Multinational Pooling & Captives

Exploding the Myths!

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1. Introduction & Executive Summary

This paper presents the key findings of research studies conducted by William M. Mercer, Inc. on the experience of insured employee benefit contracts included in multinational pooling arrangements and captive insurance arrangements.

Multinational pooling is a way that a company with insured benefit programs in a number of countries can utilize global economies of scale to reduce costs and gain other advantages compared to taking a decentralized approach to insuring these benefits.

The main objectives of this research were:

- To build a database of claims and pool experience,
- To analyze ranges of risk and administration charges (retentions) to see how they vary by pooling network and pool characteristics,
- To identify profitable and unprofitable contracts,
- To develop tools that can be used to actively manage pooling arrangements in order to maximize the financial effectiveness of pooling,
- To investigate the prevalence of reinsuring a multinational pooling arrangement to the company's captive insurance company.

An additional purpose of the research was to analyze actual data from a large number of pools in order to confirm or disprove a number of broad suppositions that have commonly be used by international benefit practitioners in the past.

Some of the key findings of the research include:

- Although dividends have been reducing in recent years, pooling is still an effective way of financing international insured benefits.
- Active management of pools is required in order to maximize financial rewards. This is achieved by:
  - careful selection of contracts to pool (and the removal of contracts that are expected to be loss-making)
  - reviewing the risk management technique utilized (stop loss versus loss carry forward – or a combination)
  - continual monitoring and adjustment.
- Few companies have transferred the risks relating to their multinational pool to a captive, and there seems to be little financial advantage to be achieved by so doing.

The rest of this paper describes the analysis that we carried out, along with a more detailed discussion of our findings and conclusions.

2. Concept Basics

Many multinationals choose to insure some of their benefit plans around the world. Often the insurance contracts in different countries are not related to each other. This approach can waste money because:

- competitive insurance rates are not available in many countries.
- cost savings from economies of scale are lost.

With a multinational pool, the waste can be eliminated. Under a pooling arrangement, each local benefit plan is insured with a carrier which belongs to a network of insurance companies. Each year, the network draws up an account (the "international account") for the sponsoring company, which shows:

- total premium paid to the insurers
- total claims paid by the insurers
- other amounts received, set aside for future payments, or paid out by the insurers (e.g., interest, commission, profit-sharing).

A charge to cover the insurers' expenses and risk exposure is deducted from the balance of the income and outgo (referred to as the "retention"). Any remainder is paid to the multinational company as a dividend, commonly called the "international dividend." If the remainder is negative, the multinational usually pays no extra. Typically, either the loss is cancelled under the "stop loss" system or is caried forward to be offset against future surpluses - the "loss carry forward" system.

An international dividend can arise when:

- the claims experience of the insured employees is more favorable than was assumed in the premium basis; or
- investment income on any policy reserves is greater than was assumed in the premium basis; or
- expenses of administering the plans are less than were assumed in the premium basis.

In addition to the dividend, a pool can bring other advantages to a multinational company including:

- improved underwriting (including coverage for small groups that might not otherwise be available)
- easier transfer of employees between countries
- enhanced local contract terms
- annual financial reporting globally
- influence with local insurance companies.

In order to pool with a network, each insurance contract must be underwritten by the local insurer of that network. For some of a multinational's operating companies, this may mean a change of insurer. The local company may not, however, wish to change if:

- the network's local insurer is more expensive or inefficient;
- terminating the existing contract would result in a loss;
- benefits in payment would be affected adversely; or
- the incumbent insurer has other business connections to the company.

Additionally, changing insurer can consume valuable management time.

As a result of these types of issues, it is common for a multinational company to start by establishing several "pools of convenience," i.e., pools based on existing insurers. While this may not maximize the financial benefit to the company, it provides for a choice of insurer when seeking to insure new coverages.

As a result a multinational company will typically have two or more pools in place. Indeed, Mercer's survey showed an average of just under two pools per company.

3. Multinational Pooling Research

In the past, international benefit practitioners have commonly used broad rules of thumb for many aspects of the analysis of multinational pooling arrangements. This was primarily because data on which to perform empirical analysis was simply not available.

