



Brands, Innovation and Growth

Evidence on the contribution from branded consumer businesses to economic growth

A report for AIM – the European Brands Association

April 2004



By Peter Smith and James Amos

PIMS Associates Ltd
15 Basinghall Street
London
EC2V 5BR
Phone: +44 207 7776 2800
www.pimsconsulting.com

Acknowledgements

We have produced this report as an update and extension of the 'Brands, Innovation and Growth' report written by Tony Clayton and Graham Turner of PIMS Associates Ltd. for AIM in 1998. The insights and models created in their report have provided a basis for our analysis.

Special thanks go to Tony Clayton for his work and advice during the production of this report.

Contents	Page
Executive Summary	5
1. Introduction	8
● Background	8
● Objectives	9
● Approach	10
2. Growing market share	12
● Value and growth in market share	13
● Image and growth in market share	16
● Innovation and growth in market share	17
● Comparison of branded versus unbranded FMCG businesses	20
3. Branding and public benefits	21
● Growth in value added	22
● Employment growth	24
● Innovation, productivity and growth	24
● Productivity and investment	27
● How branding creates public benefits	28
4. Profitability	29
● Quality and share	29
● Growing market share	31
● Relative direct cost	32
● Relative value	32
● Relative image	33
● Innovation	33
● Value added growth	34
● Capital and labour productivity	35
5. Conclusions	36
References	40
Appendix I	Description of PIMS Competitive Strategy Research Database
	41
Appendix II	Further breakdown of the FMCG sample of the PIMS Database
	42
Appendix III	Glossary of terms
	47

Executive Summary

Scope of study

The case for branding, in consumer products as in other sectors, rests on its role in:

- Helping consumers to exercise choice and recognise products in a crowded market place; and
- Enabling producers to communicate with end users, and to gain recognition for innovative approaches that meet consumer needs.

We have established models for growth at the business unit level, and also assessed the wider benefits for society, resulting from product branding and innovation in the fast moving consumer goods (FMCG) sector.

In this study we have used the PIMS Competitive Strategy Research Database (PIMS Database) to assess the role of branding, defined in terms of advertising and promotional expenditure, and innovation on FMCG businesses.

We have looked at three performance areas in our study of FMCG businesses. The key measures we have assessed in our work are the:

- Change in relative market share, which identifies the change in a business's competitive position and its ability to compete for consumer preference;
- Growth in real value added, which represents the contribution of a business to real Gross Domestic Product (GDP) growth; and
- Return on Capital Employed (ROCE), an indicator of profitability and the ability of a business to compete for capital investment.

Key results

Competitive market share gain in branded FMCG businesses results from achieving advantage over your competitors in the areas of innovation, consumer perceived value and image.

Wider economic benefits are likely to arise when product branding exists as these businesses invest larger sums, and invest more efficiently, in the areas, such as innovation, that create economic growth, employment and productivity. This is the result of competitive stimulus and the role branding plays in enabling FMCG businesses to reap the rewards of investment.

Profitability is higher in branded FMCG businesses and is positively correlated with market share growth, high consumer perceived value and a strong image.

Summary

Competitive share gain

The three headline factors driving competitive share gain are innovation advantage, value advantage and strong image. These three competitive capabilities are interdependent and themselves determined by the channelling of investment into product R&D, process R&D and advertising.

Our statistical analysis shows that:

- Investing more in product R&D and bringing more new products to the market, in the shortest timeframe and with protected intellectual property, achieves innovation advantage. The level of innovation is closely linked with consumers' perceptions of quality, itself a driver of share gain;
- An increase in perceived value leads to an increase in market share. Value is in turn affected by relative perceived quality and relative costs, which link back to product and process R&D investment and the role of image as a catalyst for improving quality perceptions;
- Image and perceived quality are highly interrelated, and image is crucial for small players in the market trying to improve their standing. Image is also essential for dominant market players if they wish to avoid severe share erosion.

Brands and wider economic benefits

Our findings on the role product branding plays in stimulating wider economic and social benefits signal important messages to European policy makers, particularly in light of the 2004 Spring Report to the European Council.

We find that for all FMCG businesses, real value added growth is correlated most strongly with real market growth. In addition we find that real value added growth is higher in branded FMCG businesses where:

- Quality advantage is increasing;
- Quality advantage is high;
- Relative direct costs are low; and
- Successful innovation is high.

These qualities link directly back to the drivers of competitive share gain for branded FMCG businesses. We find that these qualities also drive annual employment growth at the business unit level.

Our investigation of the FMCG sample of the PIMS Database also shows a strong association between innovation and real market growth. Our analysis concludes that by creating strong brands FMCG businesses are able to communicate more effectively with end users, resulting in businesses which:

- Grow better in response to innovation advantage;
- Gain a greater private return on innovation; and
- Show a better productivity return for investing in innovation.

This creates the:

- Incentive to increase the overall level of innovation; and in time
- Additional funds for further innovation.

We assert the end result is that FMCG markets, and the economy, benefit from superior productivity and growth.

Our analysis of R&D investment shows that the impact on productivity growth in branded FMCG businesses is higher than the average of all other businesses in the PIMS Database. The impact on productivity of higher R&D in the branded FMCG sample is approximately double that for industry as a whole. The evidence suggests that the complementary relationship between R&D and branding enables these businesses to extract additional returns from each unit of investment.

Profitability

We find that for all FMCG businesses greater market share is associated with greater profitability, as bargaining positions improve and returns to scale are realised. Interestingly, the pursuit of growth has no detrimental effect on profitability for branded FMCG businesses; the rewards of such strategies appear to outweigh the additional costs.

Profitability is also driven by quality and cost, which are the major components of value. The rewards of strong market position combined with strong consumer perceived quality are large. Higher share businesses appear more able to convert a perceived quality advantage into profit. These high share businesses usually possess a strong image, allowing more effective communication with end users. It has also been shown that these businesses actually spend less on advertising, promotion and total communication as a proportion of revenue than smaller share businesses do.

Finally, we can show that the impact of R&D investment on profitability is affected by the initial consumer perceived quality position of the business. Those with strong perceived quality positions are able to extract greater returns, in terms of ROCE, from their R&D effort. As with several of our findings above, this implies that strong branding heightens the value of innovation.

1. Introduction

Background

In a project for DG III of the European Commission, reported in Panorama of EU Industry 1996, PIMS traced a series of statistical relationships measured across the PIMS Database. These relationships linked 'tangible' economic variables such as relative costs and productivity, and 'intangible' measures such as intellectual property, innovation and relative quality to the success of businesses in gaining share, growing value added and making good returns on capital.

In 1998 AIM gave PIMS the task of studying:

- The role of branding in increasing businesses' competitive positions; and
- The role of branded FMCG businesses in contributing to economic growth.

The results formed PIMS' 'Brands, Innovation and Growth. Evidence on the contribution from branded consumer businesses to economic growth' report of September 1998.

Four results became clear from this study:

1. The special relationships that link innovation and branding;
2. The impact of innovation on growth;
3. Value to consumers – the combination of performance against price – is powerful as a determinant of share change, and hence of effective consumer choice; and
4. Reputation is a vital enabler of business growth, especially for small businesses challenging stronger competitors.

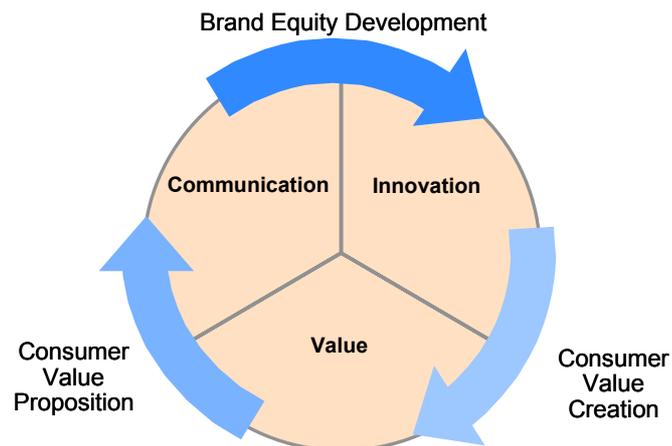
Following this project, AIM commissioned the 2000 report entitled, 'A Virtuous Cycle: Innovation, Consumer Value and Communication. Research Evidence from Today's Brand-Builders.' The Swiss-based International Institute for Management Development (IMD) conducted this study together with PIMS.

This research project examined the role of innovation and its contribution to the performance of brands. The research findings demonstrated that:

- In the highly contested consumer markets covered by the study, surveyed companies place innovation among their highest strategic priorities;
- Those innovations that create and deliver added consumer value contribute significantly to the success of brands; and
- Success in value innovation, over time, leads to a virtuous cycle whereby innovative brands create more consumer value, thereby earning greater consumer franchise, which, in turn, translates into growth in sales and market share, higher savings in communication expenditure, and greater returns on investment. With greater returns come the added resources for further innovation and, thus, the cycle repeats itself.

The study also demonstrated that the virtuous cycle of innovation can also shift into a vicious cycle if changing management priorities, or other factors including misguided policies, interrupt a continuing innovation process. Under such a scenario, the loss of innovation advantage leads to reduced consumer value and franchise which, in turn, results in poor market performance, declining returns and, ultimately, reduced resources for future innovation. Hence brand-builders must stay in the innovation race and continue to invest in enhancing consumer value relative to their competitors.

Figure 1. The virtuous cycle of innovation



(See IMD/PIMS 2000)

The report also found that:

- Management generally give lower priority to so-called “radical” innovations compared to “incremental” innovations;
- Those major, or radical, innovations that offer significant increases in consumer value can potentially do more for a brand’s competitive position than incremental innovations can achieve; but that
- Radical innovations that do not deliver significant value enhancements are likely to fail; and
- Incremental innovation can also improve a brand’s performance, provided that it offers consumers an important enhancement in value, and/or when the brand is innovating at a greater rate than its competitors.

Objectives

Our starting point for this study has been to revisit the findings of PIMS’ 1998 report, and seek to establish whether in 2004 the same factors still contribute; to competitiveness and growth in market share; to growth in value added, employment and productivity; and to profitability, in the branded FMCG sector. Drawing on these results, together with the results of previous work by PIMS, the IMD and others, we also hope to draw conclusions on the wider implications in relation to potential public, or social, benefits, which branding may achieve.

The key measures we have assessed in our work are the:

- Change in relative market share, which identifies the change in a business's competitive position;
- Growth in real value added, which represents the contribution of a business to real Gross Domestic Product (GDP) growth; and
- Return on Capital Employed (ROCE), an indicator of profitability and the ability of a business to compete for capital investment.

In using these measures of business performance we expect to establish models for growth at the business unit level, and also assess any wider benefits for society, which are the result of product branding in the FMCG sector.

Approach

The PIMS Database contains information on market share, profitability, consumer preference, growth, productivity, innovation and marketing for more than 3,500 strategic business units (SBUs). To achieve a subset consisting solely of FMCG businesses we have applied several selection criteria. These criteria are:

- Businesses selling non-durable consumer goods;
- Low value transactions;
- Frequently purchased goods;
- Low proportion of sales made to the end user; and
- Professional advisor not determining the final sale (e.g. medicine by a doctor).

As a result of this selection process, we get a sample of 404 FMCG SBUs (compared to 212 in 1998). The geographic breakdown of the markets served by these businesses is:

Europe 61%

North America 37%

Rest of World 2%

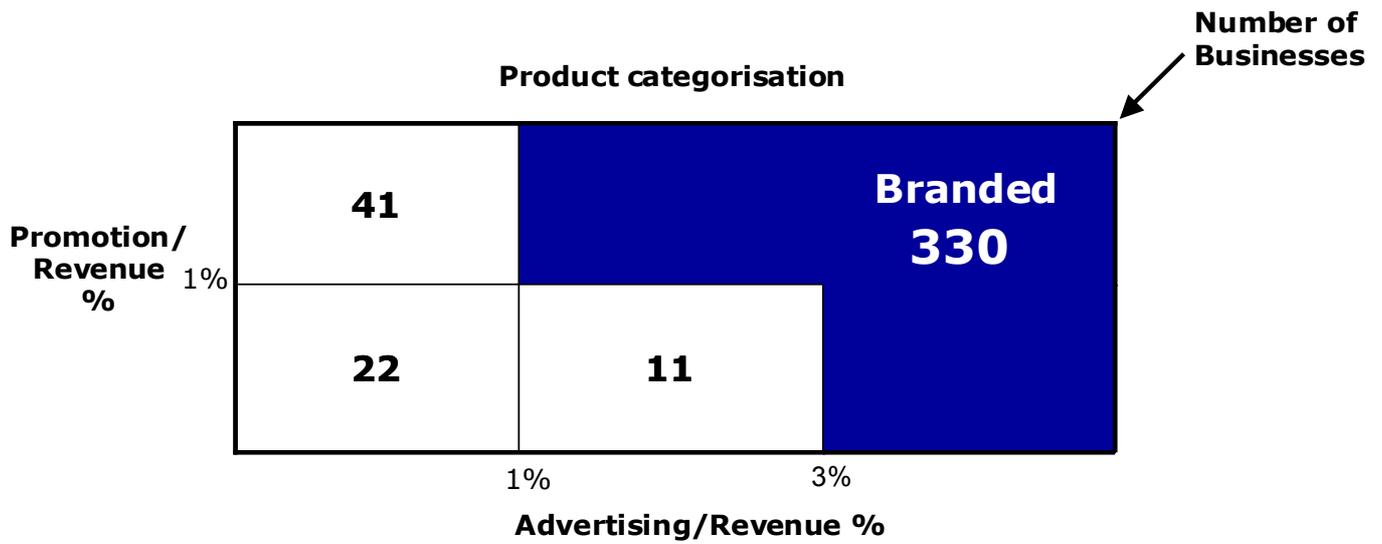
The final phase of the selection process is to separate the branded businesses from the unbranded businesses in our sample.

We have defined branded businesses as those which either:

- Spend above 1% of revenue on promotion AND above 1% of revenue on advertising; or
- Spend above 3% of revenue on advertising.

This gives 330 "branded" observations. The remaining 74 businesses we have termed "unbranded". This classification is illustrated in figure 2 below.

Figure 2. Branded and unbranded classification



Source: FMCG sample of PIMS Database

Our approach to the analysis has been to assess the statistical relationships between PIMS Database variables and our key measures of market share, value added and profitability. We have looked for best-fit regression relationships between measures of competitiveness and their driving factors. Additionally we have sought those relationships that can be demonstrated in a simple statistical presentation.

Furthermore, where appropriate, we have compared the performance of branded product businesses against the performance of unbranded businesses and industry as a whole. This report details our findings, the supporting evidence and our interpretation of the relationships exposed.

