

Designing Appropriate Remedies for Competition Law Enforcement: The Pioneer Foods Settlement Agreement

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Abstract

This paper critically discusses the use of remedies in pursuing distributive justice through the restoration of competition, deterrence and disgorgement. The paper addresses more specifically the design and objectives of the Pioneer Foods settlement agreement. The remedies that were concluded with Pioneer Foods constitute a major measure of 'success' in the enforcement of competition law in developing countries. They included, among others, an administrative fine as well as a commitment to reduce margins on the sale of flour and bread over an agreed period designed to stimulate rivalry while at the same time enabling smaller non-vertically integrated participants to compete in bread. The paper also evaluates and demonstrates the impact of the discount remedy, using a comparative approach.

Keywords: Antitrust, Cartels, Fines, Remedies, Settlement Programs

JEL classification: L13, L40, L41, L66

1. Introduction

The pursuit of distributive justice is eminently permissible if not compelled by South African competition law and its unique responsiveness to issues of distributional equity and fairness. The Competition Commission ("Commission") has several special mandates, among others, to promote efficiency, adaptability and development of the economy; to provide consumers with competitive prices and product choices; to promote employment and advance the social and economic welfare; and to ensure that small and medium sized enterprises have an equitable opportunity to participate in the economy. The goal of South African competition law is not only to enhance total economic efficiency, in which case the pursuit of distributive justice would be by assumption a waste of resources. Competition law is, at least in part, concerned with avoiding wealth transfers from consumers to cartel firms. The pursuit of distributive justice through restoration of competition, compensation and disgorgement is a legitimate task for competition law enforcement.

The concluding of complex remedial schemes has brought the issue of appropriate remedies for competition law violations to the centre of the attention of competition law policy makers, enforcers, practitioners and academics in South Africa. With Pioneer Foods admitting to its involvement in milled wheat and milled white maize cartels as well as engaging in general exclusionary conduct, there was little suspense over the existence of most egregious offences in competition law and the subsequent harm to consumers and competition. The main concern expressed related to the Commission's exercise of discretion in crafting appropriate remedies. Some argued that the Commission exceeded its authority when entering into the agreement with Pioneer Foods,² others were more measured in their

¹ The authors are respectively Deputy Commissioner and Principal Investigator at the Competition Commission South Africa. The views expressed in this paper are strictly ours and should not be taken as reflecting the views of the Competition Commission. This paper is presented at the Fifth Annual Competition Law, Economics and Policy Conference in South Africa: 4 & 5 October 2011.

² The National Treasury Department made an application to intervene in the Tribunal questioning the settlement agreement's validity and the Commission's authority to conclude it.

judgment.³ In its pursuit of innovative approaches to remedies, the Commission put itself in a difficult position of engineering remedies to achieve specific market outcomes.⁴

The remedies that were confirmed by the Competition Tribunal (“Tribunal”), are a major measure of ‘success’ in the enforcement of competition law in developing countries. They included, among others, a fine of R 500 million part of which by agreement was set aside for the creation of an Agro-processing Competitiveness Fund (“Agri-fund”), a commitment not to reduce capital expenditure as well as a commitment to reduce prices on the sale of selected flour and bread products over an agreed period. The creation of the Agri-fund was aimed at lowering the barriers to entry into the agro processing industry, while the price reduction and capital expenditure commitments seek to constrain Pioneer Foods, compensate and disgorge some of its profits to the benefit of consumers and improve the competitive dynamics of the relevant markets.

The settlement agreement included, among others, stopping the conduct in contravention of the Competition Act (“Act”) of 1998, the restoring competition in the relevant markets, compensating victims, disgorging illicit profits and deterring future misconduct by Pioneer Foods and other firms. Restoring competition should not be interpreted as an attempt at reaching perfect competition which is practically unattainable but rather restoring the market to conditions that would have existed in the absence of the anticompetitive conduct. Time has been relatively short since the implementation of remedies in the Pioneer Foods settlement agreement to be able to proffer a well substantiated judgement on its success. As such, we will not assess the impact of the capital expenditure commitment. However, we note that Pioneer Foods has not reduced its capital expenditure to date. In fact, it has committed to build a new biscuit factory.⁵ In general, we will not evaluate the deterrence effects of the settlement agreement on Pioneer Foods, although there is reference to fines and deterrence.

This paper focuses on the price reduction commitment. In order to make a relatively informed assessment of the impact of the price reduction commitment, we use two comparative approaches. First, we refer to the example of soaring food prices globally, not only to add a comparative perspective but also because South Africa is not immune to global increases in food prices. South Africa is a relatively small player on the world market and wheat is internationally traded, commodity prices are subject to global price movements after taking account of transport costs. Generally, wheat prices are around import parity, reflecting the fact that South Africa is a net importer of wheat. Secondly, we evaluate prices and sales only in the market at issue, comparing prices (and sales) in the remedy period to available prices (and sales) before and after the period of impact.

³Trade Unions, NGOs and the National Department for Economic Development came in support of the Commission.

⁴ For example, the Minister of the National Department for Economic Development pronounced proudly in the National Parliament that, “This settlement shows the resolve of the competition authorities to act swiftly and effectively to promote a competitive food-processing sector. ... For this reason, both structural and behavioural measures are important to bring in new players along the value chain. The new, pro-active stance of the competition authorities, coupled with a strong investigative capacity, makes it harder for companies to escape with anti-competitive conduct.” Statement on the Competition Commission investigations. 2 Nov 2010.

⁵ See ‘Pioneer Foods has ambitious plans for biscuit market’ Business Report, 17 August 2011. Available at <http://foodstuffsa.co.za/index.php/news-stuff/latest-sa-news/1362-pioneer-foods-has-ambitious-plans-for-biscuit-market>

While complex and far reaching, the Pioneer Foods settlement agreement raises interesting questions. What is an appropriate and suitable remedy? Does the appropriateness test require a fit between the theory of harm and the type of remedy imposed? Is there a limit to the Commission's exercise of discretion in crafting remedies? All these important questions are discussed in Section 2. Section 2 therefore explores the design of the Pioneer Foods settlement, focusing on the relationship between the narratives of harm and the consequent choice of the remedies. Section 3 evaluates and provides some evidence of the effectiveness of the price reduction commitment remedy. Section 4 concludes.

2. Designing Appropriate Remedies in Pioneer Foods Settlement

2.1. The "Appropriateness" Standard

Competition law remedies perform several different objectives, such as putting an end to the violation of competition law and preventing its recurrence, restoring competition, deterrence, compensation and disgorgement of illicit profits. Section 49D(1) of the Act provides that, if the Commission and a respondent "agree on the terms of an appropriate order", the Tribunal may confirm the agreement as a consent order. An "appropriate" consent order is one which is "suitable", that is, "suitable in the sense that it is an agreement that suits the contending interests of the Commission, as the proxy of the public interest, and the respondent, and in that sense, can be appropriate as between themselves".⁶ However, Section 58(1)(a) does not provide an exhaustive list of the kinds of orders which the Tribunal may make. Whatever remedy imposed must be "appropriate". The principle of appropriateness constitutes an important limit to the Commission's discretion in imposing remedies.

The Tribunal is required to be satisfied, when confirming a consent and settlement agreement. This therefore means that remedies agreed by Commission and a respondent do not exceed the limits of what is appropriate and suitable. In a sense, the appropriateness of a particular remedy differs from a cost-benefit analysis which focuses only on the gravity of harm and the alternative remedies that might be imposed. The appropriateness and suitability character of remedies requires remedial measurement, not only with regard to the magnitude and scope of the harm to consumers, competition or the nature of the infringement, but also in relation to the type of violation that was identified. This would cover not only a particular competition law prohibited practice, but also the theory of harm advanced in the specific case. Remedies need to be effective in pursuit of their objectives. The principle of appropriateness requires a fit between the harm and the remedy.

The Commission's discretion in crafting remedies is very wide allowing it to address various aims and objectives of the Competition Act subject of course to the appropriateness test. Essentially the appropriateness test is an objective test and is thus justiciable.

