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CONSUMER PROMOTIONS: TAMING THE MULTIBUY DRAGON

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Executive Summary

This study, commissioned by Procter & Gamble, is about the recent escalation of deep-discount price promotions in UK fast-moving consumer goods markets. We focus on a detailed analysis of the £730 million machine wash category, but also cite supporting evidence from research by AGB for ITV on the instant coffee and yellow fats (butter and margarine) categories.

The Escalation of Promotions

Price promotions do not increase the total annual volume of a mature, stable, functional category like machine wash. In fact, category volume has decreased by 2.5% over the last three years, although this largely reflects switching between product forms (e.g., concentrated and unconcentrated). Instead, the only overall effect of escalating price promotions has been to reduce the value of the category by 8.4% over the last three years – about 13% taking inflation into account.

Although "extra free" promotions (e.g., special packs with 10% extra) continue – still accounting for 18% of consumers' promotional purchases of machine wash – most price promotions today are either multibuys ("Buy 2, Get 1 Free") or price offs ("20% off"). These can be implemented quickly, cheaply, and flexibly using EPOS technology, which may have encouraged their use. The availability of weekly scanner data also allows manufacturers and retailers to measure the short-term effects of promotions: given the pressure for short-term performance and for accountability, this has further reinforced the escalation.

In this study, we focus especially on multibuys, which involve deep discounts and which account for over 70% of consumers' promotional purchases of machine wash products. The primary reason for the 8.4% reduction in the value of the category over the last three years is the promotion-induced reduction in the average price paid, which is due to an increase in the frequency of promotional events and an increase in the average level of discount (with a resulting increase in consumer take up). In the case of multibuys, the average level of discount per promotional event has increased from 18% to 25%, and multibuy purchases now account for 11.9% of total consumer expenditure on machine wash (up from 9.1%).

This escalation has reduced manufacturers' profits and directed resources from advertising, product development, and other long-term brand-building activities. Since it has not increased the category's volume – merely reduced its value – it is also likely to have reduced retailers' profits, especially since private labels have been even more heavily promoted than manufacturers' brands.

Who Is Buying on Deal?

The beneficiaries have been consumers – but not all consumers equally. An analysis of AGB Superpanel data for the year ending June 1996 shows that:

71% of multibuy purchases were made by only 13.7% of households – called "multibuy" households.

Almost all of the rest (24% out of 29%) was made by the next 13.6% of households.
All other households (73% of households) accounted for just 5% of multibuy purchases; some of these were light buyers and some bought mostly discount brands, but most were normal buyers of the category and its brands, who did not shop around for multibuys – called "normal" households.

"Multibuy" households were not economically disadvantaged (the less well-off tended instead to buy budget brands); instead they tended to be slightly upscale, larger households with children and include a housewife working part-time.

"Multibuy" households are less brand and store loyal than average.

In other words, the consumer benefits of multibuys are distributed highly inequitably and, far from brand-building, manufacturers and retailers are rewarding disloyalty.

Consumer Attitudes

We briefly review relevant responses from a June 1996 attitude survey by Survey & Marketing Services for Procter &Gamble. Among the findings are that 60% of consumers agreed or strongly agreed that *"products are priced artificially high in order to afford big promotions,"* 75% that *"it irritates me when my brand is sold out because it was on special offer,"* and 78% that *"I'd rather they brought the prices down and stopped all those offers."*

Only 18% agreed or strongly agreed that *"if there were no special offers in my usual store for washing products, I'd shop somewhere else."* Even this seems an inflated figure, since in reality consumers have little idea as to whether their usual store has more or fewer special offers than other stores: Asda shoppers tend to believe that Asda has an above-average number of special offers whereas in reality it has fewer, while exactly the reverse applies for Sainsbury – it has more special offers than average but its shoppers think it has about the same or even fewer than average.

Escalating promotions are not liked by most consumers, do not build brand or store loyalty, and do not even seem to be effective at gaining new customers.

Examining Alternatives to Multibuys

We have explored the likely consequences of manufacturers reallocating promotional resources away from deep-discount multibuy and price off promotions towards a more equitable mix of events. Specifically, we model the effects of a simplified scenario in which the depth of discount on multibuy and price off events is halved (from 30% to 15% and from 20% to 10% respectively) and the resulting saving allocated to longer-term promotions such as loyalty card points or to price cuts.

The model predicts that the net effect would be that the "multibuy" households (13.7%) would still receive a disproportionate share of promotional resources (33%), but to a much lesser extent than now, so that their average expenditure on machine wash would increase by 9.2%. The next most deal-prone group (13.6% of households) would also end up paying slightly more (0.9%). But the majority would pay less. In particular, the 56% "normal" households would save 3.5%.

The result would be much more equitable, as well as rewarding brand and store loyalty. It would also lead to cost-savings by reducing the inefficiencies caused by large and unpredictable promotion-induced sales fluctuations.

Other Product Categories

We briefly review the results of a recent analysis of the instant coffee and yellow fats (butter and margarine) categories done by AGB for ITV. The results for instant coffee are very close to those for machine wash, while those for yellow fats (a less heavily promoted category) are similar but a bit less extreme: deal prone households (16.6%) account for 60% of multibuy-based purchasing of yellow fats – still highly inequitable.

Further work is needed to extend these analyses to less mature and more price-elastic categories.

Taming the Multibuy Dragon

We believe that multibuys and other price promotions have escalated almost out of control in the last three years in the machine wash category and at least some other fmcg categories. The only people who have benefited are a minority of households.

We argue that it would be better for manufacturers, retailers, and the majority of consumers if the escalation of deep-discount price promotions was reversed, by reducing the depth (and possibly frequency) of the offers and reallocating the resources saved into longer term loyalty programmes, price cuts, advertising, product development, and other brand-building activities.

1. Introduction

As marketing managers see more and more of their marketing budgets being spent on price-based promotions, there is a concern that all these promotions are conditioning consumers to look for bargains and may be having negative consequences on brand and store loyalty. There is also some evidence that the proliferation of special deals is unwelcome to the many consumers who would prefer to be rewarded for loyalty instead of having to shop around for special offers. A number of managers are therefore starting to question whether the promotional tools currently being used are the best means of increasing the value associated with buying their brands.

