference to pay for performance. On the other hand, the Financial Accounting Standards Board (FASB) insists that the plans be treated as though there is a contractual right (the "employment exchange") to the deferred pay represented in a pension plan (but not severance and continuation of pay plans).

Are we protecting annuity benefits in payment? As the recent experience with the airlines has shown, without the full faith of the promisor and priority of deferred pay in insolvency, external funding provides little in protecting even these most sacred benefits. Faithfulness, we have seen, disappears in bankruptcy/insolvency. We seem to be protecting some severance benefits derived from

 $^{^2}$ There were par and nonpar products that returned some premiums to the employer in excess of that necessary to provide legally required benefits.

³ Unlike insurance products, the surrender values were permitted to vary according to actuarial basis used. This particular freedom began to be limited in the early '80s with the Retirement Equity Act.

retirement plans, but are they worth the effort? Compared to severance benefits available from retirement plans in Japan, those in North America are quite small. For simplicity, consider a plan that provides 1 percent of final pay⁴ per year of service at age 65. Table 1 (to the right) shows lump sum values at various ages of termination with the service indicated.

At normal retirement age 65, this plan looks similar to a common design in Japan; a lump sum of one month of final pay times the number of years of service. But what happens when employees leave before normal retirement age? In Japan, the involuntarily departing employee would still get the same column as "Age 65." In Japan, except for distinguishing voluntary from involuntary departure, the value of the deferred pay changes only with the employee's value⁵ at departure, not age at departure.

An employee in Japan who leaves voluntarily needs to take into account the diminished value of the various moneys to be received at departure. If the new opportunity is not worth the change, it needs to be reconsidered. Distinguishing voluntary from involuntary severance is a concept that needs adoption in North America.

When the severance is involuntary, the former employee needs an amount of money that suits the difficult situation, not a cash value of a deferred annuity payable at the normal retirement date. In Japan, this works; there is no retirement plan penalty for early departure or early retirement in an involuntary termination. And, since the normal form is lump sum, there is no additional penalty for being an employed female.

In North America, the amount the employer pays the employee for work already performed varies by age paid if it is paid from a retirement plan. It is a direct consequence of the application of minimum cash value theory to a non-insurance product and the inability to legally adopt the position demanded by the FASB, namely that the retirement plan represents a promise of deferred pay by the plan sponsor for performance of the employee the "employment exchange."

While I don't think that retirement plans should be mandated, when an employer chooses to establish one, these lessons from Japan could atone for some of the sins of our fathers:

1. All pay based on past performance should have priority in insolvency.

Table 1 Lump Sum Value Of Deferred Annuity Expressed as a Number of Months of Final Pay

	-		Age	-	
Service	65	55	45	35	25
5	6.0698	3.1091	1.6885	0.9319	0.5160
10	12.1396	6.2183	3.3769	1.8638	
15	18.2094	9.3274	5.0654	2.7957	
20	24.2792	12.4366	6.7538		
25	30.3490	15.5457	8.4423		
30	36.4188	18.6548			
35	42.4886	21.7640			

- 2. Employers should promise and pay only lump sums.
- Less than 100 percent vesting should occur only when an employee voluntarily leaves employment.
- Benefits paid for departure prior to normal retirement date should be designed to meet the needs of the sponsor instead of being based on MCSV principles.

Finally, I must mention the greatest sin one our fathers committed and we carry on: the sin of believing that, if the math works, it must be right.⁶ Perfect math from a false premise produces bad results. There are three areas where this is having a grossly negative impact on actuarial work involving retirement plans:

- 1. The Canadian standard requiring a margin for adverse deviations uses the mathematics of pooling risk without requiring any actual pooling. The result is overcharging.
- 2. The ERISA standard of perfection in the actuarial valuation ignores the timing of the results. Late results are useless results. "Full" funding cannot be achieved with the turnaround now permitted.
- 3. The elaborate mathematics of financial economics is based on the appealing, but incorrect, premise that the plan sponsor promises deferred pay for employee performance.

Actuaries must atone for this last sin by moving toward relevance and timeliness, regardless of standards, laws and regulations permitting otherwise.

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 $^{^4}$ This is generally not permitted in North America, but a plan could be designed to look very much like this, despite using the required longer averaging periods.

⁵ An employee's value being directly related to pay.

⁶ Unfortunately, this sin is reflected in computer work where, if the computer produced the result, it must be right.