

# **Are antitrust fines excessive to the detriment of the companies concerned and consumers in general?**

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## **Abstract**

As competition law gained more prominence over the last 10 years in South Africa, the levels of antitrust fines imposed on companies that were found in violation of competition law have also substantially increased. South African competition law, like most competition law across different jurisdictions, generally provides for sanctions (including financial penalties) to be imposed on companies that infringe the laws primarily as a deterrence mechanism. As record fines are continuously imposed on companies, questions start to arise regarding the impact of such levels of fines on the financial and/or economic viability of the companies concerned and to consumer welfare in general as companies recover the fines through charging higher prices post imposition of the fines.

This paper addresses two general beliefs about fines, that is, (1) high fines lead to the bankruptcy of the companies in question, and (2) post imposition fines lead to higher prices to the detriment of consumers. This paper discusses the theory on the welfare effects of anti-competitive conduct using cartel conduct as an example, the role of fines in deterring companies from such conduct, and contemporary arguments on the effect of fines on the economic viability of the companies concerned and on consumer welfare particularly relating to price levels post imposition of the fine. The paper then uses *Tiger Brands* and *Pioneer Foods* as case studies for assessing the effects of antitrust fines on company viability and/or consumer welfare through higher prices post imposition.

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## 1. Introduction

Over the last 10 years, competition law has become more prominent and the levels of antitrust fines imposed on firms found in contravention of the law have increased reaching record highs on occasion. Competition law generally prohibits conduct that is aimed at or has the effect of preventing, restricting or distorting competition. South African competition law, like most competition law, generally provides for sanctions (including financial penalties) to be imposed on companies found in contravention of the law. These sanctions are meant to act primarily as a deterrence mechanism. The achievement of deterrence critically depends on the probability of uncovering the conduct. Once the anti-competitive conduct has been uncovered, it is important for competition authorities to set the fine at a level that is high enough to balance the benefits that accrue to companies for engaging in anti-competitive conduct with the fine imposed on the companies for taking part in the anti-competitive conduct and other impacts that consequently arise (e.g., reputational harm and damages).

As antitrust fines increase to record levels, questions start to arise regarding the impact of such levels of fines on the financial viability and/or economic viability of the companies being sanctioned and to consumer welfare in general as companies recover the fines through charging higher prices. This paper addresses two general beliefs about fines, that is, (1) high fines lead to the bankruptcy of the companies in question, and (2) post imposition fines lead to higher prices to the detriment of consumers.

In section 2, the paper discusses economic theory on the welfare effects of anti-competitive conduct using cartel conduct as an example. Section 3, discusses the role of fines in deterring companies from such conduct, and contemporary arguments on the effect of fines on the economic viability of the companies concerned and on consumer welfare particularly relating to price levels post imposition of the fine. In section 4, the paper uses *Tiger Brands* and *Pioneer Foods* as case studies for assessing the effects of antitrust fines on company viability and/or consumer welfare through higher prices post imposition. Finally, conclusions are drawn in section 5 of the paper.

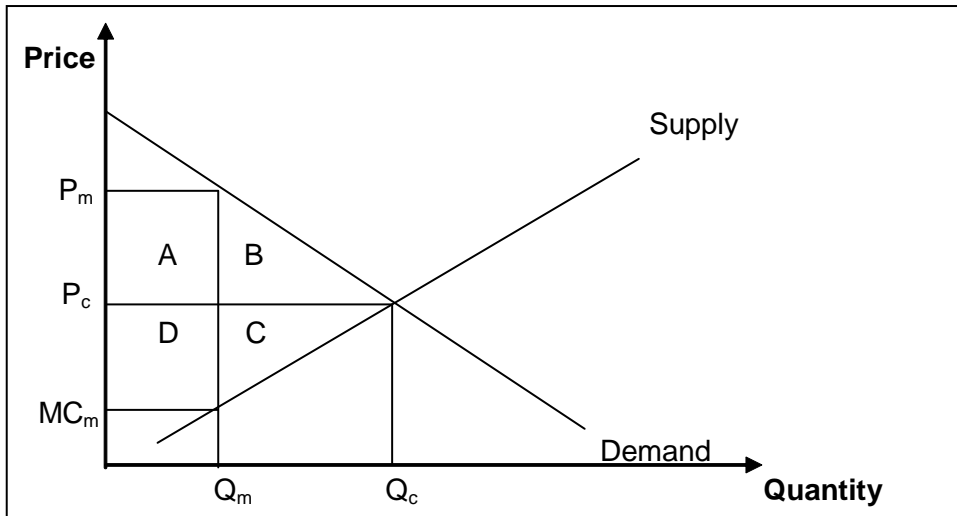
## 2. The welfare effects of anti-competitive (cartel) conduct

