

General Insurance Study Group

Expenses Working Party

Introduction

The members of the Working Party were:-

Messrs. A.K. Thomson	(Chairman)
J.R. Gyles	
R. Devitt	
J. Wallis	
Miss S.M. Cooper	

D. Allwood was originally nominated as Chairman of the Working Party but, regrettably, had to withdraw because of pressure of other commitments. Consequently, the Working Party was late in getting off the ground and had to limit the scope of its activities in view of the time available.

The terms of reference for the Working Party were:-

In general insurance expenses are a substantial element in the build up of premium rates. The Working Party is asked to consider the appropriate manner in which expenses should be incorporated in premiums for different classes of insurance business.

- (a) % to PI
- (b) Flat amount
- (c) Size of policy
- (d) Costings
- (e) Marginal costing approach

I.L. Rushton's paper "Expenses in General Insurance" to the Students Society on November 22 1977 is an excellent reference on this topic and the Working Party sought to show alternative approaches or extensions to that paper.

The Working Party has produced four papers as follows:-

Expense Loadings, Costing and Rating	Richard Gyles
Claims Settlement Expenses	Russell Devitt
General Branch Expenses in a Home Service Office	Jon Wallis & Russell
Marginal Costing	Susan Cooper Devitt

The second paper is not strictly within the terms of reference but seemed to the Working Party worthy of inclusion in view of the new form of Department of Trade Returns.

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Level of Expenses

So as to obtain an indication of the level of expenses relative to written premiums, schedule A sets out commission and management expenses as a percentage of written premiums in 1978 by class for 10 large and medium UK based companies as shown in their Department of Trade Returns (Schedule 2 Part III).

The figures shown are from the net revenue accounts and are therefore distorted by the effects of reinsurance, particularly in those classes where substantial proportional reinsurance is normal. This distortion occurs because reinsurance does not affect the management expenses but the ceding office receives substantial commission which effectively reimburses the ceding office for the commission and a portion of its management expenses on that part of the risk reinsured.

Since commission is invariably a percentage of premium income, the problem of allocating and incorporating into premiums relates to the management expenses. The schedule shows these rarely exceed 30% of written premiums and are normally below 20%.

COMMISSION & EXPENSES OF MANAGEMENT AS % OF WRITTEN PREMIUMSSource DOT Returns for 1978

<u>Company</u>	<u>Liability</u>	<u>Marine, Aviation & Transport</u>	<u>Motor Vehicle</u>	<u>Pecuniary Loss</u>	<u>Personal Accident</u>	<u>Property</u>	<u>Treaty</u>	<u>Total</u>
1. Commission	16.6	-	12.4	12.7	26.7	16.5	32.7	14.5
Management Expenses	18.3	8.7	13.0	23.1	17.5	26.9	4.4	16.6
Total	34.9	8.7	25.4	35.8	44.2	43.4	37.1	31.1
2. Commission	15.2	-	13.5	13.2	23.5	15.8	45.3	13.5
Management Expenses	16.0	10.0	16.2	30.4	18.7	27.6	5.7	20.0
Total	31.2	10.0	29.7	43.6	42.2	43.4	51.0	33.5
3. Commission	14.6	-	11.8	16.4	18.7	19.3	32.8	14.5
Management Expenses	12.6	10.2	12.5	17.1	13.5	14.3	5.1	13.2
Total	27.2	10.2	24.3	33.5	32.2	33.6	37.9	27.7
4. Commission	10.0	-	10.0	28.8	19.5	19.9	21.1	13.8
Management Expenses	8.1	12.4	17.4	13.1	24.8	20.0	1.3	13.7
Total	18.1	12.4	27.4	41.9	44.3	39.9	22.4	27.5
5. Commission	13.6	-	8.6	2.9	7.0	16.1	34.9	12.1
Management Expenses	16.1	7.2	13.4	24.8	17.9	24.0	3.2	16.0
Total	29.7	7.2	22.0	27.7	24.9	40.1	38.1	28.1

Continued.....