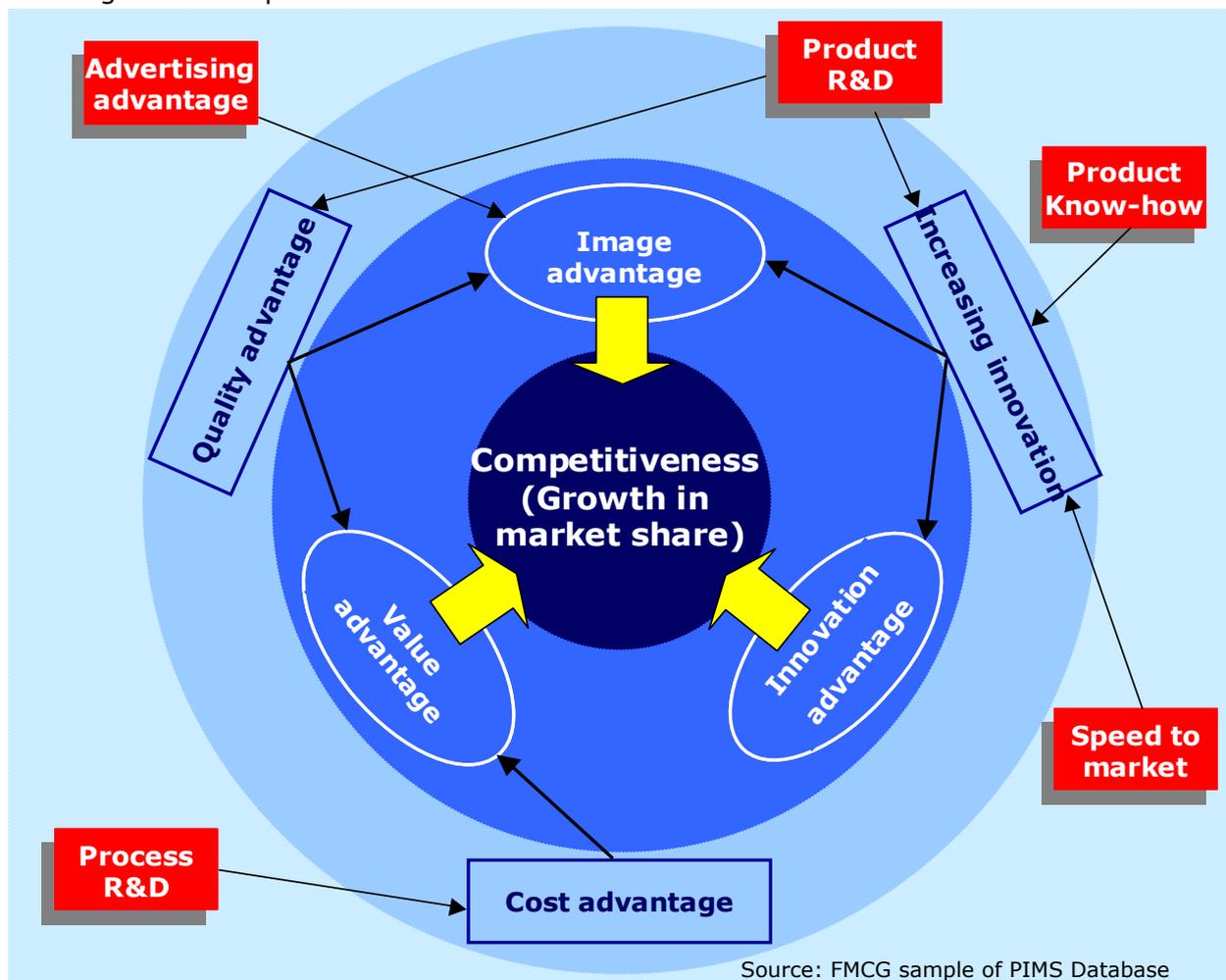
2. Growing market share

Summary

The model for competitiveness, or growth in market share, for branded FMCG businesses is constructed by mapping the relationships and interrelationships between investment types, intellectual property and the drivers of growth. The model requires the set of inputs to achieve its outputs.

Figure 3, below, illustrates the model in full. At the top level, boosting the value proposition relative to competitors, increasing innovation advantage and improving image are the three drivers of share growth. In turn, these three growth drivers are driven themselves by the business's ability to achieve quality and cost advantages over rivals, and achieve higher innovation levels. Drilling down a stage further, the ability to reach such superior positions is dependent upon the channelling of investment, the intellectual capital and the efficiency of processes within the business unit.

Figure 3. Competitiveness in branded FMCG businesses



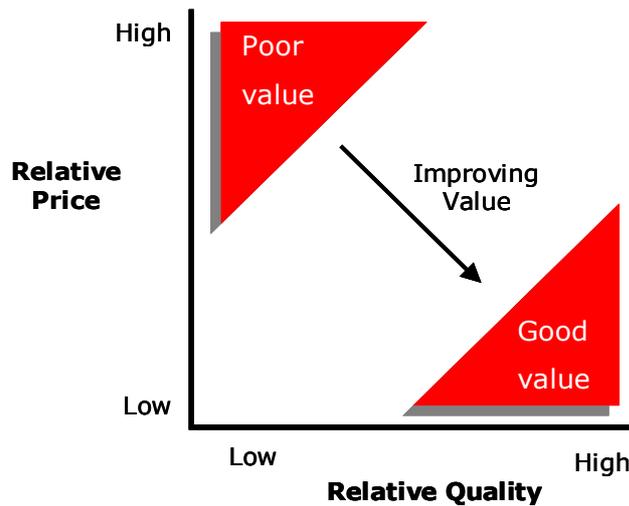
From regression analysis, we can be confident that each headline relationship is statistically significant at around the 90% level.

In this chapter we look at how the relationships above are linked, and how they interact, tracing competitive growth back to its source.

Value and growth in market share

The PIMS measure of value is based on market measures of relative consumer perceived quality (consumer perceptions of product and retailer perceptions of service) and relative price compared to the substitutes available (see appendix III for details). To achieve an improving value score, a business must improve the consumer perceived quality of its offer (or avoid the mistakes of competitors), and/or reduce the relative price of its offer. This is shown graphically in figure 4.

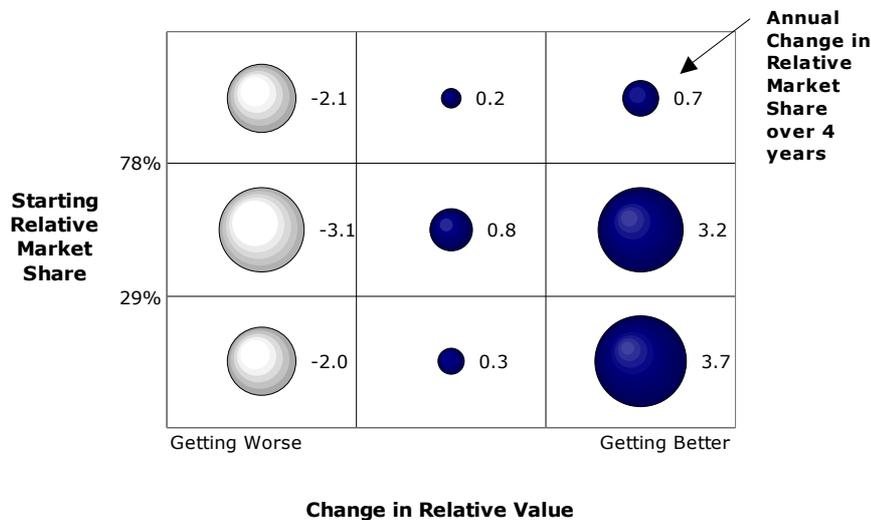
Figure 4. 'Better value'



We find that either value change or consumer perceived quality change is a strong driver of relative share change, but relative price change on its own is not. Relative cost, however, via value, is a significant driver of share change as it can represent sustainable advantages. Relative price is often observed as less important in models such as this, with the rationale that price moves can be, and often are, instantly imitated.

In FMCG markets where consumers make frequent repeat purchases and the availability of information keeps search costs low and transparency high, it is intuitive that relative value for money is critical. Figure 5 shows that those branded FMCG businesses offering improving value relative to competitors gain relative market share. Those businesses offering worsening relative value lose market share to competitors. This correlation is true for all levels of market share, with the gains from improving value greatest for businesses starting from low relative market share.

Figure 5. With value comes share growth

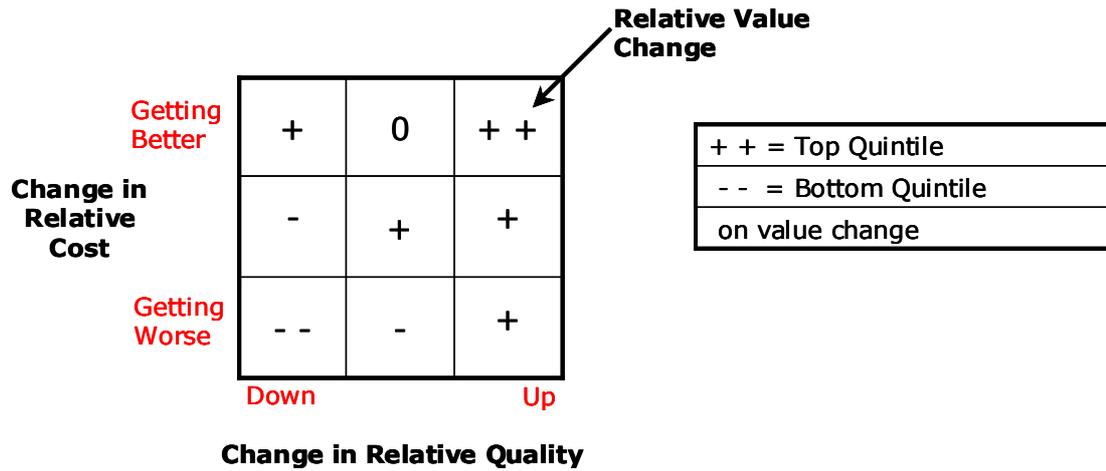


Source: FMCG sample of PIMS Database

So, as figure 5 above illustrates, change in relative value is a clear driver of relative market share growth in our observed businesses, but what affects relative value?

Figure 6 represents our earlier assertion that both changes in relative cost levels and changes in relative consumer perceived quality result in changes to relative value. Further analysis of the relative impact of these two explanatory variables shows that the ratio of quality importance to cost importance in driving value change is around 58:42.

Figure 6. Decrease costs and increase quality



Taking the analysis one step further we see that relative quality improvement is associated with a firm's image in the marketplace. The causality of this relationship, shown in figure 7, is mutually reinforcing. Strong image may well be the catalyst for improving relative perceived quality, while at the same time strong image is the by-product of quality enhancement. Logically, as well as statistically, the two go hand in hand.

Figure 7. Image is a building block for quality

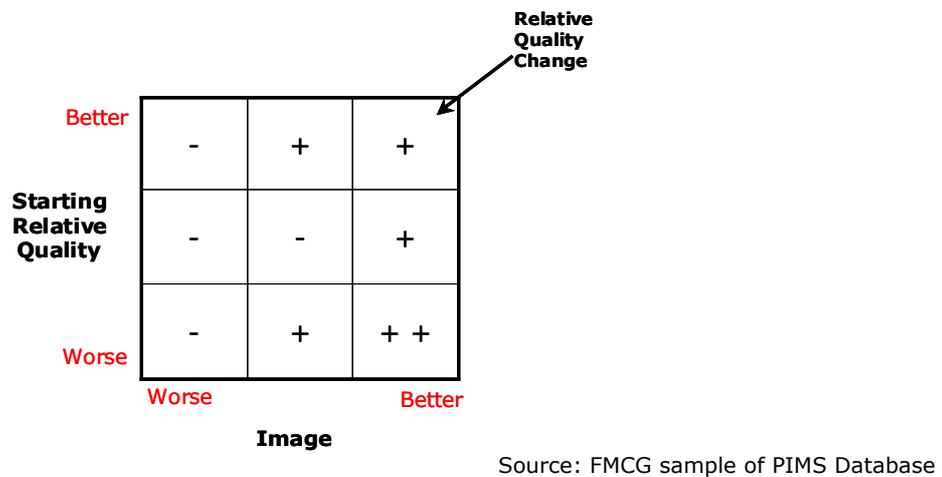
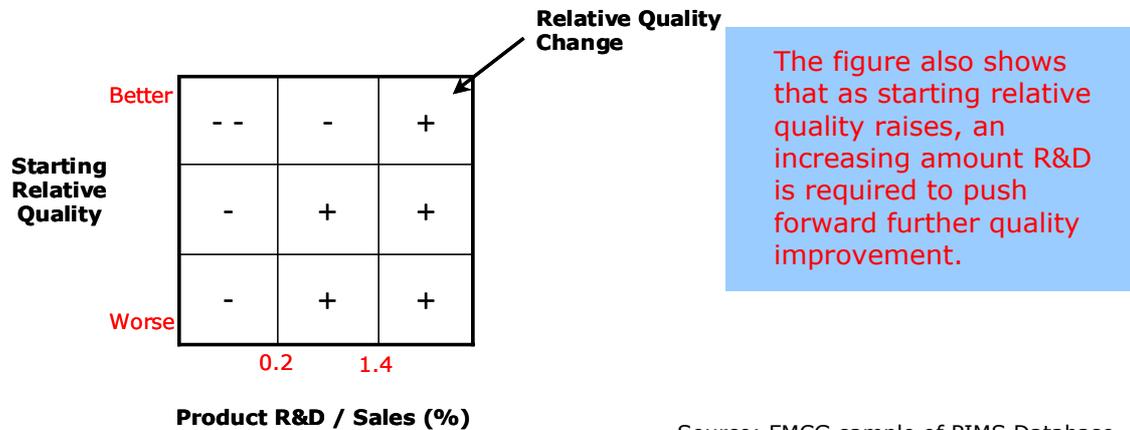


Figure 8 shows, unsurprisingly, a strong relationship between change in consumer perceived quality and the proportion of revenue invested in product R&D, which is linked to innovation.

Figure 8. Quality and R&D are linked



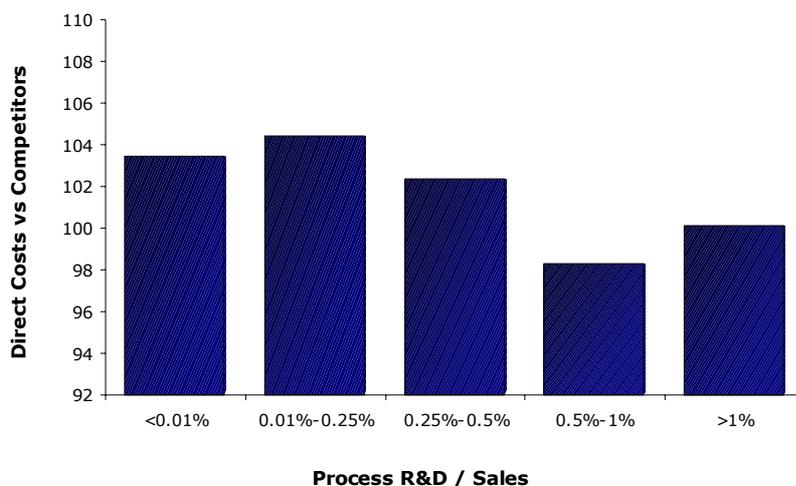
Source: FMCG sample of PIMS Database

We have seen above how competitive growth is driven by value advantage, and how one component of value advantage is consumer perceived quality, which itself is affected by image and product R&D.

We turn now to the other component of value advantage: cost advantage.

It is demonstrable from the observed businesses in our sample that higher process R&D as a proportion of revenue is correlated with lower relative direct cost levels versus competitors. Whether the effect is causal, or both are the upshot of management focus on operational efficiency is debateable.

Figure 9. Process R&D is good for costs



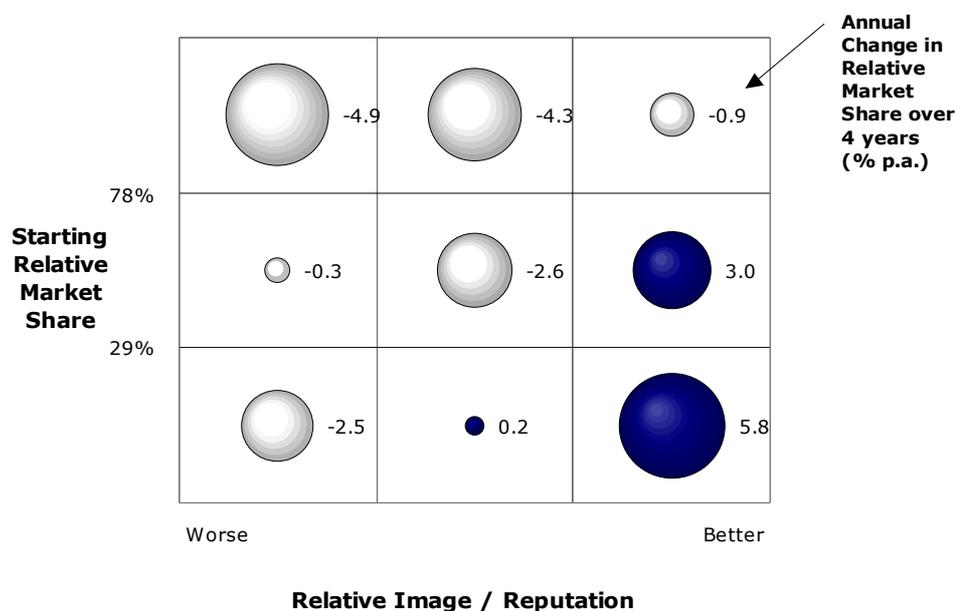
Source: FMCG sample of PIMS Database

Image and growth in market share

The measurement of image can never be completely objective, and indeed image observations in the PIMS Database are somewhat subjective. Generally, however, the ability of respondents to determine and rate relative image is far greater when the subjects are FMCG products. PIMS' method requires respondents to rate image, relative to competitors, on a five-point scale ranging from 'much worse' to 'much better'. For FMCG businesses the score will be dependant both on awareness as well as on the perceived quality of the offering.

