Benefits and International Mergers and Acquisitions

A.F.M. Jungman, the Netherlands

Actuaries should be involved if mergers and acquisitions take place. This article describes the special difficulties when international mergers and acquisitions are involved. Then the actuary deals with international differences in benefits, caused by culture, different levels of social security, funding and accounting methods, communication and labor environment.

The role of the actuary should be that of an excellent tool in the hands of smart and well informed negotiators. But he or she must behave as an expert and may not believe that one figure represents the only true answer. After all the true pension liability will only be known 40 or 60 years after the merger. Different parties can have a different view on the degree of conservatism or realism needed in the valuation.

From the point of view of the potential buyer it is most important to what extent the earning capacity is influenced by the merger or take-over. Therefore the actuary advising him should concentrate on looking for possible increases of pension costs as a consequence of the take-over. The degree of funding of pensions is only a part of the problem.

Besides the pension costs also the salary structure may be of great importance. Harmonization can lead to substantial cost increases (including pension costs).

It is a pity that in many cases actuaries concentrate on the funding degree of pension plans only.

The approach of FAS 87 can be used very well in these negotiations, because it enables us to make estimates about the future pension expenses of benefit plans and because international auditing firms are well familiar with the concept.
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1. Introduction

Each year thousands of mergers and acquisitions take place. In most of them actuaries are not involved. Why not? Because:

- there is no time to study the benefits aspects;
- human resource issues are often given low priority;
- buyer and seller focus on product and financial issues, other than those of benefits;
- confidentiality requirements often prevent using outside support of consultants early on;
- many acquisitions take place by buying the shares of the company, being taken over, at the stock exchange market, without any involvement of actuaries.

Still in many cases actuaries are asked for advice. In some of these cases however their services during the merging or take-over process are not appreciated in the end. Sometimes they are seen as trouble makers in stead of problem solvers. The danger that this may happen is even greater in international mergers and acquisitions. Especially if experience and understanding of different cultures, missions and practices are lacking.

In this article I want to go into:

- international differences in benefits;
- what the role of the actuary should be;
- what is important: long term expenses or funding degree.

I will use examples taken from countries, which are member of the European Union 1).
2. International differences in benefits
As far as I know there is no country in the Western World, which has organized its retirement provisions exactly the same as its neighbor country. This is at least completely true in the countries, belonging to the European Union 1).
Differences in culture are reflected in different social security. Therefore also additional pensions are organized differently. We see points systems in France, multi-employer pension funds in the Netherlands and personal pensions in the U.K. and nowhere else. Also the funding systems differ. And as you may expect in each country there are auditors, who have been very creative in inventing different auditing systems. If a company, with its headquarters in Italy, takes over a company in the U.K. it is not likely that the managers will pay much attention to pension obligations of the U.K. pension fund. But if the headquarters is located in the U.K. or the U.S.A. such obligations will be searched for more often.

Let me mention some aspects of the differences.

2.1. Influence of culture
As my fellow countryman, Professor G. Hofstede defines it 2) culture is: “the collective programming of the mind which distinguishes the members of one human group from another” and “the software of the mind”. In his studies he uses as dimensions:

- large or small power distance (the extent to which people accept the fact that power and authority are distributed unequally);
- weak or strong uncertainty avoidance (the degree to which people feel threatened by uncertainty and ambiguity);
- individualism versus collectivism (the extent to which people see themselves as individuals or as members of the group, family or organization to which they belong);
- quantity vs. quality of life (the extent to which the dominant values of a society favor achievements, heroism, assertiveness and material success, or have a preference for relationships, caring, nurturing and intrinsic rewards).
I have taken some figures from his books showing characteristic positions of the Netherlands, Germany, the U.S.A. and Japan in these dimensions.