In light of this, the aim of this study is twofold. First, we wish to better understand the nature and consequences of current promotional activities, with a particular focus on the machine wash product category. Second, we wish to explore whether there exist avenues for marketing managers to design more equitable and/or efficient promotional strategies.

1.1 Report Outline

Following a discussion of the study's scope and limitations, we examine trends in promotional activity, both generally and in the context of the machine wash category. Our attention then shifts to the question of how equitable is the distribution of the manufacturers' promotional expenditures among the consumers of their products. This is followed by an examination of consumer perceptions and attitudes towards promotions. We then explore possible changes in promotional activities that manufacturers could undertake to improve the equity of their promotions and the efficiency of the supply chain. Having focused our attention on the machine wash category, we then briefly extend the analysis beyond this category. The concluding section summarises the various analyses conducted in this study and gives an overview of the main findings and implications.

1.2 Scope and Limitations of the Study

This study has two main limitations. First, the "what-if" scenario discussed in Section 5 – an alternative to deep-discount multibuys – is based on reasonable assumptions about how consumers with varying degrees of deal-proneness would respond to a reallocation of promotional spend. These assumptions are derived from our analysis of panel data (Section 3) and consumer attitudes (Section 4). The assumptions and detailed calculations are given in Appendix B. However, these assumptions cannot be directly tested from the data. It might be possible to refine them with a more complex econometric analysis – we have not explored this – but we believe that the only way to discover the consumer response for certain would be through a live experiment, perhaps for just one or two categories in one or two regions.

Second, faced with a choice between an in-depth analysis of one product category and a more superficial analysis of several product categories, we chose the former. As the issues at stake are of great importance to both manufacturers and retailers, it is important that clear insights and research approaches are developed. The machine wash category is a classic example of a mature, stable fmcg market. We would expect our results to generalize to other such product categories, and the results of a recent ITV study of instant coffee and yellow fats (discussed briefly in Section 6) support this assertion. We do not know the extent to which the conclusions generalise to less mature and/or stable categories such as soft drinks or premium ice cream. More research using the same methods as here would be needed to explore the issues of promotional equity and efficiency across the full range of fmcg product categories.

2. The Escalation of Promotions

2.1 General Business Trends

The past decade has seen a shift in marketing expenditures from above-the-line to below-the-line activities, in particular, to price-based sales promotions. A number of factors have lead to this increase in promotional spending:

> As markets became more competitive due the proliferation of brands and, especially, SKUs (many of which lacked meaningful product differentiation), and the maturing of categories, marketing practitioners turned to short-term promotions as a means of achieving share targets.
>
> This trend was reinforced by the increasing pressure for marketing accountability: price promotions produce large measurable short-term sales increases. Pressures from the sales force (many of whom are evaluated and compensated on the basis of volume movement) have also encouraged such activities.
>
> The increased usage of promotions, along with the economic downturn of the late 80s/early 90s, is thought to have conditioned many consumers to be more price-oriented, thus making managers feel they need to make even more use of price promotions.
>
> The increasing power of retailers and the growth in private label activity has also "forced" managers to make more use of promotions, be it due to retailer pressure (e.g., the desire of retail buyers to meet volume levels so as to qualify for (annual) quantity-based manufacturer discounts, and to meet internal annual category volume and profit targets) or the need to meet the threat of lower-priced brands.
>
> Some commentators argue that there has been a decline in advertising efficiency, especially for television, due to increased media fragmentation and clutter combined with large increases in the cost per thousand viewers (CPT) over the period 1975-90.
>
> Finally, the availability of POS scanner technology and weekly scanner data means that it is now very easy both to implement and to measure the immediate effects of promotions.

Along with the increase in promotional spending, we have seen changes in the promotional tools used by marketing managers. In the past, coupons were more widely used, whereas multibuys were less popular as they often required the manufacturer to create banded packs, which required forward planning and increased the cost of production and distribution. However, the introduction of EPOS systems meant that multibuys and price offs could be implemented at minimal notice and in a virtually costless manner. Given that it is easy to communicate the nature of a multibuy deal to the consumer (e.g., "Buy 2, Get 1 Free"), it is not surprising that these promotions have increased in popularity. For example, in 1990-91, Procter & Gamble spent about 20% of its consumer promotion budget on multiple purchase promotional events in the laundry, cleaning and paper categories in which it has a presence. This rose to almost 40% in 1993-4 and about 65% in 1995-6. The absolute spend on multibuys has increased even more, since the total budget has also increased (much faster than inflation).

2.2 An Overview of the Machine Wash Category

Moving beyond generalities, we now focus on the machine wash category. This is considered to be a mature category, with very high-penetration of households (92% of UK households, as measured by the AGB Superpanel) and limited scope for increased household consumption: while consumers may "stock up" on machine wash products, frequency of washing is primarily driven by the number of dirty clothes. Machine wash is an important category on which the average household spends £32 per year (approximately 2% of total grocery expenditure). Table 2.1 gives an overview of category sales for the past three years.

Table 2.1 - Machine Wash Retail Sales 1994-6

		Year Ending June	
	1994	1995	1996
Category Turnover £million[1]	796	754	729
Index	100	94.7	91.6
Category Volume[2]	100	99.1	97.5
Price/Volume[3]	100	95.6	93.9
Base Price (non promotion)[2]	100	96.9	98.4

[1] Source: AGB Superpanel
[2] Source: Nielsen Store Audit
[3] Derived from 1 & 2

What is striking is that the past three years have seen an 8.4% *reduction* in category turnover (index from 100 to 91.6); taking inflation into account, this represents approximately a 13% reduction in real terms. As would be expected in such a mature and stable category, there was little change in volume sales – a mere 2.5% reduction, primarily due to switching between product forms. Consequently, most of the reduction in turnover is due to a 6.1% reduction in the average price paid by consumers (approximately 11% in real terms). Given that the average base price has decreased by less than 2%, most of the decline in category turnover is attributable to the increase in promotional price reductions, as we now discuss.

2.3 The Growth of Price Dealing in Machine Wash

For the year ending June 1996, 92% of the promotional events in the machine wash category were directly price-based (e.g., multibuys, special offers). Price deals are typically conveyed to the consumer in the form of a price reduction, a multibuy purchase, or extra product free (i.e., extra fill). Looking at AGB Superpanel data for the past three years, we can classify each consumer's machine wash purchase as either a budget brand purchase (Tesco Value, Safeway Savers, Kwiksave No Frills, Q Matic, Netto, Aldi) or a non-budget brand purchase. The non-budget brand purchases can be further classified as either deal (price off, multibuy, extra free) or normal (no price deal) purchases. Table 2.2 reports the proportion of total machine wash expenditure accounted for by each purchase type for the past three years.