2.2. The Narratives of Harm

This section briefly discusses the conduct and theories of harm which led to the confirmation of the settlement and its specific provisions.⁷ Until the 1990s the marketing of agricultural products in South Africa, including grain products, was extensively regulated by the state

⁶ The Competition Commission v SAA and others. Case number 83/CR/Oct04 paragraph 47.

⁷ See Competition Tribunal, case number 15/CR/Mar10, Competition Commission vs. Pioneer Foods (Pty) Ltd, 30/11/2010, available at <http://www.comtrib.co.za/cases/consent-order/>

through the Marketing Act of 1937 (consolidated in the Marketing Act of 1968). After deregulation in 1996, while direct controls were removed, it appears that extensive private anti-competitive arrangements, replaced the public controls. In December 2006 the Commission received information of an alleged bread cartel that was active in the Western Cape. The Commission initiated a complaint against Premier, Tiger Brands, Foodcorp and Pioneer Foods, all of whom allegedly had been involved in the bread cartel. The four companies are the biggest in many food product markets and are vertically integrated into flour and bread production. Premier applied for leniency in terms of the Commission's Corporate Leniency Policy (CLP), during which it revealed that bread and milling cartels operated in parts of South Africa and admitted to its involvement. Premier's leniency application was corroborated by a further leniency application from Tiger Brands. Tiger Brands also admitted to their involvement. Subsequently, Foodcorp also admitted to their conduct and settled with the bread case with the Commission.

After contested proceedings and on 3 February 2010 the Tribunal ruled that Pioneer Foods had engaged in fixing the price of bread products in the Western Cape province and nationally, imposing on Pioneer Foods a fine of R196 million. Following this Pioneer Foods approached the Commission with the intention of settling all the other cases that had been referred to the Tribunal for adjudication or that were currently under investigation by the Commission in which it was a respondent. The following is a brief description of some of the markets damaged by Pioneer Foods' anti-competitive conduct which formed part of the agreement.

Of the several complaints that formed a part of the agreement, two had been referred by the Commission to the Tribunal for adjudication. The first referred complaint related to the white maize products cartel. The cartel included all the major players in the milling of white maize meal including Tiger Brands, Pioneer Foods, Foodcorp and Premier. The Commission's investigation revealed that at various stages during the period 1998 to at least 2007 the respondents engaged in price fixing arrangements in contravention of section 4(1)(b)(i) of the Act. The respondents attended numerous meetings and held telephone conversations in which they agreed at both national and regional levels *inter alia* to fix the price of white maize products, to create uniform price lists for wholesale, retail and general trade customers and to the timing of price increases and the implementation thereof. Through these price fixing arrangements, Pioneer Foods and its competitors prevented and/or limited price competition amongst themselves in relation to pricing of white maize products. Pioneer Foods admitted that it contravened section 4 (1) (b)(i) of the Act for this conduct.

The second referred complaint related to milled wheat products cartel. The Commission alleged that Premier, Tiger Brands, Pioneer Foods, Foodcorp and Godrich Milling had engaged in collusive activities in the wheat milling industry. Representatives of the firms had attended numerous meetings and held telephone discussions in which they agreed at both national and regional levels *inter alia* to fix the price of milled wheat products, to create uniform price lists for wholesale, retail and general trade customers, to the timing of price increases and the implementation thereof and the allocation of customers between the firms. This conduct was in contravention of section 4(1)(b)(i) and (ii) of the Act. The agreements concluded at these meetings were used by Pioneer Foods and its competitors to secure co-ordination at both national and regional levels and were mutually reinforcing. Pioneer Foods admitted that it contravened section 4 (1) (b)(i) of the Act for this conduct.

Following the uncovering of the cartels in bread and milling, the Commission also initiated an information exchange case involving the wheat milling members of the National Chamber of Milling (NCM) and the South African Chamber of Baking (SACB). The Commission was concerned that it was not observing competitive outcomes even after having uncovered cartels in the industry. The Commission's investigation revealed that the respondents, which included Pioneer Foods, submitted to and received commercially sensitive information from the SACB and NCB. This investigation is currently on-going, but the respondents have agreed to cease the conduct pending the outcome of the investigation.

In December 2008 the Commission initiated a complaint against Pioneer Foods in respect of allegations that it was engaged in exclusionary predatory pricing conduct. The initiation was pursuant to an initial complaint brought forward by Mossel Bay Bakery, an independent bakery. According to Mossel Bay Bakery, Pioneer Foods engaged in a predatory price conduct, charging prices for bread below cost with the intention of eliminating Mossel Bay Bakery from the market. The Commission's investigation revealed that Pioneer Foods was dominant in several markets and that during 2002 to 2004 and during 2007, Pioneer Foods had indeed priced below cost. Pioneer Foods admitted to threatening competitors with predatory conduct in several towns within the Western Cape province and introducing fighting brands in order to protect its market share in areas where it was facing competition. These fighting brands will be pulled out as once a competitive threat had been removed. This conduct excluded small independent bakeries from competing effectively and allowed Pioneer Foods to build a reputation for fighting entry across markets and time. Pioneer Foods admitted that its conduct may have impeded small independent bakeries from expanding within the market and competing effectively, in contravention of section 8 (c) of the Act for this conduct.

The narrative of harm as a result of Pioneer Foods' conduct is clear. Cartels have pernicious effects on poor consumers despite the obstacles created by legal prohibitions on collusion and individual firm's incentives to compete rather than to collude. For South African consumers, bread is a staple food and flour is a major input into bread, the direct cost of a cartel is plain: prices are high and there is reduced product choice (if there is customer allocation and/or if the cartelised product is differentiated) as a result of a cartel.

2.3. The Consequent Choice of the Remedial Approach

The Pioneer Foods settlement agreement has, among others, the purpose of enhancing and restoring competition in the relevant markets. The agreement sought to promote competition in pursuit of the objectives and purposes of the Act.

Pioneer Foods undertook in terms of the proposed settlement agreement to:

- Desist from the conduct which infringed or might infringe the Act, continue its compliance programme to prevent future infringements and co-operate with the Commission in its prosecution of others.
- Pay a fine of R500 million to the National Revenue Fund. In addition, the Commission, National Treasury and the Economic Development Department separately agreed that the Economic Development Department would submit a budgetary proposal and business case motivating for the creation of an Agro-

processing Competitiveness Fund of R250 million drawn from the penalty to be administered by the Industrial Development Corporation (IDC).

- Adjust the prices of certain of its products for an agreed period of time so as to reduce its gross profit by an amount of R160 million.
- Maintain its capital expenditure and increase it by an amount of R150 million.

These commitments and the fine excluded the earlier fine of about R196 million in relation to Pioneer Foods' involvement in the bread cartel. The fine of R500 million amounted to about 5.6 % of Pioneer Foods' Sasko turnover in 2009. The fine was in essence in respect of Pioneer Foods' admitted involvement in the white maize meal and milled wheat products cartels. In respect of the exclusionary conduct case, Pioneer Foods admitted to the conduct as being in contravention of section 8(c), for which there would be no penalty for a first contravention. Pioneer Foods' admitted anti-competitive conduct involved products affecting all South Africans and especially the poor, for whom bread and maize meal are staple products. The effect of the conduct was inherently harmful to consumer welfare.

Pioneer Foods' conduct affected the structure of the relevant markets. This conduct, coupled with the legacy of the previous regime with its sanctioned cartels, created an environment which did not encourage or facilitate entry. The Commission regarded it as its mandate, not just to address the cartel conduct through punishment and deterrence, but also the address of structure of these markets through the Agri-fund. The Agri-fund is aimed at facilitating new entry into the value chain in the agro-processing industry and specifically by small to medium enterprises which are also the domain of historically disadvantaged South Africans. This fund thus enables the Commission to meet a number of its policy objectives: creating a more efficient and effective agro-processing sector and ensuring the participation of historically disadvantaged South Africans in the economy.

Although the bread baking industry in South Africa is characterised by low exogenous barriers to entry, the existence of the cartel in flour mitigated the ability of independent bakers to enter and expand within the industry. Premier, Tiger Brands, Pioneer Foods, Foodcorp account for more than 95 % of the milled flour market, at the same time their collectively dominate the downstream bread market. In other words, consumers were faced with essentially a vertically integrated monopoly, that is, an upstream flour cartel and a downstream bread cartel. Predatory conduct was also used to create artificial barriers to entry. The crafting of the remedy was thus set out to undermine the anti-competitive environment created by cartel conduct involving Pioneer Foods. It aimed to introduce competition and instability into historically stable markets to the benefit of consumers.

