

# DO CARTELISTS CHANGE BEHAVIOUR POST-INVESTIGATIONS?

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## INTRODUCTION

The investigation of cartels continues to be a subject of interest for many competition authorities around the world, and has been for many years. As a result many cartelists have been caught, and many investigations have been documented and publicized. The ultimate objective for many authorities is to deter and eradicate cartels for the harm they cause to consumers and the economy in terms of inflated price and other distortions.

This huge focus on cartels has resulted in a body of work that is invaluable for understanding cartels as existing literature gives a lot of guidance on cartels. Thus, we now know why cartels are formed, we know how cartels typically operate and we also know characteristics of industries likely to have cartels. However, despite all this one of the difficulties that continues to be faced by competition authorities is that cartels are not easy to detect as they operate in a veil of secrecy, and are often elusive. We therefore still require some economic analysis that can enhance our ability to detect new cartels and repeat offenders. It is worth acknowledging though that the leniency programmes introduced by many competition authorities, including South Africa's, have gone a long way to destabilize many cartels and uncovering the conduct which could have otherwise gone on for many more years without detection.

Our focus in this paper is detection of cartels in industries whose structure makes it difficult to detect without a whistleblower or leniency applicant. We therefore start with a brief background on cartels and consider factors which seem to facilitate cartel conduct. Lastly we use the South African long steel cartel as a case study and to determine whether there has been any discernible changes in that market since the Commission's investigation in 2008.

## AN OVERVIEW OF CARTELS

A cartel is an agreement/s between two or more competing firms to reduce the level of competition between them, with the ultimate aim of making supernormal profits. In terms of the Competition Act 89 of 1998, as amended, (the Act) the relevant section is section 4(1)(b) and this section prohibits *per se*, price fixing, market allocation and collusive tendering.

A look at the evolution of cartels reveals that cartels played a central role in countries like Germany in the nineteenth and early twentieth century, as they were used to control prices and output in industries such as coal and chemicals, especially after prolonged depressions. Increasing concerns over cartels in later years came about because of their desire and ability to raise prices to supra-competitive levels (Harding and Joshua, 2003:71). To this date, it is well accepted that hardcore cartel conduct is the most extreme form of anti-competitive conduct as it results in consumer harm and deadweight loss to society. It is therefore not surprising that this area of enforcement remains prioritized in many jurisdictions around the world.

Literature also suggests that two factors that seem to facilitate cartel conduct are those that relate to the structure of the industry and the nature of the cartel itself and we deal with each of these below.

## STRUCTURE OF THE INDUSTRY

Veljanovski (2007)<sup>2</sup> lists some factors which make cartelization more likely in a given industry as:

- Inelastic market demand as output falls by less when prices increase.
- High concentration to facilitate coordination and monitoring
- High barriers to entry to deter entry
- Absence of non-price competition which may differentiate products, making coordination more difficult or more costly
- Exchange of information facilitated by an industry group or association through which players signal intentions to each other
- Static or declining demand to detect cheating firms
- History of collusion and
- Multi-market contact
- Excess capacity and stocks
- Market transparency

This is not necessarily an exhaustive list but suggests a link between the structure of an industry and firm behavior. This perception of a link between the structure of an industry and the behavior of firms suggests that certain characteristics may foster competition while others do not. In explaining this approach, Harding and Joshua (2003) refer to the nature of a commodity, concentration levels and overcapacity or recession as the significant market characteristics that favour co-operation among competing firms. Using this approach, it is easy to classify some industries as likely to engage in collusion. This perception is also difficult to refute as a number of investigations worldwide have revealed cartel conduct in industries which exhibit some of these characteristics.

One other factor which is overlooked in the above list of characteristics is the history of government intervention in certain industries. This fact is relevant as governments historically encouraged and even facilitated cartelization, e.g. in agricultural markets to stabilize food prices. It is only in the 1990s that cartels seem to have been condemned in many countries for being against the public interest. Even in South Africa, government has been actively involved in the agricultural industry and other strategic industries like steel and fuels, and it is sometimes difficult to look at the cartels that have formed in some of these industries without taking into account the historical context.