Table 2.2 - Dealing Trends

% of Total Expenditure	Year Ending June 1994	1995	1996
Normal	81.9	79.7	77.5
Deal	12.9	14.5	16.4
Budget	5.2	5.8	6.1

Over the past three years, we have seen a 27% increase in the proportion of consumers' expenditure on machine wash products accounted for by purchases on some form of price deal (i.e., from 12.9% to 16.4 of total expenditure)..

This increase is due to a combination of three factors:

i) an increase in the number of price deals,

ii) an increase in the size of the average deal value, and

iii) an increase in consumer response.

Specifically, the number of events (including multibuy, link save, special offer and extra product free) in the top 7 retailers for all brands in the machine wash category increased from 388 in 1993-4 to 894 in 1995-6. An anecdotal study of individual promotional events suggests that in 1993-4, multibuy events were showing typical short-term sales builds of 25-40%; this had increased to 50-200% during 1995-6. This increased take-up appears to be due to both increased offer levels and the "training" of consumers.

2.4 The Impact of Private Label Price Deals

The past few years have seen an increase in private label activity in the machine wash category. It is therefore natural for us to examine to what extent this is driving the increase in deal expenditures. Table 2.3 separates the figures reported in Table 2.2 into amounts associated with branded and private label products, as well as their respective market shares.

Table 2.3 - The Impact of Private Label Price Deals

	Brand			Private Label		
	1994	1995	1996	1994	1995	1996
Share	88.7	86.0	82.4	11.3	14.0	17.6
% Total Expenditure						
Normal	84.0	83.5	81.6	65.6	56.6	58.3
Deal	12.1	13.4	15.7	18.7	21.3	19.6
Budget	3.9	3.2	2.7	15.7	22.3	22.1

It is clear that the increase in category deal expenditure is due to both increased private label share (accompanied by an increase in dealing by private label brands) and an increase in the proportion of purchases of branded products on some form of price deal. In value terms, the increase in deal expenditures is almost equally split between branded and private label products. Whilst the increase in private label share is obviously of concern to the manufacturers of branded products, the 30% increase in the proportion of their sales on deal (12.1% to 15.7%) should be of equal, if not greater, concern.

2.5 The Use of Different Types of Price Deal

Up to this point, our documentation of the proliferation of price dealing in the machine wash category has ignored the type of deal being used. Table 2.4 breaks down the deal expenditure

Table 2.4 - Trends in Price Deal Type Usage

% of Consumers' Expenditure	Year Ending June 1994	1995	1996
Price off	0.8	0.8	1.5
Multibuy	9.1	10.2	11.9
Extra free	2.9	3.5	2.9
Total Price Deal	12.9	14.5	16.4

figures into the percentages associated with each of the three deal types.

Although price offs have grown by more in relative terms (0.8% to 1.5%), it is the growth in multibuys (9.1% to 11.9%) which largely account for the 27% overall growth in the proportion of consumers' expenditure on price promotions (12.9% to 16.4%). This is because multibuys account for about 70% of consumers' price promotion-based purchases of manufacturers' brands and about 80% for private labels (Table 2.5).

Table 2.5 - Trends in Deal Type Mix

% of Consumers' Purchases on Price Promotion		Year Ending June		
		1994	1995	1996
Total:	% Price off	6	6	9
	% Multibuy	71	70	73
	% Extra free	23	24	18
Brand:	% Price off	6	4	10
	% Multibuy	70	70	71
	% Extra free	25	27	20
Private Label:	% Price off	10	12	8
	% Multibuy	78	73	81
	% Extra free	12	15	10

Overall, the mix has been fairly stable, apart from a recent decline in the usage of extra free promotions. Digging deeper, for manufacturers' brands there is a clear shift from extra free to price off promotions, and a slight shift from both offer types to multibuys for private labels. The main pattern, however, is the dominance of multibuy promotions in the machine wash category.

2.6 The Increasing Depth of the Multibuy Offer

The growth of the proportion of consumer expenditures on multibuys, which has driven the growth of consumers' purchases on price deals, has been driven not only by an increase in the frequency of multibuy promotions but also by an increase in their average depth. The average multibuy offer level has increased from 18% in 1993-4 to 25% in 1995-6. Over this time frame, the range of discount levels has not changed; rather there has been a shift to events with higher effective discount values. As larger discounts tend to generate greater sales volume, we can assume that the average *event* discount values correspond to sales-weighted averages of 20% and 30%, respectively. This suggests that manufacturers' funding of multibuys has more than doubled over the same period![1] Given the stability of this category, the growth in promotional discounts

[1] From Tables 2.1 and 2.4 we can compute that consumers' purchases on multibuys amounted to £72.4m in 1993-4 and £86.8m in 1995-6. An average discount of 20% suggests that the manufacturers' funding amounted to £72.4/(1 0.2)*0.2 = £18.1m in 1993-4. With an average

has not lead to volume increases – as we saw in Table 2.1, volumes have if anything decreased. All that has been achieved is a significant reduction in the value of the category, combined with an increase in total supply chain costs due to the large and only partly predictable short-term swings in volume caused by deep-discount promotions. Nor do these promotions seem to be effective in increasing brand share or store share (as we discuss in Sections 4 and 6).

Thus, price promotions, especially deep-discount multibuys, have hurt manufacturers and not benefited (or even, by reducing category value, also hurt) retailers. Leaving aside supply-chain inefficiencies, the beneficiaries have been consumers. But how many, and which consumers? This is the question addressed in Section 3.

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discount of 30% in 1995-6, the manufacturers' funding of multibuys amounted to £86.8/(1 0.3)*0.3 = £37.2m, which represents a doubling of expenditure.

3. Which Consumers Benefit from Multibuys?

Up to this point, our focus on promotions has been at the total market level. We now turn our attention to the consumer, with a view to understanding which consumers are benefitting from all this promotional activity, and how equitable the allocation of promotional monies is. (The numbers reported in this section are based on an analysis conducted by Taylor Nelson AGB.)