Companies generally engage in cartel conduct to maximise the joint profits of cartel members in a manner that equates the joint profits to a profit outcome that would result if a monopoly existed in the same industry. A cartel can be seen as a temporal and partial merger among competitors intended at generating monopoly profits and this is probable because cartel participants collectively have the power to increase prices paid by customers. Figure 1 below is a basic illustration of the negative welfare effects of collusion by firms.<sup>2</sup>

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<sup>2</sup> Landes W (1983); Motchenkova E (2005); and Page W (1990).

**Figure 1: Negative effects of collusion and price fixing**



Under competitive conditions, the equilibrium price and quantity is  $P_c$  and  $Q_c$  respectively, given consumer preferences and supply technology. However, when a cartel is established, joint profits are maximised at the monopoly price,  $P_m$ , reducing output from  $Q_c$  to  $Q_m$  as price-sensitive consumers either opt out of the market or reduce the quantities they would otherwise purchase. Two distinct effects arise from cartel conduct. Firstly, the change in market revenues and production costs brought about by the monopoly overcharge, price increase from  $P_c$  to  $P_m$  (represented by rectangle *A*). The overcharge represents the economic harm to consumers of the cartelised product.<sup>3</sup> The sum of *A* and *B* represent the total loss of consumer welfare arising from cartel pricing. Triangle *B* represents a loss to consumer welfare due to higher cartel prices which force consumers to withdraw from buying the cartelised product and to consume inferior substitutes (if any are available). Secondly, the social cost (represented by triangles *B* and *C*) which is a result of the reduction in output and sales linked to monopoly pricing.<sup>4</sup> Triangle *C* is the loss in producer surplus arising from producers in the cartelised industry operating at sub-optimal levels as industry output contracts.

In general, cartel conduct leads to a loss of consumer welfare as discussed above and a successful antitrust policy should therefore consider these welfare-effects of cartel conduct in order to intervene in a manner that will fully deter firms from engaging in such conduct. It is, however, difficult to estimate the level of benefits that accrue to firms as a result of engaging in cartel conduct and even more complex to determine the level of harm imposed on society. The role of fines in antitrust enforcement is discussed below.

### **3. The role of fines in deterring companies from engaging in anti-competitive conduct**

According to the OECD (2009), a successful competition law enforcement policy depends largely on four key principles, namely:

- (i) The ability to deter future engagement in anti-competitive conduct;
- (ii) The ability to eliminate any financial gain or benefit from non-compliance;
- (iii) Proportionality of enforcement to the nature of the offence and the harm caused; and

<sup>3</sup> This is a transfer of consumer surplus from consumers to producers.

<sup>4</sup> This is commonly known as the deadweight loss of monopoly pricing.

- (iv) Responsiveness and appropriateness of the penalty for a particular offender and the type of prohibition.

This section outlines the fundamentals of economic theory in the design of fines primarily aimed at achieving deterrence. According to Motchenkova (2005), legal intervention is the first element of competition law enforcement and a clear distinction should be drawn between *ex-ante* (pre-screening and/or company audits) and *ex-post* enforcement (deterrence/imposition of fines on offenders). Contrary to other areas of law enforcement, in competition law the imposition of fines is more pronounced relative to pre-screening (Wils, 2006). This is mainly because the costs involved in increasing pre-screening/audits are immense such that competition authorities would tend to lean towards increasing fines when combating anti-competitive behaviour.

Wils (2006) states that creating a credible threat of penalties that sufficiently balance the expected benefits and costs of engaging in antitrust violations is the basic objective of achieving deterrence. It is to be expected that when firms decide to become members of a cartel, it is rational for them to conduct a risk assessment which considers the possibility of detection and the implications of being caught partaking in the conduct against the higher profits earned from operating in less competitive markets (the benefits). If the benefits are higher than the costs, then a firm is more likely to engage in the anti-competitive conduct. Several authors<sup>5</sup> concur that in order for fines to achieve deterrence, penalties must be set at levels which exceed the benefits that companies stand to gain from engaging in cartel conduct.

