

# MAIN ARTICLES

## Analysis of Cost for Pricing: An exploration of the gap between Theory and Practice

*Ibrahim Zubairu*

### Abstract

*Over the years, there has been several discussions over the alleged gap between management accounting theory and practice. As a result, researchers sympathetic to neoclassical economies have sought to rationalize the gap in terms of information economics and have proposed constrained optimisation as the norm. Scapens (1994) and Ahmed & Scapens (2000) have suggested that, the old institutional economics framework might better explain management accounting practice.*

*The old institutional economics originated about the same time as neoclassical economics and in opposition to its rationalization of the gap, it largely rejects rational optimisation as the basis for much of human behaviour and stresses, instead rule following and adherence to custom.*

*This research paper reports on the findings of two case studies undertaken as part of a programme of case studies intended to examine the power of the old institutional economics framework to explain the gap between management accounting theory and practice, in the realm of costing for pricing. The paper concludes that, much observed management accounting practice is difficult to reconcile with ex ante constrained optimisation, but is explicable in terms of conditioning by various institutions in question.*

### 1. Introduction and History of the Reality Gap

There are several write-ups over a prolonged period about the alleged gap between the conventional wisdom of management accounting textbooks, academic/professional journals and management accounting practice. But the 'reality gap' did not attract much attention in all these except in the area of cost analysis for pricing and product mix decisions.

The textbooks recommended a decision relevant approach to cost analysis for pricing decisions, while the empirical research on the other hand has consistently suggested that such an approach is not widely used in practice.

No sooner had the accounting researchers began to systematically conduct empirical studies of management accounting practice than the 'reality gap' became apparent. Studies made in the United Kingdom by Coates et al (1983) and Gordon et al (1981) in the United States of America are typical examples of the empirical studies conducted on management accounting practice. The studies have been regularly replicated up to the present day, for example Drury and Tayles (2005) — Full

cost plus pricing appears to be common. Most studies also suggest that, demand and competition are often taken into account.

However, 'cost' as defined by accountants considering typical full cost as measured for external financial reporting purposes was shown to be a very important benchmark in pricing and adjustments in response to demand and competition certainly did not constitute equivalent to full cost application of marginalist/incrementalist principles.

Looking from 1980s onwards, the conventional wisdom has also advocated for the use of target costing as a way of dealing with increased competition. However, survey evidence available suggests that, this approach is not widely used in practice (Drury et al., 1993 and Garg, 2003).

In recent times, Drury and Tayles (2005), attempted to explain management accounting practice in terms of cost-benefit contingencies; from the point of view of information economics. Their approach was consistent with the arguments of Demski (1972), Demski and Feltham (1976) which drew its conclusion from the earlier work of Arrow (1963) and Horngren (1990) postulating that sophisticated techniques are often costly to implement and the benefits may not justify the costs. They concluded however that, the contingent variable suggested by the theory in Cooper (1988) could not satisfactorily explain divergences between theory and practice. The cost-benefit contingency in a constrained optimization approach assumes a degree of rationality and consensus that is often not present in group decision making contexts; in which pricing decisions are often made. Consequently, these authors called for further research, using case studies to provide insights into why accounting practice differs from accounting theory.

## 2. Alternative Research Frameworks

Other researchers have suggested that, 'reality gap' results from the fact that, the world in which management accounting is practiced is different

from that of neoclassical economics, on which the conventional wisdom is based (Scapens, 1994; Ahmed and Scapens, 2000). In this view, either competitive conditions differ from those assumed by conventional theory, or the decision-making context differs or both. The former would include tacit collusion among oligopolistic firms rather than price competition (Tool, 1991). The latter would include group decision-making under conditions of uncertainty and ambiguity, rather than the rational mode of decision-making assumed by neoclassical theory (Stacey, 1996). Group Decision-Making is different from individual decision-making and in addition to the scope for different interpretations of decision problem, there is likely to be lack of goal congruence among the group members; each of whom has their own functional responsibility. More so, there is likely to be an unresolved agency problem between group members collectively as agents and the shareholders as principal (Varlow et al, 2005). Under such circumstances, the techniques prescribed by the management accounting textbooks may be irrelevant to the needs of managers in practice.

### 2.1 *The institutionalisation of cost accounting*

Scapens (1994) and Ahmed and Scapens (2000) have suggested that, the reason for reality gap is that, the world in which management accounting is practiced is better explained by old institutional economics framework of Veblen (1899), Commons (1931 and 1934) than by neoclassical economics framework on which the conventional wisdom of textbooks is based.

Institutions are important for economic life and have been defined by North (1990) as the rules of the game with organization as the players. They are credited with establishing patterns of human action by excluding some types of behaviour and encouraging others. Institutions facilitate and maintain patterns of habitual behaviour (Hodgson, 1988), as opposed to rational behaviour. They can be considered as a response to the high information and computation costs that so-called rational behaviour would have and a coordinating device for human actions (Loasby,

1999). However, Hodgson (2006) defined institution as “the system of established and prevalent social rules that structures social interaction”. An important aspect of institutions is according to Hodgson (2006), that they are useful to create stable expectations. Generally, institutions enable ordered thought, expectation and action by imposing form and consistency on human activities. The institutions we share with each other make social life easier, more predictable and therefore more efficient.

