

**PORTFOLIO TRANSFERS**

**COMMUTATION WORKING PARTY**

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**P N Matthews  
D I Tomlinson  
M G White**

## Portfolio Transfers

### 1.0. Preamble

1.1. This note arose out of, and forms an attachment to, a paper on the subject of commutation. Depending upon their needs, it is intended to give readers a background note or a brief introduction to portfolio transfers. Its objectives are as follows:-

- (i) To explain what portfolio transfers are, the circumstances in which they occur and how the amounts involved are determined.
- (ii) To consider how portfolio transfers affect the statistics of all the parties involved.
- (iii) To look at the commercial considerations from an actuary's point of view.

### 2.0. Introduction

2.1. Portfolio transfers tend to occur only in connection with proportional treaties. In a proportional treaty there are essentially two parties, cedant and reinsurer. The reinsurer takes a proportion of all the business the cedant writes (or the risk the cedant runs, if the treaty is on an "earned" basis) in a specified period which comes within the treaty definition (eg marine hull, etc.). Each treaty is unique and will be as comprehensive as possible in setting out the relationship between cedant and reinsurer. This note concentrates on the transfer of liabilities from reinsurer to succeeding reinsurer. Frequently there is more than one reinsurer "on" a treaty, all taking different shares, and the

composition of the reinsurers can vary from year to year, as can the proportion of the treaty that is placed. A "succeeding reinsurer" can include the cedant as self insurer if the proportion of the business passed to the treaty drops from one year to another.

- 2.2. Reinsurance terminology can be confusing. You can have a premium portfolio transfer or a claims portfolio transfer, or both. When the treaty provides for a premium portfolio transfer, the unexpired proportion of the premium is transferred at the end of the treaty year and claims falling after that date are the responsibility of the recipient of the transfer, normally a succeeding reinsurer on the treaty. This type of portfolio transfer is consistent with accounting on an accident year basis and does not seem to be very common in the UK. The significant point for an actuary is that claims development figures will actually be more developed (one presumes by six months in the average case) than would be the case for development statistics relating to an underwriting year.
- 2.3. Premium portfolio transfers, if they are used, will determine which reinsurer takes what risks in the first place. They do not determine for how long the responsibility for emergence of claims remains with the reinsurer. Under a proportional treaty, the reinsurer only comes off risk for this run-off if there is a claims portfolio transfer, though he may instantaneously be back on risk as a reinsurer on a succeeding year of account.
- 2.4. It is the peculiar features of claims portfolio transfers, including their effect on the statistics, which will be of most interest to the actuary, and this note concentrates on claims portfolio transfers.

### 3.0. Claims portfolio transfers

- 3.1. First, compare claims portfolio transfers with commutations. In many ways a claims portfolio transfer is similar to a commutation, certainly for the reinsurer who is coming off risk. However, there are fundamental differences; a portfolio transfer is usually to a succeeding reinsurer on a treaty as opposed to back to the cedant, and portfolio transfers are a normal part of continuing commercial relationships as opposed to a specially negotiated break in relations.
- 3.2. A claims portfolio transfer may also be compared with the reinsurance to close of a Lloyd's syndicate. A reinsurance to close is a contract between two sets of Names whereby liability for the run-off of prior business is passed from one set to another (though technically there is a reinsurance, as opposed to a transfer of the original liabilities). With claims portfolio transfers, liability is passed from one reinsurer to another, the framework of rules simply being in accordance with the treaty; this contrasts with the rules relating to Lloyd's reinsurance to close where the sole criteria is equity between the parties involved.
- 3.3. If there is no claims portfolio transfer, the reinsurer will have to keep his books open on the year of account concerned for an indefinite period, and the cedant will have to transmit information and draw up accounts indefinitely as well. This can clearly involve great expense and waste of effort if after a few years the business reinsured on any one year of account gives rise to no more or very few transactions. So the first rationale for claims portfolio transfers is to simplify the bookkeeping.

- 3.4. The second rationale is apparent when we remember that a treaty runs for a series of successive years, with the make-up of the reinsurers on the treaty varying over time. It is logical for reinsurers who no longer wish to be on the treaty for future business to be able, at some stage, to sever the relationship with the cedant, thus again reducing expense and effort on all sides.
- 3.5. It is clear that claims portfolio transfers are ideally suited to short-tail business, and that the complications will arise when there is a liability, or long-tail component in the treaty concerned. However, present market practice only recognises this fact partially. Thus while portfolio transfers of non-marine treaties with a casualty content tend to be rare, portfolio transfers of aviation and marine treaties covering liability risks are quite common. In such cases the new reinsurer is clearly at risk of unpredicted deterioration which ought to be recognised when determining the amount of the transfer payment; in practice this often seems to be done implicitly.
- 3.6. The treaty will usually specify that claims portfolio transfers will occur together with the duration after the commencing of the underwriting year at which they will occur. The treaty will frequently also set out the method of determination of the transfer payment, including who is to determine the transfer payment. Treaties frequently leave many or all questions to the discretion of the cedant. In the absence of specific and comprehensive provisions relating to portfolio transfers in the treaty, any questions or disputes which arise would tend to be resolved by reference to accepted market practice. This places considerable power with the cedant.