3.1 Creating a Household Grouping

We start by classifying households in the AGB Superpanel according to their propensity to buy machine wash products on multibuy. For the year ending June 1996, households are classified according to the proportion of their total category expenditure made on some form of multibuy deal. Five categories are created in the following manner:

Multibuy Buyer	-	the proportion of machine wash purchases on multibuy was more than one standard deviation above the panellist's expected multibuy spend (after allowing for his/her pattern of store choice).[2]
Average Deal Buyer	-	the proportion of machine wash purchases on multibuy was within one standard deviation of the panellist's expected multibuy spend.
Normal Buyer	-	the proportion of machine wash purchases on multibuy was below the panellist's expected multibuy spend by more than one standard deviation
Budget Buyer	-	more than 50% of the panellist's machine wash spend was on budget brands.
Light Buyer	-	the panellist made less than 3 machine wash purchases.

[2] See Appendix A for details regarding the expected multibuy spend and standard deviation calculations.

3.2 Characterising Household Types

The purchasing patterns of each group are summarised in Table 3.1. Whilst 17% of the households are classified as “budget” or “light” buyers, they accounted for only 6% of category turnover; we will therefore mainly focus our attention on the remaining three groups of households.

Table 3.1 - Purchasing Patterns by Household Type
(Year Ending June 1996)

	“Multibuy”	“Average Deal”	“Normal”	“Budget”	“Light”
% Households	13.7	13.6	55.8	6.6	10.3
% Expenditure on Deal	48	21	5	7	17
Avg # Brands	2.9	3.0	2.5	2.5	1.2
Avg # Category Purchases	11.7	13.9	11.2	11.3	1.6
Category Share (%)	20	19	55	4	2
Average Category Spend	£47	£45	£31	£21	£5
Average Basket Size	£41	£42	£34	£30	
Share of Store Turnover (%)	16	17	55	6	£21
Avg # Stores	5.0	4.8	4.5	4.8	6
					4.6

The 14% of households classified as “multibuy” buyers were heavy category buyers and, not surprisingly, a large proportion of their expenditure in the machine wash category was made on some form of price deal (48%). 92% of these deal purchases were multibuys. While these “multibuy” households tended to have large weekly shopping bills (based on an analysis of total till roll expenditure), there is a regression-to-the-mean effect: their disproportionate share of category purchases was only partly reflected in their share of store turnover. These “multibuy” buyers were less brand loyal and less store loyal than “normal” buyers: they had large brand and store portfolios.

Those households classified as “normal” buyers accounted for 56% of households, 55% of category sales, and 55% of total store turnover. Yet only 5% of their expenditure in the machine wash category was made on some form of price deal. Moreover, they had high levels of both brand and store loyalty.

3.3 Demographics

Turning our attention to the demographic characteristics of these different buyer types (Table 3.2), we see that “normal” buyers were, as one might expect, demographically like the population at large. Importantly, the “multibuy” buyers were not an economically disadvantaged group: AB households are over-represented and Es are under-represented. “Multibuy” households tended to be larger households, and this corresponds to having children at home. Additionally, “multibuy” households were more likely to contain a housewife who worked part time, which may allow more time to “shop-around” for deals.

Table 3.2 - Consumer Type Demographics
(Indexed Relative to Market Average)

	“Multibuy”	“Average Deal”	“Normal”	“Budget”	“Light”
Household Size:					
1	54	46	98	106	238
2	88	99	108	94	75
3	125	126	98	102	41
4	135	144	94	89	33
5+	167	130	88	123	21
Social Class:					
AB	125	110	93	55	121
C1	97	112	100	90	96
C2	110	113	99	97	77
D	94	90	104	147	70
E	73	66	105	122	138
Housewife Age:					
16-27	103	116	104	52	84
28-34	126	110	103	71	55
35-44	130	119	93	124	60
45-64	92	111	99	115	91
65+	71	61	104	94	173
Housewife Working Status:					
Full Time	101	99	102	83	99
Non Working	89	86	101	111	123
Part Time	121	131	96	95	53

3.4 Deal Purchasing by Buyer Type

Whilst Table 3.1 tells us that “multibuy” buyers made a large proportion of their purchases on deal, and “normal” buyers made few purchases on deal, it does not tell us what proportion of deal purchasing was accounted for by each consumer type.

Focusing on those purchases made on deal, Table 3.3 reports the distribution of purchases, according to deal-type, across the three main consumer groups:

Table 3.3 - Distribution of Deal-Type Usage

	"Multibuy"	"Average Deal"	"Normal"
% Exp on deal	48	21	5
Share of Deal	57	23	17
Share of: price off	19	22	55
multibuy	71	24	2
extra free	17	21	59

We see that 57% of deal purchases were by those households classified as "multibuy" households. Focusing on multibuy purchases, we see an even greater concentration of purchasing: over 70% of the purchases on multibuy were made by less than 14% of households. Assuming that the average discount associated with multibuy purchases is the same across all consumer groups, this means that 70+% of the manufacturers' funding of multibuys is going to less than 14% of households! "Normal" buyers, who account for over half of the market, received a mere 2% of the manufacturers' funding of multibuys. This does seem inequitable. Reflecting on the fact that "multibuy" buyers tend to be less brand and store loyal, one must question the logic of manufacturers targeting over 70% of their multibuy promotional spend at such a small group of consumers. The share of promotional expenditures accounted for by each consumer type is less skewed for the price off and extra free promotions.

Shifting our attention to the proportion of each household group's purchases on the three types of deal (Table 3.4), we see that the majority of promotional purchases for the "multibuy" and "average deal" consumer groups are multibuys, while for the "normal" buyers the proportion was less than 10%.

Table 3.4 - Percentage of Deal Purchasing by Buyer Type

	"Multibuy"	"Average Deal"	"Normal"
Price off	3.0	8.6	29.9
Multibuy	92.0	75.7	9.8
Extra free	5.0	15.7	60.3

Table 3.5 shows the buyer types' sharply differing propensities to buy on each of the three deal types (by expressing the above proportions of purchases on the three deal types as an index relative to the proportions for all households).