In the institutional world view, human behaviour is not typically the result of rational optimisation as postulated by neoclassical theory. People do not have the information, the cognitive capacity, or the inclination to optimise; rather, behaviour is guided by custom and rule following. In a given decision-making situation, the problem is identified as being a particular type of and then the appropriate custom or rule of thumb is invoked.

The particular custom or rule followed will be the result of specific historical episodes or events. Ahmed and Scapens (2000) argue that much of contemporary costing and pricing practice has its origins in the developments in cost accounting which occurred in the first two decades of the 20<sup>th</sup> Century. These developments comprised two historical episodes: first, the evolution of industry uniform costing systems, to avoid damaging price competition which failed to take account of the full cost of production; and second, Government was contracting in First World War which made it necessary to avoid profiteering by private contractors, cost accounting was not intended to be concerned with determining “relevant cost”, or the incremental future cash flows attributable to a particular product. Rather, it was concerned with ensuring the systematic recovery of all historical monetary outlays on production resources (based on a functional classification) and the earning of a fair or normal return on investment.

Institutionalised accounting methods proved to be appealing to firms in a number of industries,

because they seemed to offer a way of ensuring the systematic recovery of all production costs in the prices charged to customers; also, if all firms in the industry adopted the same (full cost plus) approach, this would drastically reduce price competition. Where firms have similar cost structure, however, cost plus pricing will tend to result in stable prices rather than prices constantly changing in response to short-run demand fluctuations. As Blyth (1923, p. 124), a prominent contributor to the early literature on cost accounting, puts it:

Uninformed price cutting would be gradually eliminated and by this means, one of the greatest menaces to successful business would be removed. This would tend to create greater stability not only in each industry but in industry generally.

Costing practice thus provided a means of subliminal tacit collusion, institutional writers have also observed that cost plus pricing may be considered more socially acceptable than the seemingly opportunistic demand driven pricing (Tool, 1991).

Given the Scapens/Ahmed and Scapens explanation regarding the divergence between competitive conditions assumed by theory and those in which management accounting is practised. Management accounting practices are customs or institutionalised rules to facilitate conformity across organisations in a field (DiMaggio and Powell, 1983), to provide order and stability in the industry. In this context, institutional economics, unlike neoclassical economics, is not mechanistic or deterministic; it postulates that there will be a wide variety of approaches to costing and pricing-reflecting different historical trajectories-i.e., “path dependency” rather than universal optimisation (Scapens, 1994).

A general proposition of old institutional economics, however, is that there are large sectors of the modern industrial economy where tacit collusion rather than price competition

prevails. The foregoing discussion of the institutionalisation of cost accounting suggests that cost practices may be instrumental in maintaining such collusion.

## 2.2 *Alternative decision-making modes*

Given Stacey's explanation regarding group decision-making under conditions of uncertainty and ambiguity (for example, decision —making as a political process), management accounting information is not used to facilitate "rational optimisation", but provide ex post rationalisation of decisions taken on other grounds. This theme i.e., of accounting being used to justify ex post rather than inform ex ante pervades the early literature on "behavioural explanations" of cost plus pricing see, for example, Earl and Hopwood (1979), Weick (1979) and Cooper et al. (1981).

## 2.3 *The validity of neoclassical theory*

It must be emphasised that the issue here is not the validity of the neoclassical economic theory of the firm. Indeed it is probably impossible to test that question by reference to observe costing and pricing practice at the level of the individual firm. Friedman (1953) in his famous Essay in Positive Economics argues that competitive process results in firms having to act optimally (or at least in a way consistent with constrained optimisation) only firms doing so will survive. Where a rule of thumb (such as full cost pricing) is employed rather than explicit application of the marginalise calculus, the firm may have found over time by trial and error that this approach produces the maximum profit.

Thus, the firm's behaviour is "as if" it were acting according to neoclassical assumptions: using a "rule of thumb" results in same outcome as would explicit application of the marginalise calculus. Any observed behaviour (as Friedman himself suggests even simply picking a figure at random) could, therefore, in principle be consistent with profit maximisation thus vindicating neoclassical economic theory.

Thus, potentially, whatever a firm's cost and pricing approach, it could achieve the same (profit maximising) outcome as if the marginalise

calculus had been explicitly applied. The question being explored in this paper then, is not whether neoclassical theory is valid in predicting the outcome of pricing decisions (with respect to achieving profit maximisation). The purpose here is to explore the behavioural dimension in management accounting practice in order to understand why the neoclassical approach is not applied in practice and, in particular, to evaluate whether behaviour is explicable in terms to the old institutional economics framework. In this respect, management accounting could be said to be a practice in search of a theory.

## 3. *The need for case studies at the level of the individual firm*

Although there is no logically necessary association of neoclassical economics and positivist research methodology, such as that employed by Drury and Tayles (2005) the latter approach has tended to be the dominant one in the economics-based management accounting research literature. This approach is based on the discovery of general laws of behaviour, which can be represented by statistical correlations. Given this approach, if existing theory cannot explain observed behaviour, then a new theory is required: case studies are simply exploratory device for generating hypotheses for subsequent testing, using quantitative methods in the search for general covering laws of behaviour (Ryan et al..2002).