These structural characteristics are a challenge for competition authorities in their efforts to detect cartels, specifically in oligopolistic markets.<sup>3</sup> In fact Whish (2003: 507) refers to a theory of oligopolistic interdependencies which is sometimes used to refer to a situation where the structural conditions in a market may be such that firms do not compete on price or any other way. Firms in an oligopoly are said to be so interdependent that they cannot act independently of each other's likely strategy. Under such conditions, firms do not need to meet and agree on prices explicitly, the nature of the industry on its own may facilitate a collusive outcome which may remain until the structure of the industry itself changes. In economic literature, 'game theory' or Prisoner's Dilemma also supports this view.

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<sup>2</sup> Also see Grout and Sonderegger, 2005.

<sup>3</sup> Where there are only a few sellers (or firms that compete with each other)

The arguments about cartels likely due to the structural characteristics of an industry are however criticized for four specific reasons. We only mention three of these which are of major interest to us. The first is that in an oligopoly, even if firms cannot compete on price it may still be possible to have non-price competition such as service, R&D or quality, and others. Therefore, blindly following a competitor's price without considering non-price competition may still attract scrutiny. Secondly, another counterargument is that supra-competitive profits may be difficult to achieve in an oligopoly in the absence of collusion because prices would have to increase from time to time (e.g. stepwise increases) and this cannot be achieved without an established pattern of price leadership. Thirdly, interdependencies are questionable where firms produce identical goods but the cost structure is different and where the actual price paid by the consumers is not transparent due to discounting, (Whish, 2003). This criticism of tacit collusion in oligopolistic markets therefore suggests that there may be very few, if any, circumstances where firms can reflect co-ordination in the market without any collusive arrangement. At the same time it is worth highlighting that authorities should be cautious of identifying 'likely suspects' as absolutely colluding. The courts are mostly persuaded by more than just theory, and without convincing evidence that indeed there is a conspiracy, a case may still be dismissible.

More importantly for our purposes, is moving from conceding that an industry has these characteristics which facilitate collusion to detecting and actually finding a cartel. This is a challenge as in more recent times cartels seem to increasingly rely on more sophisticated ways to coordinate their conduct and as a result are becoming even more difficult to detect without a leniency application or a whistle bower. For example, they leave no trail of evidence, communicate through private email accounts, use pseudo names, create fictitious invoices for compensating other cartelists in a bid rigging scheme, stagger price announcements in a price fixing cartels. All this makes it possible for collusion to continue for a long time undetected or if detected, it may still be possible for firms to collude but more tacitly or in certain instances confess involvement in one cartel while continuing to collude in other markets. Therefore where a cartel is uncovered, the next challenge may be confirming with certainty that conduct ceases and that cartels do not resuscitate their agreements after being found to have contravened the Act.

The first step to detecting cartels therefore requires an understanding of how they operate and how their behavior can be distinguished from normal competition. In various cartels investigated it seems that once the ground rules for the operation of a cartel are set, cartel members look for more creative and sophisticated ways to implement their agreements whilst avoiding detection. This is explained by Harrington (2006) when he studied cartel behavior in twenty decisions of the European Commission between 2000 and 2004. He proposed some markers of cartel behavior found to be common in those decisions. For example, what to expect or to look for in cartels involved in price fixing agreements. This is important to understand because different prices charged by cartel members do not necessarily mean that there is no cartel, as firms can agree on discount ranges and rebate structures or even formulae to be implemented in a market or a group of products such that firms maintain a specific margin while not necessarily charging the same Rand amount to customers. Similarly when looking at market allocation cartels, the temptation is to look at the stability of market shares over time and parties involved as pointers to collusion. Harrington indicates that although stability of market shares may be common in market allocation, it is not universal and may even vary a lot for instance, as it happened in the vitamins cartel.

