# An exploratory survey of transfer pricing in selected South African listed companies

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The use of transfer pricing among certain sectors of the JSE is investigated by means of a questionnaire survey. Information regarding the transfer pricing methods used and the management control systems applicable to those prices was requested. Where appropriate, comparison with similar studies carried out in other countries was made. Findings are largely in keeping with the position generally suggested by the literature. However, one particularly interesting difference between this study and comparable surveys carried out overseas is that in South Africa the minimization of tax is ranked relatively lower as an objective of the transfer pricing system. Another notable finding is that while transfer pricing among the companies that indicated they were using it, appears to be at a sophisticated level, a large proportion of the companies surveyed indicated that they did not use transfer pricing even though they could have been expected to be operating on a decentralized basis.

Die gebruike van oordragpryse deur sekere sektore van die Johannesburgse Effektebeurs is met behulp van 'n vraelys ondersoek. Inligting is aangevra met betrekking tot die oordragprysmetodes in gebruik asook bestuurskontrolestelsels van toepassing op die pryse. 'n Vergelyking met gelykstaande ondersoeke in die buiteland is gemaak waar toepaslik. Die voorstelle deur die literatuur gemaak word grootliks deur die bevindings gesteun. Een spesifieke verskil in die vergelyking van hierdie ondersoek met gelykstaande buitelandse ondersoeke is dat die Suid-Afrikaanse ondersoek laat blyk het dat belastingminimisering as 'n doelwit van oordragprysstelsels relatief laag op die ranglys staan. 'n Tweede noemenswaardige bevinding is dat maatskappye oordragprysstelsels op 'n gesofistikeerde vlak gebruik, waar dit wel gebruik word, alhoewel 'n groot aantal maatskappye wat na verwagting op 'n gedesentraliseerde basis opereer, nie gebruik maak van 'n oordragprysstelsel nie.

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## Introduction

The higher levels of motivation and autonomy flowing from decentralized organization structures — where decision making and profit responsibility are delegated to operating managers at lower levels in the organization — are well supported in the literature. There is a trade-off, however. Particularly in organizations where there is a degree of interdependence between operating units, the profit centre concept, which is the cornerstone of decentralization, can and usually does, lead to inter-divisional competition. This in turn almost invariably necessitates a system of transfer pricing. Transfer pricing is defined as the price placed on goods or services which are sold (transferred) within divisions of the same organization.

If the potential benefits of decentralization are not to be negated, the objectives of the transfer pricing system should be congruent with those underpinning the structure itself; namely to promote autonomy, goal congruence and motivation, and to facilitate performance evaluation. These are referred to directly or by implication in the literature. (For example, Anthony, Dearden & Bedford, 1984; Horngren, 1982.)

Conceptually, it would seem unlikely that any one transfer pricing method could satisfy all of these objectives at the same time, since, for example, autonomy and goal congruence could well be contra-opposed. Determining the extent to which transfer pricing systems in South Africa meet the desiderata outlined above is a core objective of this study. In turn this prompted the need to identify and describe transfer pricing systems in use in selected South African industries and to investigate the management control processes surrounding those systems, with particular reference to the measurement of how well the systems investigated supported, rather than detracted from, the perceived benefits of decentralization.

## Research method

A questionnaire survey was carried out among selected sectors of the JSE, and in evaluating the results comparison was made, where appropriate, with similar studies carried out overseas. The sectors selected — Industrial Holdings, Motor, Engineering, and Banking and Finance — were drawn from a wider universe of industries which, it was felt, would be likely to have internal transfers of goods or services. The smaller sample was chosen to include companies involved in manufacturing, distribution, the provision of services — both of a product and a funding nature — and the control of conglomerates.

A preliminary screening was undertaken to eliminate those companies which were considered to be unlikely to have a situation warranting transfer pricing. Sixty-six companies were included in the survey, made up as follows:

Industrial Holdings — 31
Motor — 13
Engineering — 11
Banking and Finance — 11

**Table 1** Number of employees

| | Use transfer pricing | |
|---|---|---|
| | Yes | No |
| Up to 1 000 | 10% | 50% |
| Over 1 000 | 90% | 50% |
| Total | 100% | 100% |

A high proportion (68%) of the companies surveyed responded.