### 3.1 *The institutional view: behaviour as rule following*

Old institutional economics, however, like other "interpretivist" approaches (i.e. approaches that believe "reality" is socially constructed/negotiated) is based on the assumption that as Outhwaite (1987, p. 13) puts it: "Human beings are not only propelled by causal influences, but also act for reasons which are not causes and must be understood in terms of rule following or some other mode of analysis radically distinct from the identification of law like regularities". "Rules" have been defined by Hodgson (2006, p. 3) as: a socially transmitted and customary

normative injunction or immanently normative disposition, that in circumstances x do y.

Institutional economics also recognises that the rules being followed reflect "dispositional power" (Ribeiro and Scapens, 2006). These authors suggest that the "reality gap" results from the fact that the "reductionist" approach of the conventional wisdom ignores the social and organisational context of management accounting. They argue that "dispositional power" is a major component of organisational context and that this can provide a framework for the study of management accounting practice in organisations.

Dispositional power is contrasted with overt exercise of power in conflict situations and is defined as the ability to take advantage of others' acceptance of one's authority and legitimacy of one's interests.

Accounting researchers adopting the old institutional economics perspective (e.g. Burns and Scapens, 2006; Burns, 2000) have explicitly considered this aspect of power. They suggest that institutionalised rules constitute an important dimension of power. The power of social actor to achieve desired outcomes over time will derive from the appropriateness of institutionalised rules and routines become institutionalised as "the way things are done in people's minds; thus, such rules and routines constitute an important dimension of power.

### 3.2 *The institutional research approach*

The purpose of research within the institutional approach, then, is to draw on the theoretical framework to understand/explain specific behaviour not to identify general covering laws. Regarding the adoption of the institutional economics framework to understand/explain management accounting practices, it is necessary to identify the institutions' (i.e. settled patterns of thought) conditioning behaviour in particular organisations.

This involves identifying the rules being followed,

the power bases reflected in such rules and their meaning/significance to managers, which account for their perpetuation.

To explain the accounting practices of individual organisations, therefore, it is necessary to study the processes of accounting practice in the context of the internal dynamics of the firm.

In order to evaluate the explanatory power of the institutional economics framework, a number of case studies were undertaken, using a semi-structured questionnaire. The following section discusses two of the case studies undertaken as part of the research programme.

### 4. **Case 1: Interplast Limited.**

Interplast Ltd is a manufacturer of PVC pipes; HDPE pipes & tubes; PVC electrical ducts & trunkings; PVC doors and windows. It is based at Spintex Road in Accra Ghana, employing over 650 people and with a sales turnover of about Ghc380m. Its net profit, however, is only about 2.5% of sales turnover. Interplast Ltd was established in 1970; in consultation with Ghana Water & Sewerage Corporation to provide high quality unplasticised polyvinyl chloride (uPVC) pipes and fittings manufactured to internationally recognised standards. The company has since produced and supplied the majority of Ghana's requirement of small and large diameter PVC pipes for the supply of water throughout the country. Interplast has since expanded its products range to cover the manufacture of HDPE (High Density Polyethylene) pipes as well as PVC profiles for the building industry. Interplast modern production facility located in Accra is equipped with the most technically advanced extrusion machinery available today and has the capacity to supply complete uPVC & HDPE pipe lines within limited time frame and carry out routine testing of all its pipes as laid down in DIN standards under the supervision of the Ghana Standards Board. The corporate clients of Interplast include Ghana Water Company Ltd, Srabag Ltd, China GEO Engineering Corporation and Ghamal Telecommunication Company Ltd. It purchases

its raw materials from oil producing countries such as, the Kingdom of Saudi Arabia, Lebanon, Nigeria etc and its equipment from original equipment manufacturers in Taiwan, India, Korea and Japan. It manufactures, stores, packs and delivers to a range of corporate, retail and wholesale customers and also performs various 'value added activities' to give the product unique position in the market. Different customers place different demands on the firm's operating resources, yet no cost allocations are made to different customers to reflect these differing resources consumption levels: pricing and customer profitability analysis are based solely on the manufacturing price of the product. Senior managers believe that overall profitability could be improved by a better understanding of customer profitability and renegotiating terms or even dropping unprofitable customers.

Conventional wisdom would recommend the allocation of attributable operating costs (inbound/outbound logistics and so on) to particular customers, using appropriate cost drivers, but this is not done. This is particularly surprising, given that the firm operates in highly priced competitive markets with wafer thin profit margins. Operating cost total about Gh¢370.5m in relation to sales turnover given a net profit of Gh¢9.5m).