**Examples**

**Dimension**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Relative Positioning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Distance</td>
<td>Small</td>
</tr>
<tr>
<td>Uncertainty Avoidance</td>
<td>Weak</td>
</tr>
<tr>
<td>Individualism/Collectivism</td>
<td>Large</td>
</tr>
<tr>
<td>Quantity/Quality of life</td>
<td>Quantity</td>
</tr>
</tbody>
</table>

In heaven, as you know, the English are the police men, the French the cooks, the Italians the lovers and the Germans the organizers. But in hell the French are the police men, the English the cooks, the Germans the lovers, while the Italians organize everything.

If you come from one of these countries, please do not blame me, after all this study only gives kind of averages and each individual is different. One of the good reasons for visiting IACA conferences is the opportunity to experience cultural and individual differences.

It is clear that international mergers are even more complicated than national ones because cultural differences influence the behavior of negotiators. Also these differences can partly explain differences in social security levels and labor environments in different countries. Beside the country's culture also company cultures will be different in most cases. This is the main reason why so many take-overs or mergers fail.
2.2. Influence of social security
In take-overs or mergers where companies ask our advice, they will be concentrating on the costs of the pension plans, as part of the total compensation package.
In countries, where social security covers all or nearly all of the retirement pensions, managers will not give much attention to costs of additional company pensions.
As the following graph about retirement pension covered by social security in countries belonging to the European Union clearly shows this is more or less the case in countries like Spain, Portugal, Italy and Greece.

Social insurance EU
Old age pension married man in % salary

However, this graph is based on continuation of the existing level of social security. In the meantime the governments of these 4 countries have struggled with labor unions, pressure groups of elderly people and political parties about the future of their social security. All projections show that the population is going to age quite rapidly and that social security cost will go up dramatically in the next 20 years. If this happens, it seems likely that social security will be reduced and that additional pension plans will have to compensate this at least for a part.
A colleague of me in Spain expects the maximum social security pension to increase 2% less than the wages *). If that is true it will loose 1/3 of its purchase power in the next 20 years and 1/2 during the next 40 years.

*) actually this maximum increased by 3.4% and the wages by 7.8% averaged over the last 9 years.

2.3. Funding and accounting for additional pensions

Funding systems
In nearly all countries social security is funded on a pay as you go system. For the additional pensions, provided by a company pension plan the following funding systems are the most occurring.

<table>
<thead>
<tr>
<th>Most occurring funding systems</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>bookreserve on the balance of the company:</td>
<td>Germany</td>
</tr>
<tr>
<td></td>
<td>Spain</td>
</tr>
<tr>
<td></td>
<td>Portugal</td>
</tr>
<tr>
<td></td>
<td>Italy</td>
</tr>
<tr>
<td>point-system - pay as you go:</td>
<td>France</td>
</tr>
<tr>
<td>life insurance:</td>
<td>Denmark</td>
</tr>
<tr>
<td></td>
<td>Belgium</td>
</tr>
<tr>
<td></td>
<td>Luxembourg</td>
</tr>
<tr>
<td></td>
<td>Greece</td>
</tr>
<tr>
<td>pension funds:</td>
<td>Netherlands</td>
</tr>
<tr>
<td></td>
<td>Ireland</td>
</tr>
<tr>
<td></td>
<td>U.K.</td>
</tr>
</tbody>
</table>

You will understand that the degree of funding - the degree in which a liability is covered by assets - varies very much. In Germany the book reserves are based on the fiscal rules, which allow an interest rate of 6% per annum, without any salary projection. Pension funds in the Netherlands must use an interest rate of 4% as a maximum (also without salary projection). In the United Kingdom actuaries will use a higher interest rate, but will also take salary projection into account.
An interesting and for most actuaries, missing a U.K. actuarial education, puzzling phenomenon is the way U.K. actuaries value equities on the balance sheet of the pension fund. In nearly all take-overs where those actuaries communicate with their brothers from abroad this leads to endless discussions.

Auditing systems
These different systems play a very important role in international mergers and acquisitions. The annual reports, checked by auditors, are the starting points in all negotiations. As everybody knows the auditing rules give much room for creative people, some of who like window dressing. I have experienced many cases where companies had huge pension obligations, while the annual report did not mention anything of it. In France companies have the obligation to pay a severance sum of up to 20 months salary if employees are fired. Following the official rules these obligations have to be accounted for. However most auditing firms are not at all interested in this. French auditors told me: “these reserves would not be tax-deductible: that is why.” That is clear enough, isn’t it?

