

Mergers in a Failing Industry: A Case Study of the Ostrich Merger

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Abstract

Competition authorities are increasingly being faced with merger filings relying on the failing firm and/or industry defence. In this paper we argue that competition authorities should not be using merger control as a tool to sympathise with parties to a merger in a declining industry, but to rather resort to alternative enforcement tools such as exemptions to provide relief to much needed distress that firms and industries are likely to face in the aftermath of Covid19. We also discuss additional tools that competition authorities can rely on when assessing harmful mergers in declining industries. We analyse the likely unilateral effects that may arise using two empirical tools, the upward prising pressure (UPP) and the gross upwards pricing pressure index (GUPPI). We illustrate these techniques using the ostrich merger as a case study. In this context, we find that both UPP and GUPPI consistently show the likelihood of the post-merger price being significantly different to that in the pre-merger scenario. We conclude that these empirical tools are useful and that competition authorities should add them into their evidence toolbox in merger assessments to support assessments on the likely competitive effects of a proposed transaction.

KEYWORDS: Failing firm, failing industry, unilateral price increases

JEL Classification: K21, L40

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1 INTRODUCTION

The global economy is currently facing unprecedented declines in economic activity due to the implications arising from the Covid-19 pandemic. On a more granular level, these effects are highly compounded within local economies as each nation continues to deal with the social and economic consequences of the pandemic. Some of the economic consequences of the pandemic are already being observed in the impending failure of a number of firms across industries.

In South Africa's case, the economy had already been facing significant contraction in the latter quarters of 2019. However, the Covid-19 pandemic has caused further economic contraction and South Africa now faces a deep economic crisis. In general, an economic crisis may affect the consideration of mergers and acquisitions (M&A) notified to competition authorities, as many notified M&A cases may come at the backdrop of failing firm and/or failing industry motivations by merging parties. For problematic merger notifications with failing firm or failing industry defences, competition authorities may thus face challenges to its merger policy regime.¹ In terms of South Africa, the difficulties experienced by the competition authorities² may be exacerbated by the trade-off, between the doctrine to uphold competition but also to ensure public interest concerns are considered and protected.

M&A transactions with real and verifiable issues relating to a failing industry justifications may create further complications and challenges to the competition authority, who must deal with the urgency and constrained timelines to ensure that the correct decision is made. In this paper, we seek to highlight certain tools which can be undertaken by the South African competition authorities to review mergers quickly and efficiently under the justifications of a failing firm and/or failing industry defence. To illustrate these tools, our analysis is based on a previous merger between Klein Karoo International (Pty) Ltd and Mosstrich Limited

¹ Merger control policy is an important aspect of competition regulation. M&A activity causes structural changes to a jurisdiction's economy and may cause significant changes to competitive dynamics within and across the affected industries.

² In South Africa, the competition authorities consist of the Competition Commission of South Africa (the "Commission"), the Competition Tribunal (the "Tribunal") and the Competition Appeal Court (the "CAC"). In terms of the review of M&A, the Commission is independent state body that reviews notifiable M&A transactions (those that meet the merger notification thresholds or are requested to be notified) and subsequently decides on the approval according to the doctrine of the Competition Act No. 98 of 1998, as amended (the "Act") – in particular for intermediate mergers. In terms of large merger proceedings, the Tribunal receives a recommendation from the Commission and is the ultimate decision maker on these types of mergers. The Tribunal may also be the decision maker on non-large M&A cases in which the merging parties or third parties are dissatisfied with the Commission's decision.

concerning the ostrich industry in South Africa. On 22 August 2018, the intermediate merger involving Cape Karoo (Pty) Ltd (“Cape Karoo”), Klein Karoo International (Pty) Ltd (“KKI”) and Mosstrich (Pty) Ltd (“Mosstrich”), was notified to the Commission. This merger was initially prohibited by the Commission but after an application of consideration to the Competition Tribunal (the “Tribunal”), the merger was ultimately approved with conditions on the 19 August 2019.³ The paper will thus also use this merger as a case study to see if the correct findings and decisions were made given the Tribunal’s decision based on the failing industry notion. To do so, we assess different merger tools that could have been used by the Commission to make its case for prohibition stronger. For this, we looked at different pricing pressure models cited in literature.

Ultimately, we seek to enrich current literature specifically on mergers with failing industry defences used as a justification for mergers likely to create a substantial lessening of competition (SLC) as well as to provide measures that competition authorities may adopt when dealing with such mergers. The paper is organised as follows: Section 2 elaborates the assessment of the counterfactual by considering literature and applications and learnings from the ostrich merger; Section 3 discusses the economic tools and theories that can be applied during merger review and applications to the ostrich merger as a case study; and Section 4 concludes.