In particular, Motta (2007) states that for deterrence to be achieved, a company should perceive the expected gain from engaging in cartel conduct to be lower than the probability of the cartel being uncovered and successfully prosecuted multiplied by the fine that would be imposed on it for participating in cartel conduct. The resulting fine must therefore be greater than the level of benefits derived from engaging in cartel conduct. Motta (2007) argues that competition authorities can achieve this in two ways, that is:

- By establishing antitrust authorities that can effectively operate against cartels in a way that sufficiently increases the probability of uncovering cartels; and
- Introducing fines which are large enough to discourage potential cartel members from engaging in cartel conduct.

The probability of uncovering and successfully prosecuting cartels can be increased by a combination of leniency programmes and settlements or other measures that reduce the period between the inception of an investigation and the formal decision (Motta 2007). These measures will free resources which can then be used to monitor the economy and identify the possible existence of collusive schemes through the analysis of market data. Resources can also be freed through transparency in the manner in which fines are calculated which makes fines predictable and reduces the probability of companies appealing against fines. In the EU for instance, the EC's fining notices have been providing better insights into the manner in which the EC sets fines even though some margin of discretion remains. This discretion is due to the presence of aggravating and mitigating factors in each case. It is however, important for authorities to try and reduce its margin of discretion and make the calculation of fines as predictable and consistent as possible.

The second instrument relates to the level at which fines are set. There is no consensus regarding the appropriate levels of fines for companies that engage in cartel conduct. For fines to have a sufficiently deterrent effect they must be set at levels large enough to matter to the offenders. In the EU and other jurisdictions there are cases of repeat offences by

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<sup>5</sup> Motta (2007); Wils (2006); Page (1990); Hammond (2005); and the ICN (2008).

companies which brings into question whether the fines paid by firms in the initial offences were set at optimal levels. In addition, managers of firms which are fined for engaging in cartel conduct rarely get punished possibly signalling that sanctions have not been sufficient enough to achieve deterrence. Using event study methodology to analyse the impact of antitrust investigation on company share prices, Motta and Langus (2006) found that market values of companies negatively react to dawn raids, infringement decisions and court judgements upholding the EC's decision, respectively. Interestingly, the study revealed that the substantial drop in the share prices does not necessarily emanate from the fine itself but rather from the announcement of investigations and judgements, thereby suggesting that the market expects the company's profits to drop after discontinuing with the infringement. This offers indirect evidence that antitrust action against cartels should decrease prices. Like Motta (2007), Werden (2009) states that deterrence is the only significant function of fines or any other sanction on companies for participating in cartel conduct. Moreover the specific deterrence of convicted offenders should be secondary to the general deterrence of potential offenders.

In aiming to achieve deterrence through antitrust fines and as the levels of fines have increased over the years, some general beliefs about fines have arisen, namely that fines lead to bankruptcy and higher prices as companies attempt to recover the losses from the fines. This paper aims to address these beliefs using a case study of the South African bread cartel.

### **3.1 The two misconceptions about fines**

The EC recently received some criticism following its 2006 revision of guidelines for setting fines.<sup>6</sup> Van Cayseele *et al* (2008) claimed that the EC's fine determination method introduced distortions which would result in excessive fines. They further argue that significant over-deterrence is not preferable to under-deterrence as this may result in *"increased customer price, either as a necessary means to recoup losses made or as a result of concentration through company failure"*. There have also been arguments that high fines lead companies into bankruptcy. These issues are discussed in sections that follow.

#### **3.1.1 Fines and bankruptcy**

Some commentators (including Van Cayseele *et al* (2008)) have claimed that high fines may force companies into bankruptcy leading to greater losses to society resulting from further concentrated market structures. However, a lump sum once-off penalty does not necessarily alter future returns expected by a company, which is what determines a company's viability. Motta (2007) argues that if the returns accruing to companies post the cartel crackdown are too low for a particular company to operate in a competitive market, then the company must have been too inefficient to survive and operate outside the shield of the collusive agreement. Competitive markets are, by their nature, expected to remove inefficient companies to the benefit of consumers through increased productive efficiency, product quality and investment. One could consider the exit of a company as leading to more concentrated markets and possibly higher prices, thereby harming society. However, if a company makes losses for a year, or even goes bankrupt, it does not necessarily mean that there is less competition except where the productive assets exit the market, which is unlikely to be the case.

Apart from these arguments, most jurisdictions have safeguard clauses which are meant to ensure that firms do not go into bankruptcy. In particular, most jurisdictions have an overall cap to the amount of fines that a company can be charged. In the EU, this cap is set at 10%

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<sup>6</sup> EC, 2006, Guidelines to the method of setting fines imposed pursuant to Article 15 (2) of Regulation No. 17 and Article 65 (5) of the ECSC Treaty (98/C 9/03)

of the company's worldwide turnover. In addition to this provision, the EU fining notice provides for fine to be reduced if a company can objectively show that it would be unable to pay the fine. As such, it is unlikely that a fine imposed on a company will result in bankruptcy.