Table 3.5 - Propensity to Buy on Deal Type
(Index relative to Market Average)

	"Multibuy"	"Average Deal"	"Normal"
Price off	33	95	331
Multibuy	125	103	13
Extra free	29	91	349

"Normal" buyers have a clear propensity not to buy on multibuy. One must wonder whether the roots of this are attitudinal (e.g., they dislike multibuys), behavioural (e.g., they walk past without noticing multibuys), or economic (e.g., they can't afford to stock up on the product). Their greater propensity to make price off and extra free purchases presumably largely reflects the fact that they automatically benefit from such promotions even when they buy their main brand(s) in a loyal manner. On the other hand, the greater propensity of "multibuy" buyers to make multibuy purchases suggests an active search for such deals.

3.5 The Minority Versus the Majority

Table 3.6 summarizes the above information, combining the "average deal" and "normal" buyer groups for simplicity. This "majority" accounts for almost 70% of households, and over 70% of category sales and store turnover. They make only 9% of their purchases on deal, and capture only 26% of multibuy expenditures. On the other hand, the "multibuy" buyers – less than 14% of households – capture over 70% of the manufacturers' expenditures on multibuy promotions.

Reflecting on the escalation of multibuy expenditures over the past three years, and the fact that these monies are being directed at small group of consumers who are less loyal than average, one can't help but wonder whether manufacturers could be spending their promotional budgets in a more equitable, as well as a more efficient, manner. Before exploring this, we briefly review some research on consumers' attitudes towards promotions.

Table 3.6 - The Minority vs. Majority

	"Multibuy"	"Average Deal" + "Normal"
% Households	14	69
Category Share	20	74
Share of Store Turnover	16	72
% Expenditure on Deal	48	9
Share of Deal	57	40
Share of: price off	19	77
multibuy	71	26
extra free	17	80

4. Consumer Attitudes

In order to examine a number of consumer attitudes towards promotions, we draw on a study undertaken by Survey & Marketing Services Ltd for Procter & Gamble. The study was a hall test using self-completion questionnaires run in eight locations across the UK. A total of 839 consumers were interviewed during the last two weeks of June 1996. Some of the questions asked are relevant to the issues explored in this paper.

4.1 Perceptions of Promotional Activity

One topic explored was consumers' perceptions of promotional activity. In particular, respondents were asked whether *"the store in which you do most of your shopping has more special offers than other stores, less special offers, or about the same number of special offers as other stores."* Table 4.1 reports responses by the store in which most of the respondent's shopping occurred, as an index relative to the total survey average. Thus, people who most often shop at Asda were nearly 1.4 times as likely to believe that Asda has more special offers as other stores as the average respondent believes about his/her usual store (index 139). Conversely, Sainsbury shoppers tended not to believe that Sainsbury had more special offers than other stores (index 46).

Table 4.1 - Perceived Frequency of Special Offers

	Index		
	More S.O.	About the Same	AGB Deal Index
Asda	139	83	62
Safeway	100	105	122
Tesco	86	119	107
Sainsbury	46	128	134
Base (%)	28	58	

The right-hand column shows an index of the actual proportion of sales on deal, based on AGB Superpanel data. The AGB deal index refers to the machine wash category whereas the survey numbers relate to all categories. Nevertheless, the figures are remarkable. It was not just that consumers' perceptions did not accurately reflect the actual importance of promotions in their usual store compared with other stores; even more surprisingly, there was a negative relationship between perception and reality.

For example, Asda, whose buyers were the most likely to say it had more special offers than other stores, actually had significantly fewer. The opposite was true for Sainsbury. More research is needed to confirm this result. To the extent that perceptions of promotional activity drive perceptions of overall store value, this mis-match should trouble retailers, although it does suggest opportunities for improvement, especially for Sainsbury.

Shoppers are also confused when it comes understanding how promotions are funded. When asked whether special offers are funded by the store or the manufacturer, 56% chose the store, with only 44% choosing the manufacturer. This should perhaps trouble the manufacturer, who might prefer the consumer to attribute promotions to the manufacturer, thereby building loyalty to his brand - although not if the effect is the opposite, i.e., if repeated promotions reduce brand equity. (Conversely, the retailer may prefer the consumer to feel that promotions are funded by the store, thereby thinking that they are not available in other stores and increasing the shopper's loyalty towards the store.) Closely related to this is the belief that *"products are priced artificially high in order to afford big promotions"* (60% agree/ strongly agree). Such perceptions could prove damaging as manufacturers and retailers seek to position themselves in terms of value.

4.2 Consumer Preferences

Promotions are not as important to most consumers as we might think. 78% of those surveyed expressed agreement (agree/strongly agree) with the statement *"I'd rather they brought the prices down and stopped all those offers."* Similarly, only 18% of those surveyed expressed agreement (agree/strongly agree) with the statement *"if there were no special offers in my usual store for washing products, I'd shop somewhere else."*

Even though consumers are willing to *"buy more than one pack if the offer's good"* (84% agree/strongly agree), the various promotional activities can have negative consequences: consumers are frustrated by promotion-induced stockouts (75% agree/strongly agree that *"it irritates me when my brand is sold out because it was on special offer"*) as well as perceived inequity in promotional activities (47% *"get* *irritated when I buy my usual brand and another brand is on special offer"*). It is also troubling to note that 65% agree/strongly agree that *"there is currently no incentive for being loyal to a brand."*

Finally, when asked to rate various types of special offer from most preferred to least preferred, extra free received the highest rating, followed by price off and then multibuys. In-store coupons were least preferred. Given current promotional practices, this suggests that there is plenty of scope for manufacturers to realign their promotional activities, and explore approaches that encourage loyalty to both the brand and the store. We examine this issue in the next section.

5. Examining Alternatives to Multibuys

Based on the observation that we have seen an escalation in price promotions over the past three years, especially in the depth of multibuys, and that these marketing expenditures are being directed at a small group of consumers who are less brand and store loyal than average, we now explore the issue of whether there are more equitable and efficient ways for manufacturers to spend their promotional budgets.

5.1 Designing More Equitable Promotions

We first consider the issue of equity in the distribution of promotional spend. New technologies such as retailers' loyalty cards represent new opportunities for manufacturers to create promotional tools which reward consumers for brand loyalty, e.g., by issuing bonus points on the basis of brand purchases over a six-month period. This also enables manufacturers to co-develop promotions with retailers to reward both brand and store loyalty. In the following analysis, we simply assume that such mechanisms exist; we leave their creative design to the appropriate marketing and sales executives.