2 ASSESSING THE COUNTERFACTUAL

The counterfactual is an analytical tool used in assessing whether a merger transaction gives rise to an SLC (OFT, 2010). The counterfactual seeks to provide a hypothetical scenario on how the market under consideration would evolve within the foreseeable future absent a proposed merger.

2.1 Counterfactuals presented in the Ostrich Merger

According to the merging parties: *“Absent the merger, the ostrich volumes will continue to decline, which will lead to the eventual exit of one of the two merging parties. The merger is therefore the preferred outcome, as it will stabilise volumes and lead to better overall returns*

³ See the Tribunal’s reasons for decision on the intermediate mergers between Cape Karoo (Pty) Ltd, and Klein Karoo International (Pty) Ltd and Mosstrich (Pty) Ltd. Available at: <https://www.comptrib.co.za/case-detail/8650>

for farmers."⁴ In their application for consideration and throughout the hearing, the merging parties contended that the proposed merger was necessary to stabilize the South African Ostrich industry which is suffering significant decline in production volumes due to the large-scale exit of ostrich farmers. The number of ostrich farmers rearing ostriches to slaughter age had reduced from more than 400 prior to 2011 to less than 200 in 2018.⁵

According to the merging parties, the large-scale exit of ostrich farmers and resulting decline in local production volumes were said to result from a number of factors which contribute to ostrich farmers being unable to realise sufficient overall returns on their farming activities. The factors include amongst others: (i) droughts (in certain areas of the country); and (ii) the recurrence of the Avian Influenza (AI), resulting in the bans on the export of raw ostrich meat in the context of an industry which is heavily reliant on exports.⁶

The Commission considered the pre-merger industry conditions and the pre-merger competitive dynamics. With regards to industry conditions, the Commission found: (i) notable fluctuations in ostrich slaughter volumes since 1993; (ii) ostrich meat had been primarily export driven prior to 2011 with notable shift caused by the export ban on fresh and frozen ostrich meat making the local market increasingly becoming important to the merging parties than was previously; (iii) the other products (leather and feathers) remained mostly export driven as they are not affected by the export ban; (iv) realization to farmers had decreased during periods of export bans; (v) severe ongoing drought in the Karoo for a period of three to four years resulting in significant feeding costs; and (vi) recurrence of Avian Influenza which resulted in numerous export bans of chilled and frozen ostrich meat in the EU. The Commission found that the shocks to the ostrich industry were exogenous and independent from the merger – some were unlikely to recur whilst others were likely to be constant feature of the ostrich industry.

With regards to market dynamics absent the merger – the Commission found no evidence of either company within the ostrich industry exiting the market. No evidence suggesting either of the merging parties or any other firm in the industry were not profitable businesses. Similarly, no evidence on parallel transactions and alternative bidders which could have

⁴ Merger Record, Page 128. Econex: Economic Analysis: The Proposed Merger between Klein Karoo International and Mosstrich. Final report dated 15 August 2018.

⁵ See the Tribunal's reasons for decision on the intermediate mergers between Cape Karoo (Pty) Ltd, and Klein Karoo International (Pty) Ltd and Mosstrich (Pty) Ltd, para. 43, p. 10.

⁶ Ibid. para. 7, pp. 2-3.

significantly alter the prevailing competitive dynamics. The Commission found no reason to believe that absent the merger the nature of competition would be different to the pre-merger situation. The Commission believed that the counterfactual relevant for the purposes of analysing this transaction was the that the pre-merger competitive conditions in which several external supply shocks (i.e. exchange rates fluctuations, AI, drought, ostrich mortality rate and high feed costs) that have been present in the past and are likely to be recurring features of the ostrich industry.

In its decision, the Tribunal accepted that the proposed transaction is taking place in an industry that is under stress with a significant decline over time in the number of ostrich farmers in South Africa, droughts in certain areas of South Africa, the presence of Avian Influenza and export bans on fresh ostrich meat make the industry volatile and risky for ostrich farmers from investment and operational perspective.