### **3.1.2 Increase in prices as a means of recovering losses from fines**

Authors like Cayseele *et al* (2008) argue that companies will pass fines onto customers through higher prices so as to recover the losses incurred from a fine. However, standard economic reasoning dictates that fixed sunk costs (including fines) do not change optimal pricing decisions which are influenced by conditions relating to marginal costs and profitability.<sup>7</sup> In addition, Motta (2007) notes that antitrust action can be expected to disrupt cartel conduct such that any one company's attempt to raise prices after being fined is likely to result in the company being undercut by its competitors thereby rendering the strategy unprofitable. It can also be expected that if antitrust action against a cartel results in explicit collusion being replaced by tacit collusion, prices are unlikely to decrease immediately. However, any demand or supply shock is likely to undermine the tacit collusive outcome and drive prices below the cartel prices.

Leniency programmes which have been instrumental to the collapse of several cartels also leave the cartel companies in asymmetric positions as one company receives immunity. So, in cases where companies wish to increase prices after being fined, the company that receives immunity would not have to increase prices thereby limiting the ability of the other companies to increase prices.<sup>8</sup> Furthermore, it stretches the mind that following the uncovering of a cartel, prices would be higher than they would have been during the period of the cartel's existence.

## **4. The case of the bread cartel involving Tiger Brands and Pioneer Foods**

### **4.1 Could fines bankrupt companies in South Africa?**

The South African Competition Act, like other jurisdictions including the EU, has safeguard clauses which put a cap on the amount of the fine that a company can be levied for engaging in anti-competitive conduct including even the most egregious, cartel conduct. In particular, section 59 (2) of the Act states that:

*“An administrative penalty imposed in terms of sub-section (1) may not exceed 10% of the firm's annual turnover in the Republic and its exports from the Republic during the firm's preceding year.”*

Regardless of the fact that the Act allows for Competition Authorities to impose the fine on a company's total turnover in the Republic and its exports, the competition authorities have been very conservative when imposing fines. The fines have been limited to relevant turnover and for companies engaging in cartel conduct, the maximum fine, in percentage terms, that the competition authorities have imposed is 10% of relevant turnover.<sup>9</sup> Table 1 below is a sample of cartel conduct cases for which a fine has been imposed on the members.

**Table 1: Sample of cases for which fines were imposed for cartel conduct in South Africa**

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<sup>7</sup> Motta (2007).

<sup>8</sup> Buccirossi and Spagnolo (2006).

<sup>9</sup> Only one company has been fined a maximum per cent fine of 10%, the previous maximum per cent fine had been 8% of relevant turnover.

Respondent	% of annual turnover	Penalty <sup>10</sup>	Activities considered	Section of the Act contravened	Date of consent order or fine
Pioneer Foods	10%	R195,718,614	Sasko's national 2006 bread turnover (Pioneer's bread baking division)	4(1)(b)(i) and 4(1)(b)(ii)	3 Feb 2010
Sasol Chemical Industries Ltd	8%	R250,680,000	Sasol Nitro's turnover, a <u>division</u> of Sasol Chemical Industries Ltd, excluding turnover attributable to detonators and other accessories	4(1)(b) <sup>11</sup>	20 May 2009
Aveng (Africa) Ltd	8%	R46,277,000	Infrasnet business unit's turnover, a business unit of Aveng Manufacturing, a subsidiary of Aveng (Africa) Ltd	4(1)(b)	25 Feb 2009
Thusanong Healthcare (Pty) Ltd	5%	R287,416	All operations of Thusanong Healthcare (Pty) Ltd	4(1)(b)	25 Feb 2009
Dismed Criticare (Pty) Ltd	6%	R1,277,058	All operations of Dismed Criticare (Pty) Ltd even when conduct related to a rigged individual contract	4(1)(b)	25 Feb 2009
Tiger Brands (Pty) Ltd	5.7%	R98,784,870	Baking operations of Tiger Brands	4(1)(b)(i) and 4(1)(b)(ii)	28 Nov 2007
Foodcorp (Pty) Ltd	6.7%	R45,408,360	All baking operations	4(1)(b)	6 Jan 2009
American Natural Soda Ash Corporation / CHC Global (Pty) Ltd	8%	R9,696,847	Soda as revenue of Respondents in South Africa	4(1)(b)	4 Nov 2008
Adcock Ingram Critical Care (Pty) Ltd / Tiger Brands Ltd	8%	R53,502,800	All operations of Adcock Ingram Critical Care (Pty) Ltd	4(1)(b)	30 May 2008