The pricing reduction commitment was intended to not only compensate consumers but also to undermine the effects of Pioneer Foods' admitted anti-competitive conduct on prices in the relevant markets. Prices of flour, maize meal and bread products went up as a result of collusion and strategic behaviour and have been sticky downwards following the uncovering of this anticompetitive behaviour as has been evident particularly with regards to bread prices (see Figure 2 in section 3). The Commission sought to achieve through the price reduction commitment, a direct benefit to consumers as well as to stimulate more intense rivalry in the market. The price reduction commitment was also designed to stimulate rivalry while at the same time enabling smaller non-vertically integrated participants in bread.

The commitment to increase approved capital expenditure by an additional amount of R150m was aimed at increasing Pioneer Foods' output for certain product lines as well as to contribute to the creation of jobs. The Commission was concerned about the impact of the settlement agreement, in the context of the economic recession, that Pioneer Foods might use it to justify job losses and reduced output.

3. A Critical Assessment of the Effectiveness of the Pioneer Foods Remedies

In this section we focus on evaluating the impact of the price reduction commitment remedy. Consumers were harmed by the conduct of Pioneer Foods and others. To partially compensate consumers for their injury, Pioneer Foods committed to reduce its prices of selected standard bread and flour products for a limited period of time up to the value of R160 million. We demonstrate using a simple analytical framework that such discount remedies result in a deadweight loss by inducing excessive consumption by consumers, however, we do not compare the magnitude of the loss to that caused by the cartels. We also demonstrate the impact of this remedy on prices and sales before and after the remedy. But first, we discuss the impact of settlement programs and fines on deterrence.

3.1. Settlement Programs

Settlement programs generate clear and significant benefits. First, they reduce legal costs for both the competition authorities and respondent firms. They allow for speedy resolution of disputes outside the formal litigation route, but their outcomes have a force of law. The added benefit for consumers is that the conduct will cease earlier than it would be the case if the respondent firm defended the matter whilst continuing with the conduct. For the respondent firm the added benefit is to put the matter behind it and focus on running the business. Competition law transgressions consume a lot of management time and attract bad publicity. For settlement programs to work, all parties must see the benefits. It is for this reason that administrative penalties in settlements should generally be lower than fines the case would attract if it was litigated. In other words the firms must know that if they don't settle they are likely to be successfully prosecuted and fined heavily. Settlements therefore reduce the expected penalty paid by competition law violators.

Pioneer Foods could have been fined at least up to 10% of turnover for its involvement in each of the two cartels in which it admitted involvement (the white maize milling cartel and the wheat milling cartel). In other words, Pioneer Foods would not have settled unless the settlement payment was less than the expected cost of pursuing the Commission's referrals through adjudication, trial and appeal. Such outcomes lead, other things the equal, to reduced deterrence. Polinsky and Rubinfeld (1989) offer one illustration of this point, using a model in which the injuring party settles only if the settlement leads to a reduction in the expected penalty plus the expected cost of litigation. While an exact balancing of the costs and benefits of a settlement program is undoubtedly difficult, settlement programs do generate improved deterrence within the constrained, limited enforcement budget as is the case in South Africa.

A settlement program communicates to others the benefit of settling early rather than at a later stage. The need for speedy resolution has implications for the costs of litigation. In this case, Pioneer Foods only came forward with a settlement proposal after having been fined

for its involvement in the bread cartel and four years after being made aware of the Commission's investigation.

3.2. Fines and Deterrence

The literature on fines points out that fines deter cartel violations in a number of ways.⁸ First, fines may have a deterrent effect, by creating a credible threat of being prosecuted and punished. This raises the expected costs of a cartel above the expected benefits. Second, fines may have a moral effect, in that they send a message to the spontaneously law-abiding, reinforcing their moral commitment to the competition law prohibitions (see Wils, 2006). In addition, fines have disgorgement of the unjust profits as one of their effects in that the proceeds of fines normally go into the public budget rather than to the victims of the cartel violations. It could be argued also that fines contribute to the pursuit of distributive justice through compensation in an abstract and indirect way, of course, if one assumes that the restoration of competition will benefit the general public (see Wils, 2006).

Fines are usually much lower than the collusive gains and in many cases do not represent a credible threat to deter collusion. Connor and Lande (2007) compare the fine levels imposed by the EC and US authorities to the amounts gained on average by cartels as a result of their offence. They collect and analyse the available information concerning the size of the overcharges caused by hard-core price fixing, bid-rigging and market allocation agreements. They found that cartels over-charged on average between 18 % and 37 % in the US and between 28 % and 54 % in the EU.⁹

Connor (2006)'s analysis of 1998-2004 EU cartel decisions likewise concludes that deterrence is not being served in that, "fines imposed by the EC Commission are not based on estimates of the offender's gain or victim's losses...the (EC) Commission makes no attempt to estimate the overcharge or to concede that it is possible to do so. As a result...it would seem doubtful that fines, even at their present historically high levels, deter price fixers." Deterrence through the use of fines will work if, and only if, from the perspective of the company contemplating whether or not to commit a violation, the expected fine exceeds the expected gain from the violation (Wils, 2006). This assumes, as Jenny (2009) points out, that persons engaging in illegal practices are rational individuals who consider the expected cost and benefit to them of violating a law and will engage in such a violation if it pays.

The Tribunal has established that the primary role of fines in South Africa is deterrence rather than retribution.¹⁰ The current situation in South Africa is that fines are the only sanction used to deter cartel violations and are not combined with fines on individuals, imprisonment or other individual sanctions, or with private damages. Moreover, private enforcement of competition law is weak. Under-deterrence rises from generous discounts and weak private anti-cartel enforcement. Aproskie and Goga (2011) examine two popular claims that fines are passed on to consumers and that high fines could lead to poor competitive outcomes such as firms exiting the market. They conclude that administrative

⁸ Concerns about the inadequacy of fines are the object of an intense debate within the competition policy circles (see Harrington 2004, OECD 2003, Motta 2008).

⁹ Connor and Lande (2005) conclude that average cartel overcharges for the US are between 15% and 36%, with most of the median and average results between 20% and 30%, and recommend that the Sentencing Commission raise the current level of cartel penalties.

¹⁰ Competition Tribunal case number 08/CR/Mar01, Competition Commission v Federal Mogul Aftermarket Southern Africa (Pty) Ltd and Others

penalties do not lead to higher prices for consumers; fines do not generally impact the optimum pricing levels of a firm and that only in very specific circumstances would a fine lead to firm closure (see also Muzata and Mnisi (2010), Motta (2008)).

From a deterrence point of view, Jenny (2009) rightly observes that, “it makes no difference whether payments are made to the state budget or to consumers. Thus the current discussion in the EU on private enforcement should take into account the fact that even if the purpose of private enforcement is to compensate victims rather than to punish violators, the possibility of adding compensatory damages to administrative (or criminal) sanctions increases the overall cost of being caught for violators and therefore increases the deterrent effect of the enforcement system. This means that when considering whether an enforcement system is over deterrent or under deterrent (and when considering whether more or less resources should be devoted to public enforcement), one should take into account the effect of the interaction between public and private enforcement.”

The administrative penalty imposed on Pioneer Foods as a result of the settlement was 8.9 % of Pioneer Foods grain business turnover.¹¹ In monetary terms, the administrative penalty was the highest ever levelled on a firm in South Africa. We have to assume that Pioneer Foods did not just want to put the matter behind it, but thought the likelihood of getting higher penalties at the Tribunal was higher. This conclusion would not have been unreasonable. Should the Tribunal have levelled a maximum fine on the total turnover of Pioneer Foods for each of the contraventions, the penalty could have been over one billion Rands. While, fines must be set at levels that effectively deter anti-competitive behaviour, such a calculation is difficult. In Europe the cap is 10% of the group’s (not firm’s) worldwide turnover and still there are repeat offenders.¹²

It is important to also not that the South African jurisdiction is relatively new and immature when it comes to fining. The majority of fines are imposed by way of settlements and the courts have not had many opportunities to decide on the matter, and there are no fining guidelines. It is therefore extremely difficult to assess the effect of fines on deterrence yet.