## Findings

Forty-two per cent of the respondents indicated that they used transfer pricing. In order to establish whether there was any relationship between size of company and the use of transfer pricing, respondents were asked to indicate the total number of employees within their company. The responses are summarized (Table 1) as companies employing up to 1 000 and those employing more than 1 000 employees.

While companies that do not use transfer pricing are evenly spread by size, those that do use transfer pricing are predominantly the larger companies. This is not surprising since a decentralized form of management control is in general more appropriate for a larger company (Anthony, *et al.*, 1984: 238) and is consistent with findings for the United Kingdom (Rook, 1971: 4).

Despite the fact that the study was carried out among a selected group of companies which were considered to have a high propensity to decentralize, 50% of those that do not use transfer pricing are large companies. This could mean that:

1. The firms do not operate on a decentralized basis.
2. The firms do operate on a decentralized basis but inter-unit transfers do not occur.
3. The firms do operate on a decentralized basis and inter-unit transfers do occur but in an unstructured manner.

It is conceivable that all three would apply to a certain extent. However, there would need to be a strong rationale for 1 or 3 to apply to a significant level. Without that rationale, inefficiencies in the management control systems of South African business could be postulated.

Those respondents who indicated they did not use transfer pricing were asked not to complete the remainder of the questionnaire. While the response rate to the questionnaire was good, only 19 companies indicated they were using transfer pricing, hence intersectional comparisons are not appropriate and the findings of this survey need to be regarded as exploratory, and providing a direction for future studies.

## Objectives of the transfer pricing methods

As mentioned earlier primary objectives of a transfer pricing system as identified in the literature, are autonomy, goal congruence, motivation, and performance evaluation. Others could also be seen as appropriate, including an ability to aid decision making, tax minimization and compliance with Generally Accepted Accounting Practice so that divisional results sum up to reported results. Respondents were asked to rank the objectives given in order of importance for their companies. The results are summarized in Table 2.

**Table 2** Objectives of the transfer pricing method

| | Ranking |
|---|---|
| Performance evaluation | 1 |
| Goal congruence | 2 |
| Divisional autonomy | 3 |
| Motivational | 4 |
| Aid in management decisions | 5 |
| Minimise tax | 6 |
| GAAP compliance | 7 |

The four highest ranking objectives of the transfer pricing methods used by the respondents were in line with those suggested by the literature. Baxter & Konopka (1985), for example, indirectly reinforce the top two ranked objectives (performance evaluation and goal congruence) by pointing out 'the substantial impact transfer prices can have on a multinational enterprise's human resources, both psychologically and in terms of remuneration and promotion decisions'. Tax minimization showed a relatively low ranking. By contrast, in a number of overseas studies, the minimization of tax (and hence the maximization of after-tax profits) is frequently considered to be the factor which overrides other considerations in selecting the most appropriate transfer pricing system. Both a study of Canadian companies (Tang, 1980) and one comparing Japanese and American companies (Tang, Walter & Raymond, 1979) showed the maximization of consolidated after-tax profits to be one of the most important objectives.

Harris (1985) made reference to a generally held estimate that upwards of $1 billion was being diverted annually out of the taxable profits of Canadian companies to affiliates in other countries — particularly the 'so-called tax havens'. Rahman & Scapens (1986) postulate that, given the market power of multinationals in Bangladesh, it might be expected that these corporations would be more profitable than their local counterparts. Their study, however, indicated that net profit as a percentage of sales in the multinationals surveyed ran out at about 59% below that of local firms. In both cases transfer pricing appeared to be used to minimize the global tax burden of the companies surveyed. An explanation for the relatively low ranking of tax minimization in South Africa could be that South African companies have relatively fewer inter-divisional transfers across international borders than their foreign counterparts, and thus fewer opportunities to take advantage of differential rates of tax.

**Table 3** Transfer pricing methods used

| | With market price available | No market price |
|---|---|---|
| Market related price | 38% | n/a |
| Negotiated price | 24% | 64% |
| Cost related | 19% | 15% |
| Cost plus profit | 14% | 14% |
| Other | 5% | 7% |
| Total | 100% | 100% |

## Transfer pricing methods

A variety of methods by which transfer prices may be established are available. These are usually either cost related or market related. In general, where autonomy and motivation are the dominant objectives, a market-related (or negotiated) price is preferred. Cost-related prices on the other hand have the advantage of ease of use and administration.