We wish to note that the Tribunal did not outright decide on the relevant counterfactual in the ostrich merger. We infer from its decision on the unilateral effects assessment: “...*the merged entity’s ostrich meat pricing in SA would be constrained by a combination of factors (i) there is a small demand for ostrich meat in South Africa (ii) imposed volume condition that obliges the merged entity to sell certain minimum volumes of different ostrich meat cuts in SA will affect its pricing ability in SA (iii) the constraining effect on the merged entity’s ostrich meat pricing of other cuts to which certain customers could switch...*”⁷. That is, the decision was based on competitive considerations in which both the merging parties existed absent the merger, i.e. the status quo. We further infer that the Tribunal did not conditionally approve the proposed merger on the basis that it was anti-competitive, but on the basis of a failing industry – which would translate to the Tribunal implicitly evoking the thinking around the failing firm defence. It is clear in its decision that the Tribunal was persuaded by the parties that the volume-based remedy imposed and customers’ ability to switch to alternative meats would address any competition lost between the merging parties, amongst the other conditions applied. We note however that the Tribunal did mention that the industry factors such as Avian Influenza, export bans and drought had an impact on the overall decision to approve the proposed merger subject to a wide range of conditions.⁸

⁷ See the Tribunal’s reasons for decision on the intermediate mergers between Cape Karoo (Pty) Ltd, and Klein Karoo International (Pty) Ltd and Mosstrich (Pty) Ltd, para 122, p. 28.

⁸ Ibid, para 47, p. 11.

It was well accepted by both the merging parties, the Commission, and the Tribunal that ostrich volumes were volatile and have recently been declining. What is not clear however is the role that a declining industry has in merger assessment. Guidance on how to treat a declining industry is critical, particularly following the Covid-19 pandemic in which most industries and sectors are in distress.

2.2 Guidance from case precedence – failing firms and failing industries

Competition authorities have and will be faced with similar mergers in industries and or sectors with declining volumes, most of which are characterised by failing firms themselves. Guidance is sought on how competition authorities are to deal with such proposed transactions. For a proposed transaction in a declining industry which is highly concentrated, where the target firm is facing financial difficulties – guidance exists on how the merging parties can rely on failing firm defence.

A good example of this scenario was demonstrated in the merger between CTP Limited (“CTP”) and Compact Disc Technologies (“CDT”) which was notified to the Commission on the 15 November 2015. The Commission prohibited the merger on the 2 February 2016 and the Tribunal conditionally approved the merger on 16 March 2016.⁹ The merging parties had relied on the failing firm defence, stating that CDT was a failing firm in a dying market. However, the Commission had found that they did not meet all the requirements of the EU test, in particular proof that there was no other buyer for the target firm. The Commission had also found that CDT and CTP were the only two effective competitors in the defined market. The Tribunal accepted that another buyer that would result in a less anti-competitive outcome was unlikely given the nature and characteristics of the market, namely two effective competitors (if CDT had exited – all CDTs market share would have been captured by CTP) and declining industry meant that there was no incentive for new entry. This implicitly meant there was no alternative buyer that could have bought CDT. The Tribunal accepted that CDT met the requirement of the EU test for failing firms. We note that the Tribunal in this case conditionally approved the merger not because of the declining industry but because of the failing firm in the declining industry.

Under the “*failing firm*” defence, it is argued that, although the transaction might seem to reduce competition, the fact that the target company is failing and about to exit the market

⁹ See Tribunal case number IM232Feb16

means that there is no reduction in competition.¹⁰ This is because in the absence of the transaction, the target would not have remained a competitor.

In the US, the failing firm scenario is one of the considerations for merger review. A number of factors are considered in the assessment of a merger involving a failing firm. In the US, a merger is not likely to create or enhance market power or facilitate its exercise if the allegedly failing firm:¹¹ (i) Would be unable to meet its financial obligations in the near future; (ii) Would not be able to reorganize successfully under the Bankruptcy Act; (iii) Has made unsuccessful good-faith efforts to elicit reasonable alternative offers of acquisition of the assets of the failing firm that would both keep its tangible and intangible assets in the relevant market and pose a less severe danger to competition than does the proposed merger (not an alternative buyer whose purchase would not raise competition concerns); and (iv) The assets of the failing firm would exit the relevant market absent the acquisition.

Although the EU's treatment of the failing firm is not exactly the same as the US, the thinking is largely influenced by the US. In the EC, the test of the failing firm requires that the following conditions be satisfied:¹² (i) The acquired firm would have withdrawn from the market if not taken over by the other firm; (ii) The acquirer would gain the market share of the acquired firm if the latter were to exit the market; and (iii) No alternatives were available that were less anticompetitive. The second condition in the EU test is not a requirement in the U.S. test and makes the EU conditions more stringent than the US in its consideration of the failing firm defence.