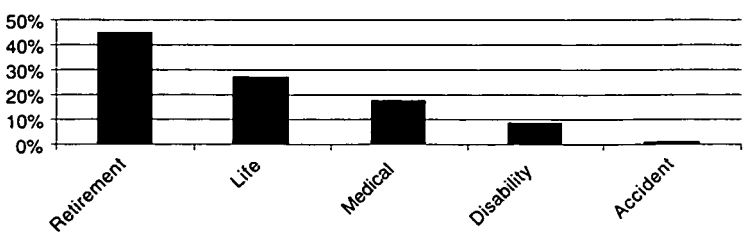
William M. Mercer recently set out to gather data on the actual past experience of the multinational pools of a cross-section of multinational companies in order to either confirm or deny the various rules of thumb (or perhaps "myths"), generally touted in practice.

This paper outlines some of the results from this research study.

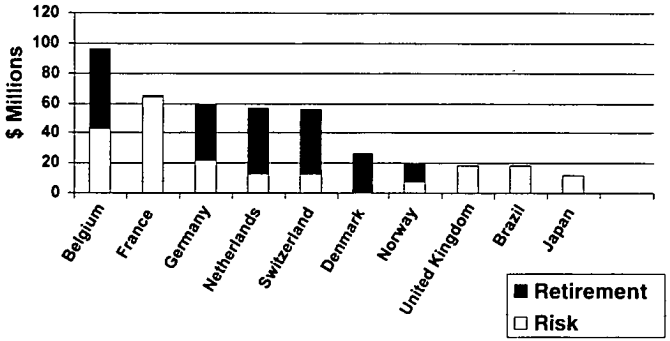
3.1 Summary of Data

Study participants provided copies of recent multinational pooling reports. The data on which our analysis was based is summarized as follows:

- Included data from 69 companies.
- A total of 275 pooling reports.
- The data spanned the years from 1993 to 1997. The majority of the data was from 1995 and 1996.
- 78 countries were represented.
- Over 6,000 separate policies were included, spanning 886,000 life years.
- On average, each participating company operated 1.7 separate pooling arrangements.
- The average pool size, in terms of premium volume, was $1.9 million.
- For those pools with no retirement contracts, the average pool size, in terms of premium volume, was $0.8 million.
- The total premiums included in the study, broken down by coverage type, are distributed (in percentage terms) in the following chart shown below:



_ The chart below indicates the top 10 countries in terms of premium volume.

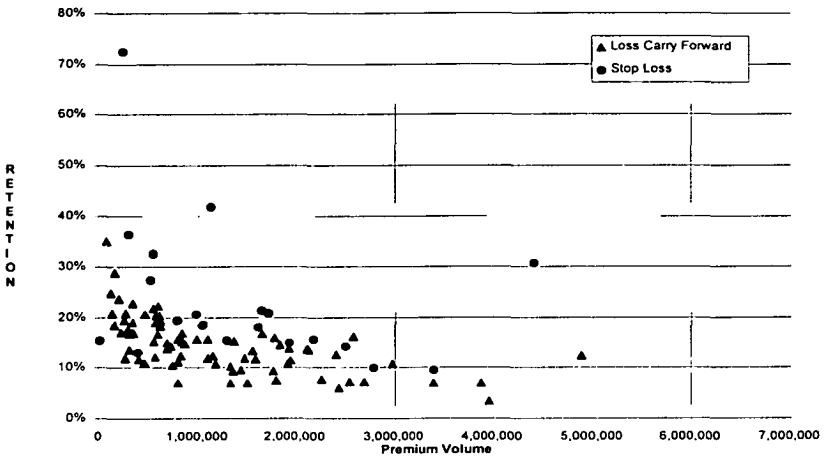


3.2 Retention Analysis

Our analysis has indicated that after taking all factors affecting retention levels into account, there do not appear to be significant differences in average retention levels between the major networks. This has lead us to the conclusion that, unless networks artificially depress retentions in a competitive bid, a greater financial advantage may be obtained by actively managing the contracts included in a pool (and risk management strategy used) rather than shopping between networks in order to reduce retentions.