- 3.7. Many treaties allow the cedant the option not to affect portfolio transfers but to allow the treaty to run off, and this would probably be done if the treaty were discontinued. The cedant must do this for the whole treaty and not just for certain reinsurers.
- 3.8. The portfolio amount may just be outstanding claims. There may be a discount for the time value of money; there may be an increase to allow for IBNR.

#### **4.0. The effect of claims portfolio transfers on statistics**

- 4.1. From a purely statistical point of view, claims information in respect of a particular underwriting year should be held distinct from that on other underwriting years indefinitely. However, for reinsurers who are on proportional treaties which are subject to portfolio transfers, this would negate one of the purposes of portfolio transfers, and thus some distortions are inevitable, with losses relating to underwriting years which have been transferred into a subsequent underwriting year being reported as applicable to the subsequent underwriting year.
- 4.2. A reinsurer thus does not receive sufficient information from his cedant to keep an indefinite series of run-off triangles but it might be thought that the cedant at least would keep this information for his own purposes. However, in practice, where a cedant has placed a proportional treaty, and where this treaty is subject to portfolio transfers, he will tend to keep his own records in a "simplified and efficient" manner, as opposed to a manner designed with the actuary's requirements in mind.
- 4.3. There is a further problem from the reinsurers' point of view in that they will wish to have details of large losses so that claims can be made on their own protections. With some effort it is usually possible to obtain details of large losses. However, it is unlikely that other claims details will be provided - merely a block figure of all outstandings. As such it is impossible to say whether movements in the claims figures are attributable to the earliest open year (into which all past years have been portfolioed) or to some unspecified past year. It is also unlikely that a reinsurer will be able to make all the claims on his own

reinsurances to which he is technically entitled, because he will not be able to build up the necessary information to make the claims.

- 4.4. It is usual for the outgoing portfolio transfer to be regarded as the payment of claims coupled with the reduction of outstanding claims to nil. In a similar way the incoming portfolio is customarily treated as a negative claim payment which will be coupled with an increase in outstanding claims; if the portfolio amount is equal to 100% of outstanding claims there should be no change in the total of paid plus outstanding subject to administrative hitches. While this procedure appears sensible if a definite known claims liability is involved, it might be thought that some of the transfer should be regarded as a premium if there is appreciable risk of deterioration. It should be noted, however, that in DTI returns these transfer payments must be recorded as the payment and receipt of a premium.
- 4.5. Portfolio transfers are often regarded as an administrative matter to be done when time permits. As such the duration at which they are done may vary from underwriting year to underwriting year. It is possible that the portfolio amount will be advised to the reinsurer in a different accounting period from that in which the corresponding outstandings are advised, so that they are booked as happening at different times.
- 4.6. When an actuary is looking at the statistics of an account which may have been affected by portfolio transfers (and any proportional treaties are candidates for this) he must take care to find out what lies beneath the statistics, and if there have been portfolio transfers it may be necessary to isolate the affected treaties. The development patterns of a block of



business may be changed quite quickly if the premium income is increased by writing shares of a couple of large treaties or if participation in those treaties is discontinued, and these effects are in addition to the "usual" distorting effects of premium portfolio transfers. A book of business which contains several treaties with premium portfolio transfers affected at slightly different times, will produce statistics that are an accumulation of all movements and it may be very difficult to see any pattern in the figures.

- 4.7. Figures 10.1., 10.2. and 10.3. of the main commutation paper show how it is possible to draw inappropriate conclusions from claims statistics which contain losses which will not develop further mixed with those that may. Because of the assumption of liability in later underwriting years a block of business with portfolios will have other complications as well.

To take an idealized example, constructed for this purpose only, consider business written in underwriting year 1 which will have an actual paid claims experience as follows:

<u>Development Year</u>	<u>Payments</u>	<u>Total to date</u>
1	36,000	36,000
2	36,000	72,000
3	36,000	108,000
4	36,000	144,000
5	33,333	177,333
6	19,337	196,667
7	3,334	200,000

Suppose that at the end of the third year there is a portfolio transfer and, because this is a hypothetical example, further suppose that the amount of the transfer is exactly equal to the remaining payments which will be made.