Figure 10 demonstrates that image is a strong factor in determining the ability of FMCG businesses to grow market share. The striking result is that image is crucial for smaller players trying to improve their standing in the market. The message for market leaders is that they must work to maintain a superior image if they want to protect their position from challengers.

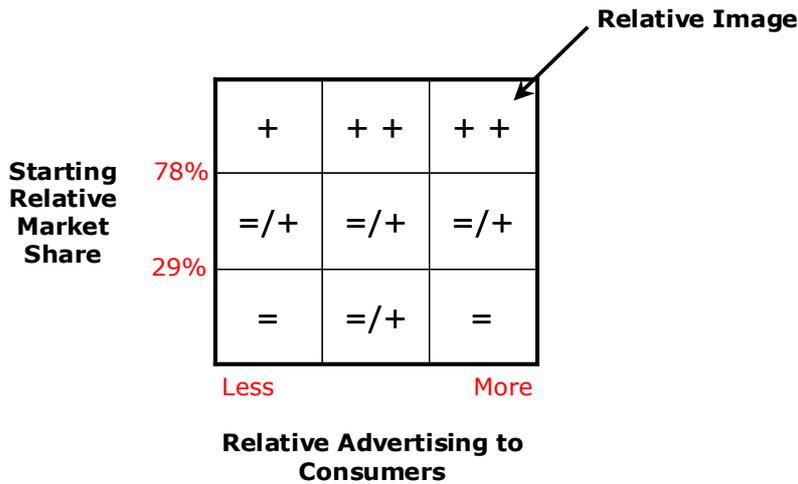
Figure 10. Good reputation helps to increase market share



Source: FMCG sample of PIMS Database

The main contributor to image advantage is the relative investment a business channels into advertising. Relative advertising is measured as a percentage of revenue, adjusted for share of voice. This may explain why figure 11 shows the relationship is only true for high share (greater than 78% relative market share) businesses, as a small scale business would need massive increases in advertising investment to improve its relative advertising position.

Figure 11. Larger relative advertising spend helps image...



Source: FMCG sample of PIMS Database

...but only for high share businesses

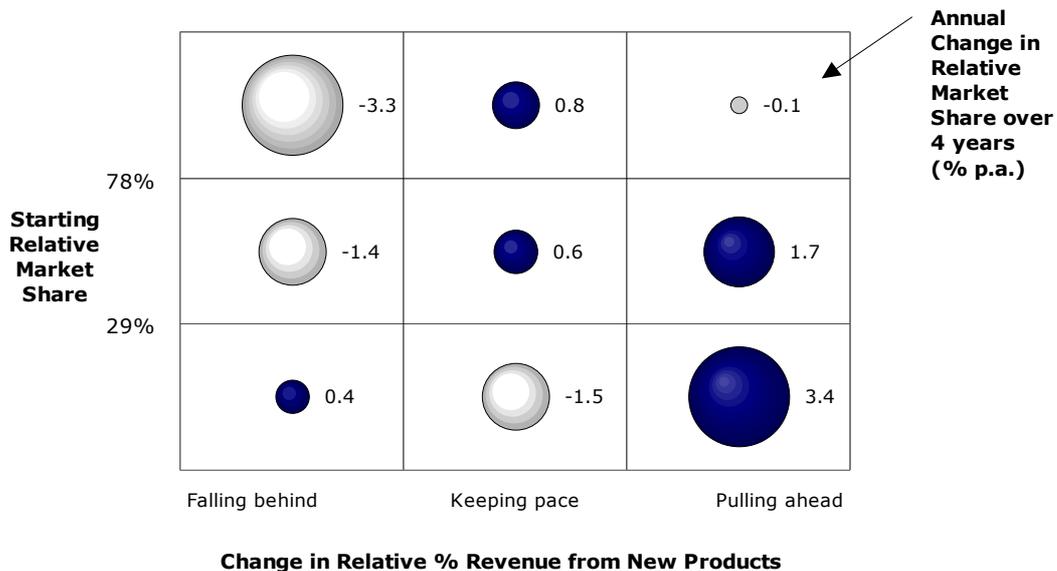
We have also seen in the previous section the connection between consumer perceived quality and image, which as we noted is a two-way process. A likely consequence of the inability of small share businesses to improve relative image, through advertising and service measures, is that these companies will also struggle in the battle for consumer preference.

Innovation and market share growth

There is a wealth of previous evidence, the PIMS and IMD report of 2000 included, which identifies the powerful influence of innovation on competitive share growth. It isn't enough just to stay ahead; the greatest rewards go to those, which manage to stretch their innovation lead over rivals, gaining share as they do so.

Looking at figure 12 below, the results are consistent.

Figure 12. Successful innovation can help market share

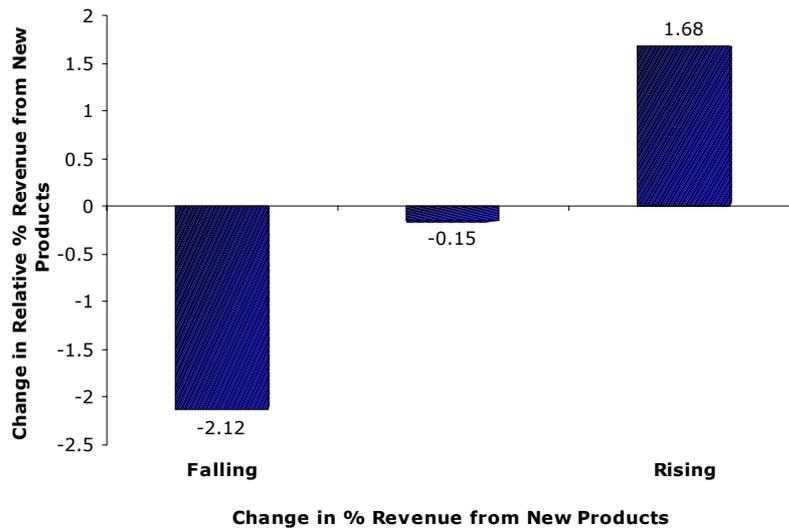


Source: FMCG sample of PIMS Database

For all but the highest share businesses, those who are pulling ahead of their rivals in innovation effort are the firms achieving the highest increase in relative market share over the period. And falling behind your competitors will lose you share.

A business's relative innovation position is, intuitively, driven by the amount of revenue gained from new products in the sales mix.

Figure 13. New products and innovation

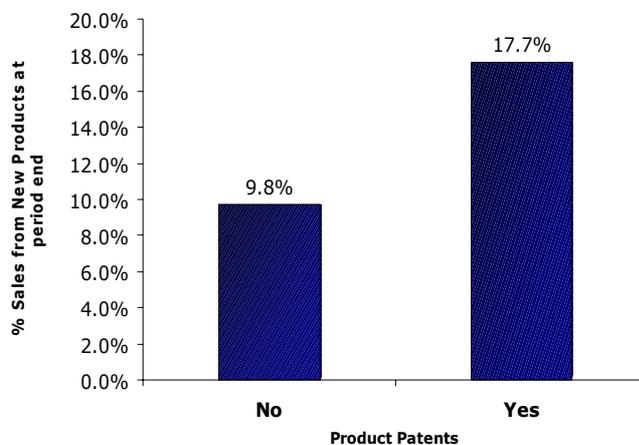


Source: FMCG sample of PIMS Database

Figures 14, 15 and 16 below identify that the route to attaining innovation edge over your competitors, demands:

- Superior, protected intellectual property;

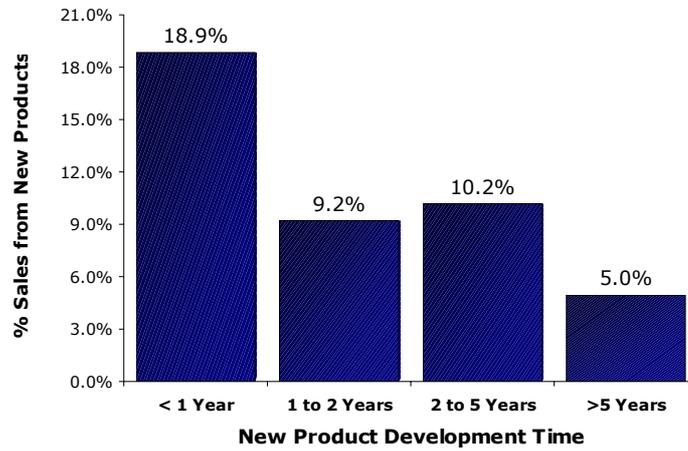
Figure 14. Product patents aid successful innovation



Source: FMCG sample of PIMS Database

- Processes that bring ideas to the market in the minimum timeframe; and

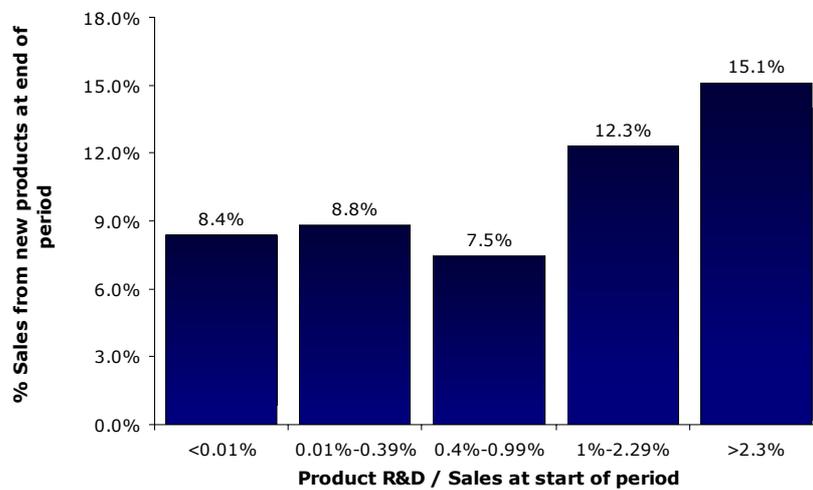
Figure 15. Speed to markets helps innovation success



Source: FMCG sample of PIMS Database

- Greater investment in product R&D.

Figure 16. Successful innovation is linked to prior R&D



Source: FMCG sample of PIMS Database

Comparison of branded versus unbranded FMCG businesses

Appendix II contains data on the different characteristics of branded FMCG businesses and unbranded FMCG businesses in the PIMS Database. As detailed in our approach above, the difference between the two samples is based on the level of advertising and promotions spend as a proportion of revenue.

The evidence shows that unbranded FMCG businesses are less likely to channel investment into achieving advantages on innovation, value and image; the drivers of growth identified in Figure 3. They generally display lower capital productivity and employee productivity. Furthermore profitability is significantly lower in these businesses, to an extent that questions their long-term financeability.

Successful innovation activity in the unbranded sample is significantly lower than for the branded sample. More than 50% of the unbranded businesses have zero recognisable successful product innovation, based on the proportion of new products in the sales mix. The investment in both product R&D and also process R&D are considerably lower than observed in the branded FMCG businesses. 47% of the unbranded sample spends nothing on product R&D, with 40% spending nothing on either process or product R&D. This may not be through choice; these businesses are severely restricted in the funds available for R&D due to their low profitability.

The lack of product R&D investment is also identified in the ratings of consumer preference. The evidence suggests that unbranded FMCG businesses are more likely to be perceived as having low relative quality versus competitors, while branded FMCG businesses are more likely to have a high perceived quality advantage.

3. Branding and public benefits

Summary

While the scope of this project is predominantly focused upon relationships at the business unit level, such as market share growth and profitability, in this chapter we attempt to assess the wider public, or social, benefits which brands can bring to the economy. And in particular the role brands can play in achieving the objectives set out in the Lisbon Strategy.¹

In this chapter we have analysed more 'macroeconomic-type' measures, such as real market growth, real value added, employment growth and productivity; and what affects these at the business unit level.

Value added represents the contribution a business makes to the economy in which it operates. An economy can only grow if the businesses within it generate additional value added. The strongest determinant of real value added change is the real growth of the business's served market. Alongside this, our analysis identifies that for branded FMCG product businesses, value added growth is correlated with:

- Increasing relative quality advantage;
- The level of relative quality advantage;
- The level of relative direct cost advantage; and
- The amount of successful innovation.

The ability of branded product businesses to generate value added via these drivers is statistically more certain than for unbranded product businesses, with the exception of relative cost where the statistical significance is similar.

The Spring Report² to the European Council 2004 raises concerns that; "Inadequate investment in the strategic areas of research and innovation is undermining our competitiveness. At the same time, it is vital for the internal market to function properly to create an environment which is conducive to dynamic entrepreneurship and to make our economy more competitive."

Our analysis finds a robust link between innovation levels and real market growth. Using wider analysis of external sources we have also shown that the ability of FMCG businesses to support their products' brands is positive for innovation and positive for the economy as a whole.

We also find that branded FMCG product businesses achieve greater increases in productivity through higher and more efficient R&D investment. The additional value added from R&D expenditure in these businesses can be more than double the average for industry as a whole.

¹ The Lisbon Strategy is a commitment to bring about economic, social and environmental renewal in the EU. In March 2000, the European Council in Lisbon set out a ten-year strategy to make the EU the world's most dynamic and competitive economy. Under the strategy, a stronger economy will drive job creation alongside social and environmental policies that ensure sustainable development and social inclusion. The Lisbon Strategy touches on almost all of the EU's economic, social and environmental activities. (Source: EUROPA, the portal site of the European Union (<http://europa.eu.int/>))

² The European Commission's annual Spring Report examines the Lisbon Strategy in detail. The Spring Report is the only document on the agenda of the Spring European Council, where EU Heads of State and Government assess the progress of the strategy and decide future priorities in order to realise the Lisbon targets. (Source: EUROPA, the portal site of the European Union (<http://europa.eu.int/>))

Growth in value added

Value added is defined as the difference between net sales value and the cost of principal external raw materials, packaging, energy and services. Value added is the basis for measuring total growth in an economy and requires businesses to maximise the returns to capital and employment. This not only needs firms to focus on the battle for consumer preference, but also demands efficiency in supply to minimise external costs.

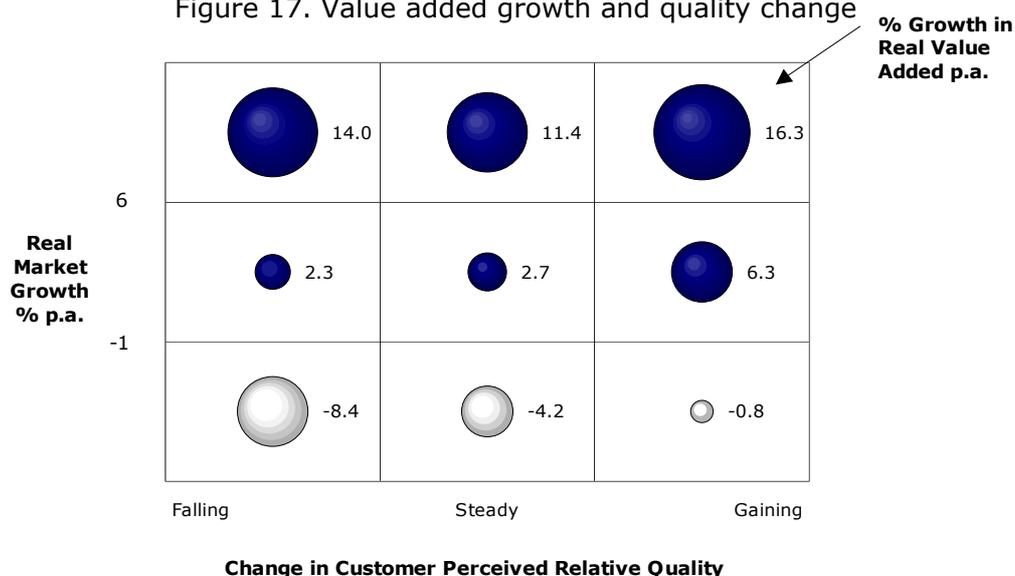
For analysing value added growth we have developed a similar model to that used for competitive share growth, see figure 3. The model assesses the importance of variables like those in section 2 on value added growth, taking account of the level of real market growth experienced by the business, over a four-year period.