For the purpose of the study, retention is defined as the total of the risk charge and the administration charge. Since many of the networks did not break the retentions down into the two components, we were unable to analyze the two components separately.

The chart on the next page plots the retention (as a percentage of total premiums) for each of the pools included in the study. For this purpose (and for all of the analysis in this section relating to retentions), only the latest year's data for each pool is shown. Retentions for pools using the "loss carry forward" risk management technique are shown separately from those using the "stop loss" technique.



As expected, the chart indicates a general trend that the retentions, as a percentage of premiums, decrease as the size of the pool increases. **This suggests that some savings may be achieved (via lower retentions) by combining multiple pooling arrangements together into larger pools.**

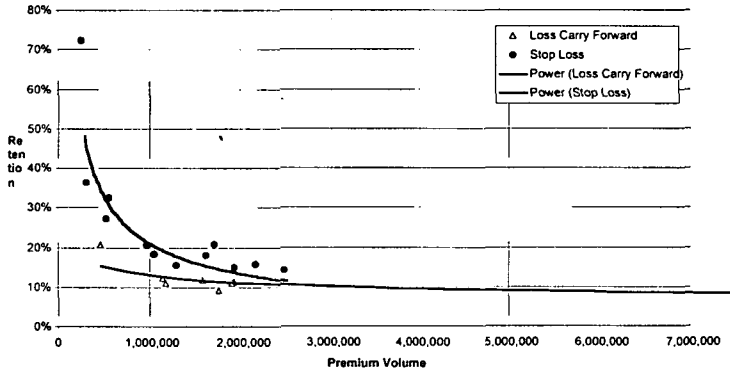
Also as expected, the other trend indicated from the chart is that the retentions for pools utilizing a stop loss technique are generally higher than for those using loss carry forward. It is noted that even at the lower premium volume levels, the loss carry forward system is predominant.

The chart only shows pools up to a total premium volume of US$7 million. Data for much larger pools (up to US$50 million) was also submitted. These data points were consistent with the data shown in the charts (i.e., lower retentions as premium volume increased).

While the previous chart clearly provides an indication of retention levels, it contains a mixture of different networks. As a result, the picture is somewhat distorted by the particular characteristics of the pooling arrangements offered by each network (e.g., differences in crediting of interest etc.).

In order to remove these effects to the extent possible, we plotted the retention points for each network on separate charts. The chart below shows the data points for one such network which has a substantial volume of stop loss data as well as loss carry forward.

The retentions under the loss carry forward and stop loss systems are shown separately. We also fitted regression lines to both sets of data (using power regression techniques) and those best fit regression lines are also shown on the chart.

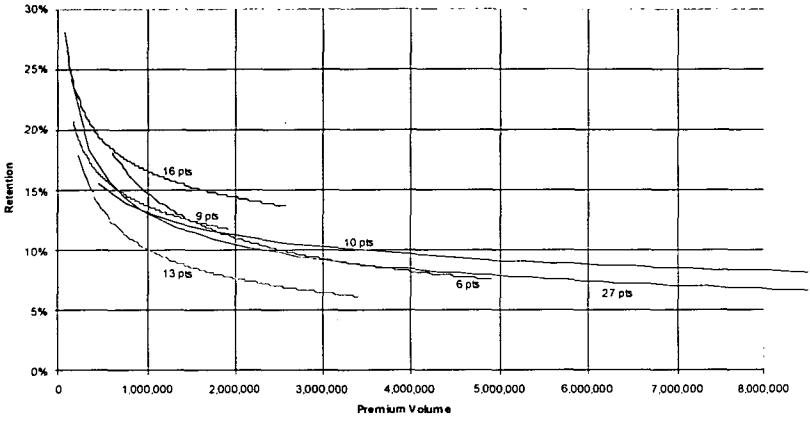


The chart indicates that the "fit" of the regression lines to the data are quite good and reveal a clear trend of reducing retentions as pool size increases (although the slope of the regression line is fairly gentle for loss carry forward). Clearly, there are some data points above the regression line (indicating higher than average retention for the particular pool size) and some below.

In cases where the actual retention is significantly above the regression line, there may be an opportunity to negotiate lower retentions if the underlying mix of business is not unusual.