The apparent paid claims will now be:

<u>Underwriting Year</u>	<u>Development Year</u>	<u>Payments</u>	<u>Total to date</u>
1	1	36,000	36,000
	2	36,000	36,000
	3	36,000	36,000
	4	92,000	200,000
2	1	NIL	NIL
	2	NIL	NIL
	3	-56,000	-56,000
	4	+56,000	NIL
3	1	NIL	NIL
	2	NIL	NIL
	3	-22,667	-22,667
	4	+22,667	NIL
4	1	NIL	NIL
	2	NIL	NIL
	3	- 3,334	- 3,334
	4	+ 3,334	NIL

By way of explanation the movements in development year 3 of underwriting year 2 will consist of an inward portfolio payment of 92,000 followed by claims payments outwards of 36,000; the movement in year 4 will be the outward portfolio transfer.

## 5.0. The cedant's perspective on statistics

- 5.1. Clearly a reinsurer will have difficulty in interpreting statistics which contain treaties affected by premium portfolio transfers. It might be thought, however, that it would be a simple matter to deal with outward treaties, ie from the cedants point of view, because all the information that might be required ought to be available from internal sources. In practice, the actuary will probably be disappointed because the information systems are unlikely to have been designed with his requirements in mind. Furthermore, different proportions of surplus treaties may be placed in different years and the shares ceded to quota shares treaties may differ from year to year.
- 5.2. It is therefore probably desirable to consider statistics gross of the proportional treaty; and to analyse the business before making a final adjustment for the treaty. When making the adjustment for the treaty, allowance will be made for the differing proportions of protection bought in different years. This approach will obviously be much easier when excess of loss protections come before the proportional treaty.
- 5.3. When portfolio transfers are made between underwriting years it becomes essential to consider statistics gross of the treaty, if there is any change in the proportion reinsured. So called "pure net" figures will be misleading because reinsurance recoveries in any development year will depend upon the proportion of the treaty placed in the year into which back years have been transferred at the time.

5.4. It should also be realised that any change in the percentage reinsured will lead to a net portfolio payment either in or out. Logically this should be allocated across pure underwriting years, where it will cause further peculiarities in the statistics. In practice every payment may be lumped into the then current earliest year adding a further layer of complication.

## 6.0. Commercial Aspects

- 6.1. The rationale for the use of claims portfolio transfers is very clear but there are also complications. First, from a statistical viewpoint, they are not without their disadvantages. Statistics can be made difficult to analyse at best, especially when there is significant claims development after the duration at which the transfers are affected.
- 6.2. On reflection, there is also a second complication which can come as a surprise to actuaries new to the subject: the difficulty of financial analysis of a treaty which has portfolio transfers. This is not a statistical point, but a commercial one, namely how "fairly" does the amount transferred as a claim portfolio transfer reflect the liabilities transferred? An insufficient transfer amount can put a succeeding reinsurer at significant financial risk, whereas an excessive figure can penalise those reinsurers coming off the treaty (or, more precisely, those who came off the treaty after the underwriting year which is now subject to transfer). It should also be remembered that a treaty can go into run-off at any time.
- 6.3. As mentioned above, the reinsurer is frequently in the hands of the cedant with regard to many aspects of portfolio transfers and when conducting a financial analysis many aspects could be considered. For example:-
- (i) How much discretion does the treaty give to the cedant to determine transfer amounts, their timing, or even whether they take place at all?

- (ii) If the treaty specifies exactly how transferred amounts will be determined, to attempt to quantify the implicit profit or loss element this represents.
- (iii) (When considering going onto a treaty, or increasing share on a treaty, or staying on a treaty which is growing), are the amounts transferred sufficient to protect the reinsurers - and do we have the statistics even to make the analysis?
- (iv) (When considering leaving a treaty, reducing share on a treaty, or leaving a treaty which is growing), are the amounts transferred excessive, leaving profits for succeeding reinsurers (or for the cedant if the self insured percentage is growing) - and do we have the statistics even to make this analysis?

6.4. It could be argued that where there is a low liability content, these questions are not of importance and that the amounts potentially involved are small. In this event the practical advantages of portfolio transfers will be paramount and the past profitability or otherwise of the treaty will be fairly easy to determine.

6.5. Another argument is that a reinsurance treaty is frequently intended to be a long standing relationship and there are some treaties which have survived for very long periods. This being the case, the details of claims portfolio transfers only affect the allocation of profit from year to year; the long term result is unaffected and it could thus be argued that the questions above are unimportant and that the traditions and practices

surrounding proportional treaties are designed with this long term relationship in mind.

- 6.6. Recent history tells us, however, that long term relationships do not always last forever, that the reinsurance world is changing fast and that a more rigorous approach could well be advisable.