In a study of seventy-two cartels by Levenstein and Suslow (2006), it was also found that one of the factors that causes cartels to last is the use of market allocation arrangements and punishment as these lowered the probability of cartel breakups significantly. This makes sense in that if for example a cartel has a market allocation arrangement which is based on allocating exclusive geographic territories, a breakup of the cartel may not automatically result in firms entering each other's territories. The cartel may have lasted for such a long time that each firm entrenched its position in the allocated market and created barriers to entry which may not be easy to overcome within a short space of time for potential entrants. Additionally, there may even be overcapacity deterring any other entry. This is why even if a cartel comes to an end, firms could seem to still be operating under the terms of the cartel when in fact they are not doing so. This is in contrast to price fixing cartels which may destabilize or break easier due to cheating or difficulty of monitoring and punishment.

Some international cases also seem to support some of the above arguments. For example, in the Graphite Electrodes cartel, conduct continued at least for a year after the European Commission's investigation. In another matter employees who were participants in Ariva and FirstGroup cartel continued with a market sharing agreement despite having gone through an internal compliance program. At the other extreme, F Hoffman-La Roche continued to engage in the vitamins cartel even while pleading guilty and paying a fine for another cartel in citric acid. In the vitamins and citric acid cartels, evidence was destroyed to such an extent that it was difficult to conclude with absolute certainty that the collusive conduct had ended.

In South Africa, in the cement industry even though the cartel was no longer sanctioned by the authorities, the Commission observed that market conditions obtaining during that era had not changed and therefore in 2008 the Commission initiated an investigation into this industry. Raids were conducted during 2009, consequent upon which PPC filed a leniency application. This matter is still under investigation. In the bread cartel, prices of bread increased after the Commission uncovered the cartel. Again the Commission has initiated an investigation in order to determine whether there is any continued anticompetitive conduct in this market. Another example worth mentioning is in fertilizer wherein in December 2009 Sasol approached the Commission and advised that during its internal investigations, it had uncovered evidence of meetings between its managers and those of Omnia and Yara/Kynoch in which discussions relating to price and market allocation were engaged in. As a result Sasol settled the long running complaint referral with the Commission in May 2009 while Omnia and Yara continue to deny their involvement in cartel conduct.<sup>4</sup> All these instances involve alleged cartel conduct in oligopolistic markets and point to the need for authorities to understand certain industries very well during and after investigations so that one can separate anticompetitive conduct from conduct reflective of other factors or constraints in the industry that affect all firms.

Hence if for example, the cartel has come to an end but there is no change in prices as would be expected, and there is no proof of collusion either, the prices may simply be reflective of the underlying industry circumstances. This however does not suggest that the observed behaviour does not reflect cartel conduct, neither does it suggest that the opposite is true. Rather, the point is to highlight that observed behaviour needs to be investigated on a case by case basis.

Further, given that in cartel conduct no remedies are imposed, the established 'ways of doing things' such as in oligopolies may not necessarily be addressed and this may facilitate continued conduct. In order to address these Whish (2003) suggests a behavioural approach, a

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<sup>4</sup> See Sasol settlement under case number 31/CR/May05

structural approach and a regulatory approach, none of which are easy to implement. For example, a regulatory approach would bring back government regulation which is not necessarily appropriate either and can be even ineffective considering that many industries have moved towards market regulation. A structural approach requires preventing any structure that is likely to lead to cartelization, and this sounds cumbersome post the conduct and may be difficult to propose the correct remedies to unbundle firms (likely though in the context of mergers). A regulatory approach seems more preferable, as it envisages addressing behavioural concerns. For example, instead of prohibiting parallel pricing/tacit collusion on its own, authorities could rather focus on behaviours which facilitate collusive conduct such as information exchange in oligopolistic markets.

Therefore in certain circumstances where a cartel is detected and is stopped by the authorities, it may be worthwhile to also consider the nature of the industry and the extent to which it facilitates collusion, and either impose remedies or monitor the industry over time to determine the extent to which there has been change in behaviour.

We now turn to the experience of the Commission in the recent long steel cartel investigation.