Schedule A Continued

<u>Company</u>	<u>Liability</u>	<u>Marine, Aviation & Transport</u>	<u>Motor Vehicle</u>	<u>Pecuniary Loss</u>	<u>Personal Accident</u>	<u>Property</u>	<u>Treaty</u>	<u>Total</u>
6. Commission	14.1	-	10.6	17.5	15.6	15.9	28.5	13.4
Management Expenses	40.9	8.9	29.7	34.1	42.5	28.9	3.0	27.5
Total	55.0	8.9	40.3	51.6	58.1	44.8	31.5	40.9
7. Commission	15.6	-	11.5	16.6	27.5	19.2	31.7	16.7
Management Expenses	14.4	14.5	14.2	15.2	10.0	17.9	7.9	15.1
Total	30.0	14.5	25.7	31.1	37.5	37.1	39.6	31.8
8. Commission	15.2	-	14.5	17.4	20.8	15.1	23.5	15.7
Management Expenses	14.5	12.1	15.6	20.1	22.3	23.3	10.0	17.1
Total	29.7	12.1	30.1	37.5	43.1	38.4	33.5	32.8
9. Commission	12.8	16.1	11.0	9.9	20.8	14.2	33.5	16.7
Management Expenses	12.0	10.1	11.8	20.5	17.8	19.3	2.9	12.3
Total	24.8	26.2	22.8	30.4	38.6	33.5	36.4	29.0
10. Commission	14.9	12.8	15.2	24.9	13.5	18.4	35.2	17.7
Management Expenses	17.1	11.0	15.6	15.9	21.9	14.9	2.0	14.6
Total	32.0	23.8	30.8	40.8	35.4	33.3	37.2	32.3

Notes

- (1) Companies 6 and 10 are Home Service Offices.
- (2) For Marine, Aviation & Transport, the figure shown is that for 3 year business only, except for one company which accounts entirely on a 1 year basis, as the 1 year business is small.

Expense Loadings, Costing and Rating

Introduction

In common with Life Assurance the premium paid by the insured for a policy will include some allowance for the expenses involved in writing the policy. The amount allowed may be arrived at by an explicit premium basis or by inference, being the balance after paying claims and commission. The total premium charged will depend upon market forces, the marketing policy of the office and the individual claims and expense experience of the office. Unlike Life Assurance the premiums charged for General Insurance risks are applicable to all types of transaction. The vast majority of the policies involved will be renewals although most offices will hope to pick up some degree of new business, the amount depending on the office's marketing and pricing policy. In other words the decisions that an office makes about its rating levels will apply to all business and will expose the existing portfolio to lapses.

The method of calculating Life Assurance rates is what might be termed "zero-based" in that the rates to be offered over the forthcoming period need not be influenced by those charged at the moment. However, as mentioned above, the bulk of General Business activity revolves around renewals so that the increase or decrease in the existing rates becomes more important. The starting point for establishing a new set of rates is, therefore, the current rates and experience (or the most recent that is meaningful). If the results for a particular class of business are satisfactory and future conditions are not expected to upset the relationship between premium income and outgo then rating changes will be restricted to "fine-tuning" of the rate structure without fundamentally changing the overall level of rates. If the results are unsatisfactory or if future conditions e.g. inflation, are expected to cause an unacceptable deterioration in results, then changes must be considered. In such a consideration the level of expenses will be an important factor and indeed the allocation of expenses to classes is implicit in determining the result of the business. Also important is the effect that the revised rates will have on business volumes both in terms of resources and on the assumptions on expense ratios used to derive the rates. The effect of various rating levels on the volume of business is extremely difficult to determine with any degree of certainty yet failure to appreciate this aspect can produce a vicious circle whereby an office with a high expense ratio has to charge higher premiums and hence renders itself more uncompetitive etc.

Costing

The allocation of expenses to classes of business and to products will depend on the costing techniques used by the office. There are various ways of approaching this problem ranging from a simplistic apportionment to written premium to a detailed analysis of time spent and other resource utilisation. Another technique that can allow flexibly for changing volumes of business without recourse to frequent detailed and costly analyses is functional costing.