3.3. The Price Reduction Commitment

To our knowledge, a pure discount remedy as contemplated in the Pioneer Foods price reduction commitment has not been used in South Africa or elsewhere, although coupon remedies have been widely used in the US. For example, in 1994 passengers who had travelled on major U.S. airlines between January 1988 and June 1992 received coupons with a total face value of approximately \$400 million. The coupon could be applied toward their cost of subsequent flights, expired after three years and could be transferred only to immediate family members or to someone designated in advance. Similarly 1994, Circa Pharmaceuticals settled a class action price fixing suit by issuing \$2.5 million in coupons that permitted former customers to purchase Circa products at a discount.

The Pioneer Foods price reduction commitment remedy was essentially a discount remedy. It involved a discount off the competitive price for all consumers of the product. A discount remedy is not administratively costly and does not require identifying individuals who were

¹¹ The penalty includes the fine of R 500 million and the price reduction commitment of R160 million.

¹² See Massimo Motta, Recent CAC judgement opens door to leniency on cartels, 31 August 2011, Business Report

injured by the cartel, finding their addresses, and contacting them. An alternative remedy which could accomplish the desired deterrence and restoration of competition while eliminating the administrative costs of identifying and compensating individual consumers, is to pay a substantial amount of cash to a third party, such as a developmental finance institution, for financing new entrants into the relevant markets.

In general, remedies have both a deterrence and desistance effect (see Motta and Polo (2003)). Desistance arises because the competition authority is able to increase the intensity of competition by imposing structural and behavioural remedies (once firms have been proven guilty and/or at least temporarily). Put differently, remedies have a direct effect on the market decisions of firms and are monitored by the competition authorities for some time after the final decision. The desistance effects of remedies are confirmed in empirical studies by Bizjak and Coles (1995).

3.3.1. A Simple Analytical Framework

The model adopted to analyse the pure discount remedy follows from Polinsky and Rubinfeld (2008) who model the deadweight loss from coupon remedies.¹³ Suppose the cost of producing the good at issue is assumed to be constant per unit, with no fixed costs. During the cartel period, a firm charges the monopoly price. Assume for simplicity that after the cartel period has been stopped, the competitive price will prevail, aside from the effect of any remedy. This might be the case because the price that would be paid in the absence of a discount is set by competitive firms who are not subject to any remedy.

Let c = constant marginal cost of production and m = price mark-up during the cartel period. Thus, the price during the cartel period is $c + m$, and the price thereafter would be c if there was no remedy. Assume that the demand for the product is linear and stochastic. In each period a consumer may have “low” demand or “high” demand. The individual’s demand curve is $q = a_i - bP$, where $i = H$ if demand is high and $i = L$ if demand is low ($a_H > a_L$). Assume demand is independent from period to period. Let θ = probability that demand is low. The population of consumers is normalized to be unity.¹⁴ Consider the losses suffered by consumers during the cartel period. The consumption decision for a consumer in the cartel period is shown in Figure 1. The loss of consumer surplus due to the price mark-up is the sum of the areas A and B (or $= (a_i - b(c + m))m + \frac{1}{2}m^2$) in Figure 1.

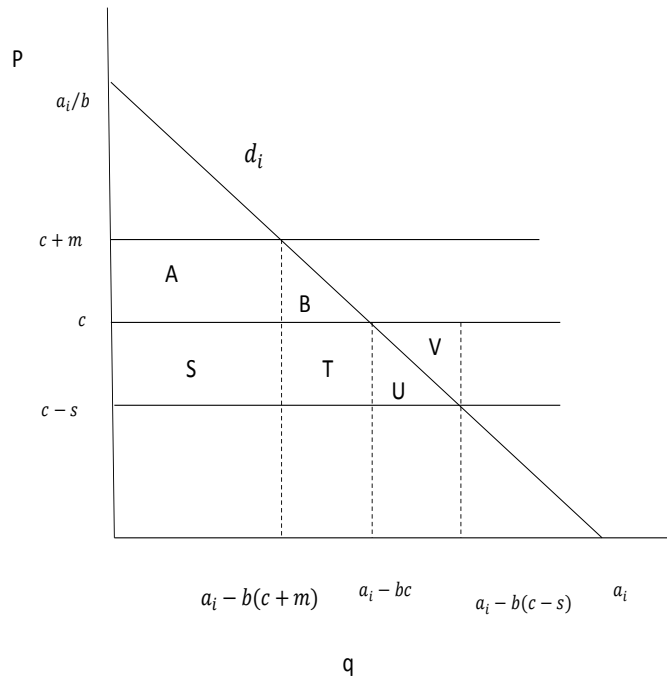
Let $K = [\theta a_L + (1 - \theta)a_H]m - bcm - \frac{1}{2}m^2$, the expected consumer surplus loss during the cartel period. Unlike Polinsky and Rubinfeld (2008), suppose that the discount remedy consists of allowing all consumers (whether harmed or not) to purchase as much of the good as they want at some price less than the competitive price c . Polinsky and Rubinfeld (2008) assume that consumers who bought the good at the marked up price are given coupons equal to in number to the units of the good that they purchased during the injury period.¹⁵

¹³ Polinsky and Rubinfeld (2008) is an update and revision an earlier working paper (Polinsky and Rubinfeld (2003)) in which they compare the deadweight loss from coupon and discount remedies.

¹⁴ Thus, we refer to an individual consumer and the class of consumers interchangeably.

¹⁵ This is a variant of a discount remedy which was not considered during the Pioneer Foods settlement negotiations. The remedy takes the form of awarding consumers with coupons that can be used to purchase the good at price below the competitive price. Another alternatively remedy not considered would be to pay cash to the consumers who have suffered from cartel conduct. This would not distort consumption, since the price faced

Figure 1



Let $s =$ discount below the competitive price. Then the price in the remedy period is, $c - s$. As shown Figure 1, an individual with demand curve d_i in the remedy period will purchase $a_i - b(c - s)$ units of the good. The value of the discount remedy to this individual is the sum of the areas S, T, and U in Figure 1, which equals $(a_i - bc)s + \frac{1}{2}bs^2$.

The expected value of the discount remedy to consumers, given the probability of demand being low or high, is $\theta[(a_L - bc)s + \frac{1}{2}bs^2] + (1 - \theta)[(a_H - bc)s + \frac{1}{2}bs^2]$. Setting the expected value of the discount remedy to consumers to equal the expected consumer surplus loss during the cartel period, the discount s is less than the mark-up in the in the cartel period m . This follows from the observation that consumers buy more of the good at the discounted price than they did at the marked-up price. Consequently, if the discount equalled the mark-up, consumers would gain more from the discount than the loss from the mark-up. This is easy to see in Figure 1. The gain from the discount is the sum of the areas S, T, and U. The harm from the mark-up is the sum of the areas A and B. If s were to equal m , then S and A would be of identical size and T would exceed B; thus the gain would exceed the loss. To avoid overcompensating consumers, the discount s must be less than the mark-up m . The deadweight loss of the discount remedy is shown in Figure 1 as the loss corresponding to area V.

Borenstein (1996) argues that firms will offset discounts by increasing the retail price from which the discount is calculated. The incentive for firms to respond by raising the retail price

by consumers would not be affected unlike both coupon and discount remedies. The downside to a cash remedy is that it can be administratively costly. In this regard a coupon remedy is no better

depends on whether the firm views the total loss under a discount remedy to be a sunk cost or believes that its behaviour can reduce that loss. However, the design of the discount remedy could eliminate such strategic behaviour. For instance, if the discount remedy has a binding time limit, specifying that discounts will continue until a certain date in the future, then the total foregone profits from the contract are not fixed and the firm will change its prices strategically in order to minimise the loss. If discount is Rand limited, continuing until a given total discount amount is reached, then the firm is likely to treat the discount remedy as a sunk cost (see Borenstein (1996)).