Respondents were presented with a list of transfer pricing methods. They were asked to indicate which were employed in their companies, both in the case of a market price being available and in the absence of market prices. The methods were grouped according to broad categories and the responses are summarized in Table 3.

It can be seen that either a market-related price or a negotiated price were the dominant transfer pricing methods used, over 60% of respondents using these methods whether market prices were available or not.

Most of the industries surveyed are operating in a competitive environment. In such an environment the use of the prevailing market price is particularly appropriate for establishing the transfer price since it accurately reflects the performance of the divisions and preserves their autonomy (Benke & Edwards, 1980: 31).

The remaining responses can be mainly accounted for by some form of transfer price based on full production cost (28%). As mentioned, cost-related methods are easy to use and administer.

Table 3 indicates that where market prices are not available, a negotiated transfer price is the most commonly used (64%). The use of negotiated prices has long been supported in the literature, for example, Dean (1957: 254) suggests that competitive intracompany transfer prices negotiated in arm's length bargaining by the profit centre managers is an underlying requirement for effective profit centre control.

**Table 4** Comparison of methods used

| | South Africa | Japan | USA | Canada | UK |
|---|---|---|---|---|---|
| Market related | 38% | 34% | 30% | 35% | 54% |
| Negotiated price | 24% | 19% | 18% | 21% | * |
| Cost related | 33% | 46% | 50% | 41% | 46% |
| Other | 5% | 1% | 2% | 3% | 0% |
| Total | 100% | 100% | 100% | 100% | 100% |

* The UK study combined market related and negotiated prices

**Table 5** Review of transfer pricing methods

| | |
|---|---|
| Never | 16% |
| Monthly | 5% |
| Quarterly | 5% |
| Annually | 11% |
| Other regular intervals | 11% |
| Internal situation changes | 26% |
| External situation changes | 10% |
| Request by division(s) | 0% |
| Other | 16% |
| Total | 100% |

**Table 6** Review of transfer pricing methods — summary

| | |
|---|---|
| Never | 16% |
| At some regular interval | 32% |
| When there is a change in situation | 52% |
| Total | 100% |

The transfer pricing methods used in South Africa are comparable with those predominantly used overseas. This is shown in Table 4.

It is evident that in South Africa there is a greater use of market-related and negotiated prices than in the other countries compared. This is consistent with the finding that performance evaluation is considered to be the most important objective of the transfer system (whereas in the Canadian and the USA studies the maximization of after-tax profits was most highly ranked.)

## Review procedures

Respondents were asked to indicate the review procedures applicable in their companies. The responses are presented in Table 5 and it is evident that they are well spread across the available choices. For purposes of analyses the responses were categorized into three groups as presented in Table 6.

The preference for never changing the transfer pricing method was shown mainly by the motor industry. This may be a consequence of the structure of that industry, where it could be expected that very little change would occur with regard to the criteria for establishing transfer pricing methods, so that there is little need for review.

Transfer pricing methods were reviewed on some regular basis by 31% of the responding companies. This indicates a well-defined and structured approach to transfer pricing methods and suggests also that management is aware of the volatility of their environment, and hence the need for well-defined review procedures.

The remaining respondents indicated that they reviewed their transfer pricing methods as and when the situation required it. This would suggest that these companies are operating reactively (changing methodology only when constrained to do so by external forces) or proactively with a degree of flexibility. For example, a respondent in the construction industry indicated that it adjusted its method for each contract. While flexibility related to industry needs could be seen as a desirable feature, it could nonetheless be argued that care should be taken that reviews are carried out no more often than, and as often as, necessary, since flexibility, unless well managed, could lead to difficulties in applying standards of control and of performance evaluation.

In essence the review procedures should be structured according to the characteristics of each individual firm/ industry. This is suggested by the variety of responses received. Moreover, the transfer pricing method should not be so flexible that it leads to uncertainty and confusion amongst the divisional managers and central office as to the procedures.

## Arbitration methods

Respondents were asked to indicate both the arbitration methods used, and the frequency of use. The methods used in most cases are summarized in Table 7.