This chart also shows that there is a clear difference between retentions charged for a stop loss system of pooling and for a loss carry forward system. It is then possible to estimate the magnitude of the charges under each system for a particular overall pool size.

The following chart indicates how the retentions (under loss carry forward system only) compare between networks. Only those networks with more than five data points are shown. The identity of the networks is not disclosed. The best fit power regression lines are shown rather than the individual data points themselves.



The chart indicates that there appear to be some substantial differences between the retentions charged by each of the networks at the various total premium levels. However, when comparing retention levels between networks, certain factors having an impact on the retentions charged should be borne in mind.

One of the most important factors is the underlying mix of business. We have found from the data that the networks with the higher retentions tend to have a smaller proportion of retirement contracts included in the pools and vice versa (the inclusion of retirement generally results in lower retentions). To illustrate this point, the network showing the highest average retentions on the chart (16 pts) was the only network that did not contain pooled retirement contracts in the data submitted. The network with the lowest average retentions on the chart (13 pts) had the greatest proportion of retirement contracts (on a premium basis) in the data submitted.

Another important factor is the interest crediting policy (to premiums and/or reserves) used by each network. However, it is interesting to note that the network with the highest average retentions represents one of the networks which credits very little interest.

Taking all of these factors into account and noting that there is very little difference between the regression lines for four out of the six networks shown on the chart, one conclusion that could be reached is that there may be little financial advantage obtained by "shopping" between networks for the purpose of reducing retentions and it may be more financially advantageous to concentrate on the risk management technique utilized (i.e., stop loss versus loss carried forward) and the active management of contracts included in or excluded from the pooling arrangement. Having said that, there has been some evidence of the networks reducing their quoted retentions when in a competitive bidding situation.

3.3 Overall Profitability of Pooling

Dividends of the order of 10% of pooled premiums are often touted as a reasonable estimate of the savings that can be expected from multinational pooling. Our research indicates that this is an over-estimation.

The weighted average annual dividend reported for all pools in our study was 5.6% of pooled premium.

This portion of our analysis concentrated on the levels of surplus and hence dividends being generated from pooling.

As the starting point for this analysis, we aggregated the data for all pools and all years (a total of 275 pool years), and built a single cashflow statement (i.e., we treated the data as though it was in a single pool for one year). The results of this aggregation are shown in the following table:

Income	$ mil	Outgo	$ mil
Premiums	529.5	Claims	281.4
Interest	98.8	Increase in Reserves	187.9
		Retentions (admin & risk)	49.0
		Local Dividends	65.3
		Other	14.9
	628.3		598.5

For the purpose of this table, "Other" includes commissions and taxes.

As can be seen from this table, the final result of this analysis is an overall "surplus" of $29.8 million or 5.6% of premiums paid. It is also interesting to note that the total retentions were 10% of premiums *(pools using a stop loss risk management technique were adjusted to a hypothetical loss carry forward basis to ensure consistency in the results).*

Claims represented 53% of premiums and the increase in reserves was 35% of premiums.

Based on historic experience, the overall surplus (and hence expected dividends under a loss carry forward system) of 5-6% would seem to be lower than expected. This is likely a result of:

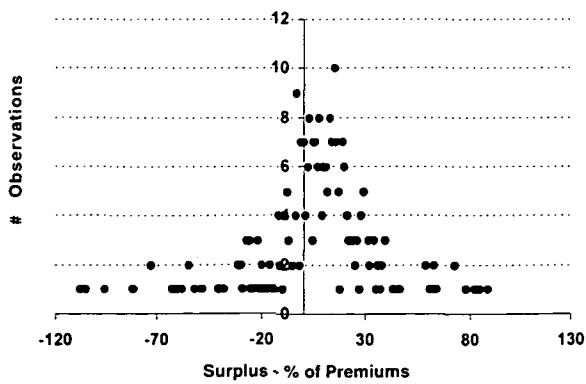
- increased competitiveness of many local insurance markets resulting in lower up-front premiums;
- gradual removal of tariff premiums in some countries;
- an increase in the number of contracts that provide a local dividend (local dividends represented 12% of aggregate premiums).