Our aim is to evaluate the impact of cutting back the depth of short-term price promotions by a fixed amount, and returning a proportion of the savings to consumers via longer-term promotions (e.g., linked to loyalty cards). The purpose of the analysis is to demonstrate some of the potential consequences of a de-escalation in promotional activities, and to challenge readers to think of the possibilities associated with the redesign of their organization's promotional activities.

The approach we take is to view the year ending June 1996 as a "base year" and examine the likely changes in market behaviour given a few simple assumptions. Specifically, we compute expected sales under the new promotional regime and the associated savings for the manufacturer. This money is then redistributed to consumers, and we compute the average change in total spend for each buyer type. The exact details of the calculations are described in Appendix B.

5.2 A "What-if?" Scenario

Let us first assume that the average price off discount was 20%, the average multibuy discount was 30%, and the average extra free discount was 20% (i.e., 25% extra free). Suppose there was a unilateral move on the part of all manufacturers whereby they halved the value of their price off and multibuy discounts (to 10% and 15%, respectively), and that there was no trade reaction. (It is assumed that there is no reduction in the format of extra free packages due to manufacturing constraints, and therefore no change in the equivalent price discount.)

Next, we have to make some assumptions regarding the reduction in promotional sales following the reduction in discount values. Let us

i)condition our analysis on a stated reduction in promotional sales associated with the reduction in average price discounts, and

ii) assume that the purchases which replace the dropped promoted purchases are made at price levels the same as the non-promoted price of the same brand which would have been purchased on promotion (as opposed to switching to a lower price-tier brand).

More specifically, let us assume that halving the discount levels for price offs and multibuys results in a 40% reduction in promotional sales volume for each promotional type.

Under these simple assumptions, we would observe the following purchasing patterns for each of the five consumer groups (Table 5.1).

Table 5.1 - Purchasing Patterns Under New Promotional Regime

	"Multibuy"	"Average Deal"	"Normal"	"Budget"	"Light"
Avg Spend on: price off	0.46	0.53	0.33	0.15	0.03
multibuy	15.10	5.06	0.12	0.69	0.44
extra free	1.13	1.44	0.98	0.23	0.22
Avg Total Spend	52.99	46.78	31.47	21.37	5.41
% Increase (*vs*. act 1995-6)	13.6	5.0	0.4	1.5	3.6

(Note that under the assumption that the average discount for each promotion type is the same across all consumer groups, each groups' share of purchases by deal type remains the same as the figures reported in Table 3.4.) These reductions would free up £128.55/100HHs, or a total of approximately £29m in retail terms.

Let us assume that the manufacturers decided to return all of this saving directly to consumers via longer-term promotions (e.g., a loyalty card-based scheme or a reduction in base price). We assume that the savings are redistributed on the basis of each household's category purchases. Over the year ending June 1996, this would correspond to just under 4 pence in the pound.

Table 5.2 - Revised Expenditures and Allocations

	"Multibuy"	"Average Deal"	"Normal"	"Budget"	"Light"
% Households	13.7	13.6	55.8	6.6	10.3
Avg Reallocation	2.05	1.81	1.22	0.83	0.21
Avg Category Spend	50.93	44.97	30.25	20.54	5.20
% Increase/Decrease (*vs.* act)	9.2	0.9	-3.5	-2.4	-0.4
Share of Promotional Exp	33	21	41	3	2

From Table 5.2 we see that "multibuy" buyers receive the greatest "refund" (£2.05), as they are heavy category buyers. This, however, does not compensate them for the decrease in multibuy and price off discount levels; their average category expenditure increases by 9.2%.

On the other hand, since "normal" buyers made hardly any purchases on deal, they are more than compensated for the reduction in discount levels; they are now spending 3.5% less on the category. What is encouraging is that we now have a far more equitable distribution of the manufacturers' promotional expenditures. Whereas "multibuy" buyers (14% of households accounting for 20% of category sales) used to capture 57% of total promotional expenditures, their share has dropped to 33%: still far more than their share of category sales but to a much lesser extent than now. Under the old promotional regime, "normal" buyers received only 17% of the manufacturers' promotional expenditures; this has now risen to 41%, much closer to their 55% share of category purchases. This is clearly a more equitable scenario, and through the appropriate design of the reallocation mechanisms, could encourage loyalty to the brand and the store.

Other scenarios could be examined. For example, rather than redistributing all of the savings directly to the consumer, say 25% could be held back and invested in media advertising, product development and other long-term brand building activities.

5.3 The Impact of a New Promotional Regime on Efficiency

Aside from the above equity and loyalty benefits, there are number of cost savings that would naturally flow from a de-escalation of deep-discount multibuy and price off promotions. Even if this de-escalation involved no reduction in the frequency of promotions but merely a reduction in the discount value (as in the above analysis), we would see a smoothing of the standard sales patterns.

The benefits to the manufacturer of this reduction in the variance of sales include lower inventories of raw materials and finished goods (with a reduction in working capital), improved production coordination, reduced overtime, more efficient use of warehouse facilities (and possibly a reduction in the need to use outside storage), and more efficient management of the process of distributing the product to the retailers' distribution centres.

From the retailers' perspective, there are a number of benefits associated with less fluctuating sales rates. There should be a reduction in the need to store large amounts of product before and during promotions, with clear impacts on storage, financing, and handling costs. Additionally, there should be less disruption of work in the retailers' distribution centres. In the store itself, the likelihood of stockouts should be reduced, thereby minimizing the problems of customer dissatisfaction and lost purchases. Moreover, in-store personnel can be freed from some of the burden of managing the implementation of these promotions.

Without access to commercially confidential company information, we cannot quantify the cost savings associated with improved efficiency of the logistics system. However, viewing the development of more efficient promotional strategies as a part of category management and ECR initiatives, we can reflect on the cost savings presented in the

ECR literature. In particular, we consider some figures from the value chain analysis conducted by Coopers & Lybrand as part of the ECR Europe project.

