

Public Submission to ACCC Grocery Inquiry by Alan Abrahams on 13th March 2008.

We have an approach and methodology that we believe would add considerable value to the ACCC enquiry into the competitiveness of retail prices for standard groceries. I would be happy to meet with members of the enquiry team to discuss this in more detail if the information provided below is of sufficient interest and value to the enquiry.

My colleague John Parsons was a Director of the South African National Productivity Institute (NPI). He was closely involved with several national studies, including the preparation and submission of a proposal to review the entire South African food chain through a sampling of individual organisations at every level (farmer, transport, manufacturing, warehousing, retailing) using an approach called Productivity Accounting (Please refer to the attachment "Productivity Accounting Brief").

In South Africa during the late 1980's and early 1990's, Tiger Oats was one of two major food manufacturing companies. The other was Premier Milling. John Parsons had been doing work with Tiger Oats on measurement. Information resulting from one of these exercises showed that, over a five year period, Tiger's maize milling, feeds and egg operations had achieved consistent productivity gains and price under-recoveries (around SAR20m). Tiger Oats liked it so much they agreed to go public because food prices at the till were going up at least double the inflation rate and everyone was looking for someone to blame. This let Tiger Oats "off the hook" and allowed them to start pointing the finger at others, particularly the retailers, not least because selling space was increasing but real sales not as much, and this indicated capital productivity losses.

Around that time a large number of institutions were getting into the act -- Chamber of Business, AHA, COSATU, Consumer Association, SAAU, NAFCOC -- all calling for action and/or defending themselves. The farmers were convinced they were getting a very "raw deal", the manufacturers were keeping low (especially Premier Milling after Tigers Oats' press release), and the retailers were claiming that it couldn't be them because their margins weren't increasing!

To stir things up even more, indications were that the CPI was increasing markedly faster than the PPI for similar sectors, suggesting that the problem was indeed at the retail end.

To keep the initiative and look like they were doing something positive, some retailers and manufacturers set up the Food Logistics Forum to investigate the pricing problem. There were several committees and countless meetings involving all the stakeholders, but little promise of any real insights or corrective action. To counter this, in 1992 the NPI (led by John Parsons) put up a proposal to review the entire food chain. The pitch was made at a Food Logistics Forum follow up meeting with all the stakeholders represented.

The farmers supported the proposal, as did the unions and consumer groups. The manufacturers exhibited a mixed reception of the proposal, and the retailers were vociferously against it. They claimed that it wouldn't show what was needed and the SAR1m price tag was far too much to pay (this was merely an excuse as they made more than this on a single Saturday at each store).

I am happy to provide you with further details on our Productivity Accounting approach if required.

Please contact me if you have any further queries

Regards,
Alan Abrahams

Productivity Accounting

A briefing paper on productivity, pricing, wealth creation and wealth distribution

John Parsons

What is productivity accounting?

The Corporate Executive Board (Working Council for CFOs) describes productivity accounting as a methodology capable of integrating financial and strategic reporting. By bringing about such integration, it enhances the strategic planning process, improves management reporting and performance management, and enables companies to deliver strategic information to the investor community thereby increasing shareholder value.

Essentially, productivity accounting is a high-level executive reporting system that provides profound insights into business decision making. It enables a monetary value to be attached to changes in productivity and price recovery thereby directly linking productivity with profits. In short, productivity accounting can:

1. Show whether company productivity is increasing or not and the impact that this is having on bottom line results
2. Identify how much wealth is being created or destroyed, where this is happening and which stakeholders are beneficiaries
3. Review the competitive position of the company in the marketplace
4. Ascertain whether strategic plans and budgets are plausible
5. Improve the quality and transparency of company data in the public domain.

Management must know the source of profits in order to evaluate the company's competitive advantage and defensible market share. Profits derived from productivity growth are sustainable, those derived from price recovery are not.

How has productivity accounting been usefully applied in telecommunications and other service industries?