Source: Competition Tribunal

It is highly unlikely that the fines imposed by the competition authorities have been too high to have the effect of bankrupting companies. It is also important to note that up until the Pioneer fine, the maximum percentage fines have largely been below the maximum allowable 10% under section 59 (2) of the Act.<sup>12</sup> Although the fine amounted to 10% of Pioneer's bread turnover, the fine amounts to approximately 4.2% of Sasko's (Pioneer's bread making division) 2006 total turnover and approximately 2% of the Pioneer Group's

<sup>10</sup> Penalties rounded off to the nearest Rand.

<sup>11</sup> Note that Sasol only admitted to engaging in cartel conduct and therefore other aspects of alleged contraventions relating to Section 8 allegations are continuing.

<sup>12</sup> 10% of the firm's annual turnover in South Africa and its exports from South Africa.

total turnover for the year 2006. The relative size of the fine therefore declines substantially from a group level. Assuming a cartel mark-up of 5% on the bread turnover of almost R2 billion in 2006, the benefit from engaging in cartel conduct would approximately be R98 million meaning that in two years of involvement in cartel conduct, the fine can fully be offset by the cartel mark-up over the two year period. Now for a cartel that lasted more than two years, this fine is substantially lower than the gains derived from the conduct. To our knowledge there has not been a firm in South Africa that has gone bankrupt as a result of fine imposed on it. In terms of the bread cartel, the members appear to have made sufficient provisions to be able to pay the fines imposed on them and still operate profitably in the market. This to some extent confirms Motta's (2007) contentions that efficient companies involved in cartel conduct should be able to build provisions and increase their assets such that they are able to pay fines and survive in the industry.

In any event, although the Act does not have a provision for considering a company's ability to pay a fine as a mitigating factor, there has been some allowance for companies to pay the fine in instalment amounts. For instance, Foodcorp, a member of the bread cartel was ordered to pay its R45 million fine in three equal annual instalments and to date has not yet paid the full amount which it will only pay by January 2011.<sup>13</sup> Similarly, by fighting the case, Pioneer managed to delay the imposition and subsequently payment of the fine by between two to three years. If anything, Foodcorp's and Pioneer's fines are then actually discounted. Therefore in a spectrum of reasons why companies go bankrupt, antitrust fines do not seem to fit the bill in the South African context.

#### **4.2 Did fines on the South African bread cartel lead to higher consumer prices?**

The bread and milling cartels which were uncovered in 2007 in many ways bear a reflection of the general belief that high fines lead to higher prices post antitrust action against the offending firms. The cartel involved the four primary bakeries, that is, Tiger (under its Albany brand), Premier (under its Blue Ribbon brand), Foodcorp (under its Sunbake brand) and Pioneer which owns Sasko and Duens bakeries. Together the four bakeries enjoyed a market share of between 50%-60% of the domestic bread market in South Africa. During 2007, Premier Foods sought leniency from prosecution for its role in the cartel in exchange for co-operating with the Commission's investigation.<sup>14</sup> Tiger Brands also applied for leniency from prosecution. Premier Foods was subsequently granted conditional immunity for its participation in both the bread and milling cartel activities while Tiger Brands was granted immunity only in the milling cartel. For its role in the bread cartel, Tiger Brands entered into a consent order agreement in which it was fined R98.7million (this amounted to 5.7% of Tiger Brands' national turnover for its bread operations for the 2006 financial year).<sup>15</sup> Foodcorp also entered into a consent order agreement with the Commission and fined approximately R45million. Pioneer Foods opted to challenge the case against it in the Competition Tribunal, but was subsequently fined approximately R195million (10% of its 2006 Sasko bread turnover) for its role in the bread cartel.

Almost immediately after the bread cartel was uncovered and some cartel members were fined, the price of bread increased with the suppliers citing increases in the input costs as the source of the increase, mainly wheat. Several interest groups believed that the bread manufacturers were using the price increases to pass on the fines to consumers resulting in further harm to the consumers, particularly the poor. This paper seeks to assess whether the price increases could have been a means of the bread producers passing on the antitrust fines to consumers or, as the producers argued were a result of input cost increases. The

<sup>13</sup> See paragraph 6.3 of the Tribunal's consent order agreement available at: <http://www.comptrib.co.za/%5Ccomptrib%5Ccomptribdocs%5C1003%5C50CRMay08%20foodcorp.pdf> accessed on 15 August 2010.