Also in auditing one finds the cultural differences back. In Germany everything is forbidden unless it’s allowed. In Britain everything is allowed unless it’s forbidden. And in France everything is allowed even if it’s forbidden.

I think IACA-actuaries should be aware of this.

2.4. Communication
Communication about benefits is also very different in the world. In the U.S.A. and the U.K. many employees receive nice pension booklets, describing the headlines of their pension plan in a language that is as clear as possible. But I also have experienced companies which more or less hide their pension provisions in some countries. A well known leading European company had a generous pension plan in Spain, but their managers did not know that it existed. It had to be sorted out by external lawyers that his company had such obligations in the end.

Consulting actuaries can play an important role in communication about benefits.
2.5. Labor environment

Labor environment is different in most countries. In Germany the workers councils are very strong institutions, which can hinder any alteration in pension plans for a period of at least a year after the take-over. Labor unions can be very important negotiating partners in Italy, France, the Netherlands and Spain. In some countries people are willing to strike even if minor benefits are taken from them.

It sometimes happens that after a take-over or split-off of a certain company another collective labor agreement is applicable, because the branch of industry changes.

If, after the take-over management is replaced by people from foreign cultures, they will have to realize that things like job evaluation are not known in some countries and that in some countries it is not common to have even a small percentage of salaries at risk. Managers have to be knowledgeable and flexible. It is obvious that motivating employees and minimizing employee fear and anxiety, caused by a take-over, is most important.

Of course consulting actuaries will bring this to the attention of their clients.
3. The role of the actuary
What should be the role of the actuary?
Are we independent arbiters 3)? Of course not.
There are so many ways to value benefits that it is impossible for one
person to say what is right or what is wrong.
Are we just an excellent tool in the hands of a smart negotiator, who
has learnt that investment in our fees will always pay back?
Yes, I think for the greater part we are just that, although there are
certain limits. We must act and behave as experts and may not use or
give arguments, which are impossible to defend, based on science or
practical experience. I think we may not believe that one figure repre-
sents the truth and nothing but the truth, while we know that a small
change in one of our assumptions makes such a difference in the re-
sults of our calculations. If possible we have to show our clients this in-
fluence too.
After all, the true pension liability will only be known 40 or 60 years
after the merger. Different parties can have a different view on the
degree of conservatism or realism needed in the valuation.

As Mr. Topper wrote in his interesting paper 4) it is not uncommon, in
a sale and purchase situation in the U.K., that up to 4 actuaries are
involved in the negotiation:
nr. 1 advising the purchasing company;
nr. 2 helping the board of the purchaser's pension fund;
nr. 3 assisting the selling company;
and nr. 4 the pension fund of the seller.
And this is not only the case in the U.K., but also in other countries,
where pension funds are involved, which are legally independent
from the employers. I think this can be completely justifiable.

Although I am not sure that everybody will like to take part in such
discussion it is a fact that there are different parties involved, with
different interests. Part of the negotiating strategy of one of the parties
is often to act as if this is not the case and bring in their expert as
THE EXPERT. However, experienced consulting actuaries, having
worked for all 4 sides of the table, know that many alternative appro-
aches can be defended.
4. What is important: long term expenses or funding degree?
I will approach this question from the position of the potential buyer. The seller will usually take the opposite point of view. Furthermore, I will concentrate on the situation of a take-over, followed by a harmonization of labor conditions with those of the buyer. However, the same principles hold in my opinion in case of a merger 5).

4.1. Earning capacity
Let us assume that company A buys company B from company C. To what extent must company A consider the consequences of pensions and other labor conditions? The answer with most companies is that benefits shall be reasonably funded; at least that is a clause one will often find in Purchase and Sales agreements.