In a study of fifteen product categories (including machine wash), expected cost reductions attainable through the implementation of ECR were estimated to average 5.7% of consumer retail price, with 4.8% stemming from reduced operating costs and the remaining 0.9% attributable to a reduction in inventory costs. Almost 30% of the operating cost reductions result from optimized promotions and synchronized production; in the case of inventory reductions, synchronized production accounts for 40% of the savings. In all, Coopers & Lybrand estimate that savings of approximately 1.8% of retail price can be obtained through optimized promotions and synchronized production. In order to realise such benefits, all parties in the supply chain would need to cooperate. Whilst we would not claim that a re-thinking of promotional activities along the lines of those previously discussed would lead to savings as high as this, they do indicate the scale of savings available.

Clearly, further work is needed in order to appreciate how a de-escalation of promotional activities contributes to the widely touted potential savings associated with the implementation of ECR This lies beyond the scope of this study.

6. Other Categories

Our analysis of the impact of current promotional practices and the possible consequences of changes in these activities has focused on the machine wash category. A natural question is how generalizable are the ideas discussed in this paper? This can be addressed in two stages:

i) do we observe similar levels of inequity in the allocation of promotional expenditures in other mature categories where there is little scope for promotion-induced increases in total annual consumption, and

ii) do we observe similar levels of inequity in the allocation of promotional expenditures in categories for which there may be scope for increases in total annual consumption?

6.1 Instant Coffee and Yellow Fats

In order to partially answer the first part of this question, we re-examine the results of an analysis, similar to that presented in Section 3, commissioned by ITV and presented at BAFTA, 17 July 1996. In addition to machine wash, two other major high-penetration consumer categories – instant coffee and yellow fats – were examined. The classification of consumers differs slightly from that used in our study in that households were classified according to the proportion of their total category expenditure made at promotional prices (i.e., including price offs and extra free as well as multibuy). Therefore, the “multibuy” group of buyers becomes the “deal prone” group. All the other buyer group names remain the same.[3]

The results for instant coffee are similar to those for machine wash. For the 1995 calendar year, 17% of total expenditure was on one of the three deal types previously considered (versus 15.6% for machine wash over the same period). Moreover, multibuys were the dominant form of promotional tool, accounting for 71% of deal purchases. Price off and extra free deals accounted for 19% and 10% of deal purchases, respectively. Turning our attention to the consumer, and using the same rules for categorizing households, we observe very similar distribution patterns (Table 6.1).

[3] Note that our group names are not exactly the same as those used in the ITV report.

Table 6.1 - Instant Coffee: The Minority vs. Majority

	"Deal Prone"	"Average Deal" + "Normal"
% Households	14.4	62.1
Category Share	23	73
% Expenditure on Deal	48	8
Share of Deal	62	35
Share of: price off	44	53
multibuy	68	28
extra free	50	47

The inequitable allocation of promotional resources is similar to that observed in the machine wash category. Moreover, "deal prone" buyers again have the largest brand portfolios, suggesting less brand loyalty than other consumers. Finally, the "normal" buyers account for over 40% of households, yet only make 2% of their purchases on deal, and receive a mere 3% of the manufacturers' funding of multibuys.

Table 6.2 presents the equivalent analysis for the yellow fats (butter and margarine) category.

Table 6.2 - Yellow Fats: The Minority vs. Majority

	"Deal Prone"	"Average Deal" + "Normal"
% Households	16.6	80.7
Category Share	19	79
% Expenditure on Deal	22	4
Share of Deal	57	43
Share of: price off	55	44
multibuy	60	41
extra free	70	29

Whilst this category is less promotion intensive than machine wash and instant coffee (only 7% of expenditure on deal) and the mix of promotional tools is quite different (price off accounts for 73% of promotional expenditure), we again find a highly inequitable distribution of the manufacturers' promotional spend, with 17% of households receiving 57% of the spend.

As reported in the original ITV presentation, the "deal prone" buyers are not an economically disadvantaged group of consumers. (Whether we can say that it is almost the same group of consumers across the three categories who are benefitting from these promotions is beyond the scope of this analysis and could be examined in future research.) Future research may wish to examine the applicability of the proposals outlined in this report to these two categories.

6.2 Low-Penetration and Price-Elastic Categories

Clearly, the strategies explored in Section 5 are not necessarily desirable in all categories. In particular, for low-penetration categories (e.g., yoghurt drinks) where there are no "natural" barriers to increased penetration (cf., disposable diapers), promotions may play an important role in increasing consumer acceptance of the product category, and the negative aspects of promotions we observe in the machine wash category are unlikely to hold to the same extent.

Also, in many other categories, even mature categories with high household penetration, there may be scope to create incremental household consumption via promotions (e.g., chocolate, crisps, fresh fruit juice). Clearly promotions can be a "good thing" in such categories. Moreover, as we have not documented either the trends in promotional activity or the concentration of promotional purchases for such categories, we are not in a position to comment on the wisdom of changing current marketing practices. Such further research should be a priority.

7. Conclusion: Taming the Multibuy Dragon

The aims of this study were to better understand the nature and consequences of current promotional activities, with a particular focus on the machine wash product category, and to explore possible avenues for marketing managers to develop more equitable and/or efficient promotional strategies.

Over the past three years, turnover in the machine wash category has decreased by 8.4% in money terms – approximately 13% in real terms. The primary cause of this decline is a 6.1% reduction in the average price paid, mainly resulting from an increase in deep-discount price promotions. By the year ending June 1996, 16.4% of consumers' expenditure on machine wash products was on some form of price deal. Within this category, multibuy promotions are the dominant promotional tool, accounting for 73% of deal purchases. The past three years have seen a doubling in manufacturers' funding of multibuy promotions.

With so much money spent on one promotional tool, we explore what is happening with this expenditure. Turning our attention to the consumer, we see that a mere 13.7% of households account for 57% of purchases on deal and 71% of multibuy purchases. Assuming that the average discount associated with multibuy purchases is the same across all consumer groups, this means that 71% of the manufacturers' funding of multibuys is going to just 14% of consumers! On the other hand, over half of the households receive a mere 2% of the manufacturers' funding of multibuys. This clearly is not equitable. Moreover, the "multibuy" buyers tend to be less brand and store loyal, bringing into question the logic of manufacturers targeting over 70% of their multibuy promotional monies at such a small and disloyal group of consumers. Additionally, current practices need to be re-evaluated in light of consumer attitudes towards promotions (see Section 4).