Illustrated below are the key relationships we identified, after accounting for price changes and the real growth in the served market of each business.

Real value added growth is influenced by...

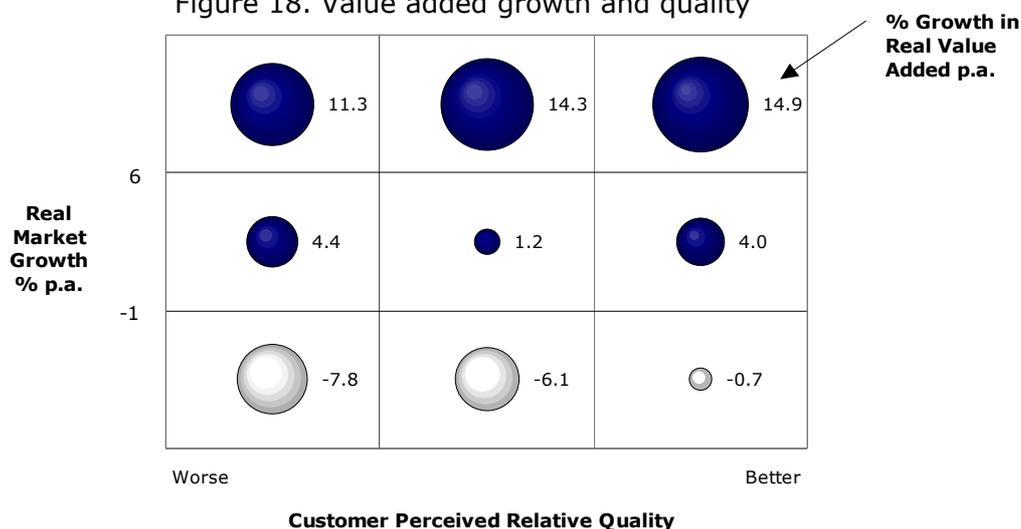
...improving quality

Figure 17. Value added growth and quality change



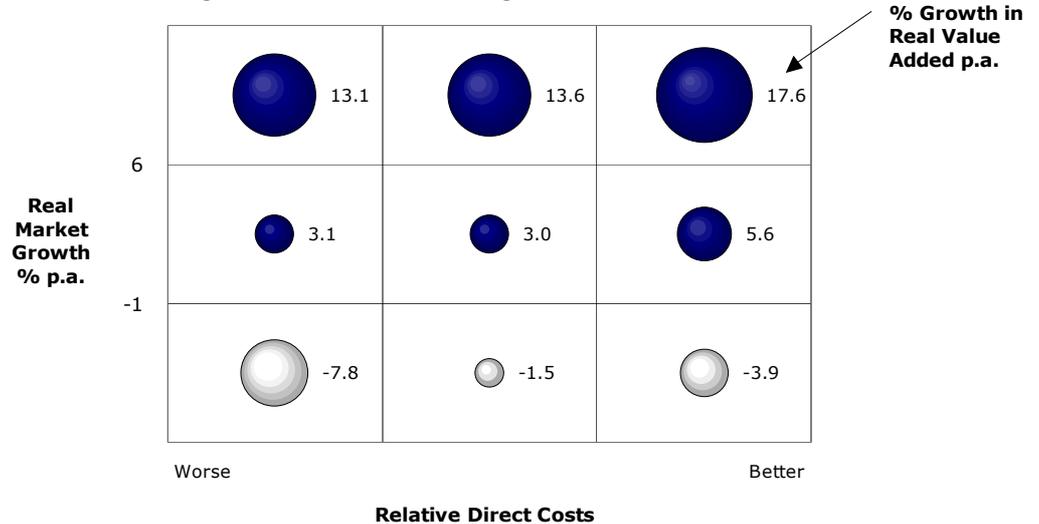
....high quality

Figure 18. Value added growth and quality



...and low relative direct costs

Figure 19. Value added growth and relative costs

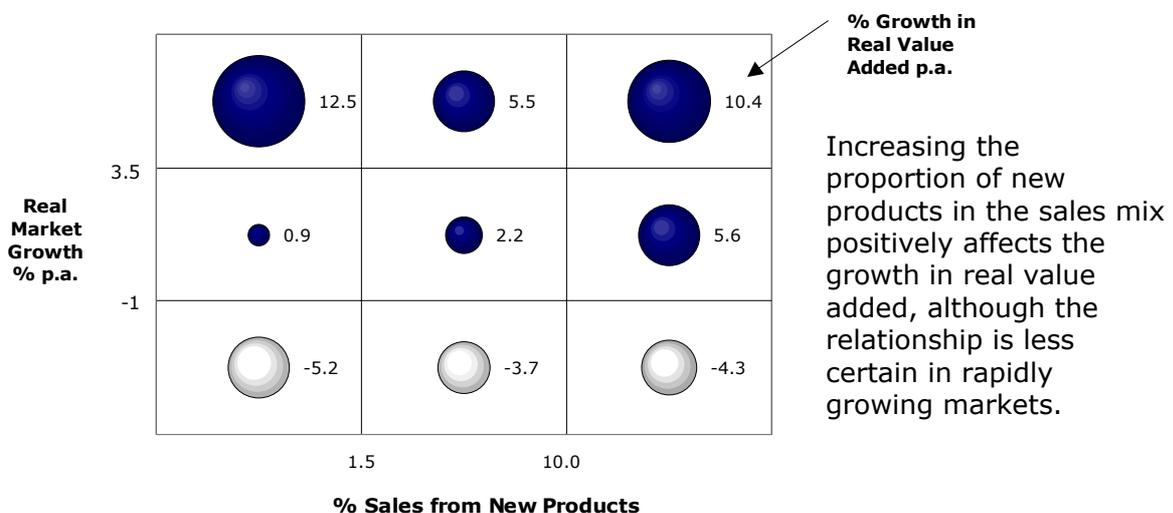


Figures 17, 18, 19 Source: FMCG sample of PIMS Database

These charts show that, while real market growth is the main driver of real value added, branded FMCG product businesses can improve their value added via better relative value offerings, through high relative consumer perceived quality and low relative direct costs. Moreover, the relationships show that being ahead does not suffice in these markets. These businesses must strive to further enhance the relative attractiveness of their offer, in order to maximise the growth in value added.

In addition to the effects of the components of value, we find that the level of successful innovation also impacts the growth in value added observed.

Figure 20. Successful innovation helps grow value added



Source: FMCG sample of PIMS Database

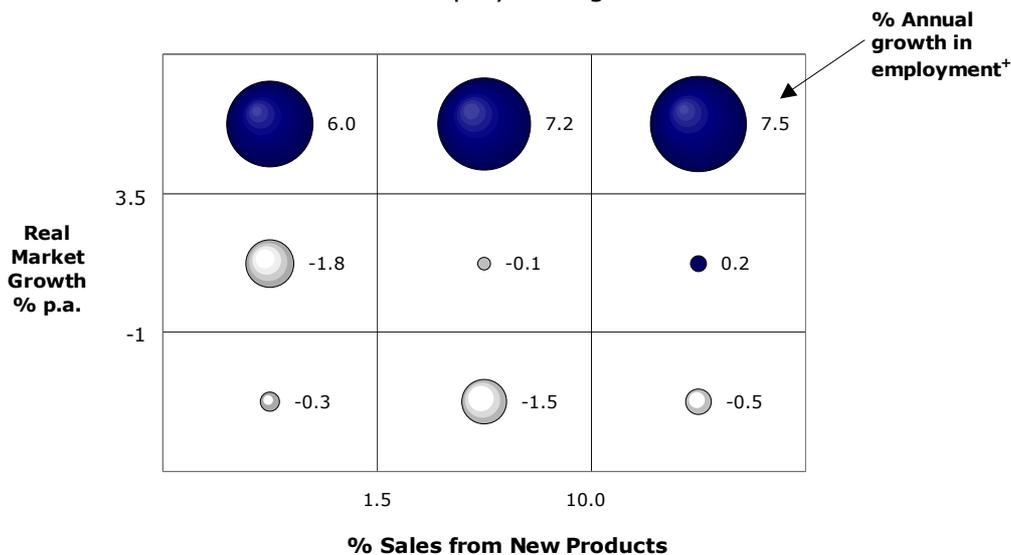
We can only infer that this represents economic growth – to the extent that economic growth is the sum of the value added growth of all businesses. To this end, the effects described above must have a positive impact on economic growth, but as we are only accounting for a subset of the total economy, we cannot prove anything further.

Employment growth

Our analysis has shown that the key factors driving employment growth are closely related to those that drive value added growth and growth in competitive market share. Recalling figures 17 to 20, these factors include real market growth, as well as improving consumer preference, falling relative costs and higher levels of innovation.

Figure 21 below illustrates the link between innovation and employment growth. The effect is greatest in growing markets, and gives a clear signal that innovation creates jobs at the individual business level. Furthermore, as a consequence of the level of outsourcing evident in businesses today, these figures may hide a much greater impact on annual employment growth, which is simply not recognised in our business unit data.

Figure 21. Innovation is linked to employment growth



Source: FMCG sample of PIMS Database

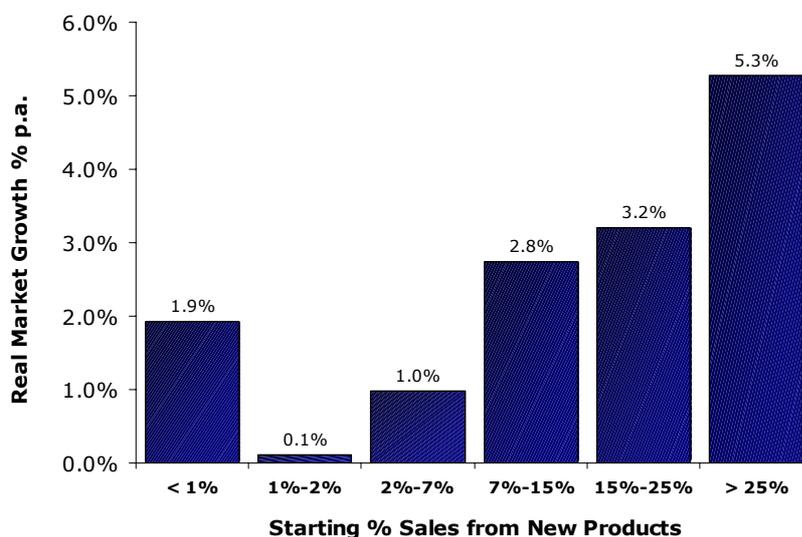
Innovation, productivity and growth

“Innovation involves the development of new ideas and their economic application as new products or processes. Businesses and other organisations engage in innovation when faced by problems or when they perceive profitable opportunities.”

(See DTI Economics paper 7)

Our analysis has focused on the proportion of new products in the sales mix as a measure of successful innovation within the observed FMCG businesses. This measure concentrates on the main area of innovation in this sector; product innovation. Our investigation of the PIMS Database shows a strong association between the proportion of new products and the level of real market growth.

Figure 22. Successful innovation and market growth



Source: FMCG sample of PIMS Database

Based on this data of individual businesses alone, it is not possible to definitively prove the causality of the relationship. But, our chart does show that the causality cannot be real market growth as we have taken the percentage of new products in sales mix at the start of the observation period. To draw conclusions requires wider analysis.

It is widely accepted in both academic and political communities that innovation is at least desirable, at most essential, for the ongoing health of an economy.

“Innovation, research and development and skills are crucial for Europe's growth potential.”

(See Lisbon Strategy conclusions)

“Innovation provides opportunities for productivity growth through the development of more valuable products or services or the development of new processes that increase efficiency. It also drives improvements in peoples' lives through changes to the environment in which they live and work.”

(See DTI Economics paper 7)

Relating innovation to macroeconomic measurements is about more than just the product innovation relationships we have depicted above. The overall level of innovation, and hence its impact on economic productivity and growth is affected by the specific characteristics of the economy and the markets within it. These characteristics address not only the ability and incentives to create new ideas and processes, but also the systems in place to ensure the effective distribution of these innovations.

These characteristics include the:

- Behavior of consumers and suppliers;
- Regulatory environment;
- Competition and entrepreneurship;
- Access to finance;
- Sources of new technological knowledge;
- Networks and collaboration; and
- Capacity to absorb and exploit new knowledge.

(See DTI Economics paper 6 and UK Report to Spring European Council 2004)

The weight of study to date has focused on the impact of Information and Communication Technology (ICT) and its role in enhancing the innovative capabilities of economies. George Van Leeuwen found that, "ICT can contribute to labour productivity growth directly through capital deepening and indirectly by enhancing innovation." Similar conclusions were reached by the UK Office of National Statistics who concluded that the ability to innovate was affected by e-commerce and the ability of firms to communicate both upstream and laterally, with its suppliers, partners and research institutions (see Clayton et al. Eurostat 2004).

Although such studies support the notion that intangibles can play a significant role in boosting economies, academic work is yet to approach the questions we are raising here; about the effect of marketing communication and knowledge transfer to end users on innovative capabilities. The question is intriguing, and a logical next step following this report.

So, what we are unable to do in this study is assert the **extent** to which the ability to brand products in FMCG businesses, through increased innovation effort, can alter the productivity and growth of economies.

However, in light of the external evidence of the links between innovation and the macro economy, we can assert the **direction**. From our analysis we can show that branding in FMCG businesses is positive for productivity and hence economic growth.

Supporting their products' brands enables FMCG businesses to communicate more effectively with end users, and as a result these businesses:

- Grow better in response to innovation advantage (figure 12);
- Gain a greater private return on innovation (figure 32); and
- Show a better productivity return for investing in innovation (figure 23).

This creates the:

- Incentive to increase the overall level of innovation; and in time
- Additional funds for further innovation.

The end result is a move to the right of figure 22, where FMCG markets, and the economy, benefit from superior productivity and growth.

Productivity and investment

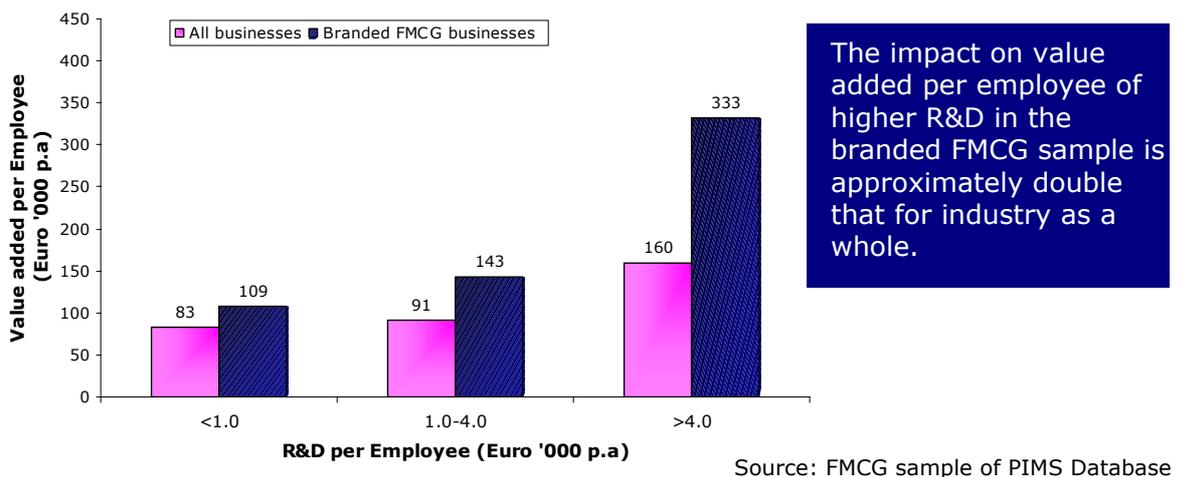
Another key criticism of the progress towards the Lisbon objectives raised by the Commission of European Communities is that employment and productivity is still insufficient for growth. One of the reasons productivity is still too low is that investment is inadequate, especially in research and innovation. They state that:

“In general, measures to increase the volume of, and improve the environment for, research investment have been fragmented and sluggish. While most Member States and acceding countries have adopted targets for increasing research spending, few of them have been able to translate these into budgetary terms, and efforts to make spending more efficient are often needed.”

(See Report to the Spring European Council 2004)

We have already identified R&D expenditure as a key investment for branded FMCG businesses. Our investigations of the impact of R&D shows that the value added per employee in branded FMCG businesses is higher than the average of all other businesses in the PIMS Database.