Competition in the market place will also prevent any one firm from responding to a discount remedy by raising their prices. If we assume that two firms are engaged in repeated Bertrand competition with an infinite time horizon and assume further that the firms produce a homogenous good with constant marginal costs. The static Nash equilibrium involves marginal cost pricing. Firms may engage in a tit for tat strategy and thus competition may prevent a rival firm from raising its prices. If however, the discount remedy is time limited, it can yield lower net benefits for consumers when applied to more competitive markets.

With the Pioneer Foods discount remedy, rival firms did not know the duration and extent of the reductions. However it knew the total value of the discount remedy. In an environment where markets had been stable as a result of collusion and information exchange, this lack of transparency introduces rivalry which is the essence of competition. In other words, the discount remedy coupled with the stopping of the information exchange creates uncertainty about rival firms' actions resulting in price competition akin to a repeated prisoner's dilemma game.

3.3.2. Implementation Mechanism

The implementation mechanism was designed in such a way that the average realised gross profit for the selected products over the base period would be compared with the average realised profit over the comparative period. The base period was chosen arbitrarily and did not correspond to the cartel period. The comparative period was defined as the period under review during the implementation of the pricing commitment. The pricing commitment amounted to a gross profit reduction of R160 million when compared with the base period.

Minimum levels of price reductions were set for each identified product category to ensure that the reductions had a meaningful effect for consumers. The stipulated minimum levels related to national averages over the comparative period per specified product category. A minimum gross price reduction of R350 per tonne on white bread flour, brown bread flour and cake flour and for selected 600g and 700g white and brown bread categories, a minimum gross profit reduction of 30 cents per loaf.¹⁶ This allowed Pioneer Foods the ability to manage the supply and demand dynamics that would emerge from the anticipated increased demand for its products.

A further stipulation was included to mitigate the likelihood of any predatory outcomes as a result of reductions in bread prices. Thus a minimum realised gross profit threshold was imposed on any price reductions on selected bread products. The aim of the pricing

¹⁶See Commission media statement on the 14th December 2010 available at <http://www.compcom.co.za/assets/Uploads/AttachedFiles/MyDocuments/Pioneer-media-release-14Dec10.pdf>

reduction commitment was thus to redress the impact of the bread and milling cartels. To benefit end consumers who had been subjected to anti-competitive prices.

The price reductions were in addition to any and all promotional discounts that Pioneer Foods offered to its customers. While the total value of the price reduction was known to rivals, the duration and the minimum thresholds were not. Thus, the price reduction commitment was designed such that it was flexible, created uncertainty and was not transparent to rivals. The Commission undertook to monitor compliance on the part of Pioneer Foods and also monitor the pass-through on the part of major retailers.

3.3.3. Methodology

The idea underlying the methodology in this section is that of the “but-for” world. The “but-for” world is given by what the economic outcome would have been but for the Pioneer Foods settlement.¹⁷ We measure the actual prices (or sales) during the price reduction commitment period and compare these to the pre and post-price reduction commitment period prices (or sales), or to the global developments in prices in comparable sectors.

In addition, we reinterpret the before-and-after approach in a regression framework, in which we estimate the price over the entire period for which have data are available on a dummy variable equal to one when the price corresponds to the period when there was a price reduction commitment. The parameter associated with this dummy variable then measures the amount of the price decrease during the price reduction commitment. We extend the regression framework to include control variables that we believe to affect the prices regardless of whether or not there has been a price reduction commitment. These include relevant economic variables that changed during the period of observation.

To illustrate let Y_t denote a measure of the outcome of the price reduction commitment (price), X_t a vector of exogenous covariates not causally affected by price reduction commitment (e.g., demand and cost variables), and D_t a dummy variable indicating the period of the price reduction commitment, i.e., the impact period. Let T_0 denote the beginning of the price reduction commitment, T_{0-1} corresponds to the pre- price reduction commitment control period and $t = T_0, T_{0+1}, \dots T$ to the impact period. The model is given as:

$$Y_t = \alpha + \beta X_t + \varphi D_t + \gamma D_t X_t + \varepsilon_t$$

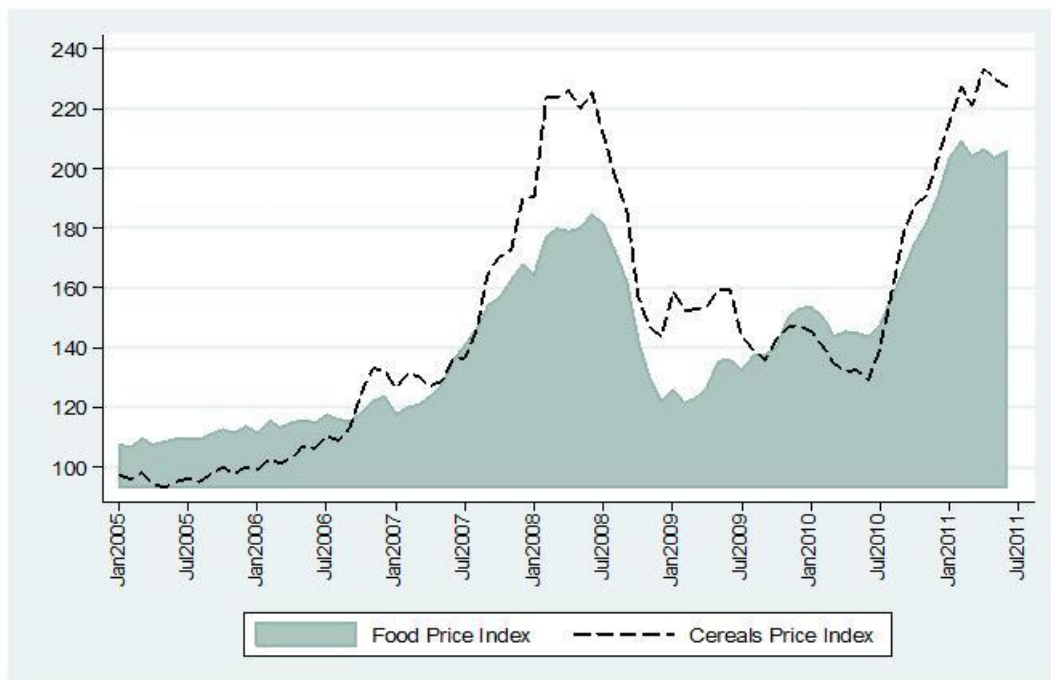
where ε_t is an error term. This specification takes into account the possibility that the price reduction commitment will affect price (the outcome) directly, as given by given by φD_t (through a decrease in price at each point in time in the price reduction commitment period). It also takes into account the possibility that the effect of the price reduction commitment will be felt through one or more of the covariate demand and cost variables, as given by the term $\gamma D_t X_t$. This allows the effect of X_t on Y_t to differ between the control period and the impact period. Thus, we evaluate the impact of the price reduction commitment by looking at the statistical significance and magnitude of the coefficient on a dummy variable that distinguishes the impact period from the control period. We assume a constant price differential through the impact period (as suggested by the coefficient on the dummy variable).

¹⁷ This approach is largely empirical, and does not require making specific economic assumptions on the market.

3.3.4. Results

In thinking about a potential impact of this price reduction commitment, it is worth discussing first, global developments in food prices. In 2010, international wheat pricing came under an upward pressure because of the poor crop forecasts from Russia and Russia's subsequent banning of wheat exports until at least 31 December 2010. The strength of the Rand and the new import tariff on wheat resulted in a steady increase in local wheat raw material prices. Between April 2010 and October 2010, the Safex price of wheat increased by almost 22%. These factors contributing to increases in food prices would also affect the impact of the price reduction commitment. During the impact period, global food prices were at their highest since 1990, according to the UN Food and Agriculture Organisation (FOA) food price index recorded above the 200 mark for the first quarter of 2011 (see Figure 1). During the same period the cereal price index overshoot the food price index.