<sup>14</sup> Corporate leniency is granted under the Commission's Corporate Leniency Program (CLP).

<sup>15</sup> Competition Commission - Press Statement, 12 November 2007.

paper therefore starts by assessing how companies in South Africa generally treat antitrust fines imposed on them particularly the members of the bread cartel.

We start by stating that there is general consistency between the treatment of antitrust fines and standard economic reasoning which states that fixed sunk costs do not change a company's optimal pricing decisions which are based on the company's marginal costs. A look at the financial statements of some of the members of the bread cartel (Tiger Brands and Pioneer Foods) sheds some light in this regard. In its 2007 financial statements, Tiger Brands made a provision for the antitrust fine that was pending for its role in the bread cartel. Similarly, Pioneer Foods made a provision for the antitrust fine it had to pay in its financial statements for the 6 months to March 2010.<sup>16</sup> Antitrust fines generally appear as abnormal losses which are written off in financial statements in a way similar to how losses on the disposal of fixed assets are treated in financial statements. Consequently, these fines have no bearing on the companies' optimal pricing decisions which are primarily determined by marginal costs of production and cannot be expected to have led to the price increases that followed afterwards.

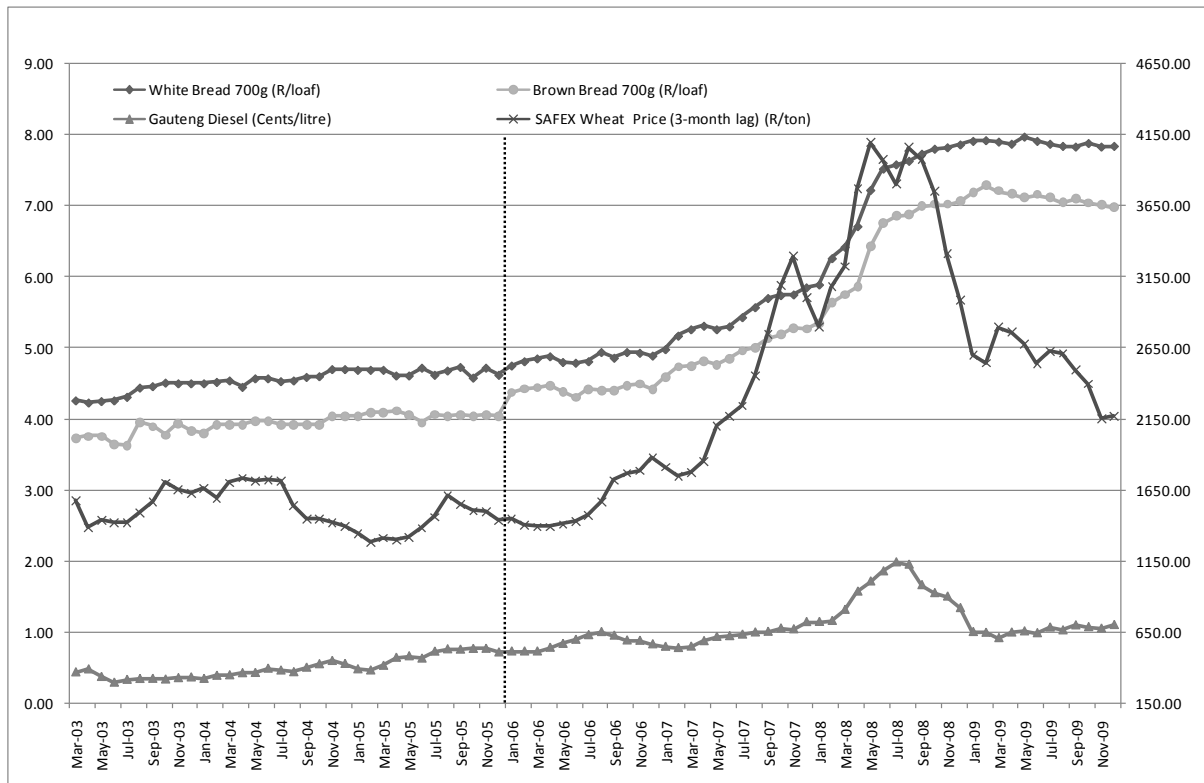
At this point we ask the question, what could have led to the price increases that followed after fines were imposed on members of the bread cartel. Could it have been a result of increased input costs or could it be a result of anti-competitive conduct or a combination of both? In attempting to answer these questions, we start by mapping out the price developments for bread as well as wheat and diesel fuel which we believe are the key inputs into bread manufacturing over the monthly period March 2003 to December 2009. In this analysis the paper uses the 3-month lagged SAFEX wheat prices (since wheat is traded on approximately 3 month forward contracts), the price of a standard 700g white and brown bread loaf, and the price per litre of diesel fuel represented by Gauteng prices.<sup>17</sup>

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<sup>16</sup> Similarly, Sasol also been fined made provision for antitrust fines in their financial statements.