The non-allocation of such costs in assessing customer profitability, effectively assumes equal consumption per Gh¢1 of sales value. Yet, account managers recognise wide differences in consumption of operating costs relative to sale value. Thus, significant distortions in profitability measurement are likely to occur. Cost apportionment problem might be expected to rise where delivery to several customers in the same locality is made by one truck and such problems mitigating against the introduction of a more sophisticated approach to customer costing. However, delivery to customers is subcontracted out to several heavy load truck operators, who charge Interplast on the basis of quantity & tonnes/miles. Therefore, to Interplast, delivery is a direct cost and such an

apportionment problem does not arise, even though, this cost is not actually allocated to customers in assessing their profitability. This non-conformity to the conventional wisdom appears explicable in the following terms:

#### *4.1 Origins of the approach*

According to several members of the current senior management team, the founding fathers of the company were Indian/Ghanaian entrepreneurs with a less than sophisticated, rigorous attitude that emphasised sales and market share growth rather than profitability. They appear to have valued these things per se, for kudos among peers or rivals. In addition, they have the conviction and had wrong belief that increased sales would automatically increase profitability. The firm has survived in a very price competitive field because all its competitors act similarly; reflecting several similar origins which led to the lack of information necessary for optimal decision-making in the company.

#### *4.2 Reasons for persistence of the approach*

The approach seems to have persisted because decisions are made by a group of managers, rather than the individual 'entrepreneur' of basic neoclassical economics (and by implication management accounting's conventional wisdom). The management team has its own functional responsibilities and problems, which often take precedence over corporate objectives.

Given the day to day pressures, managers wish to ensure first that their individual functional responsibilities are fulfilled. Certain members of the team (the Group Supply Chain Director and the Operations Director) recognise the need to introduce activity-based costing to improve their understanding of customer profitability, but the issue does not have a powerful champion. As far as it was possible to determine, this did not appear to be a priority for Sales and Marketing Management.

There seems to be lack of congruence between the organisation's goals and those of each

functional manager. This is probably inevitable where growth and increase complexity, make it necessary for a group of managers with roughly equal power to make decisions, rather than a single individual who is unlikely to have the knowledge or information processing capacity necessary to make effective decisions (Stacey, 1996). Thus, there is a conflict between the need for decentralisation and integration/goal congruence.

Interestingly also, the way Sales Marketing personnel are rewarded may provide them with a disincentive to seek allocations of operating costs to customers. The Marketing function stipulates a minimum price (adding a margin to the cost of production) and is rewarded on this margin. The Sales personnel are rewarded on the basis of the contribution achieved in excess of this budgeted margin. Thus, together, the two function on the basis of sales minus cost of bought goods. If the customers producing the highest gross profit also consume disproportionate amounts of operating costs, a certain product group managers (marketing function) and or customer account managers (sales function) would have a strong incentive to resist the introduction of a formal cost accounting system.

However, Interplast's behaviour may be due, in greater part, to the 'dispositional power' of the Sales and Marketing function resulting in a general lack of financial orientation in the organisational culture, as evidenced, for example, by the exclusion of the finance function from the pricing/customer selection decision-making process. Thus, in this firm, the dispositional power underlying the rules of pricing appears to lie with the Sales and Marketing functions as a result of the historical development path of the firm. The Accounting and Finance function is geographically remote from 'the action' and its role seems restricted to a 'score keeping' rather than a decision support one. The organisation's culture does not have a

financial orientation; financial controls and performance measures are not prominent in people's minds. Size of the turnover, market share and number of employees do seem to be. The firm operates a Balanced Scorecard approach to performance evaluation and non-financial performance measures seem to be given more attention than financial indicators, thus seemingly consistent with the firm's non-financial cultural orientation.

Interplast also provides an example of what Stacey (1996) describes as ambiguity in decision-making -i.e. where managers have different interpretations of the decision problem. There was a lack of agreement among the management team on the importance of price in the firm's marketing mix. This, of course, is significant because it would seem likely to influence the perceived need for accurate cost information. With a cost leadership strategy, accurate cost information is likely to be more important than with a differentiation strategy, which is normally synonymous with premium pricing.

There is general agreement that the firm's profitability is poor (at only 2.5% Return on Sales). However, there is disagreement over the cause and by implication the appropriate remedial action. Some managers believe it is inherent, due to the nature of competition in the industry (i.e. price competition):

Price is everything and we compete solely on the basis of price said the Sales Director. Therefore, given this view, accurate cost information is vital since margins are inevitably wafer thin. It must be pointed out, however, that despite his diagnosis, the Sales Director has not been a powerful champion of the introduction of activity-based costing for customer profitability analysis. This may be the result of the way the sales force is rewarded, as discussed above.

The Company's Supply Chain Director, on the other hand, believes that there is scope for differentiation in pricing, based on service quality differentiation. In this view, the low

profitability must be due to inadequate exploitation of this potential differentiation, which the firm fails to reflect in a value added pricing policy. The different interpretations of the problem imply different remedies (and differing importance of accurate cost information).

Where there is such a lack of consensus concerning the nature of the problem, it is not surprising that the implementation of potential remedies continually drifts; and in effect reinforces the preoccupation of managers with their own individual functional responsibilities.

In addition, the firm's main objective seems to be long-run market share rather than short-run profit maximisation and the assumption of management accounting's conventional wisdom. This may be a good thing, as Simmonds (1981) argues that market share has intrinsic value: it reduces unit costs through economies of scale. Indeed, a large market share often represents a formidable barrier to entry and thus restricts competition. It also makes people tend to automatically make the firm their supplier of first choice. Thus, market share may be a good leading indicator of long-run profitability.