Figure 1: FAO Food Price Index and FAO Cereals Price Index, 2005 - 2011¹⁸



Source: UN Food and Agriculture Organisation

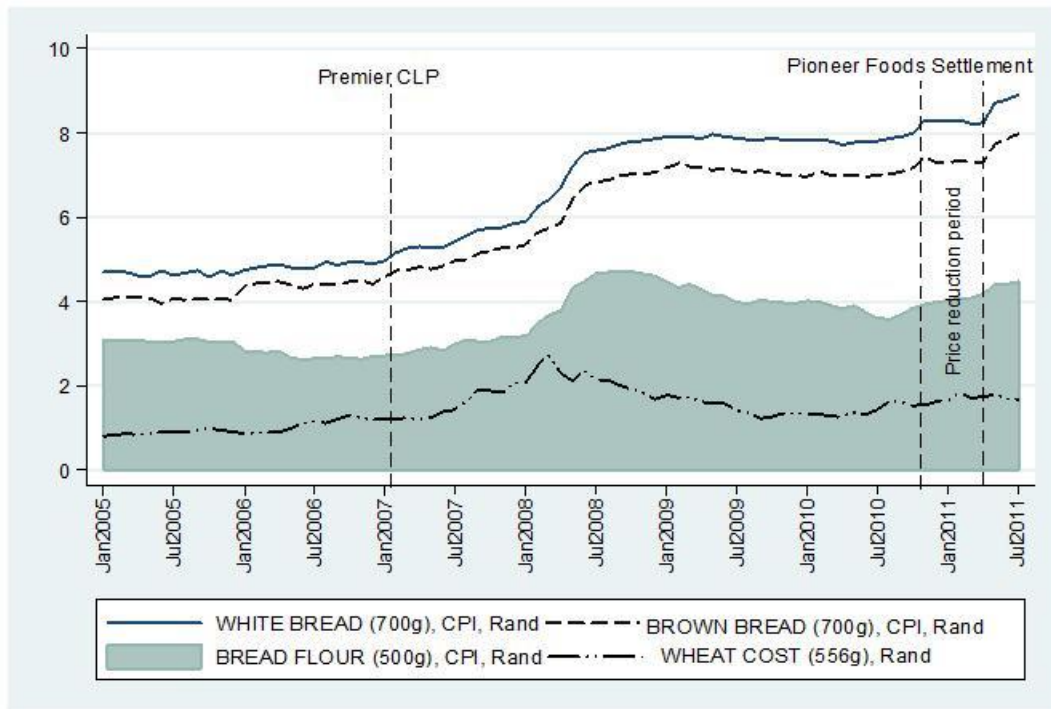
Pricing data from Statistics South Africa indicates that the price reductions made by Pioneer Foods have translated into cheaper bread prices for end-consumers. In light of the recent increasing global inflationary pressures on food prices and South Africa's position as a net-importer of wheat, during the impact period it would appear that the discount remedy yielded positive results for consumers. Importantly, South African bread prices have been historically sticky downwards (see Figure 2).¹⁹ However, during the impact period, the national price of

¹⁸ All indices have been deflated using the World Bank Manufactures Unit Value Index (MUV) rebased from 1990=100 to 2002-2004=100. The Food Price Index consists of the average of 5 commodity group price indices mentioned above weighted with the average export shares of each of the groups for 2002-2004, while Cereals Price Index is compiled using the grains and rice price indices weighted by their average trade share for 2002-2004.

¹⁹ For instance, the manager of Pioneer Food's subsidiary division, Sasko, indicated in testimony to the Tribunal as part of the bread cartel hearings that bread prices were never reduced when input costs declined because consumers apparently did not appreciate fluctuations in bread prices.

brown bread decreased by around 11 cents per loaf, and stabilised at a lower level of around R7.30/loaf (nominal CPI, from November 2010 to March 2011), while the national price of white bread was stable at around R8.31/loaf from November 2010 to February 2011 and falling to around R8.22/loaf in March 2011.

Figure 2: National bread and flour prices

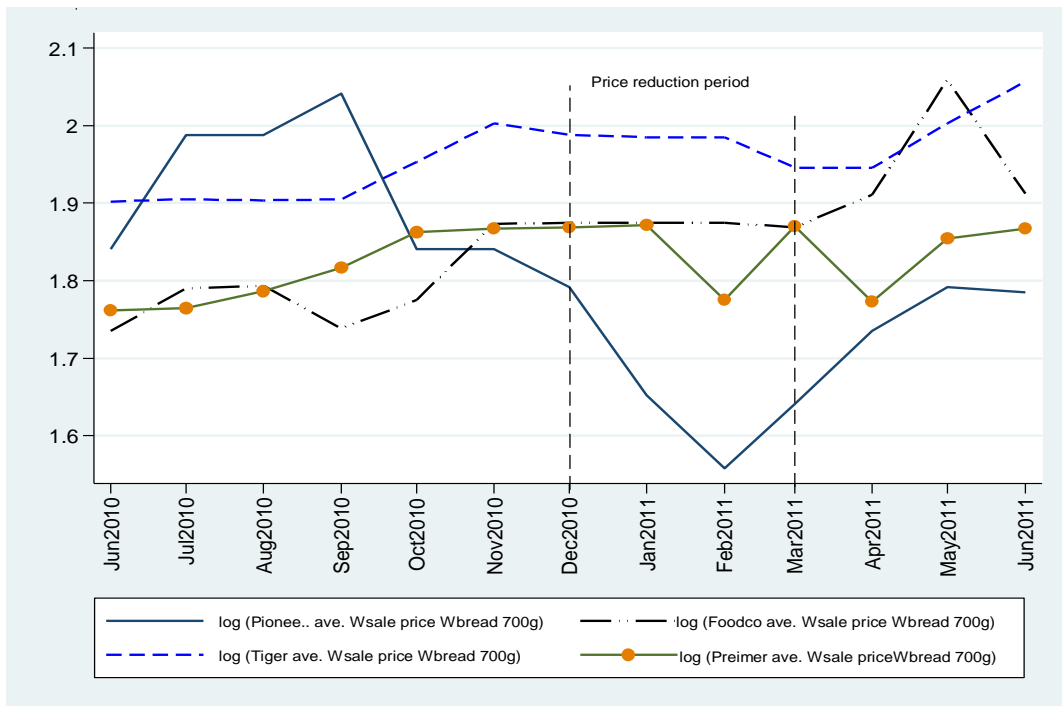


Source: Statistics South Africa, SAFEX

Interestingly, the national average of price of both brown and white bread (700g) increased by about 70 cents post the impact period. Pioneer Foods and its rivals knew that the discount remedy was for a defined period of time and so they either could ignore the price reductions if they thought they would not have long term effect on their market share or they could retaliate by lowering their prices in the hope that they would recoup their lost margins when the discount remedy is over. This is probably one explanation for the huge increases after the event.

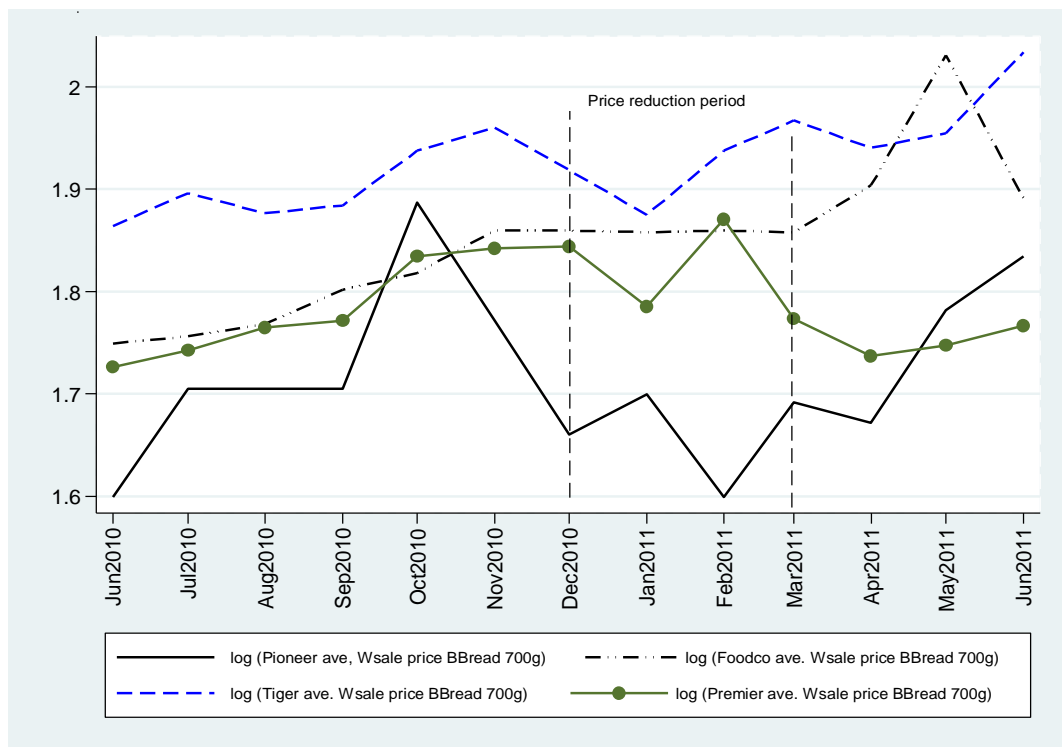
Next, we turn to the results of the comparison of pre- and post- impact period prices and sales with the actual impact period prices and sales to assess the price decrease. Pricing data from selected retailers in relation to bread products purchased from the major bread producers, namely Pioneer Foods, Premier, Foodcorp and Tiger Brands, shows the extent of the price reduction commitment. Figures 3 and 4 provide an indication of the impact of the price reduction commitment on the wholesale price of standard 700g bread loafs. The results show that during the impact period average wholesale prices of white and brown 700g bread decreased. Competition in the market prevented any one firm from raising prices even as input costs rose. It appears also that competition in the market induced responses from Pioneer Foods' competitors resulting in even wider gains for consumers than Pioneer Foods' own pricing commitment.