Figure 23. Branding boosts value from R&D



The additional productivity gain from R&D investment in the branded FMCG businesses may be due to the importance of differentiation and quality in achieving competitive advantage in this sector. Supporting their brands through advertising and promotion enables businesses to:

- Communicate differentiation to end users more effectively;
- Raise awareness of product developments; and
- Persuade consumers to try new or improved products.

This ability to connect with end users improves the chances of turning development ideas into successful products that meet the needs and expectations of consumers. The evidence above suggests that R&D investment and branding complement each other to create additional returns on each unit of investment.

Figure 23 also illustrates the positive correlation between higher R&D investment and increasing value added per employee. This is not inconsistent with our previous section on innovation, which showed an increase in the proportion of new products in the sales mix is a stimulus for growth in real value added.

The relationship between R&D input and value added per employee for our branded FMCG sample, although statistically very significant, is subject to some level of variation. We have therefore attempted to identify the characteristics of those branded FMCG businesses that create the highest value added from an above average R&D investment. These characteristics include having a:

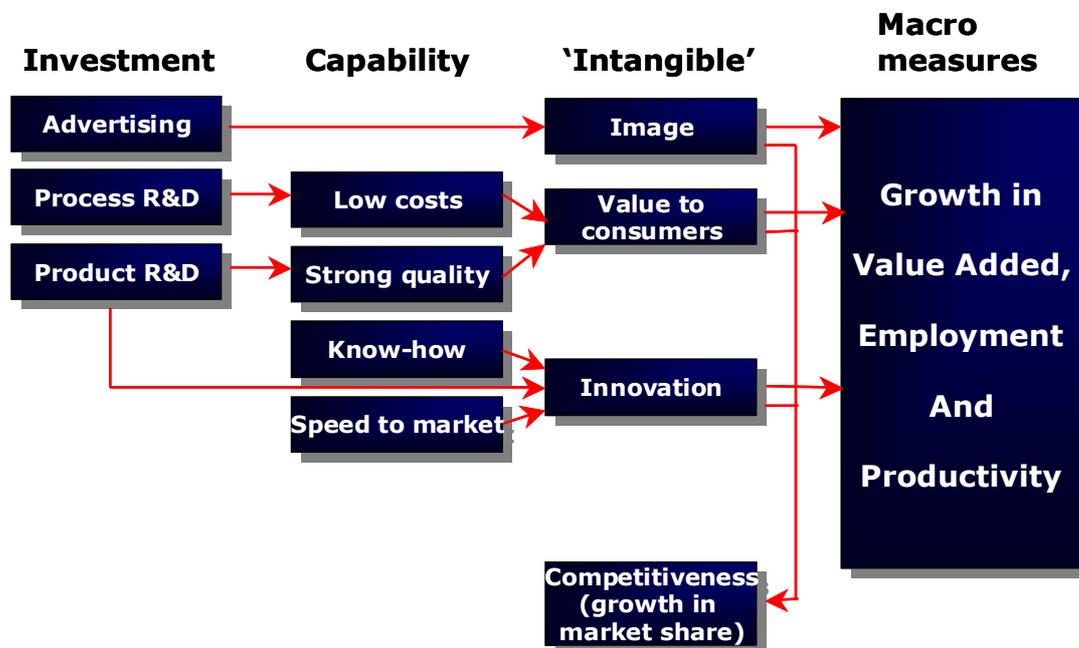
- Lower number of immediate customers (retailers) making up 50% of sales;
- Greater level of vertical integration;
- Higher emphasis on advertising in their marketing mix;
- Better service relationship with retailers;
- Stronger relative market share;
- Better capital productivity; and
- Stronger real sales growth.

How branding creates public benefits

We can collate the relationships detailed above to establish a map for how public benefits, or “macro-type” measures, are created by branded FMCG businesses. The same factors drive our public benefit model as drive our competitive share growth model (see figure 3), particularly innovation and value advantage.

The models are closely related because in the branded FMCG sector it is the competitive process which provides the catalyst for innovation, improved perceived quality and cost efficiency; which in turn are the creators of value added growth, employment, greater productivity and market growth.

Figure 24. ‘Intangible’ investment and economic growth



Source: FMCG sample of PIMS Database

4. Profitability

Summary

In this chapter we address profitability, which we measure using the Return on Capital Employed (ROCE). This figure represents a business's ability to generate profits from its assets and compete in capital markets. For our branded FMCG businesses there is little conflict between the drivers of competitive advantage and profitability.

Profitability is strongly, positively correlated with:

- Relative market share level;
- Relative market share growth;
- High relative consumer perceived quality and image;
- High relative value for money;
- Low relative direct costs; and
- Real value added growth.

For branded FMCG businesses there is no growth/profit trade-off.

Innovation has a positive effect on profitability up to a point, beyond which the costs outweigh the rewards and profitability deteriorates.

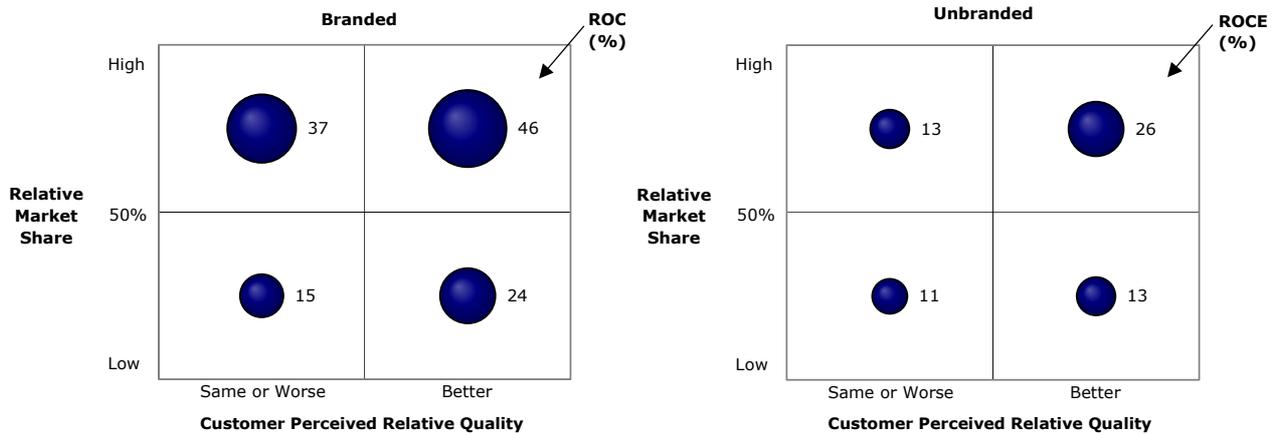
Average ROCE levels for branded FMCG businesses are materially higher than for unbranded FMCG businesses. For the unbranded FMCG businesses we find that:

- Growing relative market share has a detrimental effect on ROCE;
- Low relative direct costs is more important for ROCE than image; and
- High relative value is linked with higher ROCE.

Quality and Share

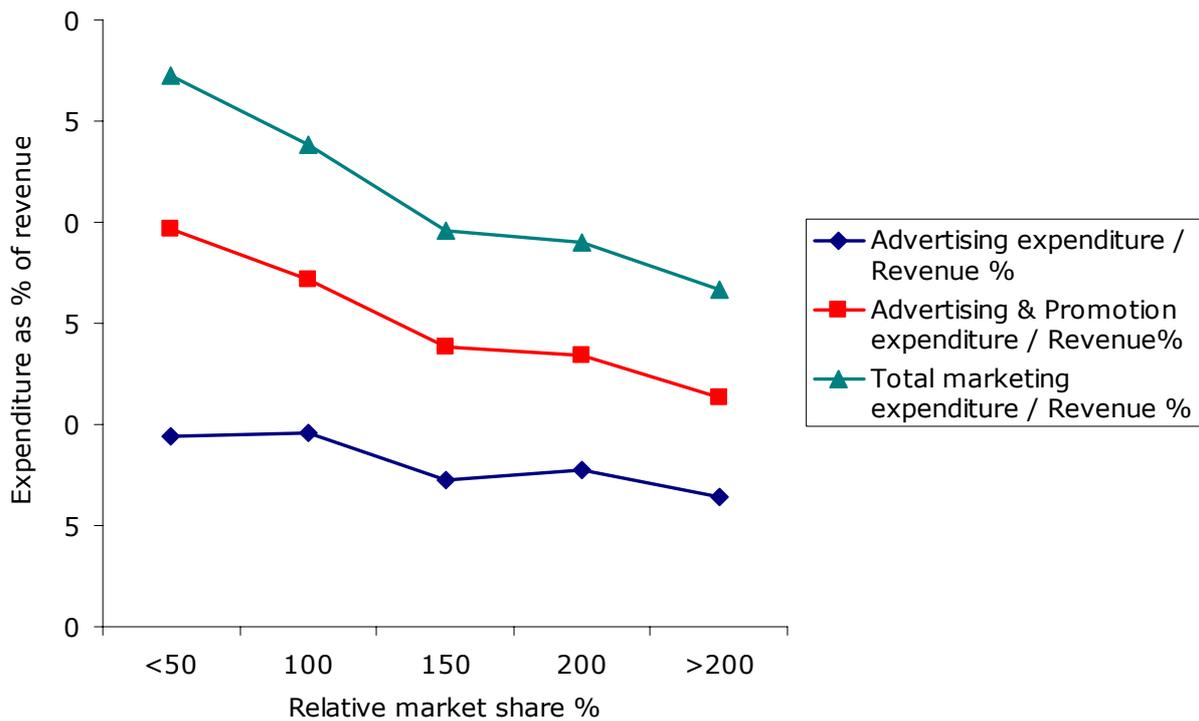
As figure 25 shows below, strong correlation exists between both consumer perceived quality and ROCE, and relative market share and ROCE. The impact of market share on profits is evident for both branded and unbranded FMCG businesses as the bargaining disadvantages faced by smaller firms depress ROCE relative to their more powerful competitors. For the branded sample the rewards of strong market position combined with strong consumer perceived quality are large. Higher share businesses are able to convert a perceived quality advantage into profit much more effectively than weaker share businesses. This again links back to the ability of high share branded FMCG businesses to convince their customers that a quality advantage exists with greater ease than low share and unbranded businesses. Indeed, the IMD-PIMS study in 2000 discovered that, "...as a percentage of total sales, high market share players spend considerably less on advertising and total communication than do low share players. Similarly, strong brands with high consumer franchise spend relatively less on advertising than do brands with lower consumer franchise". This is certainly consistent with our observations illustrated in figure 26.

Figure 25. Quality boosts ROCE



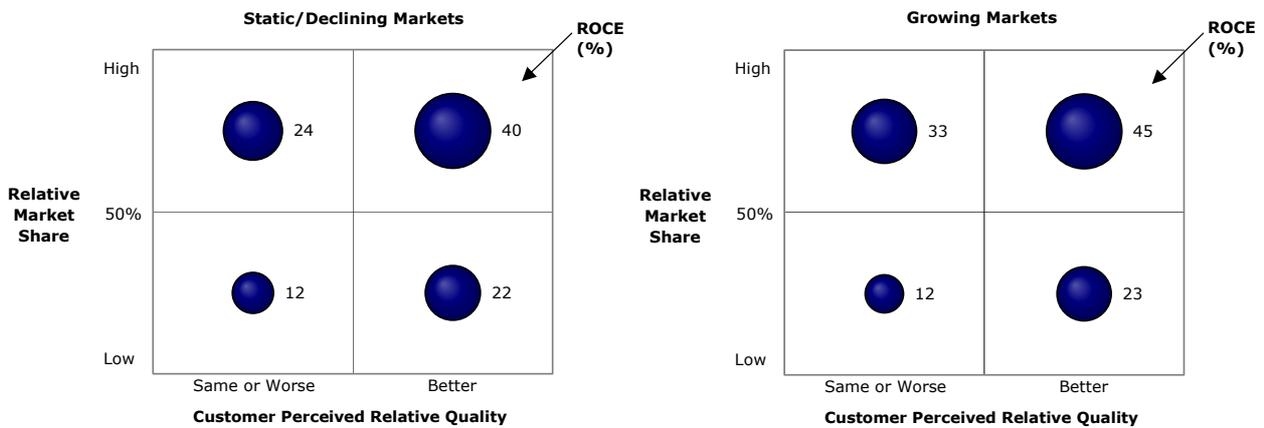
Source: FMCG sample of PIMS Database

Figure 26. Leading brands spend less on advertising and promotion effort



The relationships between market share, quality and profits hold true irrespective of market growth. Figure 27 illustrates that businesses with strong share and preference positions are able to reap returns well in excess of the cost of capital even in static or declining market conditions. It is also the high share players who are able to create additional ROCE when markets are growing.

Figure 27. Growth markets show a higher return on quality

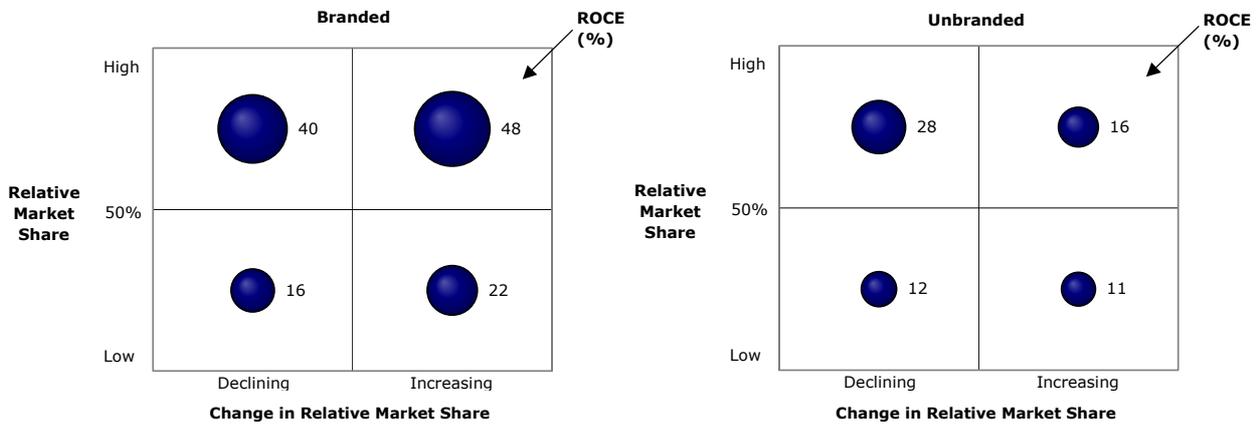


Source: FMCG sample of PIMS Database

Growing market share

Driving growth in relative market share has no detrimental effect on ROCE. Rather, for branded FMCG businesses it is these very firms who experience the highest level of returns as the rewards of share gain seemingly outweigh the costs. The same, however, is not true for the business in our unbranded sample, where pushing for share gain, in the short term at least, diminishes ROCE.

Figure 28. No growth-profit trade-off for branded firms

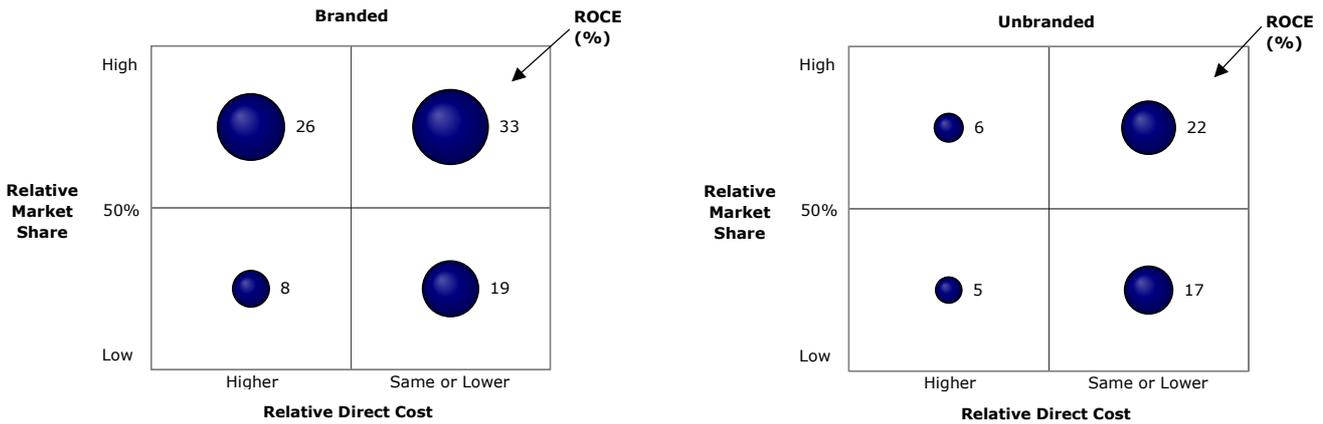


Source: FMCG sample of PIMS Database

Relative direct cost

Logically, we find that low relative direct cost is highly positively correlated with ROCE for all levels of market share. Of particular note is the importance of cost efficiency in the unbranded FMCG businesses. These businesses do not compete on non-price grounds to the extent of the branded FMCG businesses, hence low costs, and ultimately prices, become a more significant factor for the profitability of the firm.