The basis for functional costing is that a large proportion of the work can be divided into a number of operations each of which can be considered to take a standard time weighted by the relative cost of the staff involved in performing them, for example if two tasks A and B are judged to take the same time to complete yet the staff performing task B cost 50% more than those performing task A then the weighted standard time should also be 50% higher.

The purpose of any costing exercise is to allocate costs to particular sub-divisions of the business. The levels of detail to which the exercise needs to go depend on the purpose the information is to be put to. For example, for a large composite office an immediate distinction arises between Life and General business but such a distribution is of little use for premium rating purposes.

Within the General account there are likely to be several comparatively independent types of business all of which will be conducted differently. There will probably be an overseas operation, a marine and aviation operation and a reinsurance operation apart from the home fire, accident, motor and household business. As far as expenses are concerned there may be fundamental and significant differences between the types of business written in any one of these different accounts. For example, within household insurance may be included building society block business, individual tailored policies and individual package type policies all showing different expenses of operation. There is of course some limit to the level at which information will be required. To illustrate with an example from Accident business, a distinction will probably be made between Public (or General) and Employers Liability business but a distinction between rating categories within those classes is unlikely unless some are very atypical.

The analysis will be by function within class or product as follows:-

<u>Type of Expense</u>	<u>Products</u>			
	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>
<u>Underwriting</u>				
Quotation				
New policy prep.				
New policy input				
Endorsement (Special)				
Endorsement (tick box)				
etc.				

Accounts

Administration

Claims

etc.

Each position in this array will be the associated standard weighted time and the product of this array with a similar one representing volumes (i.e. the number of operations/transactions) will produce the product costs in terms of weighted time by type of expense. This exercise may be carried out at various different levels e.g. at branch section level, at branch total level, or even at divisional total level but one would hope to be able to identify various sections of staff that can be allocated to only a limited range of products or operations and apply the exercise to these separately and then aggregate the separate results. The total cost of these sections or units including other salary related costs, accommodation costs etc. can then be allocated in proportion to the weighted time analysis (it being assumed that the total resources are spent in proportion to the standard weighted time recorded on functional tasks).

The bulk of the work involved in this process is concerned with evaluating the standard weighted times but this exercise need not be repeated frequently unless working practices change.

If an office operates a work measurement system the two systems can be arranged to operate from the same base. The production of volumes can be automatic for most operations if the office is heavily computer based although a simplified manual system is viable.

The above process can only be implemented directly for what might loosely be described as direct costs. However, a very large proportion of an office's expenses, particularly if commission is excluded, comprise some form of overhead expenses. To a large extent these will be supervisory by nature and these costs can be allocated on the same basis of the staff controlled. Other costs e.g. Computer costs, Finance costs (Accountants, Investment etc.) are less obviously allocated. Computer costs can be linked to transactions but a subjective element must be present in the majority of these costings. For example, it may be decided that 70% of the Finance costs relate to U.K. activity the allocation to products being to premium or as an oncost to other expenses as appropriate. To the extent that these are largely Head Office functions and costs it is important to be able to identify this component in the final product costings. The allocation of sales costs, particularly where a sales force is not predominantly remunerated on a commission basis, presents considerable problems. An allocation to GWP, for example, ignores the time taken on abortive sales effort and may well adversely penalise products that are very competitive and need little sales effort. Some form of time analysis would seem to be the answer but is difficult to effect at product level as, for example, an inspector rarely visits an agent to discuss just one product, nor is it simple to decide in retrospect how much of perhaps an hour's conversation related to liability, fire etc.