<sup>17</sup> Due to changes in legal requirements, diesel chemical composition changed from 0.3% Sulphur to 0.005% Sulphur and 0.05% Sulphur. 0.05% Sulphur is the diesel type used by heavy duty truck mainly used for transportation. The paper consequently uses this type of diesel in the analysis. This change is shown by the line break at January 2006 when the change took effect.

**Figure 1: Bread, wheat and diesel price development over the period March 2003 to December 2009**



It is clear from figure 1 above that the price of both white and brown bread generally tracks the developments in the prices of key inputs namely, the price of wheat and the price of fuel diesel. From May 2006, the SAFEX price of wheat steeply increased (by approximately 191% over the two year period to May 2008) before peaking R4 096.10 per ton in May 2008. Thereafter, the SAFEX price of wheat receded to R2 168.55 per ton in December 2009. The initial price increase is widely due to worldwide supply shortages of wheat (droughts in grain-producing nations such as Australia<sup>18</sup>) coupled with rising oil prices which caused general escalations in the costs of fertiliser, food transportation, and industrial agriculture. A poor wheat crop and harvest during 2006-2007 resulted in most countries (including major wheat exporters such as Russia) imposing export restrictions on wheat. Between 2006 and 2008, average world prices for wheat rose by 136%.<sup>19</sup> Since South Africa is a net importer of wheat, most of the wheat sold in South Africa is sold at the import parity price and as a consequence the developments in wheat prices could only mean that the country was to experience severe wheat price increases. During the period beginning 2006, the price of oil and consequently diesel also increased, with the price of diesel peaking at R11.43 per litre in July 2008.

These input price increases fed through to the price of bread which increased steeply by approximately 28.5% for a 700g loaf of white bread over the 6-month period from December 2007 to June 2008. Over the two year period from May 2006 to May 2008, the price of bread increased by approximately 50.4%. Quite clear from these price increases is the fact that the price of wheat escalated at a higher rate than the price of bread and bread consumers did

<sup>18</sup> Australia is historically the second-largest exporter of wheat after the United States, producing up to 25 million tons in a good year, the vast for export. However, in 2006 the harvest was 9.8 million tons [see <http://news.bbc.co.uk/2/hi/asia-pacific/7289194.stm> accessed on 15 August 2010].

<sup>19</sup> See <http://globalresearch.ca/index.php?context=va&aid=8794>; accessed on 15 August 2010.

not incur the same price increases. After June 2008, the prices of both a standard 700g white and brown loaf of bread stabilised and levelled out until December 2009.

The bread price increases that occurred following the imposition of fines around December 2007 are believed to have been a result of the latter. What is clear from figure 1 above and the preceding paragraph is that these bread price increases are more likely to have responded to input cost increases which had occurred over the period starting around May 2006 through December 2007 until around August 2008. It is rather curious that between August 2008 and November 2009, the SAFEX price of wheat and the price of diesel declined substantially from their peak levels, but these declines were not followed by reductions in bread prices. Could this have been a result of anti-competitive conduct or simply a result of rationale corporate behaviour? It may well possibly be that following input price increases that were not fully matched by price increases, companies in bread manufacturing decided to recapture the margins lost when the price-cost gap narrowed between May 2006 and August 2008 by maintaining prices at a stable level after June 2008. This would surely result in the companies' margins increasing from the levels observed during the period in which significant input price increases were not matched by bread price increases.

However, this begs the question of whether the companies are competing following the uncovering of the cartel; as under competitive conditions one can expect the companies' prices to track and be as close to marginal costs as possible. Peltzman (2000) and Tappata (2006) argue that asymmetric pricing (or 'rockets and feathers'<sup>20</sup>) could explain why prices rise faster than they fall in response to changes in input costs. Asymmetric response to changes in input costs is often associated with collusion, but one must consider whether the wheat-to-bread value chain is possibly one of the markets that are characterised by asymmetric pricing. It is apparent that the companies in the milling and baking industry share, at least until recently, competitively sensitive information through their respective industry associations, which are in this case the National Chamber of Milling and the South African Chamber of Baking. Information exchange by competitors, depending on the nature, the level of disaggregation / aggregation of the information and on the structure of the market, may support collusion among competitors. It is possible that these companies used the disaggregated sale and product information as a tool to track and monitor the behaviour of competitors thereby sustaining higher prices.<sup>21</sup>

Another reason for this phenomenon is that if companies anticipate input costs to increase in the near future (possibly due to anticipated supply shortages) following a decline, prices are more likely to remain stably high as companies are reluctant to reduce prices only to then increase them in the short term. These factors could explain why bread prices did not decline, but stabilised when wheat and diesel prices started receding post August 2008.