Figure 29. Cost advantages are crucial

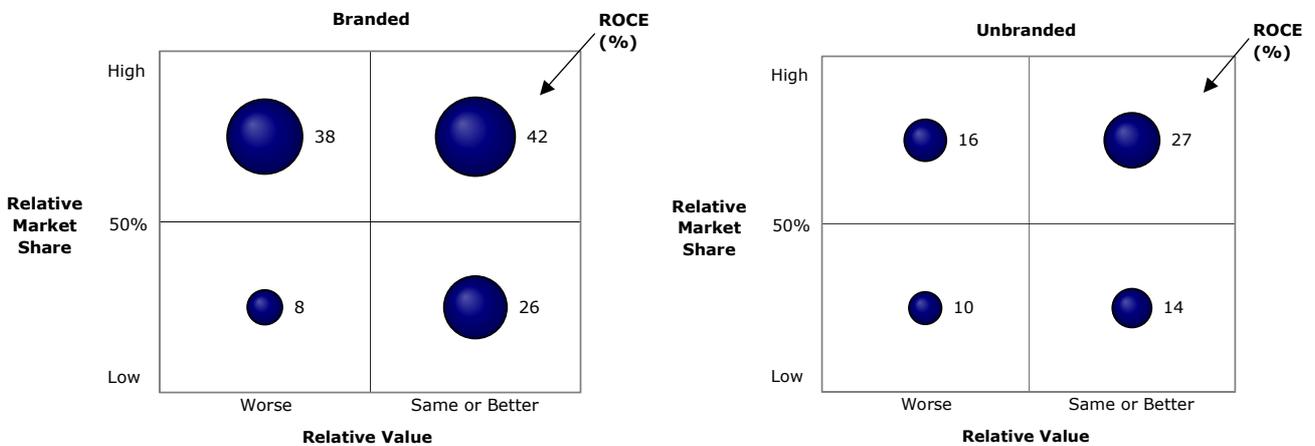


Source: FMCG sample of PIMS Database

Relative value

Given the relationships between relative cost, relative consumer perceived quality and ROCE detailed above, it is unsurprising to find that the strength of the business's relative value offering is positively correlated with profitability. High relative value improves returns in both branded and unbranded FMCG product markets at all levels of market share. For small share branded FMCG businesses a strong relative value proposition is crucial for achieving sustainable profitability levels.

Figure 30. High relative value increases ROCE

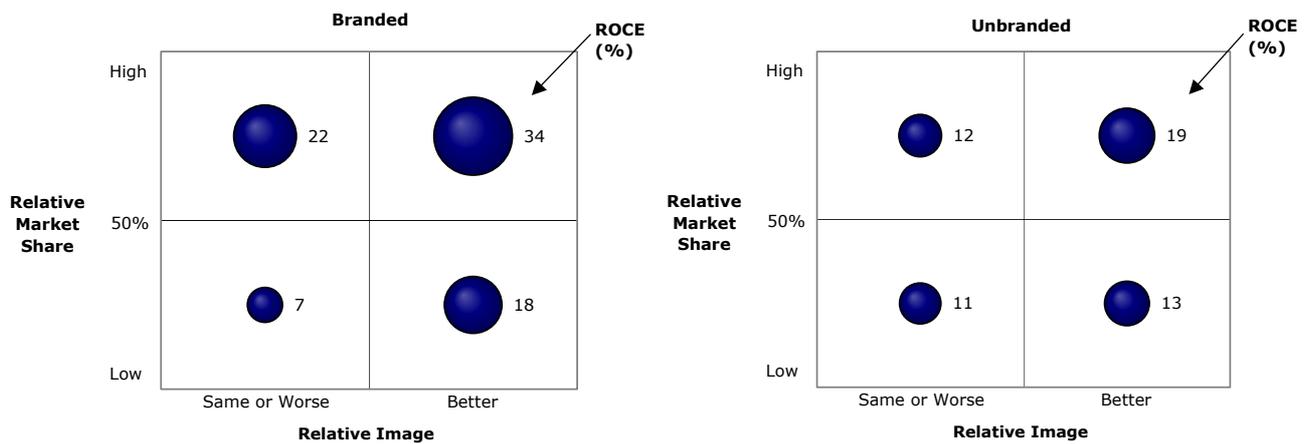


Source: FMCG sample of PIMS Database

Relative image

Strong image is a key element of the most profitable businesses we have observed. It matters at all levels of market share, especially low share branded FMCG businesses. Logically, the impact of image on ROCE is greatest in the branded FMCG business sample, where product differentiation and product awareness have a greater impact on the purchase decisions of end users.

Figure 31. Image is important at all levels of market share



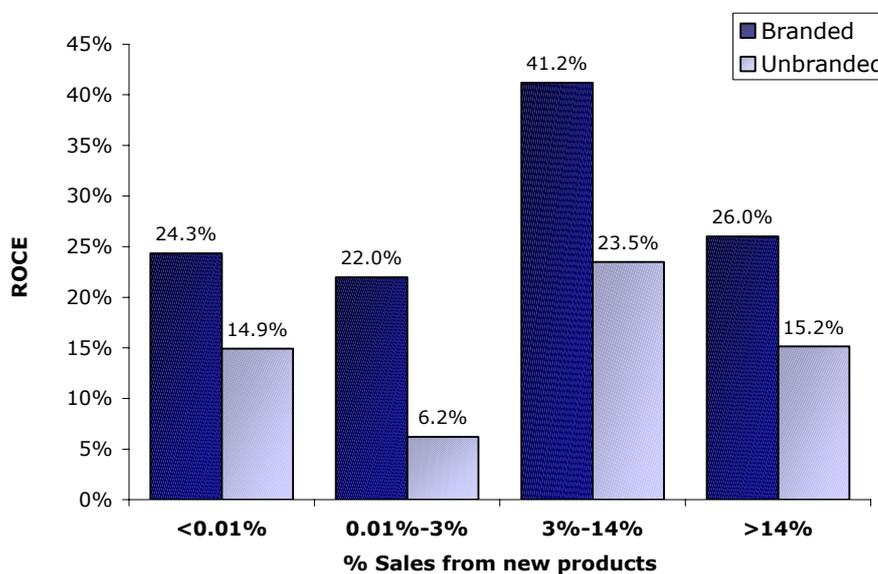
Source: FMCG sample of PIMS Database

Innovation

Figure 32 below indicates the existence of a profit maximising level of innovation for branded FMCG businesses. Moderate innovation is good for ROCE levels, creating more additional revenue than incurred in costs. The level of innovation, however, reaches a point where the marginal costs exceed the marginal revenues and ROCE starts to decline. The relationship for the unbranded sample is less certain, and subject to much wider variation in the results.

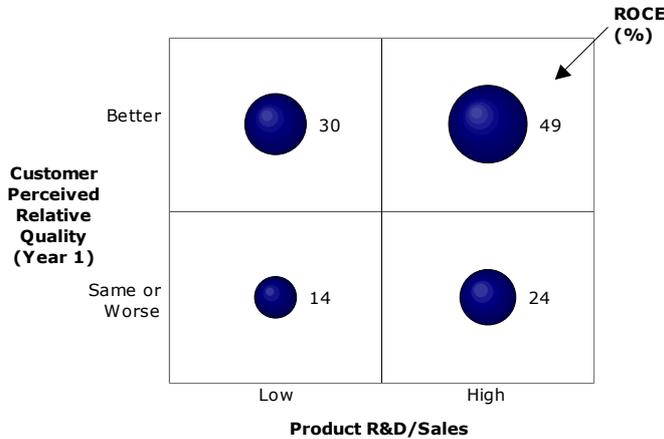
Figure 32. Moderate innovation is good for profitability

Source: FMCG sample of PIMS Database



As in the previous chapters on competitive share gain and public benefits, we have taken our analysis beyond the intangible input of innovation, to look at the impact of R&D investment. The results are interesting. The impact of R&D investment on profitability is affected by the relative consumer perceived quality position of the business.

Figure 33. Strong brands benefit more from R&D spend



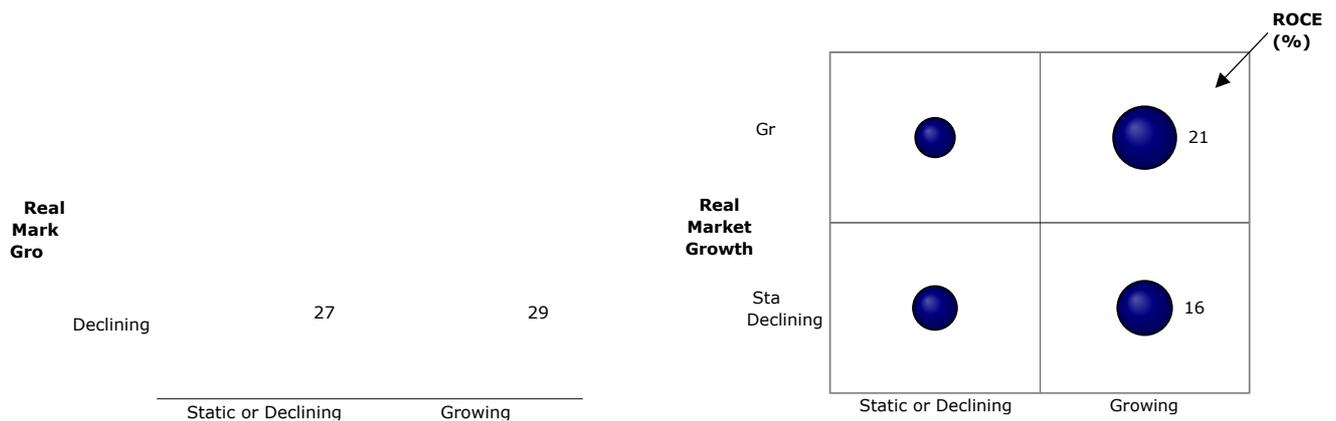
While ROCE is positively correlated with higher R&D at all levels of perceived quality, branded FMCG businesses with strong consumer preference are able to extract greater returns from their R&D expenditure. The logic behind this is directly linked to the discussions in chapter 3 above (see figure 23), which states that the stronger the branding or support of a product the easier it is to reap the rewards of R&D investment via innovation.

Source: FMCG sample of PIMS Database

Value added growth

By definition there is a direct link between growth in real value added and profitability. As analysed earlier, real value added can be achieved either through competitive share growth or growth in the served market. The clear result is that businesses that fail to grow real value added when their markets are growing make substantially lower profits.

Figure 34. In growing markets firms must grow value added



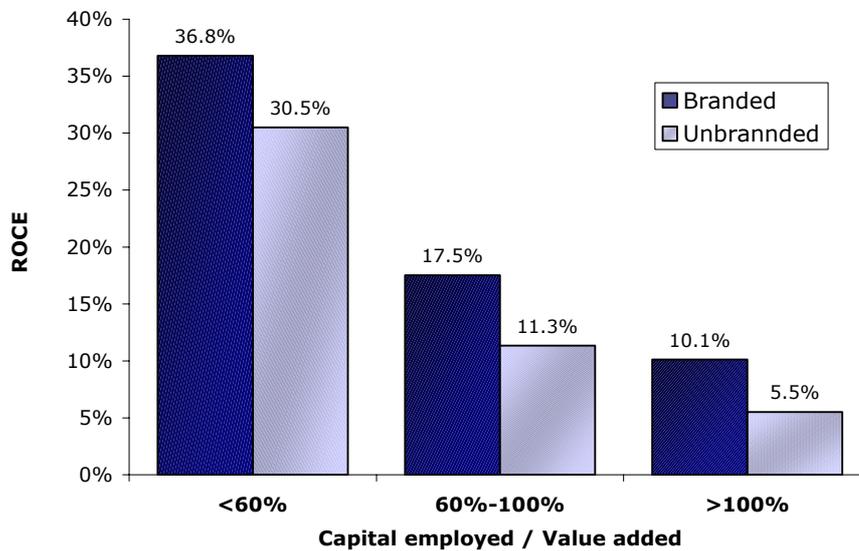
Source: FMCG sample of PIMS Database

Capital and labour productivity

Highly capital-intensive firms find it more difficult to avoid diminution in operating profit margins when faced with competitive pressure. This is the result of the higher operational leverage constricting their ability to reduce costs in the short term. Isolating this effect from any measure of capital productivity is not easy. We have used 'capital employed as a proportion of value added' as a measure capital productivity.

Figure 35 identifies the strong positive correlation between capital productivity and ROCE in both the branded and unbranded FMCG markets. ROCE is lower for the unbranded sample at all levels of productivity.

Figure 35. Capital productivity delivers superior profits



Source: FMCG sample of PIMS Database

5. Conclusions

Our analysis has addressed three issues for FMCG businesses. These are:

- What drives competitive market share gain?
- What benefits does branding bring to the wider economy?
- What factors affect profitability (ROCE)?

Competitive market share gain in branded FMCG businesses results from achieving advantage over your competitors in the areas of innovation, consumer perceived value and image.

Wider economic benefits are likely to arise when branding exists as these businesses invest larger sums, and invest more efficiently, in the areas, such as innovation, that create economic growth, employment and productivity. This is the result of competitive stimulus and the role branding plays in enabling FMCG businesses to reap the rewards of investment.

Profitability is higher in branded FMCG businesses and is positively correlated with market share growth, high consumer perceived value and a strong image.

What drives competitive market share gain?

- Innovation advantage

Pulling ahead of competitors on successful innovation drives relative market share growth for small businesses and protects the market share position of dominant players. Branded FMCG businesses achieve this through increasing the proportion of new products in the sales mix.

The best businesses at raising the quantity of new products offered invest more in R&D as a percentage of their revenues. Committing funds to create new products that respond to consumers' needs and requirements is associated with higher consumer perceived quality, and hence the perceived value of the businesses' offering. The best businesses also bring their products to market in a shorter timeframe and protect their intellectual property. This allows them to pull ahead of rivals via the first mover advantage and also to stay there, ideas analysed in depth in many other studies.

- Value advantage

Relative value is a function of consumer perceived quality and price. For given levels of product image and innovation and starting relative market share, an increase in perceived value leads to an increase in market share. The evidence also shows that small to medium sized market players have the most to gain, in terms of market share, from improving their value proposition. Raising relative value, on average, only creates minor growth for large share businesses. At all levels of starting share, worsening value has a significant detrimental impact.

Perceived quality is found to be significantly more powerful than price or costs in determining value. The transparency of the FMCG market may be an influence as price changes are easily observed and rivals can respond rapidly. Relative quality change in contrast is more difficult and time consuming to emulate.

Perceived quality is improved through investment product R&D and image in the marketplace. As the starting relative quality of products rises, we find that the additional investment in product R&D needed to improve perceived quality also rises. Essentially, high quality products are harder to improve. The relationship between quality and image is a two-way process. Strong image is catalyst for higher perceived quality, while a strong image is the by-product of a high quality product.

Relative cost is the other key determinant of value. Reducing costs can create greater profit margins, providing extra funds for investment or enabling sustainable reductions in price, both of which can improve value. The key input for cost reductions in our observed branded FMCG businesses is greater investment in process R&D.

- Image advantage

Given the close association between image and perceived quality noted above, and the impact of quality on value and thus market share, it is intuitive that image is a determinant of market share gain. Our findings show that relative image is crucial for small share businesses trying to improve their standing. At the high share level, protecting image and reputation is essential for avoiding severe share erosion.