This also makes accurate cost information less critical, as limited action would follow as a result of a better understanding of customers' profitability in which case there is the likelihood that customers would be dropped or have their terms of trading renegotiated as turnover/market share takes precedence over short-run profitability.

Moreover, certain large customers (most of whom the firm already knows are unprofitable) must be retained anyway for kudos and this restricting further the scope for acting upon more accurate customer's profitability information; although this really only relates to a handful of customers and does not seem sufficient justification for the failure to introduce a customer costing system.

#### 4.3 Case summary

In case summary, therefore, Interplast's behaviour fails to conform to management accounting's conventional wisdom for the following four reasons:

- (1) Its founders were largely unaware of the dangers of pursuing growth at the expense of profitability. Thus, the firm's behaviour is explicable in terms of a specific historical episode, rather than in terms of rational optimisation which is a fundamental premise of institutional economics.
- (2) There may still be an element of kudos among peers being the objective function, rather than profit maximisation and such kudos coming from sales/market share growth. Such a settled pattern of thought would indeed constitute an institution.
- (3) Decisions are made by a group of managers rather than an individual, each with his own more pressing issues. The introduction of activity-based costing to improve knowledge of customer profitability does not have a powerful champion and it continues to drift. Moreover, there is ambiguity concerning the nature and causes of the decision problem, which seems likely to impact on the implementation (or otherwise) of a possible remedy; such a decision context is postulated as typical by institutional economists.
- (4) Short-run profit maximisation is not the objective, perhaps rightly so, as it might conflict with long-run profitability. Thus, the firm operates a Balanced Scorecard approach to performance management, with an emphasis on long-run market share and a range of critical success factors/key performance indicators to achieve this goal. Again, institutional economists contend that sales/market share growth rather than short-run profit maximisation are typically a firm's objectives.

#### 5. Case 2: Amani Manufacturing Company Ltd. Amani Manufacturing Company Ltd was



established in 1999 and situated in Tema Heavy Industrial Area; just adjacent to Tema Steel Works Ltd. The company manufactures a range of poly products; such as plastic bowls, cups, tables, chairs, water sachets and polythene bags. It has a turnover of about Gh¢35m and employs about 250 people. It uses a rigid 'cost plus' approach to pricing and product mix decisions, based on a hybrid 'cost' figure somewhere between conventional full cost and marginal cost in contravention of conventional wisdom.

### 5.1 *Non-conformity to conventional wisdom*

The conventional wisdom recommends the use of Shillinglaw's (1963) 'attributable cost' for regular pricing and product mix decisions as in activity-based costing, for example, is intended to capture attributable cost (Shank and Govindarajan, 1993). In terms of the cost hierarchy discussed in the activity-based costing literature, this normally includes all unit level, batch level and product sustaining costs, allocated using appropriate cost drivers, while excluding non-avoidable (with respect to particular products) facility sustaining costs, the hybrid cost figure used by this firm includes some of each type (all allocated using direct labour hours) whilst excluding others, based on a functional classification of costs as 'production' versus 'non-production' costs. Thus, for example, materials handling and production scheduling batch level costs are excluded from unit product costs, as they originate in 'non-production' departments. This cost is clearly not the attributable cost, failing as it does to reflect cost cause-effect relationships. To this hybrid, cost figure is added a mark up to give a 35% gross margin. This cost plus policy is rigidly enforced by senior management monitoring sales reports (indicating margins achieved) which is seemingly independent of varying market demand conditions.

### 5.2 *Origin and persistence of the approach to costing and pricing*

It appears that the reason the firm does not apply the incremental costs and revenues analysis recommended by the conventional wisdom in Drury et al., 1993 is that it is not

engaged in price competition in a competitive market. Rather, it is probably engaged in tacit collusion where the approach to costing and pricing is intended to maintain an orderly and stable market. This seems a reasonable inference, as the firm has been able to apply rigid cost plus pricing (independent of demand conditions and not reflecting the attributable product cost) for many years. In such circumstances, it would not wish to change prices as a result of applying an incremental cost/revenue analysis (as prescribed by the conventional wisdom) through fear of competitor reaction.

This situation seems consistent with Ahmed and Scapens's 'institutionalisation of cost accounting' hypothesis outlined earlier in this research paper. The firm takes 'production cost', based on functional classification and adds a 'normal' profit mark up. This is the approach to pricing new products, based on accepted practice within the industry. It seems to have become the accepted norm of right and proper behaviour, which maintains such 'institutions' (Scapens, 1994; Ahmed and Scapens, 2000). The accountants' approach to costing and pricing in this firm seems to be accepted as legitimate by other functional managers; for example; Sales & Marketing, Supply Chain etc. When asked if, in a tight market situation, he would seek to argue the case for an incrementalist approach to pricing, the response was as follows:

"Possibly, but you're really in last resort territory here; it is, after all, necessary to cover all these costs". (Ghanaian Sales Manager). Thus, other managers seem to accept as legitimate, the approach of the accountants which is based on the fear that an incrementalist approach would result in the under recovery of overheads. Thus, in this firm, the dispositional power (underlying pricing rules) appears to be lying in the presumed expertise of the accounting and finance function. The costing and pricing practices advocated by the accountants seem to have become 'institutions' and settled patterns of thought or behaviour.