It is more likely that the price increases that South African consumers of bread experienced post the uncovering of the bread cartel were a result of rising input cost prices rather than a result of the antitrust fines imposed on the members of the bread cartel. In fact, the price increases during the period 2006 – 2008 were not limited to bread, but also applied to a wide range of food items in general including rice (price increase of 217%), corn (price increase of 125%), and soya beans (price increase of 107%).<sup>22</sup> Based on the discussion above, it is more likely that the bread price increases could have been a result of input cost escalations than anti-competitive conduct. There is therefore limited or no support (in the case of the bread cartel) for the argument that antitrust fines lead to higher prices. Other reasons could

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<sup>20</sup> As far as we are aware, Bacon (1990) was the first to use the term rockets and feathers to describe the pattern of retail gasoline prices in the UK. Prices rise like rockets and fall like feathers.

<sup>21</sup> The Commission is currently investigating cases involving information exchange by past and present members of the National Chamber of Milling and the South African Chamber of Baking, in wheat milling and baking.

<sup>22</sup> <http://globalresearch.ca/index.php?context=va&aid=8794>; accessed on 15 August 2010.

however lie behind prices not declining as key input costs declined post August 2008 and these must be determined before concluding.

## **5. Summary and conclusions**

Anti-competitive conduct such as cartel conduct not only result in higher prices as competition is inhibited, but also result in a social cost due to reduced efficiency in the affected markets. In order to protect consumers from these negative welfare effects of anti-competitive conduct, competition authorities have at their disposal a number of tools which can be used to dissuade companies from engaging in anti-competitive conduct including imposing fines on companies that contravene competition laws. For competition authorities to succeed in achieving deterrence there is need to increase the probability of uncovering anti-competitive conduct as well as setting the resulting fines at levels that are high enough to remove the perceived benefits of engaging in such conduct. As competition authorities have increased their vigilance in fighting anti-competitive conduct, the level of fines imposed on companies has also increased to record levels sparking fears that such levels of fines could bankrupt companies; thereby reducing competition and that companies would raise prices to recover the losses to the detriment of consumers.

This paper considered the South African bread cartel which was uncovered and fined around December 2007. Shortly after the fines were imposed on members of the bread cartel, the prices of bread increased sparking comments that the price increases were a result of the companies trying to recover losses from the fines through higher prices. The paper tracked the developments in bread prices against those of key inputs such as wheat and diesel fuel and concluded that the price increases were more likely to have been a result of sustained increases in the prices of the key inputs. In particular, from around May 2006, increases in the prices of wheat and fuel were more than the increases in the price of bread with bread prices only steeply increasing between January and March 2008. This coincided with the period shortly after the bread cartel was fined. It is therefore more likely that the bread price increases were more a result of input cost escalations than they could have been a result of the antitrust fines imposed on members of the bread cartel.

However, from around July to August 2008, the prices of wheat and diesel receded significantly and this decline was not met by a decline in bread prices. Instead, prices stabilised and levelled off afterwards. Two possible reasons for this are: (1) companies may have decided to bag the margins particularly given they had sustained input cost escalations which were not fully matched by output price increases in the period between 2006 and August 2008; and (2) if companies were anticipating input prices to increase in the short term following the decline, they may have thought it necessary to leave prices at a stable level rather than reduce bread prices only to increase them again in the short term. Of course the benefit of this second reason is that companies bag the margin (which coincides with reason 1). However, one question remains, should prices not have declined with the sharp reductions in input costs post August 2008 particularly given the expectation that the uncovering of the bread cartel should have led to more competition in the manufacturing and supply of bread?

In the end state, we ask the question “Could the players be sustaining a cartel further up in the value chain particularly given that they are vertically integrated into the inputs (flour production) market?” Only time will tell. These are some of the areas in which market inquiries could be employed to try and identify competition problems particularly where there is suspicious conduct by companies after an administrative penalty is imposed, amongst other purposes.

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