Figure 3: Average wholesale price from producers to retailers, white bread 700g



Source: Selected retail outlets (Inland markets)

Figure 4: Average wholesale price from producers to retailers, brown bread 700g



Source: Selected retail outlets (Inland markets)

Pre and post remedy prices are reasonable approximations for the prices but for the remedy. To the extent that remedy period prices differ in a statistically significant way from the pre and post remedy prices, we attribute a more or less reasonable degree of confidence in the price decrease. Figure 5 shows the results from the regression analysis. In summary, the dependent variable is the average wholesale price of bread charged by the bread producers and the exogenous covariates include: (1) the wheat costs and flour costs (cost factors) and (2) maize meal prices (demand factors). While, the dummy variable is negative as expected, the estimated price reduction of 27 cents is statistically insignificant.

Figure 5: Results from the Regression Analysis

Model 1	Dummy Variable γ	Coef	-0.269
		Std. Err.	0.215
Model 2 <i>log-log specification</i>	Dummy Variable γ	Coef	-0.042
		Std. Err.	0.033

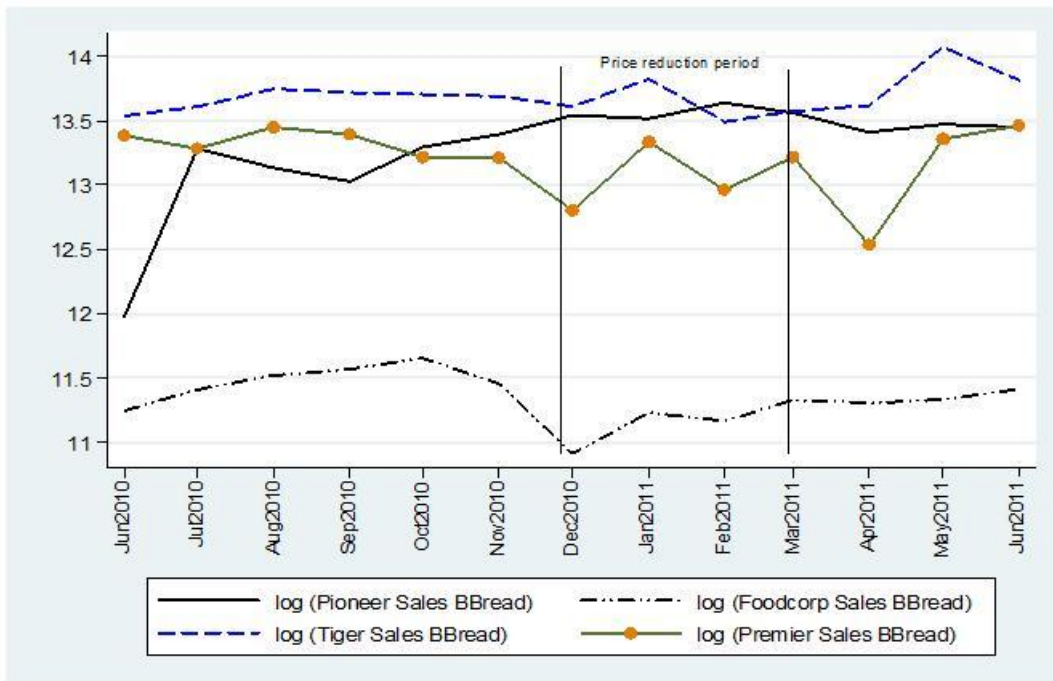
Now consider the possibility of a consumption inefficiency created by the discount remedy. For example, if the cartel period resulted in the prices being set above the competitive prices for some period of time, during the remedy period the price is discounted to some price below the competitive price for a period of time. If a particular consumer's demand was "high" in the cartel period, and that consumer's demand was "low" in the remedy period. That consumer will be induced to buy a socially excessive amount of the good during the remedy period. But if that consumer's demand is high again in the remedy period, there will not be a distortion. This is because, if consumer's demand remains high during the remedy period, the consumer will purchase more of the good at the competitive price than he did during the cartel period resulting in Pioneer Foods quickly reaching the target value of R160 million. Consequently, all marginal purchases during the remedy period will be at the competitive price.

Figures 6 and 7 show the average wholesale purchases of standard bread by retailers from producers. Figure 6 does not appear to suggest strong distortions in consumption patterns for brown bread. This could be because the amount of discount was too low to induce customers to buy a socially excessive amount of goods during the impact period. Alternatively the demand for bread, being a staple and perishable good, remained high before and after the price reduction commitment. Figure 7 however, shows an increase in demand for Pioneer Foods' white bread during the remedy period. According to business analysis, Pioneer Foods reportedly, following the implementation of the agreement, increased its volume growth at the expense of competitors.²⁰ Competitors such as Tiger Brands publicly acknowledged that trading volumes have been negatively impacted, particularly in flour, as a result of the highly competitive trading environment. An article by the Business Report in February noted how Tiger Brands' Albany bread was losing market share to Pioneer Foods' Sasko bread.²¹

²⁰ Business Report (National) 21 February 2011, p. 19

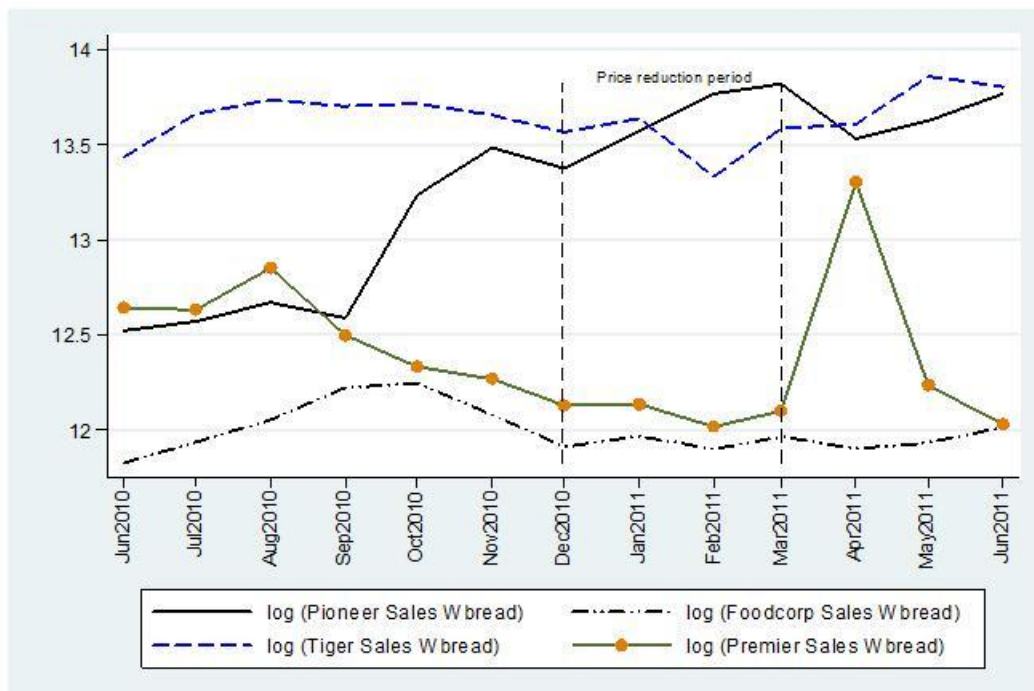
²¹ Business Report (National) 21 February 2011, p. 19