The main contributor to image is the channelling of investment into advertising, which has the clearest impact for high share businesses. We find that the difficulty small businesses face in connecting with the end user to improve their relative image is a double-edged sword. Not only do they strain to improve image, they are also likely to struggle in the battle for consumer preference.

What benefits does branding bring to the wider economy?

- Growth in value added and growth in employment

Value added represents the contribution a business makes to the economy in which it operates. For branded FMCG businesses, real value added growth is correlated most strongly with real market growth. In addition we find that real value added growth is higher in businesses where:

- Quality advantage is increasing;
- Quality advantage is high;
- Relative direct costs are low; and
- Successful innovation is high.

These qualities for growing real value added link directly back to the drivers of competitive share gain we identified for branded FMCG businesses. We find that these are also the qualities for annual employment growth at the business unit level.

We can only infer that this represents economic growth to the extent that economic growth is the sum of the value added growth of all businesses. To this end, the effects described above must have a positive impact on economic growth, but as we are only accounting for a subset of the total economy, we cannot prove anything further.

- Innovation, productivity and growth

Our investigations of the FMCG sample of the PIMS Database shows a strong association between the proportion of new products in the sales mix at the start of the observation period, and the level of real market growth over the period. Based on this data of individual business units alone, we cannot definitely prove the causality of this relationship, although wider analysis suggests innovation is the driving force.

Our wider analysis provides convincing argument that branding in FMCG businesses, through stimulating innovation, is positive for productivity and hence economic growth

Supporting their products' brands enables FMCG businesses to communicate more effectively with end users, resulting in businesses which:

- Grow better in response to innovation advantage (figure 12);
- Gain a greater private return on innovation (figure 32); and
- Show a better productivity return for investing in innovation (figure 23).

This creates the:

- Incentive to increase the overall level of innovation; and in time
- Additional funds for further innovation.

The end result is FMCG markets, and the economy, benefit from superior productivity and growth.

- Productivity and investment

R&D expenditure is a key investment for branded FMCG businesses. Our investigations of the impact of R&D shows that the value added per employee (a measure of productivity) in branded FMCG businesses is higher than the average of all other businesses in the PIMS Database. The impact on productivity of higher R&D in the branded FMCG sample is approximately double that for industry as a whole.

The additional productivity gain from R&D investment in the branded FMCG businesses may be due to the importance of differentiation and quality in achieving competitive advantage in this sector. Supporting their brands through advertising and promotion enables businesses to:

- Communicate differentiation to end users more effectively;
- Raise awareness of product developments; and
- Persuade consumers to try new or improved products.

This ability to connect with end users improves the chances of turning development ideas into successful products that meet the needs and expectations of consumers. The evidence suggests that R&D investment and branding complement each other to create additional returns on each unit of investment.

What factors affect profitability (ROCE)?

- Market share

The impact of market share on ROCE is evident in both branded and unbranded FMCG markets alike as the bargaining disadvantages faced by smaller firms depress ROCE compared to their more powerful rivals.

Pursuing growth in market share has no detrimental effect on profitability for branded FMCG businesses; the rewards of such strategies appear to outweigh the additional costs. There is only evidence of a growth/profit trade off for unbranded FMCG businesses, where those businesses experiencing growth in relative market share, in the short term at least, see diminishing ROCE.

- Consumer perceived value

Both the components of value, quality and cost, have a significant impact on profitability. For the branded FMCG sample the rewards of strong market position combined with strong consumer perceived quality are large. Higher share businesses appear more able to convert a perceived quality advantage into profit. These high share businesses usually possess a strong image, enabling more effective communication with end users. It is also apparent that the strongest brands benefit from economies of scale in their advertising, promotion and total communication efforts.

We find that low relative direct cost is a more important element of profitability in the unbranded FMCG businesses, where the weight of price against quality in the purchase decision is likely higher.

- Innovation

The evidence here suggests the existence of a profit maximising level of innovation for branded FMCGs, somewhere between 3% and 14% of revenue. We also find that the impact of R&D investment on profitability is affected by the initial consumer perceived quality position of the business. Those with strong perceived quality positions are able to extract greater returns, in terms of ROCE, from their R&D effort. This again implies that strong branding heightens the value of innovation.

References

- A Virtuous Cycle: Innovation, Consumer Value and Communication. Kamran Kashani, Joyce Miller, Tony Clayton. IMD/PIMS 2000.
- Brands, Innovation and Growth: Evidence on the contribution from branded consumer businesses to economic growth. Tony Clayton, Graham Turner. PIMS, September 1998
- Delivering Lisbon, reforms for the enlarged union. Report from the Commission of European Communities to the Spring European Council. 20th February 2004. Available at <http://europa.eu.int>
- Extracts from presidency conclusions on the Lisbon Strategy by Theme. European Councils: Lisbon to Brussels (December 2003). Available at http://europa.eu.int/comm/lisbon_strategy
- UK Productivity and Competitiveness Indicators 2003. DTI Economics paper no. 6, November 2003. Available at www.dti.gov.uk/economics
- Competing in the Global Economy – The Innovation Challenge. DTI Economics paper no. 7. Available at www.dti.gov.uk/economics
- e-Commerce and Firm Performance: An assessment using multiple survey sources and linked data. Report to Eurostat and DG Enterprise by Office of National Statistics Tony Clayton, Chiara Chriscuolo, Peter Goodridge, Eurostat 2004. Available at: <http://europe.eu.int/comm/eurostat>
- ICT, Innovation and Productivity George van Leeuwen (CPB Netherlands), Henry van der Wiel Report from Comparative Analysis of Enterprise Data (CAED) conference, London, 15-16 September 2003. Available at www.statistics.gov.uk/events/caed

Appendix I

Description of PIMS Competitive Strategy Research Database

The PIMS Database of business unit performance contains data on over 3,500 businesses in Europe, North America and elsewhere. Each business unit is described using over 400 variables, in terms of:

- The characteristics of the market in which it operates;
- The competitive position of the business in that market; and the
- Profits, cost structure, capital employed and productivity.

PIMS consultants alongside client business unit managers collate and verify data. All data has been supplied in the course of business unit benchmarking projects, in which there is a real incentive for managers to supply accurate data and where PIMS consultants have checked a number of sources within the business and the boundaries within which the business is defined. All data are confidential.

The Database was originally designed at General Electric and Harvard, and later by the Strategic Planning Institute. It was designed to facilitate statistical analysis of differences in performance between business units in different industries, and to identify performance drivers on a number of dimensions. Each observation in the competitive strategy database covers a minimum span of three years to minimise the influence of cyclical effects, and for some businesses the time span is as long as twelve years.

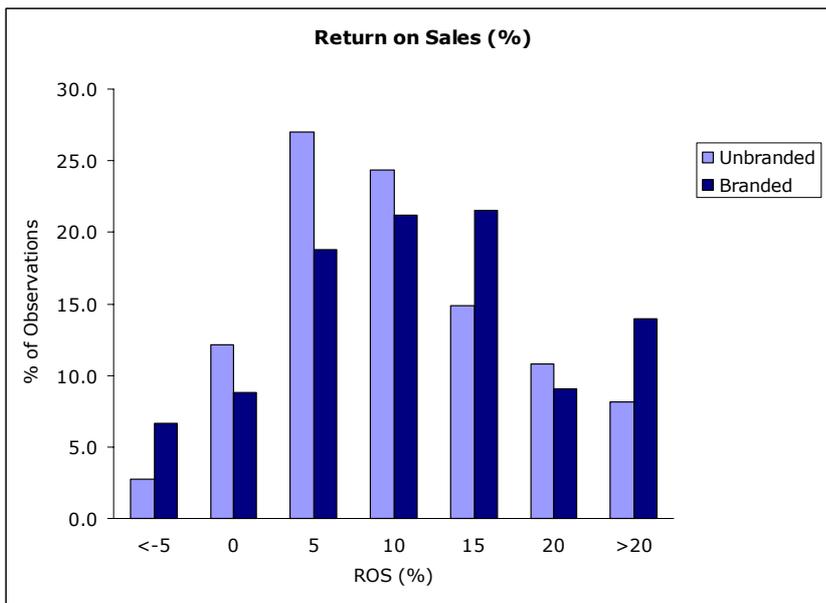
'The PIMS Principles' by Buzzel and Gale gives a theoretical perspective of PIMS database research. Further information on PIMS can be found at www.pimsconsulting.com.

Appendix II

Further breakdown of the FMCG sample of the PIMS Database

This Appendix provides further detail of the FMCG businesses analysed in this report. It provides information on the distribution of several key variables for both the 'branded' and 'unbranded' samples.

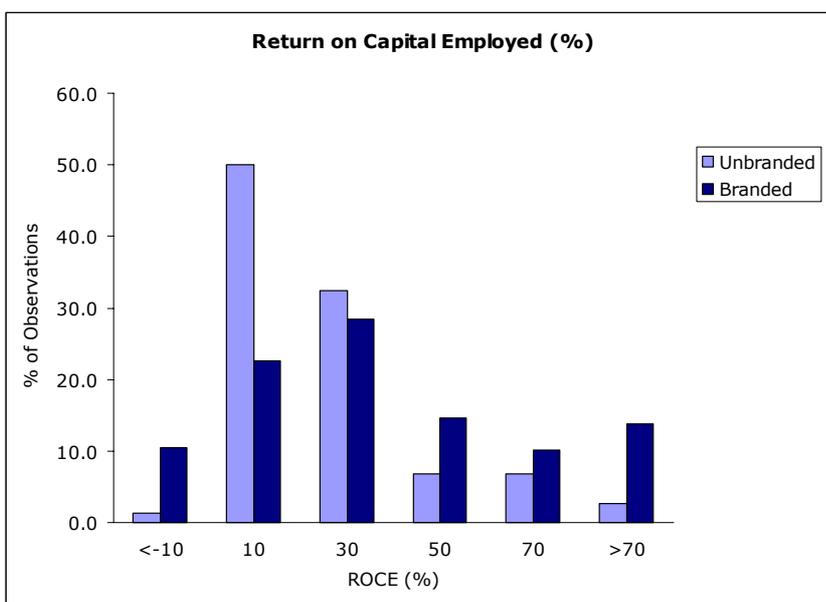
Chart A



On a return on sales measure it is clear that branded FMCG business earn higher profits than those in the unbranded sample.

Source: FMCG sample of PIMS Database

Chart B

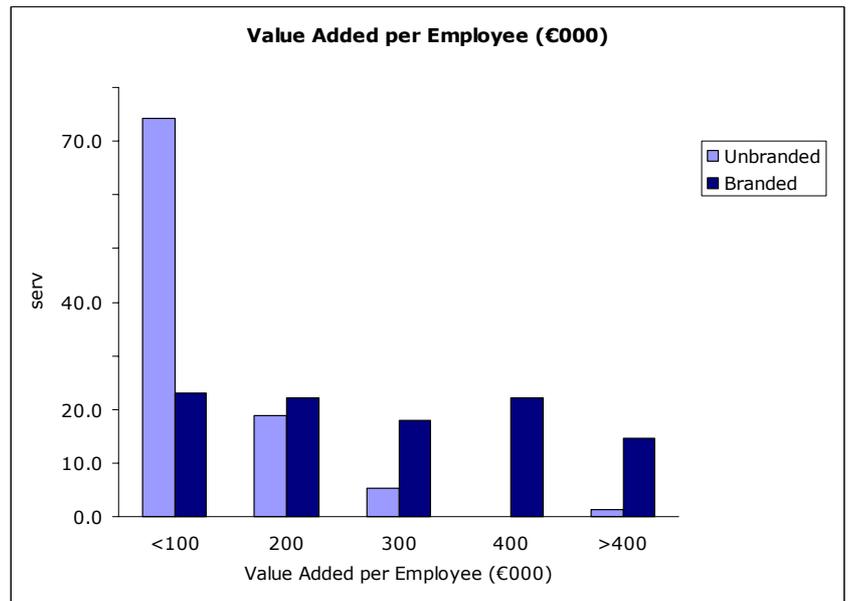


Looking at the ROCE measure of returns shows that over 50% of the unbranded FMCG business earn below 10%. At such low levels of ROCE these businesses will have difficulty in attracting investment and financing.

Source: FMCG sample of PIMS Database

Chart C

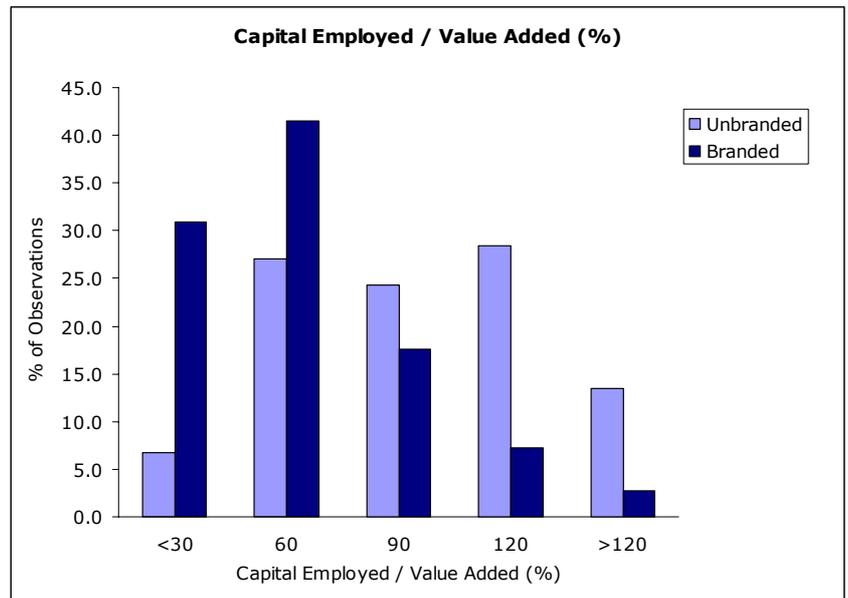
Taking capital employed over value added as a measure of capital productivity, the distribution indicates that branded FMCG businesses are generally more productive in their capital usage than those businesses in the unbranded sample.



Source: FMCG sample of PIMS Database

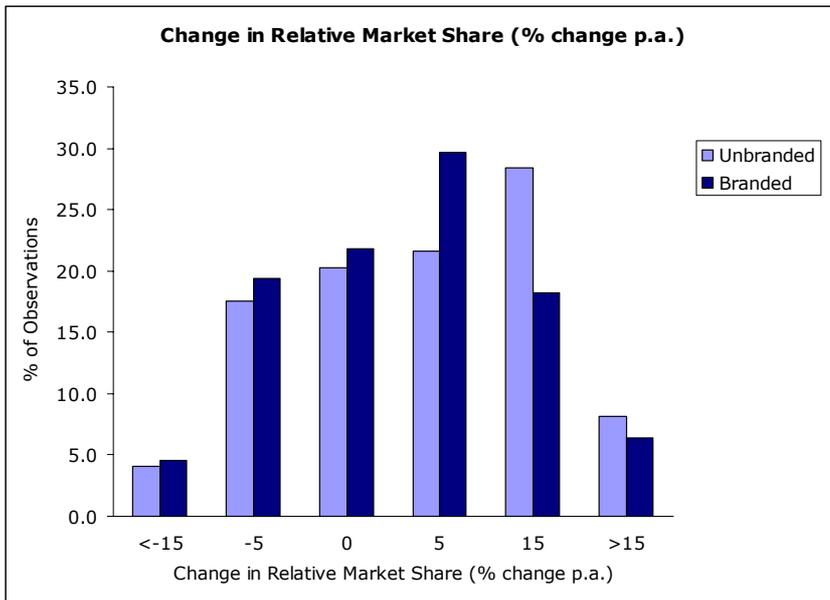
Chart D

Turning to labour productivity, measured as value added per employee a similar pattern emerges. Above 70% of the unbranded observations create less than €100k per employee. Of the branded observations 37% create over €400k per employee. On this measure labour productivity, directly affected by the capital productivity differences above, is much greater in the branded FMCG businesses.