In the merger between *Iscor Limited and Saldanha Steel*¹³, the Tribunal made references to the treatment of failing firm defence in other jurisdictions including Australia, Canada, USA and EU in its review of case law. The Tribunal noted that all jurisdictions require satisfaction to varying degrees of the fact that the firm is a failing one, that reorganization is not an option and that there is no other less anti-competitive outcome. The Tribunal also noted that there is

¹⁰ See Norton Rose Fulbright, "*Mergers and acquisitions: the 'failing firm' defence – recent merger decisions by the European Commission and UK competition authorities indicate a more sympathetic approach to acquisitions of companies in financial difficulty*", Lexology. Available at: <http://www.lexology.com/library/detail.aspx?g=aad22a2a-3b04-4c61-b757-76d6de263edf>

¹¹ See the U.S. Department of Justice and the Federal Trade Commission Guidelines April 8, 1997, Para 5.1.

¹² See Bellamy and Child, (2001) "*European Law of Competition*", Sweet and Maxwell, p. 418.

¹³ See Tribunal's Decision Case No: 67/LM/Dec01.

unanimity in all the jurisdictions that failure on its own absent the factors noted herein is not sufficient for the merging parties to rely on the failing firm defence.

The Tribunal clarified how the failing firm defence should be considered in the case of South Africa. The Tribunal highlighted that in the South African Competition Act, the failing firm doctrine is not used as a '*defence*' to a merger that is found to be anticompetitive on an initial market analysis. The Tribunal stated that the failing firm defence is one of a list of '*factors*' that one takes into account before one can determine whether a merger is anti-competitive.¹⁴ The Tribunal made comparisons between the failing firm defence application in South Africa and the US. To this end the Tribunal noted that in the US, the adjudicator would first determine whether or not a merger was anti-competitive and when the merger is anticompetitive then the failing firm doctrine will be considered as a defence.¹⁵

Given the Tribunal's guidance above, it is clear that the failing firm defence is considered as part of the counterfactual. That is, assessing the state of competition before the competitive effects of a proposed merger are taken into consideration.

In the *CTP/CDT* merger the Tribunal again confirmed its statement in the *Iscor/ Saldanha* merger that even where the EU test conditions were not met, the fact that a party to the merger was failing in the broad sense may still be sufficient to justify the approval of an otherwise anti-competitive merger, "*depending on the degree of the anti-competitive sting*" of the merger.¹⁶ This statement contradicts the Tribunal's initial view where it noted that there is unanimity in all the jurisdictions that failure on its own absent the factors (in the failing firm defence) noted herein is not sufficient for the merging parties to rely on the failing firm defence.

The Tribunal clarified what it considered to be a failing firm. In the *SchumannSasol/Price's Daelite*¹⁷ merger, the Tribunal indicated that it is not necessary to show that a firm has failed but only that it is likely to fail. The Tribunal clarified that failure need not necessarily equate to insolvency and made the following reference to Areeda¹⁸: "*Low revenues may dictate that a firm withdraw from a market rather than reinvest capital, even though it is continuously able to pay its maturing debts. Although proof of such a case poses more serious problems, the*

¹⁴ See Tribunal Decision Case No: 67/LM/Dec01 ZACT 17

¹⁵ See Tribunal's Decision Case No: 67/LM/Dec01 para 101.

¹⁶ See Tribunal's Decision Case No: 67/LM/Dec01 para 110.

¹⁷ See Tribunal's Decision Case No: 23/LM/May01.

¹⁸ See Tribunal's Decision Case No: 67/LM/Dec01 para 109.

opportunity to make it cannot reasonably be foreclosed.”. Indeed, there are a number of mergers in which the merging parties, the Commission and some extent the Tribunal (where applicable) accept that the firm itself is failing. These include amongst others the *Senwes/Suides* transaction, the *Kind/Choppies* transaction, *Videx/Aveng* transaction, and *CTP/CDT* transaction. A number of proxies have been used to establish failing firm, including performance indicators, liquidity ratios. It can be expected that firms in a highly concentrated industries with contracting volumes generally face declining revenues, declining sales, inability to pay off its debts, etc.

Could it be that the competition authorities are applying the failing firm defence loosely, that is, even where the EU test conditions were not met, the fact that a party to the merger was failing in the broad sense may still be sufficient to justify the approval of an otherwise anti-competitive merger – when conditionally approving the mergers that should otherwise not be approved? Should competition authorities be approving all mergers in distressed industries? permanently changing the structures of such industries because of temporary distress?

3 ECONOMIC TOOLS AND THEORIES

3.1 Literature Review

According to the OECD,¹⁹ market definition is an extensively used analytical framework to evaluate competitive concerns used by competition authorities (OECD, 2012). The market definition consists of defining the relevant product and geographic market as a starting point in determining the potential competition harm that may arise from merger transactions.