There is a fairly wide range in arbitration methods employed. Two observations could, however, be made:

— None of the four industries surveyed made use of a pricing committee. An explanation for this could be that the pricing committee would be seen as an instrument of corporate management and as such would compromise divisional autonomy. Furthermore, to be able to justify a pricing committee, the level of intracompany transfers would have to be of a magnitude generally higher than was found to be the case among the respondents.

— The settlement of disputes between the divisions themselves, without corporate intervention or arbitration, was at a high level. Settlement of disputes by negotiation would be consistent with the preference for negotiated transfer pricing methods as shown in Table 4, as would the antipathy towards pricing committees. In fact where divisions have themselves, independently, negotiated the transfer price, we would expect related disputes to be rare. Eccles (1983) suggests, however, that disputes will be variously resolved depending on whether the divisions concerned are competitive (where a win-lose distributive bargaining approach could be expected); co-operative (where corporate intervention is predicated); or collaborative (a mixture of the two).

By way of comparison a majority of the American companies' divisional disagreements were settled by financial executives from the parent companies, while most Japanese firms resolved their disagreements through negotiation.

**Table 7** Arbitration methods

| | |
|---|---|
| No disputes as fixed policy | 33% |
| Pricing committee | 0% |
| Between divisions | 29% |
| Divisions & management | 21% |
| Management decides | 17% |
| Total | 100% |

**Table 8** Satisfaction with transfer pricing method

| | |
|---|---|
| Fully satisfied | 32% |
| Mostly satisfied | 58% |
| Moderately satisfied | 10% |
| Hardly satisfied | 0% |
| Dissatisfied | 0% |
| Total | 100% |

**Table 9** Reasons for lack of full satisfaction

| | |
|---|---|
| Too many disputes | 23% |
| Management time wastage | 24% |
| Unit time wastage | 18% |
| Costly to administer | 12% |
| Too complex | 0% |
| Not achieve objectives | 0% |
| Other | 23% |
| Total | 100% |

## Satisfaction with transfer pricing method used

Respondents were asked to indicate the degree of satisfaction with the transfer pricing method used and the reasons, if applicable, for not being fully satisfied.

Responses to the level of satisfaction are presented in Table 8.

The results show that 90% of users are fully or mostly satisfied with the effectiveness of the transfer pricing method used at present.

Where respondents were not fully satisfied with their existing transfer pricing methods, the reasons are presented in Table 9.

No generalized set of findings can be deduced from the variety of reasons given for current dissatisfaction by respondents with existing transfer pricing methods. One finding to note, though, is that 'too complex' was never given as a reason for lack of full satisfaction. This could be seen to be consistent with the view that the bulk of the transfer pricing methods reflected in the survey are market related and such methods are not usually complicated, save where market proxies are not available.

## Conclusions

The general conclusion that can be drawn from the study is that among the companies surveyed that use transfer pricing, the concept and supporting methods are well developed and of a sophisticated nature. A major difference flowing from a comparison with studies in industrialized nations overseas is that the minimization of tax was not regarded by the South African respondents as one of the main objectives of a transfer pricing system. This is probably due to relatively less opportunity to exploit tax miminization opportunities inherent in inter-divisional transactions across international boundries. South Africa's physical location and the effects of political isolation could be exacerbating factors.

Despite the fact that the survey was directed at listed companies in industries in which it was expected that transfer pricing would be used, the fact that so few companies actually employed formal transfer pricing systems indicates a potential for further research. Among possible reasons for this failure to formalize transfer pricing methods could be:

1. a degree of retention of control at corporate level, with a corresponding diminution of real profit responsibility at the operating unit level;
2. possible inefficiencies in management control systems used;
3. reward systems at divisions being less than totally profit-related; and
4. a possible division among South African companies into those that are comparable to decentralized companies operating in leading industrialized nations on the one hand, and on the other, those that to a larger or lesser extent may be more readily identified with the less developed nations.

While the number of companies actually using transfer pricing in the survey was low, and this study has been limited therefore to drawing fairly generalized conclusions, it should nonetheless prove useful as an indicator for future research, some of which may be directed towards:

— a broader based study allowing for comparison across a wider sample of industries.

— further investigation into the reasons behind the apparent lack of use of transfer pricing (and hence the implied lack of decentralized organization structure) among relatively few of the companies.

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