As noted above, this table was prepared by aggregating all of the data for all pools together. We were somewhat concerned that these results may be distorted by inclusion of some large retirement contracts. Therefore, we carried out a separate analysis including only those pools without retirement contracts (115 pool years). This resulted in an overall surplus of 4.1% of premiums. We have concluded that the results are not significantly impacted by the inclusion of retirement contracts.

Distribution of Surpluses & Deficits

Next, we analyzed how the surpluses and deficits generated by each pool were distributed.

For each surplus amount expressed as a percentage of premiums and broken down into increments of 1% (the x-axis), the chart below shows the number of observations out of a total of 275 pool years, with that particular level of surplus.

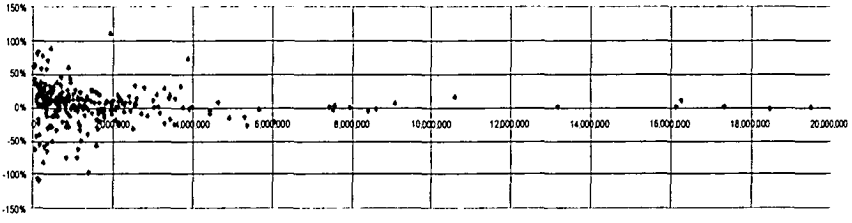


This distribution approximates the shape of a normal distribution, or bell-shaped curve. Some further observations relating to the chart are as follows:

- 87 out of the 275 pool years generated a deficit result for the year and 188 generated a surplus.
- 80% of the results were between a deficit of 25% of premiums and a surplus of 30% of premiums.
- The premium weighted average (mean) surplus is 5.6% of premiums.
- The arithmetic average (mean) surplus is 8.1% of premiums (indicating that the larger pools generated lower surplus amounts when expressed as a percentage of premiums).
- The standard deviation of the distribution is 29.4%.

We also prepared a similar chart for the pools that do not contain retirement contracts. That chart also closely resembles a normal distribution, with a slightly greater standard deviation. This indicates that the variation in surplus/deficit is expected to be greater when only risk coverages are pooled. This result is not unexpected.

The above chart does not indicate how the surpluses and deficits expected to be generated from pooling vary by pool size. In order to understand this, we plotted the surplus or deficit generated for each pool year on the y-axis (expressed as a percentage of premiums) against premium volume on the x-axis:



The funnel shape of this chart clearly indicates significantly greater volatility of surpluses and deficits at the low premium volume levels. At higher premium volumes, the surplus and deficits are much less volatile.

3.4 Loss Carry Forward versus Stop Loss

Conventional wisdom states that a loss carry forward system of pooling is likely to produce a more favorable financial result than a stop loss system for the majority of pools.

Our analysis has indicated that based on current pricing, stop loss may be preferable to loss carry forward for mid-size pools.

Intuitively, a stop loss risk management technique would seem to be more appealing for highly volatile pools (where the chance of a deficit is greater) rather than those producing relatively stable surpluses and deficits from year to year. Based on the results of the analysis outlined in the previous section, this suggests that a stop loss system should be investigated for smaller pools in terms of total premium volume (although of course the pooling network can be expected to charge a higher risk charge for more variable pools - this can in fact be seen from the chart in section 3.2 which showed a comparison of stop loss and loss carry forward charges for a single network).

In order to compare loss carry forward with stop loss at the lower premium volumes (i.e., less than $5 million), we carried out the following analysis:

Step 1 — We broke the data down into three bands of $1 - $2 million based on the total pool premium volume. The bands were:
- less than $1 million,
- $1 to $3 million, and
- $3 to $5 million.

Step 2 — For each band, we plotted the data to show the distribution of those pools in terms of their contribution to surplus and deficit. Each distribution was found to approximate a normal distribution from which we calculated a mean and a variance.

Step 3 — For each band, we then simulated the performance of 5,000 pools over a 5-year period by taking random samples from the normal distribution.

Step 4 — For each simulation, we calculated the dividends that would be paid out during the 5-year period under a stop-loss system and a loss carry forward system. For this purpose, we used standard/average retention charges from the chart produced earlier for the mid-point of the band range – i.e., the chart in section 3.2 showing a comparison of the stop loss and loss carry forward retentions against premium volume for a particular network.