For existing products, there is a firmly established market expectation of a particular price; the costing methodology described is then used for product profitability analysis and product mix decisions. The market price must cover 'production cost' and earn the normal profit mark up this being considered to represent the opportunity cost (in terms of contribution displacement ) of using 'non-production' resources in making this product rather than another. This approach clearly does not capture attributable cost and hence reveal true product profitability- spreading as it does 'non-production' overheads evenly over different products (via the application of the uniform 40% margin), which actually consume these resources very unevenly.

The approach to cost analysis has come to be rationalised (i.e., institutionalised) on other grounds too thus contributing to its persistence. Production departments are treated as profit centres each with its own product range and it is necessary to measure controllable profit for each profit centre. Production department managers are assumed to be able to control their own department's costs, but not the cost of the various service and support departments (e.g. Materials Handling, Production Scheduling). If only controllable costs are included in unit product costs, then these alone will be reflected in profit centre performance measurement. The department manager will thus have an incentive to control those costs that he/she can control.

### 5.3 Case summary

So, the approach to cost analysis has come to assume meaning and significance to managers as facilitating cost control and performance measurement. The system of costing and pricing has been in operation for many years and none of the current management team knows its origins. Actually, the firm's approach was once the conventional wisdom. As discussed earlier in this research paper, the cost accounting methods advocated by those involved in the uniform costing and government contracting episodes, employed exactly this approach, i.e., full

'production cost' (based on a functional classification) plus a fair/normal profit mark up.

In the second half of the 20<sup>th</sup> Century, Cost Accounting evolved into Management Accounting with its advocacy of 'relevant costs' for decision-making and today's conventional wisdom. The latter, however, is based on the assumption of short-run profit maximisation as the firm's objective. The former was intended to facilitate long-run order and stability in the industry and it appears to have become institutionalised practice in some organisations.

It seems that this firm's approach to costing and pricing is attributable to the fact that the competitive conditions in which it operates (that is, tacit collusion in oligopolistic markets rather than price competition, such collusion facilitated by cost accounting practices as described above) are at variance with those assumed by the conventional wisdom of today's management accounting textbooks. This situation is consistent with the way in which real market economies are assumed to operate by old institutional economics writers (Tool, 1991).

### 1. The practice of management accounting

The above case studies present us with an 'institutional' perspective which reflects the interconnectedness between management accounting practice and other phenomena. Management accounting practice in the hands of one group may be performed differently in the hands of another. When we think of assets, technology and innovations in a physical sense such as plants and buildings, processes and devices, we often overlook the fact that these are enmeshed in a network of people. People in their roles in the economic organisation of the firm do not limit their advice to technical expertise. Instead, they use their positions as manager/adviser to advocate particular programmes of action. In this sense, managers do not just discuss the ends and means efficiency of this or that policy independently of their own value assessment of the policy; rather they infuse their contribution with their own values. Management accounting is a powerful way of

analysing, interpreting and formulating action plans, and it may well be value neutral; but managers are not value neutral (Rafferty, 2007).

#### 6.1 *Accounting as social and institutional practice*

Institutional economists view the economic system in a less mechanistic and deterministic way than do neoclassical economists. In the absence of a complete resolution of the agency problem, whereby managers as agents would act solely in the best interest of shareholders as principals, managers have considerable discretion in decision-making; into this space fall various 'institutions'. Both case studies reveal group decision-making, with different group members possessing dispositional powers; these group members bring to the table their values and views about how things should be done. These values and views, in turn, reflect the 'institutions' generated by their environment.

Why do different members/functional departments possess power in imposing their values in the management practices employed? This may be partly attributable to the personalities and the internal dynamics of the particular organisation concerned. However, it may also be necessary to look beyond the boundaries of the particular organisation to the wider society, to explain the origins and dissemination of various 'institutions and the dispositional power reflected in them. In the Interplast case, the dispositional power (of the Sales and Marketing personnel) reflected in the approach to costing and pricing, seems explicable in terms of the industry's origins and the rigorous culture of the founding fathers. In the Amani case, rigid 'cost' plus pricing has clearly become institutionalised and seemingly reflecting the dispositional power of the accountants.

Institutional theorists (for example, Meyer and Rowan, 1977) have argued that it may be necessary to look beyond the organisations' boundaries, to the wider social role of accounting, in order to understand particular accounting or management practices and the

status of accountants. Hoskin and Macve (1994) have argued that the development of the modern forms of accounting and accountability made possible the emergence of our familiar modern economic discourses on productivity, profitability and performance. Miller (1994) has argued that by reducing diverse activities and processes to the end point of a single figure (ROI, NPV, EPS labour efficiency variance etc.) accounting makes comparable the entities of which it produces calculations in wider social and economic agendas.

Miller and O'Leary (1987) and Loft (1986a, b) discuss how cost accounting practice provide a bridge between national efficiency objectives and economic governance of individual enterprises in the post-world war one reconstruction. According to Loft (1986a, p. 133), Britain was to be recreated as an efficient manufacturing nation and one of the members of the corps of experts who were to provide efficiency data at the time was the costing expert! Within the enterprise, accounting was to provide a 'truth' about production which would enable its efficient management; and the sum of efficient enterprises would be an efficient nation.