The above costing process, as with the majority of others, is an absorption of total actual or anticipated costs. In circumstances where an office is not operating at full capacity this may produce inappropriate expenses for rating purposes. In addition it is important to recognise the significance of fixed expenses in General Business. A large proportion of an office's internal expenses will consist of accommodation costs, Head Office and supervisory salaries and related costs and the costs of functional departments e.g. Computer, Accountants, Finance, Personnel, all of which are insensitive to the volume of business transacted. It is necessary, therefore, to consider expense loadings against this background and consider the effects of an increased volume of business on the expense ratio and determine whether the premium implied is sufficiently competitive to generate such increased levels. As with most other types of business this decision lies close to the heart of the problems facing management but is far from an exact science, the result depending on the actions of competitors for example. Because of this uncertainty it is essential to consider the financial effects of failing to achieve the anticipated business levels to determine the risks involved in adopting particular strategies. Despite the impact of fixed expenses on the expense ratio the total variable costs including claims, commission and variable administrative costs may well total 80% of premium for some classes so that the scope for increasing profitability is rather more limited than it might first appear. This point is illustrated very clearly in I.L. Rushton's paper to the Students Society (22/11/77) entitled "Expenses in General Insurance".

Rating

As stated previously the actual price at which insurance business is sold is determined by a number of factors or forces. Looked at analytically a premium must allow for the claims cost, commission and some degree of internal expenses as outgo together with investment income, contribution to other non specific expenses, profit and safety margins. Of these various components the only reliable one is commission. For all classes of business claims experience is quite volatile at the level at which rating decisions have to be made, investment income will vary according to underwriting experience and cash flow patterns, apart from the prevailing levels of interest rates, and the profitability of the operation varies accordingly. Expenses are more consistent and predictable but inevitably contain an arbitrary or subjective element at rating level.

The price is also heavily affected by market forces, tariffs or by 'market agreement'. As such an office cannot expect to sell business on its own terms without risking losing business. An office's pricing policy will depend upon its sources of business. For example, if an office transacts much of its business through brokers then the rating levels may be very critical whereas if the bulk of the business is via some form of direct selling there is scope for charging higher premiums to achieve the same lapse experience. Whatever the source of business there will be a range of "acceptable" rates and the aim should be to choose the rate which maximises the contribution from the class of business.

It is worthwhile considering the different ways in which rates can be decided and put into practice. For some classes e.g. private motor and household insurance, rates are determined centrally and are rarely deviated from. In the main these are high volume, low premium policies where the experience of the office is likely to be meaningful (or credible) and which are subject to fairly high expense ratios. The variation between risks in these classes can usually be specified in a simple, formal way e.g. a motor rating points chart and the level of local underwriting judgement required is fairly low as must be the case if expenses are to be contained within acceptable limits. For other types of business e.g. Employers Liability, the portfolio will consist of a large number of different trades each encompassing risks of varying sizes and degrees of hazard. A centrally defined book rate is only of limited use to a local underwriter for these classes of business and the offered and accepted rates will be subject to a large element of subjective opinion including the nature of the individual risk, the connection, other associated business, the size of the risk and consequently the premium etc. The final rate will depend on the underwriter's personal experience and views and the competitive position and may not be reconcilable with the book rate on grounds of expense savings etc in any analytical manner.

It is possible that even after allowing for investment income the results for particular classes may be unacceptable if the full amount of expenses as indicated by the costing system are set against the class. In these circumstances an office is faced with a range of options. The obvious course of action will be to increase rates but this may reduce premium income and increase problems of expenses, possibly by transferring the expenses to other classes. Ceasing to write the business completely has the same, although more dramatic, effect. Some thought is, therefore, required as to the expenses that should be taken into account to determine an expense loading. It is here that the concept of direct and indirect costs is useful. Compared to a manufacturing industry it is rather more difficult to define direct and indirect costs clearly. If looked at from a marginal viewpoint it can appear that the direct proportion for an existing operation is very small indeed and the incorporation of only this amount as allocated expenses in the rating base merely leaves you with the initial problem - a large amount of unallocated expenses that have to be recovered in some way. Some distinction can be made if the office is not writing business at full administrative capacity whereby the theoretical costs assuming full capacity may be incorporated in the initial premium calculations allowing any under recovery to emerge as an expense loss in the "analysis of surplus" sense. Functional costing may be of some direct use here in that the standard times may be incorporated into the rating calculation for "volume" type policies where the majority of the work can be measured in this way. If this is done it is essential that realistic salary levels are used to convert from time to money values.