A summary of the results of these simulations follows. For each of the three bands, we calculated two statistics:

A. The number of simulations out of a total of 5,000 where stop loss (SL) would pay out a larger dividend than loss carry forward (LCF) after a period of 5 years.

B. The ratio of the total dividends (sum of 5,000 trials) using stop loss system to the total dividends using stop loss system.

Premium Band	A. No. Simulations out of 5,000 where SL Result Better than LCF	B. Total Dividends using SL as a % of Total Dividends using LCF
< $1 mil	2,442 (49%)	108%
$1 – 3 mil	3,396 (68%)	155%
$3 – 5 mil	3,446 (69%)	144%

These simulation results indicate the following:

- For pools of less than $1 million in total premium, the results are fairly evenly divided between the two systems.
- For pools in the $1-3 million and $3-5 million bands, the results indicate that a stop loss pooling system is likely to produce a better result than loss carry forward in the majority of trials (68% and 69% respectively).
- For all three bands, when the dividends are aggregated for the 5,000 trials, the stop loss system produced a superior result.

The above simulations assume that deficits in a loss carry forward pool continue to be carried forward indefinitely. In reality, companies with a loss carry forward pool in a large deficit position may cancel the pool or negotiate for a reduction in the amount of deficit to be carried forward.

We therefore, re-ran the above simulations building in automatic cancellation of a loss carry forward pool in a deficit of 50% or more of annual premiums after the second or subsequent year. For the purpose of the simulation, the pool is then assumed to "start fresh" in the following year. The following table sets out the results of these simulations:

Premium Band	A. No. Simulations out of 5,000 where SL Result Better than LCF	B. Total Dividends using SL as a % of Total Dividends using LCF
< $1 mil	2,085 (42%)	93%
$1 – 3 mil	3,198 (64%)	131%
$3 – 5 mil	3,309 (66%)	128%

These simulation results indicate the following:

- For pools of less than $1 million in total premium, the results are more favorable for loss carry forward on the basis of the number of trials producing a more favorable result and also the total dividends result.
- For pools in the $1-3 million and $3-5 million bands, the stop loss pooling system still produces a more favorable result in the majority of trials and also on a total dividends basis.
- To maximize returns, pools using loss carry forward should seriously consider canceling pools with large deficits and starting fresh (either on a stop loss or loss carry forward basis).

The above results indicate a stop loss system of pooling should certainly be considered as an alternative to loss carry forward for pools of less than $5 million (although for very small pools – which are generally more volatile – it would appear from the above results that the retentions charged by the networks for stop loss are quite high and may make stop loss unattractive).

To double check the results of this analysis, we aggregated the data for all pools included in the study in the $1 to $5 million range and compared the overall "surplus" that would have been generated under stop loss and loss carry forward pooling systems. This analysis indicated that the surplus under a stop loss system would have exceeded that generated under loss carry forward by 18.5%. This result would appear to confirm the results of our simulations.

We believe that the stop loss system is producing superior results for the $1-$5 million premium band because the networks can more accurately assess the risk involved with a stop loss pool. That is, the risk charge component of the stop loss retention covers the risk that the pool will make a loss in any given year. This is fairly easy to evaluate. The risk charge component of the loss carry forward retention covers the risk that the company will actually cancel a pool while in a deficit position – this contingency is more difficult to evaluate and quantify and so the pooling networks can be expected to charge extra for this unknown element.

It should be noted that these simulations have been carried out based on average retention charges for the two systems, and for any particular pool, the simulations should be carried out using the actual quoted retentions rather than these averages. Also, a company's actual tolerance for maintaining a loss carry forward pool with a large deficit should be factored in. Finally, it is noted that these simulations will only be appropriate if the pool being considered has a fairly "average" mix of business and risk profile.

3.5 Profitability of Individual Contracts Included in Pools

Pooling "folklore" includes various rules of thumb for certain contracts in certain countries which should be pooled, and others that shouldn't. Our research set out to prove or disprove this lore by building a database of actual historical data.