#### CASE STUDY: STEEL INDUSTRY

In September 2009, the Commission referred the findings of its investigation in the long steel market to the Tribunal for adjudication.<sup>5</sup> The Commission's investigation in this matter was triggered by concerns from government and other stakeholders, regarding the setting of steel prices at import parity pricing levels while South Africa is a net exporting country and the complex nature of relationships among players in the local steel industry.<sup>6</sup> Concerns had also been raised about the high concentration levels and high barriers to entry in an industry where steel suppliers are low cost producers due to their access to relatively cheap iron-ore, scrap and electricity, the major inputs in steel production.

As part of the broad investigation, on 19 June 2008 the Commission conducted a search and seizure operation in the premises of Highveld Steel and Vanadium, Cape Town Iron Steel Works ("CISCO"), and the South African Iron and Steel Institute ("SAISI"). Subsequent to this, the Commission received an application for leniency from one of the steel mills, Scaw Metals, in terms of which it confessed its involvement in various cartel activities. Scaw Metals also implicated ArcelorMittal, Cape Gate and CISCO (jointly referred to as "the steel mills"). After evaluating the evidence brought forth by the firm, the Commission granted Scaw Metals conditional immunity subject to full cooperation with the Commission's investigation.

#### *The Commission's findings*

The Commission's investigation established that the steel mills had a long standing culture of cooperation regarding prices to be charged, discounts to be offered to customers, and the allocation of customers. The steel mills' arrangements in this regard were in relation to the supply of long steel products such as wire rod, reinforcing bar and sections (including rounds, angles profiles. These products are mainly used in construction and infrastructure space, and for railway lines, transmission towers and other engineering services.

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<sup>5</sup> Case number 61/CR/Sep09

<sup>6</sup> The Commission's complaint was initiated in April 2010.

With regards to pricing, the Commission found that the steel mills held formal and informal discussions for purposes of agreeing on the percentages by which prices would be increased. Agreements were also reached regarding the timing of the increases (which was usually in April/ May and October each year) and the levels of discounts to be given to customers. Given that Arcelormittal was known as the market leader, it would be the first firm to announce price increases and the other mills would follow suit with similar announcements. The steel mills also agreed on the prices to be offered to an association representing their reinforcing bar customers known as the South African Reinforced Concrete Engineers' Association. The Commission found that these pricing arrangements amount to the fixing of selling prices, in contravention of section 4(1)(b)(i) of the Act.

There was also an understanding between the steel mills that for sections, the other steel mills would follow ArcelorMittal's transport structure which was categorised according to different zones. The prices quoted for reinforcing bar and wire-rod by all mills were inclusive of transport, i.e. delivered prices, while the other long steel product prices (such as sections) were quoted on an ex-works basis by agreement amongst the mills, in contravention of section 4(1)(b)(i).

The steel mills' pricing agreements started around 2000 and continued until at least the first half of 2008 when the Commission conducted the raid. It is worthwhile to mention that there were significantly high price increases in the market during 2008. For instance, prices increased by about 12 % in March 2008 and by between 15% and 25% in April 2008. In May, that same year, there was another double-digit steel price increase of about 18%. The steel mills attributed these increases (and other previous increases) to upward movement of prices in world markets, higher input costs and an inability to meet increased demand due to electricity crisis. The first two justifications were supported by research done by UK Steel.<sup>7</sup>

The steel mills also engaged in the conduct of allocating three large construction projects, namely the Coega harbour, the Hillside Aluminum Smelter and the Mozal Aluminum projects. Agreements with respect to these projects were reached between 1999 and 2003, and the duration of each project was about two years.

The Commission further established that the industry association, SAISI, was used as a mechanism to facilitate the implementation of the agreed collusive principles and to monitor compliance with such principles. Throughout the duration of the cartel, SAISI collated data from the steel mills on, among other things, output, production capacity and capital expenditure. This information was submitted in a disaggregated form and would be collated by SAISI and circulated to members in an aggregated form. The aggregated information enabled the cartel members to keep track of each others' market shares and to rapidly act against the deviating firm, in case of cheating.