If this approach of incorporating lower expense loadings in the premium rates is adopted then lower premiums will obviously ensue. These may be put into use as they stand but it is more likely that the profit levels may be altered to give the premium levels desired. Actual results can be analysed on this basis and this will highlight any expense problems that the office may have.

Incorporation of expenses into premiums

No matter what costing system is used to allocate expenses to products and irrespective of whether both direct and indirect costs are included it is inevitable that the rate at which expenses are incurred will vary by size of policy. Examining the direct element suggests that expenses can be broken down into three categories:-

- 1) Expenses that are proportionate to premium e.g. commission type payments.
 - 11) Expenses incurred on a per policy basis e.g. computer costs, policy preparation.
- and
- 111) Expenses that increase as the size of the policy increases but not necessarily proportionately e.g. survey costs, underwriting.

For some classes of business e.g. Private Motor and most household type policies the expenses (excluding commission) are essentially on a per policy basis although the premiums charged for an individual policy within any particular class may vary considerably either because of the size of the sum insured or because of the nature of the risk. For other classes, some Liability classes and Commercial Fire where underwriting is more important and the nature of the individual risk material to the premium, expenses will tend to increase as the size of the risk increases. For such risks some expenses, the routine processing costs, will be the same for all policies but others will increase with the size of the risk although not linearly.

The ways in which expenses can be charged equitably varies by type of business. The simpler "volume" type business is very similar to Life Assurance both in approach and expense structure. In both cases premiums are calculated on a formal basis from rating tables and deviation from such standard rates is relatively unusual. Life Assurance premiums have suffered from potential expense inequity and various approaches have been adopted to solve it. The principal methods are by way of a policy fee and/or a discount for size. The problem arises in Life Assurance because of the need to assume some average size of sum assured in the rating calculation over which to spread the fixed costs to produce a rate per mille. This type of approach could be applied to any class of business that operates on a rate per sum insured basis. This even applies to the more complex commercial property and liability classes although a more complex discount for size system may be more appropriate than the policy fee approach. Motor insurance would lend itself to a fixed policy fee approach particularly well were it not for the almost universal use of NCD. If a motor premium is stated gross and the policy fee included at a gross level then a policy holder on maximum NCD, say 60%, pays only 40% of the required amount. If the fee is incorporated net of NCD then policyholders will complain that they are not receiving the full discount to which they are entitled.

To some degree allowance for differing expense levels by size of risk is already made in various classes of General Insurance. In some cases the method is fairly explicit e.g. minimum premiums and basic cover plus add on units at less than proportionate cost. In others the allowance is implicit and this tends to occur in the larger commercial risks where rates are substantially shaved in competitive situations, part of the justification being an expense saving. Some offices may even use a formalised scale of large premium discount although the subjective nature of the final rating may conceal this.

There are no fundamental reasons why General Insurance premiums should not make greater and more explicit allowances for the size of risk. The reasons why such allowance is not more common is partly due to tradition and partly to a desire to keep things as simple as possible. In addition there is a P. R. problem for low risk/premium domestic policies where the real expenses may be an unacceptably high proportion of the premium quoted.

Perhaps one of the more notable changes contained within the Insurance Companies (Accounts and Statements) Regulations 1980 is the treatment of claims settlement expenses. The new requirements can be seen clearly from the definitions contained in the Regulations.

'Claims paid' is defined as "the amount that is recorded in a company's books as at the end of its financial year as paid by it (whether or not payment has been effected in that year) in full or partial settlement of -

- (a) claims, including claims relating to business accounted for over a longer period than a financial year, and
- (b) expenses (such as, for example, legal, medical, surveying or engineering costs) which are incurred by the company, whether through the employment of its own staff or otherwise, and are directly attributable to the settlement of individual claims, whether or not the individual claims in question are those mentioned above.

less any recoverable amounts".

There is a similar provision relating to expenses in the definition of 'claims outstanding'.

The Regulations also define 'expenses for settling claims'. This is stated to mean "that part of a company's expenses which has been incurred in respect of general business in the settlement of claims other than expenditure which falls to be included under claims paid."