Some of this data suggested that some of the common rules of thumb are simply not valid. *For instance, contrary to popular belief, our study has indicated that medical* contracts in Belgium and disability contracts in UK can be expected to contribute positively to pooling surplus.

This phase of our analysis focussed on the profitability of individual risk contracts (life, disability, medical and accident) in each country. For every country included in the study, we calculated the total observed claims as a percent of total premiums in order to assess which contracts are expected to contribute positively (and conversely, negatively) to the pooling dividend.

Unfortunately, most of the pooling reports we received did not break out the increase in reserves by line of coverage (and very few provided retentions broken down by line of coverage). Therefore, when reviewing the following results, it is very important to factor in these elements when assessing the overall profitability of pooling individual contracts. As a broad guideline, retentions of 10% – 20% should be factored in for all contracts. An allowance for increases in reserves should also be factored in for long-term disability contracts, life (where survivors' pensions are paid) and to a lesser extent, medical.

The following table sets out an extract of these results – it includes contracts generally considered "unprofitable", and hence often excluded from pools.

Coverage	Premiums ($mil)	Claims* ($mil)	Loss Ratio	Pool?
Belgium – medical	6.6	4.3	64%	Yes
France – medical	36.8	32.6	89%	No
France – disability	10.3	5.0	49%	No?
Netherlands – disability	5.3	2.3	43%	No?
South Africa – life	3.7	2.5	67%	Yes
UK – life	10.6	8.2	77%	No?
UK disability	3.7	0.5	14%	Yes
UK medical	3.8	3.4	88%	No

* *Actual claims paid; no adjustment for increase in reserves.*

This table indicates that a number of these contracts in our study (in aggregate) have contributed positively to pooling surplus – in particular, Belgian medical, and South African life insurance. There were a number of contracts (including French medical and UK medical) where the data supported the general rule that such contracts are unprofitable. Others appeared marginal – e.g., French and Dutch disability and UK life insurance (once possibly significant reserves are factored in). The results also indicate that UK disability may also be profitable, although the survey results may be insufficient to draw a clear conclusion.

We also aggregated and analyzed the data (for all countries) for each type of coverage. This lead to a very interesting (and somewhat surprising) observation for accident coverage.

The aggregate claims ratio for pooled accident policies was 35%. With the exception of just once country, the observed claims ratios were very low (i.e., less than 40%) for each country. This result suggests that accident policies can be expected to generate pooling surpluses since the premiums charged (at least for the policies included in our study) are conservative. However, it is important to remember that accident policies are highly leveraged and volatile in that they have very low premiums, with infrequent but potentially high claims relative to the premiums paid. For instance, from the data included in our study, one policy had claims equal to 50 times the annual premium paid. It is for this reason that many companies choose not to include accident policies in a multinational pool. However, our conclusion is that a company should consider including accident policies in a multinational pool, perhaps separate to the company's main pool, particularly if a stop loss system is used rather than loss carry forward.

It should also be noted that the volume of accident premiums included in the study was low compared to the other coverages so we have some concerns about the credibility of the data.

The data when aggregated by line of coverage also confirmed that medical contracts are marginal contributors to pool surplus and should be frequently monitored.

Which Countries are Most Profitable?

The final phase of the country analysis examines which countries are the most profitable. Since reserve and retention information was generally broken down at the country level (but as noted above, not at the coverage type level), we were able to determine each country's average contribution to surplus from the data. For each country, we aggregated premiums and interest credits, and subtracted claims, increases in reserves, retentions, local dividends and other outgo.

This calculation results in the determination of contribution to pooling surplus for each country, which was then expressed as a percentage of premiums.

The following table sets out the most profitable countries, sorted in descending order. Only those countries with more than $2 million pooled premium are included.

Country	Premiums $mil	Surplus % of Premiums
Irish Republic	4.1	22%
Argentina	3.2	21%
Greece	2.9	19%
Austria	9.8	16%
Canada	5.7	15%
Mexico	3.1	13%
Italy	3.2	13%
Japan	12.2	11%
Taiwan	3.8	10%
Singapore	2.8	10%
Switzerland	56.3	9%

The profitability of each country is highly dependent upon the mix of coverages in each country. For the two most profitable countries and those countries with the largest premium volume, the following observations on the mix of coverages are made:

- Ireland – premiums are mostly for life and disability;
- Argentina – premiums are mostly for life;
- Switzerland – premiums are a mix of retirement, life, disability and medical;
- Japan - premiums are mostly for life.