#### *Post cartel phase*

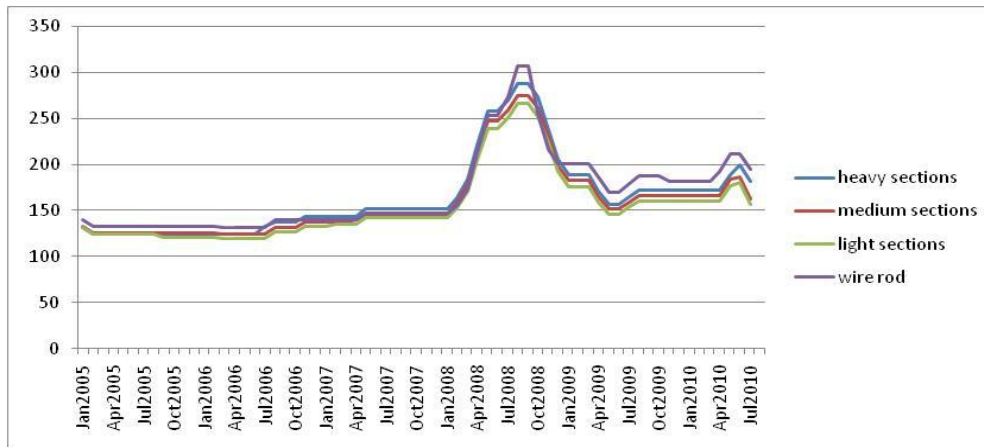
It has been two years since the long steel cartel was uncovered. However, there have not been significant changes in the local market in terms of pricing and the steel mills' behavior in general. Instead, there have been further concerns about the recent price hikes which now seem to threaten the existence of some of the downstream industries.

The two graphs below depict some of the pricing developments referred to above.

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<sup>7</sup> UK Steel, Analysis of steel price developments-summer 2008, [www.eef.org.uk](http://www.eef.org.uk) .

Figure 1. Price trends in long steel (selected products)



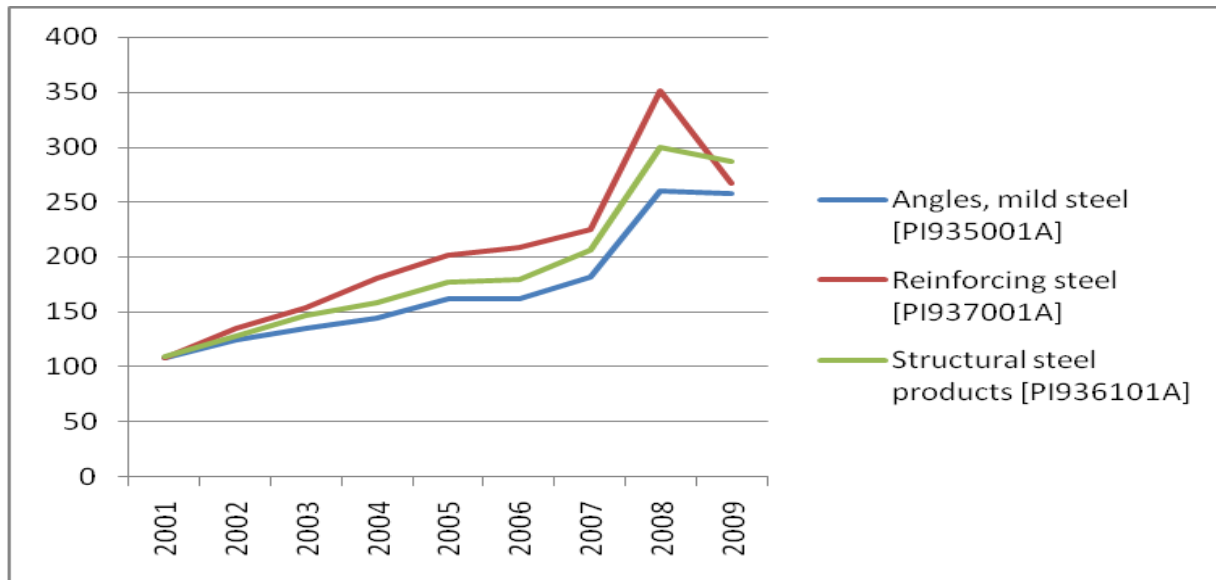
Source: SEIFSA's domestic steel price indices (January 2004 = 100)