- A productivity accounting study revealed that, over a six-year period, the US communications service sector discovered ways to better allocate labour, materials, energy and capital resources – despite significant increases in capital investment. Productivity improvement helped offset increasing costs whilst conferring substantial benefits to the consumer. These benefits exceeded the gains created by productivity growth and the difference was financed from a small reduction in the profit margin. The sector's strategic position was actually strengthening notwithstanding the decline in margins, which were, in any event, partially offset by rapidly increasing sales turnover. How such productivity gains were achieved was clearly of great interest not only to managers in the industry but also to outside stakeholders such as analysts in the investment community, government policy analysts and regulatory commissioners.

- A productivity accounting review of an integrated posts and telecommunications corporation revealed that, although the financial performance overall and in each of the two main business units was adequate, the productivity of the two business units was vastly different. Where telecommunications productivity was rising rapidly consistent with a deflationary pricing policy, the postal business unit was remaining profitable only by camouflaging productivity losses with an inflationary price umbrella. In effect, the profitability of the postal business was being subsidised by the wealth created through the productivity gains in telecommunications and by wealth redistributed from the consumer. Without serious restructuring the postal business was not viable in the long run and the corporation was subsequently split into two separate businesses.
- Over the last ten years or more, a large electric utility has shown that significant gains can be achieved through the application of productivity accounting. It has enabled managers to quantify what productivity changes are worth to the business, to identify the inflation rate that applies to the company, to manage under- or over-recovery of prices with full cognisance of the consequences, and to provide a basis for determining what is available for gainsharing. Furthermore, because the productivity results are shown in the Annual Financial Statements and reconciled with the change in profits, management, investors and other stakeholders are provided with a clear, concise analysis of how the company is performing and how wealth generated is distributed.

Moreover a total productivity measurement system that integrates and summarises the effect of all the activity on profit provides evidence that the company as a whole takes productivity seriously and is actively pursuing its stated mission. To this end, before being approved, every plan and budget within the organisation is evaluated in terms of its productivity and price recovery implications. This serves to promote assurance amongst lower-level managers that their efforts and targets are congruent with those of the company as a whole and facilitates the incorporation of productivity results into the performance contracts of business unit managers and into capital investment decision-making. Utility managers conclude that: 'Over the past ten years, the measurement and reporting of total productivity performance using productivity accounting models has had a major impact on the way the business has been managed'.

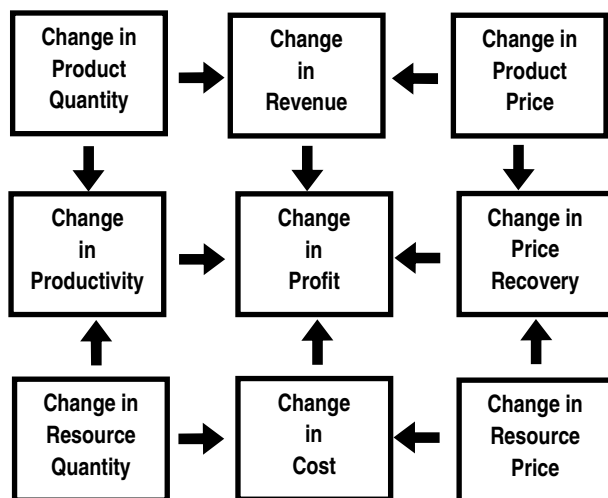
Where has productivity accounting been used?

Productivity accounting has been applied and/or introduced into many different areas within manufacturing, mining and service industries, for example:

Services	Manufacturing / Mining
<ul style="list-style-type: none"> • Telecommunications • Electricity generation, generation & distribution • Tertiary education • Banking • Postal Services • Retailing • Hospitality 	<ul style="list-style-type: none"> • Clothing, textiles & footwear • Integrated steel & aluminium production • Food & beverages • Gold & coal mining • Petrochemicals • Auto production • Pharmaceuticals • Sugar growing & milling

How does productivity accounting work?

The concept rests on isolating the quantity and price components of dollar value changes for both revenues and costs. The approach can be explained easily by means of the diagram below (Figure 1).