The accountancy profession was thus brought prominently forward; this elevation in status contributed to the financial (rather than production) orientation of British management. Thus, the 'discourse on national efficiency' resulted in a change in the 'rules of the game', enabling various experts, including cost accountants, to gain positions of power and influence. The form of power achieved could be understood in terms of Ribeiro and Scapens's (2006) concept of dispositional power.

#### 6.2 *Different institutional environments and different accounting practices*

It may be instructive to study the ways in which different environments determine the amount of accounting done in a particular organisation, rather than tacitly accepting that this derives from intrinsically necessary technical work

processes (Meyer, 1986). Importantly, Meyer and Rowan (1977) observe that organisations are driven to incorporate the practices and procedures defined by prevailing concepts of what is rational. These can obviously change over time.

Interplast was established in 1970 to provide uPVC pipes, but subsequently expanded its product range to cover manufacturing of HDPE. The approach to costing and pricing is widely used across the company's manufacturing process and the functional managers believe it was imposed by the founding fathers of the company. It seems likely, therefore, that it would have been influenced by the socioeconomic and environmental factors discussed by Ahmed and Scapens (2000) and Loft (1986a, b) etc.

On the other hand, a manufacturing firm (Amani Manufacturing Co Ltd) established in the late 1990s would not be subject to the same environmental institutional pressures and is quite likely, therefore, not to adopt the financial orientation of traditional manufacturers. These pressures within the environment which shape the institution's response in its historical context also have their 'institutional twin' in the activities within individual firms. The generalised theory put forward here, supporting the specific organisation's institutionalised activities, can perhaps be explained in terms of the interconnectedness of networks of people and functions.

Networks of people are also networks of concepts and ideas that interact with the inputs from other sources with similar networks. More complex networks lead to more complex links between people, ideas and actions. These integrated networks are the organisations 'connectedness', if one thinks of connectedness in the wider sense as resources, capabilities and competences required to achieve organisational goals/objectives. In this sense, management accounting practices is part of the 'connectedness' profile of the firm. It is a networking activity that attempts to bridge the different organisational worlds within the same

firm, with those of the operational imperatives imposed by the historical environments of the individual industry contexts.

In the cases outlined above, the role of management accounting practice is to utilise existing knowledge (costs and prices) and adapt it to the settings of the connected networks in the wider environment on the one hand and the sales and marketing, operations, finance and general management on the other. Within this role, the practice of management accounting also acts as a source of inventive recombination.

While aspects of management accounting are new in some respect (zero-based budgeting, balanced scorecard, activity-based costing, etc.) they are rooted in historical routines, methodologies and even rituals.

In its role in the connectedness profile of firms, management accounting practice finds its distinctive feature in the constructive assimilation of these pre-existing methods with a new synthesis, which is often shaped by the general circumstances and configurations of the organisation's behaviour.

Like many inventions, the practice of management accounting comes from the influence of other ideas that emanate from the network arrangements that evolve in the organisation. In this sense, management accounting practice recombines existing processes and systems with new ideas, methods and orientations that emerge from the network of the people and functions with which it engages on an ongoing basis. In its most effective form, this practice of inventive recombination accommodates change and redirection where necessary and provides the bridging process whereby the historical practices are married with the routines and rituals of the existing contexts and conditions.

Thus, in these cases it is to observe the practice of management accounting as one where the disciplines of costing are adapted to the social and operational imperatives of the organisation,

which stem from the orientations of the different network arrangements, ideas and concepts that form the connectedness profiles of firms.

### Conclusion

Much of the previous research into cost analysis for pricing and product mix decisions has tended to adopt the positivist view of the world (Ryan et al., 2002). The purpose of such research is to uncover general laws and ideally express them in the form of quantified relationships between variables (Drury and Tayles, 2005 is a good example of this approach).

Within this research approach, the only role for case studies is a source of hypothesis generation (where theory is relatively underdeveloped) for subsequent testing using quantitative methods on large-scale data.

Axiomatic to the approach of old institutional economics, is what I am likely to be able to explain particularly in management accounting practice by invoking general covering laws (of the

form if x, then y): particular behaviour cannot be understood or explained outside its specific context and its relation to the social system of which it is a part.

In old institutional economics, as in other 'interpretivist' approaches, the intention is not to produce statistical generalisations representing general covering laws. Rather, it is to understand or explain behaviour in a particular set of circumstances. The type of generalisation sought is what Ryan et al., (2002) call 'theoretical generalisation'. With such an approach, case studies are viewed as a method by which theories are used to explain observations. The theories that provide convincing explanations are retained and used in other case studies. Case studies in new or different contexts are used to generalise (i.e., extend) the theory to a wider set of contexts (Ryan et al., 2002). This has been the purpose of the research programme, with respect to the old institutional economic framework. The approach to costing and pricing in both the cases discussed in this paper is best

Date	Purpose & Activity carried out	Remarks
<b>1. Interplast Limited, Spintex Road - Accra</b>		
05/05/2008	The nature of costing applications by the company in practice	
12/05/2008	Interview of the key personnel of the company in both the accounting and sales/marketing department	
12/06/2008	Analysis of costing information and search for the gap between cost/management accounting theory and practice	
<b>2. Amani Manufacturing Company Limited, Heavy Industrial Area - Tema</b>		
07/05/2008	The nature of costing applications by the company in practice	
14/05/2008	Interview of the key personnel of the company in both the accounting and sales/marketing department	
29/05/2008	Analysis of costing information and search for the gap between cost/management accounting theory and practice in attempt to confirm their application in practice.	

understood with reference to old institutional economics.