Figure 1 above depicts domestic price changes for light, medium and heavy sections, as well as wire rod products, between 2005 and 2010. The data suggests that there were substantial price increases between January and June 2008. Historically, there had been price increases for all these products, however, such increases were not as drastic as those that occurred in 2008. This period was followed by a sharp decline in steel prices, which occurred between September 2008 and January 2009.<sup>8</sup>

A similar trend can be observed in figure 2 below, as far as reinforcing bar is concerned:

Figure 2: Price trends for long steel products (selected products)

<sup>8</sup> Between May and July 2010, prices increased again.



Source: StatsSA (2005 = 100)

There are a number of factors that may account for the above price movements, including the construction boom in South African which may have contributed to the price increases observed in the first quarter of 2008. That period also coincided with huge demand for steel worldwide. Later that year, South Africa was affected by the global financial crisis and this resulted in demand for various products, including steel, going down. Thus, the recession may well justify the decrease in prices that occurred from September 2008 to April 2010.

One of the latest developments during early 2010 was Kumba's decision to terminate the iron ore supply agreement it had with ArcelorMittal on grounds that the latter failed to convert its old mining rights into new mining rights. In terms of the agreement (which was concluded in 2001), ArcelorMittal was entitled to procure iron ore cheaper than its competitors i.e. at 3% above production costs. The termination of the agreement resulted in the firm introducing a surcharge in May 2010 and this increased its long steel prices by about 10%. ArcelorMittal's conduct in this regard may have directly contributed to the price hikes experienced in June and July 2010. It is worthwhile to mention that the Minister of Trade and Industry, Mr. Rob Davies, raised concerns with the Commission about ArcelorMittal's conduct in this respect. The Competition Commissioner has since initiated an investigation against the steel giant.<sup>9</sup>

We have also since observed that at least one of the steel mills has changed its transport cost structure. CISCO now gives customers the option of paying an ex-works price for reinforcing bar, as opposed to its old policy which was based on the steel mills' understanding that customers should be charged a delivered price.<sup>10</sup> It appears that the other steel mills have not changed their pricing structure in this regard. As regards the activities of SAISI, we understand that some of the firms have suspended their membership with association while the remaining members no longer submit the information complained of by the Commission in its complaint referral.

<sup>9</sup> The Commission's investigation in this matter is on excessive pricing under case number 2010Aug5299.

<sup>10</sup> See [www.cisco.co.za](http://www.cisco.co.za)

While we acknowledge the possibility of the above-mentioned factors contributing to the decrease in prices post-cartel phase, we are of the view that the detection and destabilization of the cartel in 2008 may have been another contributing factor, at least in contributing to more independent decisions by firms. The changes in pricing are still however insignificant if one considers the fact that the cartel had lasted for such a long time previously. It also seems very early to hope for anything more significant in that history and any hope of seeing further price decreases in the near future have now been shadowed by the recent ArcelorMitta/ Kumba dispute, which is yet to be resolved.

## CONCLUSION

As indicated above it is worth noting that uncovering cartels does not automatically lead to low prices or competitive markets. While firms caught may voluntarily wish to effect changes or even be under pressure from government and other stakeholders to do so, there may be other factors at play which prevent this from happening. Further, firms may require time to develop and implement new policies which would be consistent with competition laws, especially in markets where cartels operated for a longer duration. On the other hand it is possible that if there is no change in the industry, this may be due to cartel conduct that continues after the cartel is uncovered, albeit in a different form.

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