In light of this, in Section 5 we explored a scenario in which there was a unilateral move on the part of all manufacturers whereby they halved the value of their price off and multibuy discounts, and there was no trade reaction. Given some simple assumptions regarding the reduction in promotional sales following this de-escalation in the depth of promotional discounts, and the redistribution of the associated savings in promotional expenditures, we project a far more equitable distribution of promotional expenditures. The "multibuy" buyers' share of promotional expenditures drops from 57% to a more acceptable 33%. In addition to equity improvements, there is also scope for improvements in the efficiency of logistics systems.

Examining some recent research commissioned by ITV, it is clear that these results are not specific to the machine wash category. However, further work is required to understand the equity and efficiency of promotions, especially in product categories that are less mature and/or able to have their usages rates temporarily increased. We hope that this report motivates organisations to examine whether their promotional activities can be redesigned in such a manner so that the majority of consumers are better off, and that both manufacturers and retailers can improve the efficiency of their systems. We believe that deep price promotions – especially multibuys – have recently escalated almost out of control and that it is time to tame this particular dragon.

Appendix A
Details of Calculations for Consumer Classification

In the analysis presented in Section 3, the households in the AGB Superpanel were classified as belonging to one of five groups of buyers according to their purchasing patterns. Allocations to the “multibuy”, “average deal” and “normal” groups were on the basis of their deviation from their expected purchasing on multibuy deals. These *household-level* averages and standard deviations are computed in the following manner (based on documentation provided by Taylor Nelson AGB).

Assuming it is not a “light” or “budget” buyer, a household’s expected multibuy purchasing is based on where it shops and what proportion of sales in each store was on multibuy. Suppose for a given household that 70% of its machine wash purchases last year were made in Sainsbury and the remaining 30% in Tesco. Suppose that the percentage of all machine wash purchasing on some form of multibuy-based deal in Sainsbury and Tesco is 15% and 10% respectively. The expected proportion of spend on multibuy for this household is therefore (70% × 15%) + (30% × 10%) = 13.5%.

If this household made 10 purchases over the course of the year, the standard deviation of the expected spend proportion can be estimated by the binomial distribution formula:
sigma~=~ sqrt{p(1-p)/n} which is 10.8% for this example. If the household’s actual proportion of purchasing on multibuy deal was greater than p+ = 24.3% then it will be classified as a “multibuy” buyer, if the proportion was less than p = 2.7% it is classified as a “normal” buyer, and if it was between 2.7% and 24.3% it is classified as an “average deal” buyer.

Appendix B
Details of Calculations for "New" Promotional Regime

This appendix explains the detailed calculations used in the analysis presented in Section 5.2. In order to examine the impact of changes in promotional activity, we compute the projected impact for each of the five buyer types, then aggregate to the total market. This appendix gives step-by-step details that show the logic of the calculations for the "multibuy" buyer group; the calculations for the remaining groups naturally follow.

From the base AGB Superpanel analysis, we know that the average "multibuy" household's spend in the machine wash category for the year ending June 1996 was £46.65, 48.3% of which was on deal. The distribution of its deal purchases across the three deal types was 3% on price off, 92% on multibuy, and 5% on extra free. This corresponds to the following sterling values:

	£
Price off	0.68
Multibuy	20.73
Extra free	1.13
Non deal	24.12

Now the average discount for price off deals is given at 20%. Therefore, the non-deal value of these purchases is £0.68/(1 0.20) = £0.85. This implies that deal purchases are being funded by the manufacturers to the extent of 17 pence (85p minus 68p). Similarly, the non-deal value of the multibuy and extra free purchases are £20.73/(1 0.30) = £29.61 and £1.13/(1 0.20) = £1.41 respectively, indicating manufacturer funding to the extent of £8.88 and £0.28 respectively. Therefore, manufacturers have been funding the average "multibuy" buyer's purchases to the extent of £9.33.

Under the proposed new promotional plan, the average discounts for price off and multibuy deals would drop to 10% and 15% respectively, leading to an assumed 40% reduction in these promotional sales. Considering that the multibuy sales were previously worth £29.61 at non-deal prices, 40% (valued at £29.61×0.40 = £11.84) become non-deal sales, whilst the remaining 60% are now sold to the consumer at a discount of only 15%; therefore, the average "multibuy" consumer now pays £29.61×0.60×(1 0.15) = £15.10 on multibuy with the manufacturers' funding equalling £29.61×0.60×0.15 = £2.66. Similar calculations for the price off purchases previously worth £0.85 results in £0.34 becoming non-deal purchases, with the on-deal purchases costing the consumer £0.46, reflecting manufacturers' funding to the level of 5 pence. Note that the assumed 40% reduction in sales *volume* associated with the halving of the average discounts for price off and multibuys corresponds to a *value* reduction in sales on each deal type of 33% and 27%, respectively.

As we assume no reduction in the implicit discount associated with extra free deals, there is no change in consumer expenditure on this deal type. The breakdown of an average "multibuy" buyer's purchasing is now as follows:

	£
Price off	0.46
Multibuy	15.10
Extra free	1.13
Non deal	36.30
	52.99

This means that the average "multibuy" buyer's expenditure in the machine wash category has increased by 13.6% to £52.99. The manufacturers' funding of the deal purchases has dropped from £9.33 to £2.99, representing a saving of £6.34 per "multibuy" household.

Replicating this analysis for the other four buyer types, the total manufacturers' savings/100HHs associated with the new promotional plan is simply created by multiplying the number of households for each deal type that could be expected in a sample of 100 households by the savings associated with each deal type (13.7×£6.34 in the case of "multibuy" buyers). As noted in Section 5.1, this equals £128.55/100HHs.

Reallocation of these "savings" in promotion expenditure is assumed to be proportional to the total value of each household's category purchases. Under the new promotional regime, total category purchases amount to £3315.15/100HHs, suggesting a “refund” of 3.878 pence for every pound spent on machine wash (£128.55/£3315.15). Consequently the “multibuy” household would be reimbursed £52.99×0.03878 = £2.05, bringing its average category spend for 1996 to £50.94, which represents an increase of 9.2% over the actual spend in 1995-6. The total amount of manufacturers’ promotional funds allocated to the average “multibuy” buyer is £2.99 + £2.05 = £5.04.

Replicating this analysis for the other four buyer types, we can then calculate each buyer type’s share of promotional expenditures (Table 5.2).

These assumptions have been built into a spreadsheet model.