Again there is a similar definition of 'expenses for settling claims outstanding'.

These definitions are reinforced by the definition of 'management expenses', which are "expenses incurred in the administration of a company or its business which are not commission payable and, in the case of general business, are not included in claims paid, claims outstanding, expenses for settling claims and expenses for settling claims outstanding."

These provisions follow closely the practice prevalent in the USA. Over there, the forms prescribed by the National Association of Insurance Commissioners require 'loss adjustment expenses' to be analysed separately from other administrative expenses. They are then added to the figure of claims.

The reason for the introduction of the requirements is an attempt to make different companies' figures more comparable. At present, some of the offices with a significant presence in the USA have tended to follow the practice in that country, with the result that they would treat certain expenses as claims while other offices would treat them as management expenses. The need for standardisation is increased, of course, by the Insurance Companies (Solvency: General Business) Regulations 1977, which introduced a claims as well as a premium element into the statutory solvency margin.

The effect of the provisions will be that offices that do not already do so will have to find a method of identifying the legal, medical, surveying and engineering etc expenses that will now have to be aggregated with claims, and a means of isolating those expenses directly attributable to the settlement of individual claims. The former will probably be quite straightforward, since these expenses are likely to be direct to individual claims. How easy it will be to arrive at figures for claims settlement expenses is more difficult to predict, since this is likely to depend upon the circumstances of individual offices.

It must not be overlooked that outstanding claims will in future have to include provision for legal, medical, surveying and engineering etc expenses, and that specific provision will have to be made for claims settlement expenses. For those offices which do not already make such provisions there is likely to be difficulties in deciding how much to provide. Probably the most straightforward method is to ascertain the relationship between the expenses paid during the year and the corresponding claims, and to use this as the basis of the provision. There are, however, still practical problems to be overcome. Should the amount of claims only be taken into account, or should allowance also be made for claim numbers? Also, how is account to be taken of the fact that claims which are outstanding are partially settled? The naive view is to say that, on average, claims are half settled and it is known that at least one office uses this approach; on the other hand, it is understood that for US statutory requirements claims are treated as being 25% settled. Presumably, IBNR has to be regarded as entirely unsettled, by definition. Finally, even if it is possible to arrive at a method of determining the provision, it is difficult to see how it can be subsequently monitored to assess its accuracy.

The BIA have for many years asked for 'claims handling expenses' to be separately identified in the statistics provided each year by member companies for their Annual General Meeting. This does not appear to have led to any changes in accounting practices within the industry. Is there any reason to believe, therefore, that such a requirement in the 1980 Accounts and Statements Regulations will have such an effect? There are a number of instances where after 1981 Department of Trade Returns are going to differ from published accounts, and this may well turn out to be another of those differences. On the other hand, it cannot be denied that in the past where Regulations have prescribed a practice which differs from that generally

used in the industry, there has been a tendency for the prescribed practice to become absorbed into the industry's accounting practices.

On the assumption that the Regulations basis is eventually adopted, what implications has this for rate-making? Reference has already been made to the fact that there is likely to be a paucity of past data upon which forecasts can be made at first, and there will be distortions during the period of changeover from one basis to the other. Both of these will, however, be overcome in time. When they have, forecasting should, at least in theory, improve, since presumably claims settlement expenses and management expenses are influenced by different factors.

The implications for costing and budgetary control do not seem to be very significant. There will be some expenses which formerly were included in management expenses but will now be included in claims, but these are not expenditure that is particularly amenable to control. Claims settlement expenses, while requiring to be separately identified, are still expenses, and will continue to be controlled as hitherto.

General Branch Expenses in a Home Service Office

1. Background.

The basic philosophy of a home service office is to provide through its agency force a complete insurance service (I.B., O.B. and G.B.) to policyholders in their homes. In other composites, the sources of life and non-life business, and the staff employed on each branch are to a large extent separate. For a home service office this is clearly not the case and it becomes necessary to apportion many items of expenditure between different classes of business.