The centre column shows the usual relationship between profit, revenue and cost. Profit changes are driven by changes in revenue and changes in cost. The top row indicates that revenue changes are derived from changes in product quantities and/or prices whilst the bottom row shows that cost changes are driven by changes in resource quantities and/or prices. Resource prices would include material prices, wage rates, energy tariffs, interest rates and replacement prices for capital equipment.

Figure 1: Sources of Profit Change

The left column links changes in product quantities with changes in resource quantities and is the measure of productivity change. Measured in this way, it becomes possible to show how productivity influences profits in money terms. Productivity improvement translates directly into long-run profit growth.

In completing the matrix, the right column links the product and resource prices charged by and to the business respectively. It creates a relationship called price recovery. It determines the extent to which resource price increases (inflation) are recovered through changes in the product selling price. When product prices increase at a faster rate than resource prices, the result is price over-recovery or inflationary pricing. Price over-recovery translates into short-run profit growth.

Instead of the conventional profit analysis represented by the centre column, it becomes possible to analyse profit change in terms of productivity and price recovery, as represented by the centre row. Since profit growth supported by productivity growth is sustainable whilst that resulting from price over-recovery is not, it is crucial to be able to make the distinction when reporting on the financial condition of the business.

The analysis can be further refined by showing separately the contribution to productivity change made by spreading non-variable costs (e.g. capital equipment) over a larger or smaller product volume (capacity utilisation) from that made by management-induced resource allocation decisions. The family of measures thus derived for each resource element and for all resources is shown in Figure 2.

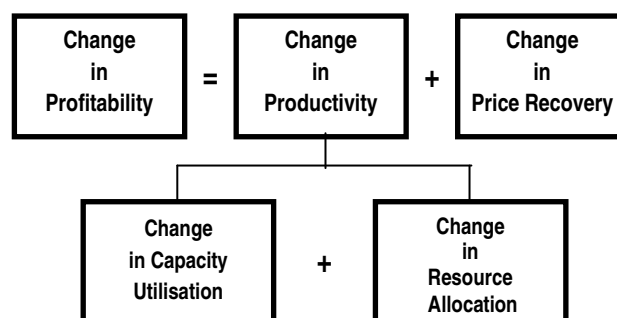
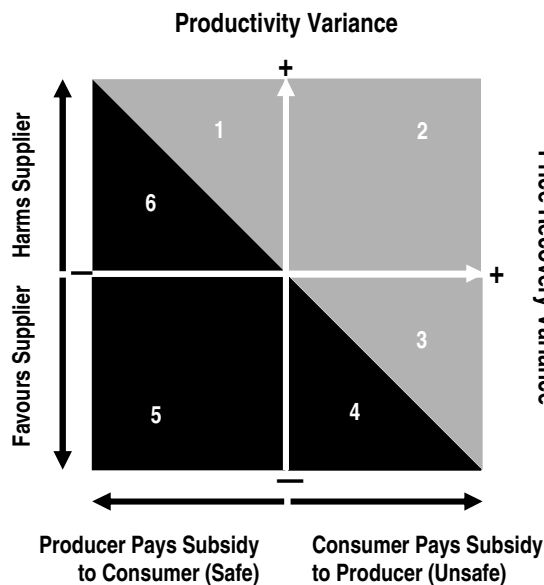


Figure 2: Performance Measures

Who gets the wealth created through productivity growth?

If productivity creates wealth then who is benefiting and who is paying a subsidy? How the wealth is being distributed amongst organisational stakeholders can be uncovered in at least two ways – a value chain/stakeholder analysis or a wealth distribution statement.



A simple value chain links the organisation from supplier to customer. The impact of productivity and price recovery on suppliers and customers can be evaluated using the chart shown in Figure 3.

In the segments to the right of the vertical axis the consumer pays a subsidy to the producer because of increasing product price relative to resource price (that is, product price is increasing faster than resource price). In the segments to the left of the vertical axis the producer is paying a subsidy to the consumer because of decreasing product price relative to resource price (that is, resource price is increasing faster than product price).