Figure 6: Average wholesale purchases from producers to retailers, brown bread 700g



Source: Selected retail outlets (Inland markets)

Figure 7: Average wholesale purchases from producers to retailers, white bread 700g



Source: Selected retail outlets (Inland markets)

4. Conclusion

In this paper we show that the Pioneer Foods settlement agreement was designed to address the negative impact of anti competitive conduct. It provides for the opportunity to redress the anti-competitive environment created by long running cartels and exclusionary conduct which may not be addressed solely by administrative penalties. We show that the remedies relate to the restoration of competition, deterrence, compensation and disgorgement. The creation of the Agri-fund aims to lower the barriers to entry into the agro processing industry, while the price reduction and capital expenditure terms seek to constrain Pioneer Foods, compensate and disgorge some of its profits to the benefit of affected consumers and improve the competitive dynamics of the relevant markets. These remedies and the administrative penalty excluded the administrative penalty of about R196 million imposed by the Tribunal on Pioneer in relation to Pioneer Foods' involvement in the bread cartel.

We also show that the anti-competitive effects of Pioneer Foods' conduct were clearly identified and theories of harm emerged as a retrospective rationalisations of different strategies adopted by Pioneer Foods that harmed consumers and competition: the cartel conduct maintained monopoly profits and the exclusionary conduct through predatory pricing undermined entry. The identification of specific narratives of harm operated as limits to the identification of adequate remedies.

We discuss the key features that influence the decision to settle both for the respondent firms and for the commission. On one hand, there is a wide consensus that the saving of time and litigation costs are significant benefits of cartel settlements and that for this reason, administrative penalties in settlements should generally be lower than fines. In addition for a competition authority, freed up resources can be used to prosecute more cases. In this way settlements can increase the ex-ante deterrence effects. On the other hand, the argument against settlements is that through a fine reduction settlements can reduce deterrence. The design of a settlement agreement is fundamental for its success. South African jurisdiction is relatively new and immature when it comes to fining. The majority of fines are imposed by way of settlements and the courts have not had many opportunities to decide on the matter. In this regard perhaps the time has come for the Commission to adopt guidelines for fines.

It is somewhat puzzling why before the Pioneer Foods settlement agreement a pure discount remedy had not been used in South Africa especially given weak private enforcement of competition law. Like all remedies, a pure discount remedy raises its own problems. Perhaps a more serious concern is that it is too modest a remedy. To fully deter misconduct, disgorgement of illicit profits must cover the total harm created by the conduct divided by the *ex ante* probability of detection and successful adjudication. Fully redressing cases where private enforcement of competition law is weak may thus require competition authorities to impose fines adequate to achieve optimal deterrence or at least reduce some of the shortfall in deterrence by depriving a firm violating competition law some of its illicit loot at the same time compensating consumers for some of their losses.

Overall, our discussion points to an important principle, that the costs of remedies should not outweigh the consumer benefit they achieve. An important disagreement exists between those questioning the settlement agreement's validity and the Commission's authority to conclude it and others who advance the view that the Commission was within its right. We

have no doubt that the appropriateness, success or failure of the remedial action in the Pioneer Foods settlement agreement or in general, the topic of competition law remedies is the next challenge of competition law enforcement and scholarship.

References

- Aproskie, J and Goga, S., (2011) 'Administrative penalties – impact and alternatives' *Journal of Economic and Financial Sciences*
- Borenstein, S., (1996) 'Settling for Coupons: Discount Contracts as Compensation and Punishment in Antitrust Lawsuits,' *Journal of Law and Economics*, 39.
- Bizjak, J.M., and Coles, J.L, (1995), 'The effect of private antitrust litigation on the stock market valuation of the firm' *American Economic Review*.
- Connor, J. M. and Lande, R. H. (2007): 'Cartel Overcharges: Implications for U.S. and EU Fining Policies', *Antitrust Bulletin*, 51, pp. 983-1022.
- Connor, J. M. and Lande, R. H., (2005) *How High Do Cartels Raise Prices? Implications for Reform of the Antitrust Sentencing Guidelines*, *Tulane Law Review* .
- Economides, N and Lianos, I., (2010), 'The quest for appropriate remedies in the EC Microsoft cases: a comparative appraisal' In: Rubini, L. ed(s). *Microsoft on Trial: legal and economic analysis of a transatlantic antitrust case*. Cheltenham, E Elgar.
- Forrester, I. S., Article 82: Remedies in Search of Theories?, in *International Antitrust Law & Policy*, 2004 *Fordham CORP. L. INST.* 167 (B. Hawk, Ed. 2005)
- Economides, N and Lianos, I,(2010) 'A Critical Appraisal of Remedies in the EU Microsoft Cases', *Columbia Business Law Review*.
- Elhauge, E., (2008) "Disgorgement as an Antitrust Remedy" *Harvard Law School John M. Olin Center for Law, Economics and Business Discussion Paper Series*. Paper 613.
- Gramlich, F., (1986), 'Scrip Damages in Antitrust Cases' *The Antitrust Bulletin*, 31,
- Gramlich, F., (2003), 'Coupon Remedies in Antitrust Cases: The Form of the Discount also Matters,' *Discussion Paper EAG 03-3*, Economic Analysis Group, Antitrust Division, U.S. Department of Justice
- Fox, E., (2005) 'Remedies and the Courage of Convictions in a Globalized World: How Globalization Corrupts Relief' *Tulane Law Review*
- Harrington, J.E., (2004) 'Post-cartel pricing during litigation' *Journal of Industrial Economics*.
- Jenny, F., (2009) 'Optimal Antitrust Enforcement: From Theory to Policy Options' in I. Lianos and I. Kokkoris, *The Reform of European Competition Law: New Challenges* (The Hague: Kluwer, 2009).
- Mncube, L and Ngwenya, A., (2011), 'South Africa's Pioneer Settlement in Bread and Milling: An Innovative Way to Remedy Competition Law Violations in Developing Countries.' Paper presented at The Amsterdam Center for Law & Economics (ACLE) annual Competition & Regulation Meeting, Amsterdam, May 2011.
- Mnisi, K. and Muzata, G., (2010) 'Are anti-trust fines excessive to the detriment of companies concerned and consumers in general?', *The Fourth Annual Competition Commission, Competition Tribunal, Nelson Mandela Institute Conference on Competition Law, Economics and Policy in South Africa*, 2 September 2010, Johannesburg .
- Motta, M and Polo, M., (2003) 'Leniency programs and cartel prosecution' *International Journal of Industrial Organisation*.
- Motta, M., (2008), 'On Cartel Deterrence and Fines in the European Union' *European Competition Law Review*

OECD, (2003) *Hard Core Cartels: Recent Progress and Challenges Ahead*, Paris.

OECD, (2007) *Remedies and Sanctions in Abuse of Dominance Cases*, DAF/COMP(2006) available at www.oecd.org/dataoecd/20/17/38623413.pdf:

Pitofsky, R., (2002) 'Antitrust at the Turn of the Twenty-First Century: The Matter of Remedies' *Georgia Law Journal* 169, 170.

Polinsky, M., and Rubinfeld, D., (1989) 'A Note on Optimal Public Enforcement with Settlements and Litigation Costs' *12 Research in Law and Economics*

Polinsky, M., and Rubinfeld, D., (2008) 'The deadweight loss of coupon remedies for price overcharges' *Journal of Industrial Economics*

Wils, W. P.J., (2006) 'Optimal Antitrust Fines: Theory and Practice', *World Competition*.