This agenda implies the need for further case studies, identifying the rule of the game being followed, the dispositional power reflected in such rules and their origins in terms of environmental 'institutions'. For organisations to incorporate institutionalised activities; to understand accounting practices from this perspective, it is necessary to trace the processes that link accounting with its institutional environment (Miller, 1994). Such research may demonstrate the explanatory power of the old institutional economics framework regarding the practice of management accounting and the 'reality gap'.

## REFERENCES

- Ahmed, M.N., Scapens, R.W., 2000.** Cost allocation in Britain: towards an institutional analysis. *European Accounting Review* 9 (2) 159-204.
- Arrow, K., 1963.** Uncertainty and the welfare economics of medical care. *American Economic Review* 53 (5), 94-973.
- Burns, J., 2000.** The dynamics of accounting change: interplay between new practices, routines, institutions, power and politics. *Accounting, Auditing and Accountability Journal* 13 (5), 566-596.
- Burns J., Scapens, R., 2000.** Conceptualising management accounting changes: an institutional framework. *Management Accounting Research* 11 (1), 3-25.
- Coates, J.B., Smith, J.E., Stacey, R.J., 1983.** Result of preliminary survey into the structure of divisionalised companies, divisionalised performance appraisal and the associate role of management accounting. In: Cooper, D., Scapens, R., Arnold, J. (Eds.), *Management Accounting Research and Practice*. Institute of Cost and Management Accountants.
- Cooper, R., 1988.** The rise of activity based costing, part 3: How many cost drivers do you need and how do you select them? *Journal of cost Management, Manufacturing Industry* (winter), 34-46.
- Cooper, D.J., Hayes, D., Wolf, F., 1981.** Accounting in organised anarchies: understanding and designing accounting systems in ambiguous situation. *Accounting, Organisations and Society* 6 (3), 175-191.
- Demski, J.S., Feltman, G.A., 1976.** Cost Determination: A Conceptual Approach. Iowa State University Press, Ames, IA.
- Drury, C., Tayles, M., 2005.** Explicating the design of overhead absorption procedures in UK Manufacturing Companies. ACCA Publications, London.
- Gordon, L., Cooper, R., Falk, H., Miller, D., 1981.** The Pricing Decision. National Association of Accountants, New York. Society of Management Accountants of Canada, Hamilton.
- Hodgson, G.M., 2006.** What are institutions? *Journal of Economic Issues* 40 (1), 2-4.
- Horngren, C.T., 1990.** Contribution margin analysis: no longer relevant/strategic cost management new paradigm. From a paper presented at a meeting of the American Accounting Association. *Journal of Management Accounting research* 2 (Fall), 21-24.
- Loft, A., 1986a.** Accountancy and the First World War. *Accounting, Organisations and Society*. Hopwood, A., Miller, P. (Eds).
- Loft, A., 1986b.** Towards a critical understanding of accounting: the case of accounting in the UK, 1914-25. *Accounting, Organizations and Society* 20, 137-170.
- Miller, P., 1994.** *Accounting as Social and Institutional Practice*. Cambridge University Press, Cambridge.
- Ribeiro, J.A., Scapens, R.W. 2006.** Institutional theories in management accounting change. *Qualitative Research in Accounting and Management* 3, 94-111.

**Ryan, B., Scapens, R.W., Theobald, M., 2002.** Research Method and Methodology in Finance and Accounting, second ed. Thomson. London.

**Scapens, R.W., 1994.** Never mind the gap: towards and institutional perspective of management accounting practices. *Management Accounting Research* 5, 302-321.

**Tool, M., 1991.** Contribution to an institutional theory of price determination. In: Hodgson, G., Screpanti, E. (Eds), *Markets, Technology and Economic Evolution*. Edward Elgar, Aldershot.

**Varlow P., Lakshmi G., Zubairu I. 2005.** The Dynamics of Management Accounting Theory and Practice in contemporary literature. *University of Lincoln Business Review*; 35 (3) 84-126.

Record of visit to the reference company sites in Accra & Tema.

## ABOUT THE AUTHOR

He is a Lecturer in the Accountancy Studies Department of Accra Polytechnic and a Finance & Investment Consultant. He holds MBA Finance from University of Lincoln, HND Accountancy from Kumasi Polytechnic, He is a Fellow Member of the Institute of Financial Accountants (IFA), Associate Member of Chartered Management Institute (CMI) and an Academic Member of the Association of International Accountants (AIA).

He can be reached on 0244 884220.

E-mail: fauzubero@yahoo.com