Figure 3: Value Chain -- Stakeholders

In the segments above the horizontal axis the resource supplier is harmed because of decreasing resource content per unit of product (that is, improved productivity). In the segments below the horizontal axis the resource supplier is favoured because of increasing resource content per unit of product (that is, declining productivity).

Wealth distribution statements are designed to identify the contributors to and recipients of wealth created through the productivity process and quantify the size of their shares. As business values change, the issue of how wealth is distributed among stakeholders becomes increasingly important.

The financial results of a typical clothing retail chain for the financial years 2002 and 2003 showed that the financial position had improved, with profits increasing from \$20 million to \$30 million and a commensurate increase in profit margin from 4.9% to 6.8% of sales. A productivity accounting analysis established that total productivity improved by a useful 5.9% which, in turn, created additional wealth of \$26.9 million.

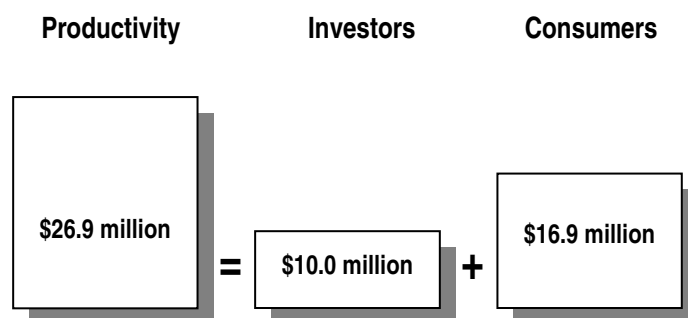


Figure 4: Investor and Net Consumer Benefits

Figure 4, a high-level wealth distribution chart, shows that, of the \$26.9 million, \$10.0 million was used to increase returns to the investor (which was already obvious from inspection of the income statement), whilst the balance of \$16.9 million was used to absorb inflation, thereby conferring an implicit benefit on the consumer.

How does productivity accounting relate to alternative measurement approaches?

Productivity accounting generally and some versions in particular represent an advance on all value-added measures (including the more complex versions such as economic value added – EVA). Essentially, value added approaches (like accounting systems) deal in dollar values, which fail to differentiate between real changes and nominal changes. Nominal changes include both wealth creation and wealth distribution. In fact, an increase in EVA indicates the extent to which the organisation has *acquired* wealth, which is a function of both wealth creation and wealth distribution. It does not address the needs of multiple stakeholders or show how wealth is created.

In fact, a productivity accounting exercise can help interpret the results of an EVA analysis. It does this by separating how much of the economic value added is value created through productivity improvements (the more efficient and effective utilisation of all resources) from that value redistributed through the pricing mechanism (inflationary pricing). If the business is adding value through inflationary pricing then obviously the barriers to entry are that much lower for a competitor to take over market share. If value is being added through productivity improvements then the barriers are much higher and it is more difficult for a competitor to take over market share. The business is more sustainable.

Furthermore, the performance indicators derived from productivity accounting are not alternatives to those that would customarily appear on a corporate dashboard such as the balanced scorecard. Productivity accounting variances, for example, form a cluster of indicators that would fit perfectly within the *Financial* perspective of the scorecard. What could be more fundamental drivers of financial performance than productivity and price recovery?

Finally, because productivity accounting is rigorously locked into the financial and management accounting systems, it offers an extension to those systems, not a substitute for either. At the same time, by reconciling with the financial figures, it offers a similar level of robustness and lack of ambiguity.

What can we conclude from all this?

Regardless of the performance measurement or the financial and management accounting systems being used, without the benefit of productivity accounting it is impossible to distinguish the separate contributions that productivity (wealth creation) and price recovery (wealth distribution) are making to bottom line financial performance. More than a question of sophistication, this represents a fundamental difference in how you understand the origins of organisational performance and therefore how you manage in order to improve it.