2. The Importance of Correct Apportionment.

Any marginal expenses in the life fund (assuming I greater than E) will attract tax relief at 37½% (or 30% if expenses exceed unfranked income) and will directly reduce life fund surplus, the bulk of which is paid to policyholders in the form of bonus.

In the non-life fund any marginal expenses will attract tax relief at 52% (assuming sufficient profit is made) and will directly reduce shareholders' profits.

The correct apportionment of expenses between the two funds is therefore a matter of equity between policyholders and shareholders, and there is increasing pressure from regulatory authorities for companies to be seen to be fair in this area.

3. An example of Apportionment in Practice.

The following outline of how a specific office apportions its expenses in practice is given to provide an example on which more general conclusions can be based.

A) Chief Office Expenses (about 25% of total expenses)

The general procedure is to use the chief office departments as cost centres and to allocate expenses to departments. The costs of service departments are allocated to the other departments.

(i) Allocation of costs to departments

- a) Salaries. This is the largest single item (over half of chief office expenses) together with related costs such as N.I. and P. Fund contributions.
- b) Rent, rates and repairs. These costs are allocated to departments on the basis of floor space.
- c) Plant and machinery. These costs are apportioned on a basis that takes account of the current cost of equipment in use and smooths the effect of acquisitions.

- d) Service departments. The cost of these departments is arrived at from a), b) and c) above and this is allocated between the non-service departments. For some departments such as personnel and staff catering allocation is made on a per capita basis. For others such as postal and typing services a usage basis applies. Computer costs are also allocated on a usage basis, from the records kept of the use of computer time.

(ii) Apportionment of departmental costs.

Where apportionment of costs within a department is necessary, this is done on a basis of time spent on each branch, weighted by salary.

(iii) Non-departmental chief office costs.

These cover such items as advertising, publicity, printing and stationery. Specific advertising is allocated on the results of the particular campaign. General publicity is allocated on the basis of new business written. The majority of printing and stationery costs are identified at source and allocated directly to the appropriate class of business.

B) Field Staff expenses (about 75% of total expenses)

Most field staff expenses fall within the following categories:-

(i) Remuneration of sales staff. (about 60% of total expenses)

Each section of sales staff remuneration is deemed to arise from a particular class of business, and so this apportionment together with related N.I. and P. Fund costs is made fairly easily.

(ii) Remuneration of fixed salary staff (e.g. district office clerks) (about 5% of total expenses)

Such staff are concerned with all classes of business, and surveys of the way they spend their time have been conducted in order to establish a basis of apportionment.

(iii) Expenses paid to field staff. (about 5% of total expenses)

In some cases these can be allocated directly to class of business; in other cases they are apportioned on a time spent basis.

(iv) District office overheads (rents, rates, repairs, etc.) (about 5% of total expenses)

These are aggregated and then apportioned on a basis which has been agreed to reflect the work done in the district offices.

C) Relationship of Expenses to business written.

Every expense is analysed between the new business element and the remainder, and between the fixed and premium related components. This enables expense information to be used in fixing premiums and to make the budgeting process more flexible and responsive to change.

4. General Comments.

A) Apportionment of Chief Office Expenses.

There are few differences of principle here between a home service office and any other composite, and the method outlined above is a good example of how apportionment is made in practice.

B) Apportionment of Field Staff Expenses.

(i) Remuneration of sales staff.

- a) Payments directly linked to the volume of business such as fees, commissions, etc. These payments can be directly allocated to the class of business concerned.
- b) Payments not linked to volume of business. It will not be the case for all offices that each item of the remuneration package arises from a particular class of business. Agents will usually be paid some form of basic salary, some of which may be related to the size of the I.B. debit (a form of collecting commission), but which may include payments which are independent of business written or in force. (These payments may be in the region of 10-15% of earnings.) The apportionment of these may not be obvious, and will probably depend on how such payments are viewed. If they are deemed to be in respect of administrative work then this could be analysed on a time basis.

A more general question arises here. The main consideration of management and staff will be the overall remuneration package rather than each individual component of it, so that even if an agents salary can be completely broken down into components and allocated to class of business, it does not necessarily follow that this represents a fair division of costs in relation to the time and work involved in doing his job.