3.6 Summing Up

To sum up, our research study has lead us to the following conclusions:

- Pooling appears to becoming less attractive.
  - ➢ ***Need active management to maximize dividends in future.***

- Differences between networks in terms of retentions is marginal.

  ➢ ***Savings can be maximized through creative risk management, and consolidation of contracts into one or two large pools, rather than "shopping" between networks.***

- Stop loss may be preferable for some mid-sized pools ($1-5 million).

  ➢ ***Review current pool strategy to maximize value.***

- Profitability of medical contracts is marginal.

  ➢ ***Review and possibly rearrange pools.***

4. Use of Captives for Financing International Benefits

Multinational companies have used captive insurance companies for years to insure in-house property and casualty risk. These captive insurance companies are usually located in a favorable tax environment and would seemingly offer an attractive way of insuring some of the employee benefit risk of the corporation.

This is indeed possible and can be achieved in conjunction with a multinational pool. Indeed, several companies have transferred risks related to their multinational pooling arrangements to their captive.

The rationale for doing so appears attractive:

- The pool insurers charge a profit loading through the retention. If the profit part of the retention can be reduced by linkage to a captive, the corporation will benefit.

- The insurance companies in the pool hold reserves to meet future claims. If some of these reserves can be transferred to a captive, there might be potential for additional investment earnings; and

- Pooled insurance linked to the captive is generally considered to be third party business for captives with US parents. If a certain proportion (generally considered to be around 30% for US multinationals) of a captive's business is considered to emanate from a third party, there can be tax advantages for the captive.

Passing risk to a captive takes one of two basic forms:

A. The captive reinsures all or part of a pool and becomes the policy holder, receiving the dividend at the end of the year. However, if there are any losses, the captive is expected to reimburse the network for some or all of the losses. Under this approach, there is usually no actual transfer of premium or significant reserves.

B. The network transfers premium, and some reserves, to the captive. As claims are paid by the local insurers, the captive is required to reimburse the network. This approach is administratively much more burdensome, but it is the approach that achieves the maximum cash flow advantage.

In preparing for this paper, we asked the networks to indicate the number of captive arrangements currently in force. Although we did not receive fully complete responses, it is clear that there are probably less than 40 pooling arrangements where there is some form of risk transfer to a captive. The vast majority of these would be of type A.

Given the substantial number of pools in effect, this is a very small proportion. Why so few?

The reasons for such a small number are as follows:

1. The retention reduction through risk transfer is usually small, by comparison to the management time required. A network may even increase its administrative charge, to take account of the extra work involved in captive linkage.

2. A great deal of management time can be taken up across different disciplines in the corporation.

3. Although significant amounts of reserve can be transferred under type B, the captive will be required to maintain assets to meet the reserves. Often this would have to be in the currency of the original reserve. If the captive would invest conservatively when it has such a liability, it may be able to achieve only a low rate of return. One network commented that its experience is that the captives' rates of return for reserves transferred have been inferior to the rates of return which the network would have credited on those reserves.

4. The international benefits premium on its own is rarely adequate to achieve the US threshold required for third party tax benefits.

5. Networks have developed systems (a) for enhanced risk transfer to the corporation and (b) for more aggressive investment of reserves. These systems do not require the involvement of a captive. This thereby reduces the rationale for linkage to a captive.

6. Captives are unlikely to be willing to take over unlimited risk. Finding a reinsurer willing to provide stop loss protection for the captive can sometimes be difficult and expensive.

Many corporations that have looked into captive reinsurance have found that in their situation there is no significant advantage to captive linkage when compared to a well negotiated, efficiently run pool .

Notes:

(a) Mercer is about to launch a brief survey among those companies that do have captive linkages. If, as is likely, the results of that survey are available by the time of the conference, we will make them available to interested participants

(b) We are grateful for the input of the networks: AIG, Generali, IGP, Insurope, and Swiss Life in the preparation of this analysis.

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