Is this really the most important fact? In my opinion this is in general not the case. Of course it is nice if the pension plan is nicely funded and these funds are transferred. But what does that help if, as a consequence of the take-over and of a following harmonization of the plan of company B with the existing plans of company A, the pension costs increase dramatically and profits are depressed far under the expected level. At the bottom line it is the future earning capacity of company A, as far as it is influenced by the consequences of the take-over, that counts.

The actuary advising the buyer therefore should concentrate on looking for possible increases of pension costs and other labor costs as a consequence of the take-over and inform his client about that. Of course part of this can come from a lower degree of funding than the buyer finds acceptable. Pension costs may also increase because of higher costs of insurance or administration, caused by a smaller scale.

Often there are other categories of labor costs that may increase too. A good example in the USA will be medical costs, that may be underestimated in the balance of a company. If for the same functions company A pays higher salaries than company B it is quite possible that as a consequence of future harmonization salaries in company B will have to be increased. This will drive up his costs and will dramatically decrease the earning capacity.
Another reason for increased salaries after a take-over may be if employees at company A pay less employees' contributions for benefit plans than those of company B. Or if they have more holidays, less working hours or special allowances (sales commissions can be very different) that company B does not have.

In defined benefit pension plans structural salary increases will increase pension costs over future and past years of service.

In an ideal world, all these effects should at least be included in the seller's considerations before the sale. As you can see the consequences of salary increases for pension costs are only part of the problem 6).

4.2. Funding position
In practice the most important element, the future earning capacity, is very often completely overlooked. In my opinion the reason for this in too many cases is because it is much easier for financial managers, auditors and actuaries to just concentrate on the funding degree. And indeed the future is unpredictable, even by actuaries, but I think that they should at least try.

If parties concentrate on the funding position the question is: "Are there any past-service liabilities, hidden or disclosed, unfunded or poorly funded?". The audit or due diligence study can be limited to benefits with a long term nature. Although the principle with this approach looks simple enough the practice can be complicated, especially in international take-overs. Also here one needs criteria for appropriate funding.

Let me give you an example from the practice:
Example: audit results for country XYZ:

<table>
<thead>
<tr>
<th>Category</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>general pension plan</td>
<td>123 participants; partly funded; partly book reserved; final average pay; social security integrated; unfunded liability because likely reductions of social security are not taken into account</td>
</tr>
<tr>
<td>individual promises</td>
<td>manager receives additional years of service; not reserved for</td>
</tr>
<tr>
<td>early retirement</td>
<td>4 individuals may retire early; unfunded liability</td>
</tr>
<tr>
<td>additional payments to retirees</td>
<td>annual voluntary Christmas payment of 567; established company practice; unfunded liability</td>
</tr>
<tr>
<td>leaving service payments</td>
<td>statutory benefits; just improved by collective agreement; unfunded liability</td>
</tr>
<tr>
<td>seniority awards</td>
<td>1 month pay after 10 and 25 years; unaccounted; unfunded liability</td>
</tr>
<tr>
<td>death-in-service</td>
<td>self-insured. Seller will have to insure at increased costs</td>
</tr>
<tr>
<td>short term disability LTD-plan</td>
<td>3 executives on extended sick leave; unfunded liability</td>
</tr>
</tbody>
</table>
Three cheers for FAS 87?
Yes, I think the approach of FAS 87, with some adjustments, can be used in negotiations about pensions in international mergers and acquisitions. This is because the methodology of FAS 87 enables us to make estimates about the future pension expenses of a certain benefit plan. Of course this does not solve all problems between actuaries. There is still plenty of room to discuss the assumptions.