(ii) Remuneration of fixed salary staff (e.g. district office clerks).

Time spent on each branch seems a reasonable basis for apportionment, and this information can be obtained by sampling. Given such a starting point, the business does change and ongoing adjustments could be based on the change in the number of contracts and amount of premium in force for each class of business.

(iii) Expenses paid to field staff.

The most significant of these is probably travelling expenses. This clearly relates to the provision of home service, and a time spent basis would appear logical. In practice this may be very hard to quantify since a variety of business may be generated (or not generated!) from one home call.

(iv) District Office overheads.

The district office will be the administration centre for business of all branches transacted in the district. The allocation of expenses should reflect therefore the overall levels of business. Premium income could be considered as a basis, but the expense of administering that premium will vary according to class of business, average premium per policy and frequency of payment. As with district office clerks, the work load would need to be measured at a point in time, and ongoing adjustments made as the business in force altered.

5. Conclusion.

A large degree of subjectivity is bound to be involved in whatever method is adopted, and there is unlikely to be a unique solution. The methods of obtaining the apportionment bases used will depend on the structure of the office and on what relevant information can be obtained.

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MARGINAL COSTING

What is a marginal cost?

It is the cost of producing the next (or marginal) unit of production.

How does this apply to General Insurance?

Marginal costs can be examined at a number of different levels depending on whether you are looking at the cost of an additional policy, class of business, branch or the business as a whole.

LEVEL 1

Represents the cost of selling the marginal insurance contract, i.e.

(i) Commission

This is usually a flat percentage of premium. The level is usually settled by a pre-determined scale.

(ii) The claims cost of the policy

This includes the amount of the claim and the expense of handling the claim. These are akin to the cost of raw materials and production in manufacturing industry, except that the claims cost is likely to be intrinsically more volatile than the cost of raw materials to be used for an extra unit of production, because to whom the policy is sold affects the claims cost, e.g. the marginal policy may be sold to an unscrupulous individual or through such an agent.

In the context of marginal costing the deviation of the claim cost from the average expected level is the appropriate cost to be considered.

(iii) Expense of administration of policy

The expense of administration of the marginal policy can be very small if it is processed by existing staff using existing stocks of stationery. The marginal expense is limited to the cost of telephone calls, stamps and a little electricity.

The marginal cost will increase as the following types of points are approached:-

- (1) Extra stationery, i.e. policy forms etc. is required.
- (2) An extra member of staff is needed to process the marginal policy.

contd.....

(iii) (contd.)

- (3) The computer system needs extending or replacing to cope with the amount of business.

Immediately following such points the cost of the marginal policy will be greatly reduced.

LEVEL 2

Consists of two parts:-

- (i) The marginal expenses of writing another class of business, e.g. the cost of underwriting, appropriate sales expertise, writing computer programs, etc.
- (ii) The cost of taking on business from a new agent, in particular, the quality of business, i.e. the deviation of the experience from the 'average' expected cost of claims.

LEVEL 3

Is organizational, e.g. the cost of setting up a new branch or extending the delegated authorities of existing branches. These could have implications for both the administrative expenses and the expected deviation from previously established claims costs.

LEVEL 4

Are those expenses incurred because one writes any business at all, e.g. cost of management and management support, e.g. Accountants, Actuaries, Personnel Department etc.

How can marginal costs be used?

They should provide an aid to management when decisions are required on pricing policy or whether a particular block of business should be written. The following considerations are relevant:-

contd.....

1. Every policy should cover its own marginal costs and make some contribution to Level 2, 3 and 4 expenses and profits. Individual policies written on a marginal basis may be large commercial property, liability or fleet policies.
2. Every class of business, agent or branch should cover its own expenses and make a contribution to Level 3 and/or 4 expenses and profits, unless it is necessary to write a particular class at a loss in order to obtain more business for a more profitable class.
3. The business as a whole should, after taking into consideration investment income, cover all expenses and provide some profit for shareholders.
4. The expenses loading for any particular line of business may vary according to the relative competitiveness of that product's market.

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