Source: FMCG sample of PIMS Database

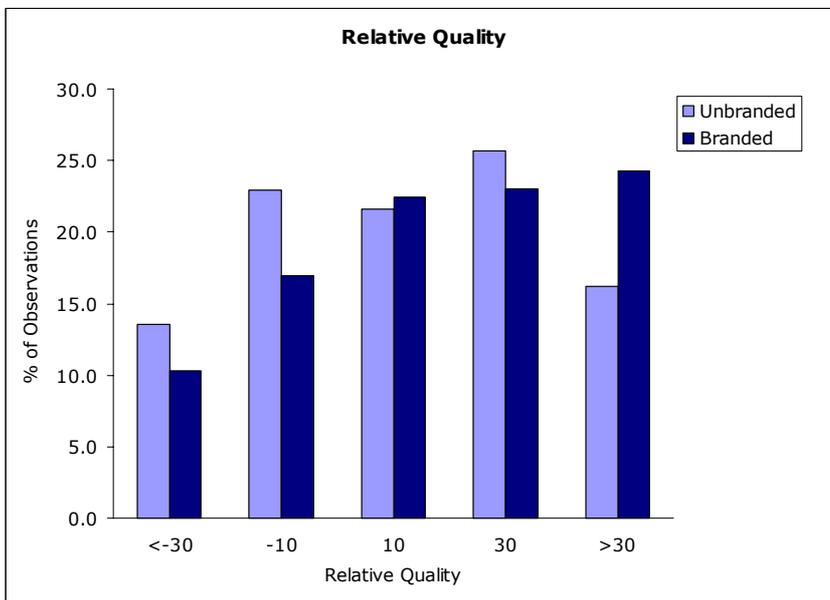
Chart E



The distributions show that relative market share change patterns are reasonably similar in both the branded and unbranded samples. There are a larger proportion of unbranded businesses above the 5% mark the reasons for which are not immediately clear.

Source: FMCG sample of PIMS Database

Chart F

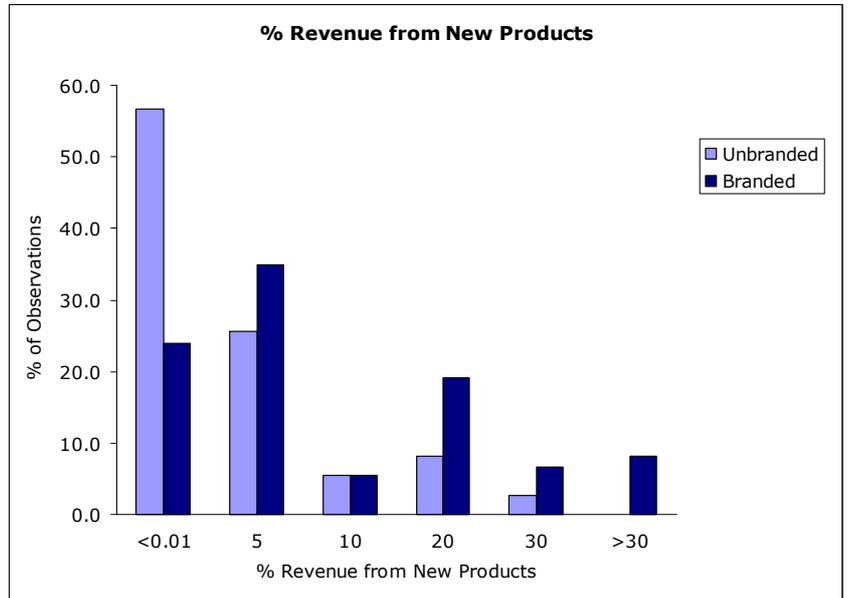


The PIMS' measurement of quality is a subjective rating of non-price purchase criteria relative to alternatives. The distribution suggests that unbranded FMCGs are more likely to be perceived as having low quality versus competitors, while branded FMCGs are more likely to have a perceived quality advantage above 30.

Source: FMCG sample of PIMS Database

Chart G

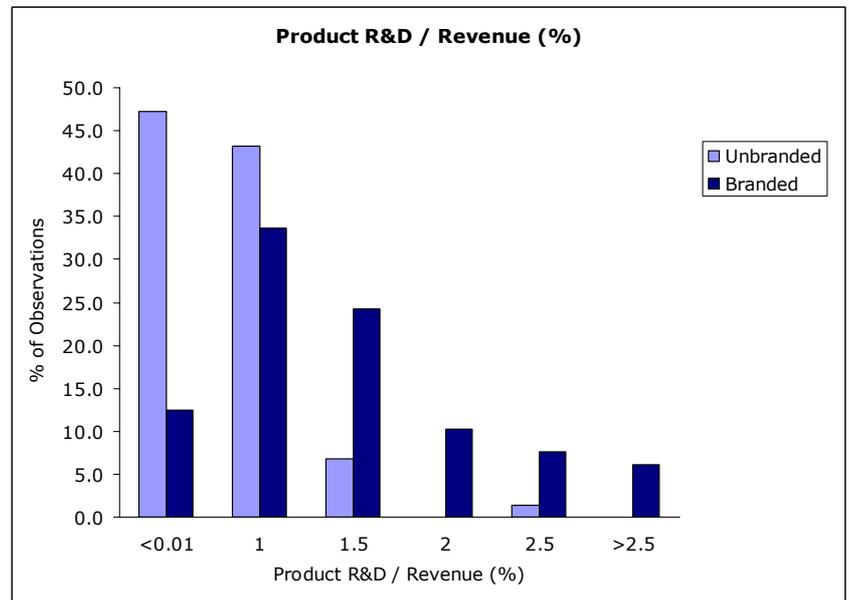
There are significant differences between the proportions of new products in the sales mix of unbranded FMCG businesses compared to branded FMCG businesses. Above 50% of the unbranded sample have zero recognisable product innovation. This figure is less than 25% for the branded FMCG businesses.



Source: FMCG sample of PIMS Database

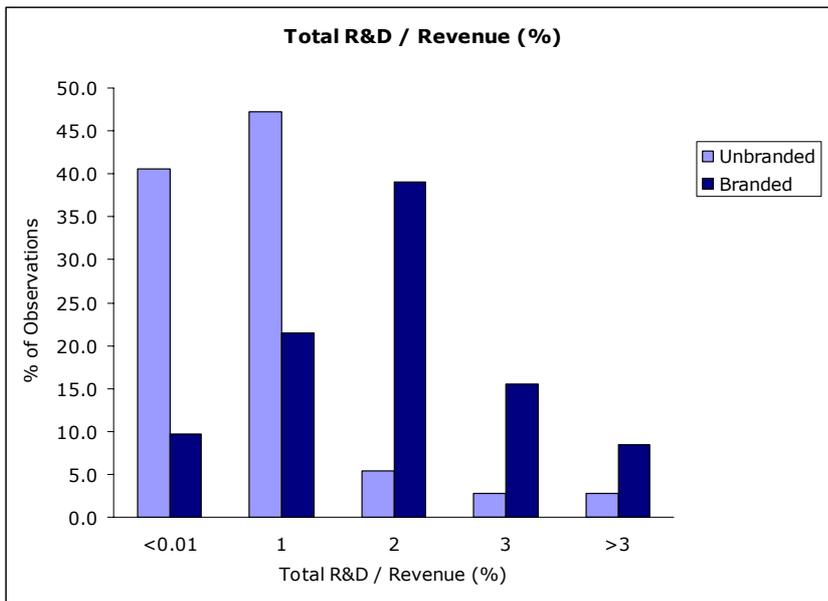
Chart H

In line with the levels of innovation in the previous chart, we see a similar pattern emerge opposite in the distributions of product R&D investment. Only 12% of branded FMCG businesses put no funds into product R&D, compared to almost 50% of unbranded FMCG businesses.



Source: FMCG sample of PIMS Database

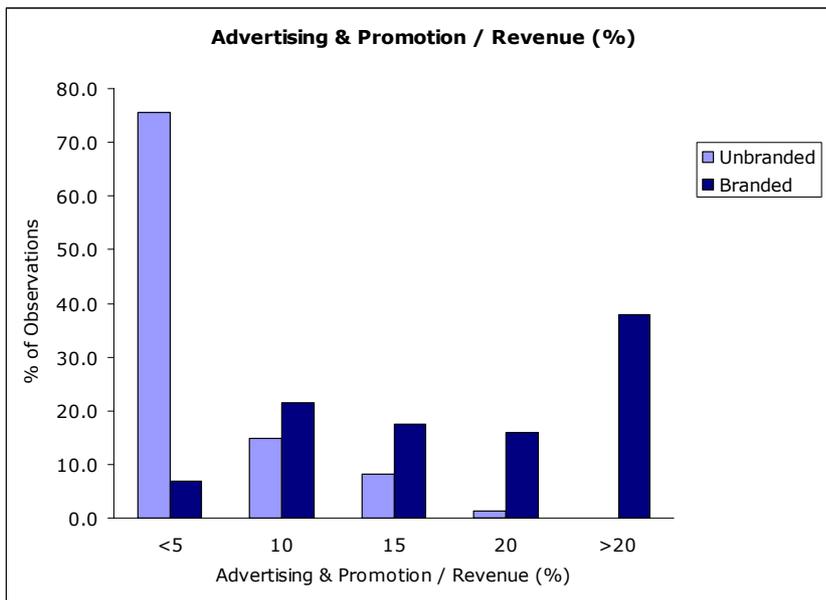
Chart I



Looking at total R&D as a percentage of revenue (which includes product R&D and process R&D) paints the same picture as the chart above depicting product R&D only. There is a slight shift to the right for the unbranded sample indicating that some of these businesses are investing in process R&D.

Source: FMCG sample of PIMS Database

Chart J



Advertising and promotion expenditure as a proportion of revenue is, by virtue of the definition of our two samples, greater for the branded FMCG businesses. The distribution does show that within the unbranded sample there are businesses spending significant amounts on promotional activities.

Source: FMCG sample of PIMS Database

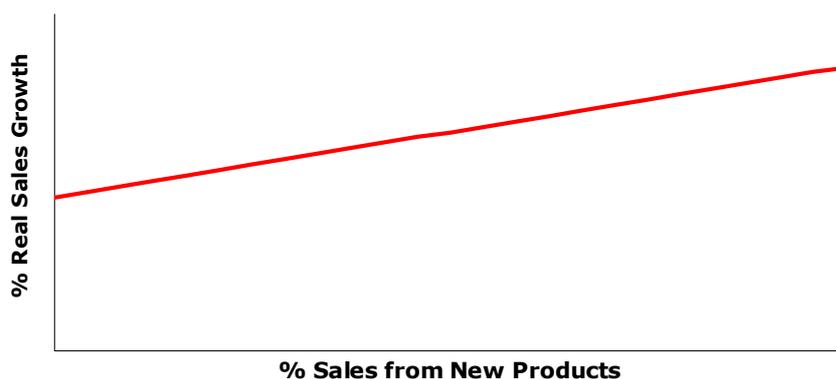
Glossary of Terms

Advertising	Expenditure on media advertising as % of revenue.
Capital Employed	Fixed assets at net book value plus working capital.
Concentration	Suppliers: Share of market of top 4 suppliers. Distributors: Number of immediate customers accounting for 50% of supplier's sales.
Development Time New Products	Typical time lag between initial R&D and first commercial sale.
Innovation	See New Products
Know-how	See Patents

New Products The percentage of sales from products introduced in the last 3 years.

- Throughout the analysis we refer to 'successful innovation'. We define this as the percentage of sales from new products.

**Correlation between % sales from New Products
and % Real Sales Growth**



- Analysis of the PIMS database shows that the two variables, '% Sales from New Products' and '% Real Sales Growth' are positively correlated to a high level of statistical significance. Thus, we are confident that '% Real Sales Growth' is not distorted by factors affecting the sales mix that do not relate to new products. Therefore, '% Sales New Products' is a robust proxy for successful innovation.

- Patents - Products and Processes** A (0,1) variable reflecting where a business has a significant patent or know how advantage, affecting products or processes.
- Productivity** Employees: Value added per employee adjusted to a common currency and date.
Capital: Capital employed / Value added %
- Profitability** See Return on Capital Employed.
- Promotion** Expenditure on sales promotion as % of revenue.
- Real Market Growth** Annual percentage change in the value of the served market adjusted for price changes.
- Relative Direct Cost** Cost per unit of output for raw materials and manufacturing, relative to the weighted average of the 3 largest competitors.
- Relative Quality** A measure of consumer preference for the products, services and image of the business relative to its 3 largest competitors.
- Relative Image** A measure of relative consumer preference for the image of a business. (A five point ordinal scale from 1 = much worse to 5 = much better).
- Relative Market Share** The market share of a business divided by the sum of the shares of the top 3 competitors. For example:

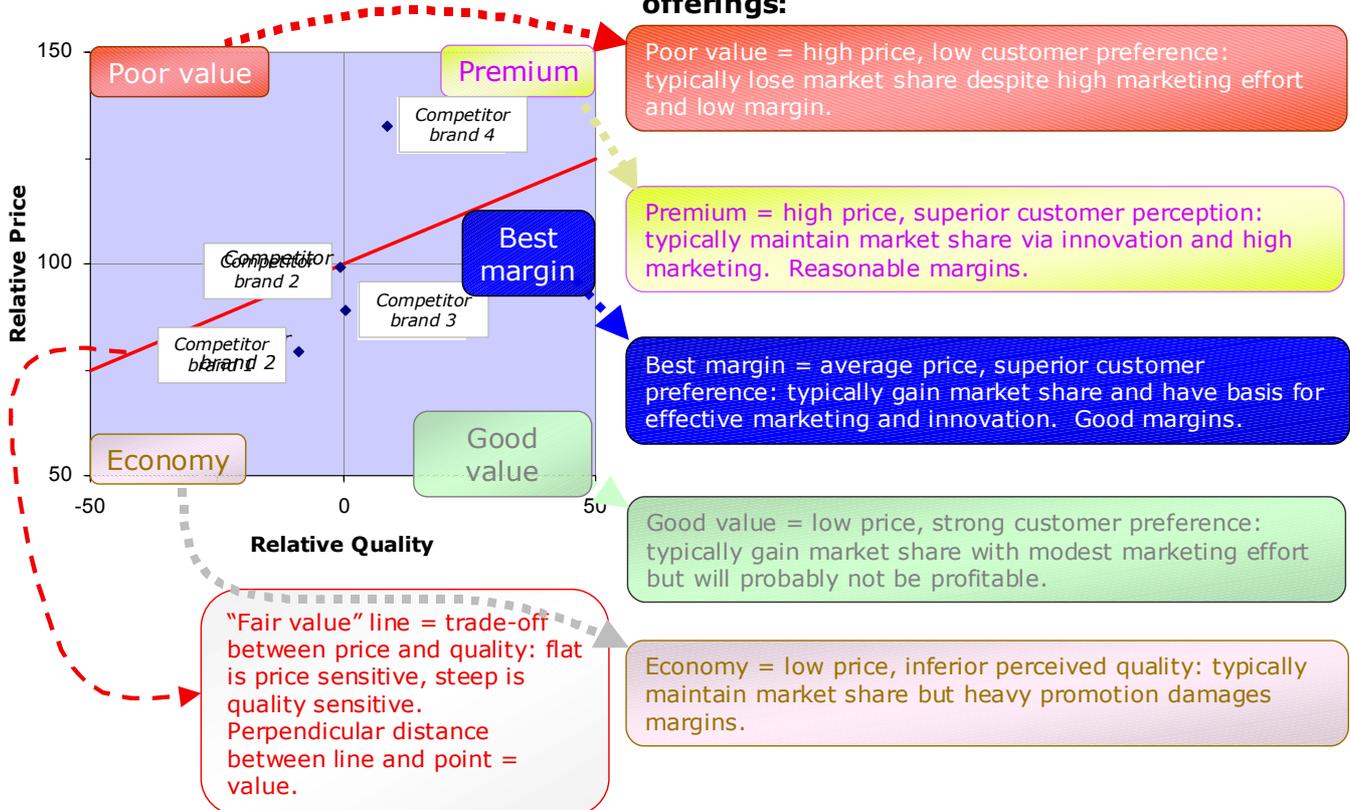
	Top Four				Other
Market share rank	1	2	3	4	7 say
Market share %	40	25	15	10	2
Relative market share %	80	38	20	13	2.2

Relative Value

Calculated as standardised relative quality less standardised relative price, both factors weighted by the relative weight of price / quality in the purchase decision. PIMS' assessment of relative value is illustrated in detail below.

How to assess relative value

These positions represent different value offerings:



Return on Capital Employed (ROCE)

Profit before interest and tax / capital employed.

Time to Market

See Development Time New Products.

Value Added

Revenue less cost of components of goods sold (primarily raw materials, packaging and energy).