One of the most important ones is the difference between the discount rate and the expected annual salary increase. As Roger Atkins showed in his article: FAS 87 assumptions for non-U.S. defined benefit plans 7) there is enough spread:

<table>
<thead>
<tr>
<th>Country</th>
<th>Lowest</th>
<th>Average</th>
<th>Highest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>1.60%</td>
<td>2.93%</td>
<td>5.25%</td>
</tr>
<tr>
<td>Austria</td>
<td>0.75%</td>
<td>2.33%</td>
<td>3.25%</td>
</tr>
<tr>
<td>Belgium</td>
<td>1.30%</td>
<td>2.73%</td>
<td>4.50%</td>
</tr>
<tr>
<td>Canada</td>
<td>1.50%</td>
<td>2.99%</td>
<td>4.50%</td>
</tr>
<tr>
<td>France</td>
<td>2.00%</td>
<td>4.21%</td>
<td>6.25%</td>
</tr>
<tr>
<td>Germany</td>
<td>1.50%</td>
<td>2.95%</td>
<td>5.50%</td>
</tr>
<tr>
<td>Japan</td>
<td>0.90%</td>
<td>1.56%</td>
<td>2.50%</td>
</tr>
<tr>
<td>Netherlands</td>
<td>2.00%</td>
<td>2.86%</td>
<td>4.50%</td>
</tr>
<tr>
<td>Switzerland</td>
<td>(0.50%)</td>
<td>1.08%</td>
<td>2.00%</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>0.90%</td>
<td>2.39%</td>
<td>4.00%</td>
</tr>
</tbody>
</table>

I think it would be good to mitigate the impact of the different assumptions somewhat. This can be done if the resulting pension expenses are not expressed in $ or Dfl. or whatever currency, but in percentages of the present value of future salaries for the existing population, based on the same assumptions.

In the model of FAS 87 it is easy to calculate the impact of a structural salary increase, which might be necessary because of a take-over. Also the consequences of potential adjustments of the pension plan, caused by harmonization, can be calculated.

Of course, this does not mean that FAS 87, based on the projected unit credit method, is the only appropriate approach. But it has at least the advantage that it is recognised and well known by the international auditing firms and financial managers.
Surplusses
This does not answer the question: how do we take into account a sur-
plus in the pension fund of a company, that is being taken over?
We have to deal with this question in the U.K., but also in the
Netherlands, Belgium, Switzerland, Spain, Canada, the U.S.A. and
Australia. For a many sided answer I refer to the article of Mr. Topper
4). But again, for the buyer it is the estimated impact on the future
earnings capacity that counts. The higher the surplus, to be transferred
to the fund of the buyer or the newly established fund, the higher the
future cost savings may be. But he has to take into account the pos-
sibility that he will not be able to fully profit from surplusses, because
the board of the fund may decide to use it partly for increasing bene-
fits.

Social security reductions in integrated plans
Another interesting issue for discussion is the impact of expected
social security reductions on the pension expenses.
Should these be taken into account if social security is fully integrated
in a pension plan? In principle I think this could be defended.
Even if pensions are not fully integrated with social security one must
expect that companies will at least have to fill up part of the gap if
governments reduce social security in the future. However, one should
be realistic and not expect that social security benefits can be halved
within 20 years without a revolution. It is interesting to see that this
principle leads to an expectation of increased company pension costs
in countries where those pension plans are rare, like in Italy and Spain.

Postscript
I hope this paper makes clear that there is much interesting and chal-
lenging work to be done by actuaries and other consultants in inter-
national mergers and acquisitions.
Many questions are only partly answered. What if FAS 87 pension
expenses are much lower than locally reported or paid pension costs?
Should not the buyer be advised to stay on the safe side and use the
actual paid amounts? And should the seller not point at the potential
long term cost savings? And if the plan is underfunded should the
buyer not use the argument that after the take-over he will have to
show the shortfall in his balance sheet? Even in case the pension ex-
penses decrease? As you see there is much room left for creative
solutions.
Notes


2) G. Hofstede: Culture's Consequences: International Differences in Work-Related Values, Sage, 1980

3) Klaus Heubeck and Dr. Gerhard Löcherbach in their article: Betriebliche Altersversorgung bei der Unternehmensbewertung, Der Betrieb, nr. 18, 1982.


5) Of course there is much more to say about the different approaches parties may take, but that would double the size of this article.

6) Because of this fact I think it is good that actuaries work more and more closely together with compensation specialists in one firm or more.

His figures are based on a survey as per December 31, 1990.