The widely accepted method to define the market is the use of the hypothetical monopolist test (or SSNIP test) which regards all those products and regions for which a hypothetical profit maximising monopolist would impose a small but significant non-transitory increase in price (SSNIP). However, market definition is a complex undertaking and the use of the simple SSNIP test in some cases may not be the most appropriate method under all circumstances. This is insofar as it relates to the ensuing concentration assessments performed by the competition authority to estimate the post-merger dominance of the merging parties.

Although the SSNIP test remains useful to evaluate whether customers would switch their purchases away from the hypothetical monopolist (i.e. the candidate market under review) to

¹⁹ Organisation for Economic Co-operation and Development.

competing products of suppliers outside of the candidate market, the extent to which these alternative products can exert a sufficient constraint on the products of the merging parties is not captured (Amelio & Donath, 2009). This may lead to the overestimation or underestimation of market shares as well as the potential competition effects by either over- or under-stating the competitive constraints between firms.

A common instance in which these misalignments between the market definition, market shares and the potential competitive effects may occur is in markets that consist of differentiated products.²⁰ In differentiated product markets, a firm may price its differentiated product higher which may not result in the loss of all of its sales due to some consumers continuing to prefer this differentiated product to the lower priced “reasonable substitute” product (Bishop & Walker, 2010). In some instances, each differentiated product could be classified as its own distinct market in the event that each of these differentiated products are not sufficient to pose any real competitive constraint against the other. Market shares estimated for a market consisting of several differentiated products may result in the competition authority understating any serious competition concerns that may indeed arise from the proposed transaction. In a merger between parties supplying the same differentiated product in a broader market of several “substitutable” differentiated products, market shares would be unable to provide insight on the actual competitive dynamics amongst firms. Hence, in differentiated markets a competition authority may rather consider the closeness of competition between the merging parties or closeness of substitutes between the differentiated products. That is, the closer competitors the merging parties are, the more likely it is that a merger may give rise to significant unilateral effects (Bishop & Walker, 2010).

In this regard, as a complementary approach to simply relying on the results of a SSNIP test and market share estimates, a large body of literature suggests the use of quantitative methods.

3.1.1 Unilateral effects analysis and market definition

The literature offers several tools which South African Competition authorities can use when evaluating mergers. Indeed, in addition to the traditional structural approaches of linking market structure to performance, economists have over time developed more economic rigorous tools which may aid in merger assessment.

²⁰ Although, the hypothetical monopolist test was designed specifically for purposes to address competition between differentiated products (Bishop & Walker, 2010).

Traditionally, in the assessment of potential unilateral effects, much emphasis has been placed on the calculation of market shares and market concentration. These estimates are then used to infer market performance and the possibility of unilateral effects. A debate still exists in the literature regarding the empirical relationship between market structure and performance as there are still opposing views on the topic (Shapiro, 1996). Given this, alternative tools to assessing unilateral effects based on the Bertrand model of price competition have been proposed by Shapiro (1996), Salop and O'Brien (2000), Farrell and Shapiro (2010) and others.²¹

A horizontal merger transaction also has the potential to lead to a decrease in prices. Post-merger, the merging firms' assets can be utilised together to achieve synergies and efficiencies which could lower marginal costs and create the incentives of lower price offerings (Farrell & Shapiro, 2010). Indeed, if a merger leads to lower costs for the merged entity, the lower costs will give rise to more competitive pricing incentives (Salop & O'Brien, 2000). If post-merger, the decrease in marginal costs are large enough, the efficiency benefits brought about the merger will lead to the increase in the competitiveness of the firm's unilateral pricing incentives which could be greater than the adverse incentive effects of price increases, such that, the net effect of a merger is the reduction of prices (Salop & O'Brien, 2000).

Given the above, it can be understood that a merger can bring about two opposing forces. First, the loss of a close competitor creates the incentive to unilaterally increase prices. Farrell and Shapiro (2010) refer to this as upward pricing pressure. Second, a merger may lead to marginal-cost savings which create incentives to reduce prices. This is referred to as downward pricing pressure (Farrell & Shapiro, 2010).

²¹ Prior to detailing these alternative tools, it is best we discuss the basic logic of unilateral anticompetitive effects. Consider a merger between two producers of beer, Firm A and Firm B, which produce Brands A and Brands B, respectively. A hypothetical merger transaction between Firm A and Firm B has the potential to give rise to anticompetitive price increases if Brand A and Brand B are considered close substitutions to one another in the eyes of consumers, such that, a significant proportion of consumers using one brand consider the other brand as an alternative.

Pre-merger, if the price of Brand A would increase, some customers would shift purchases from Brand A to Brand B. If this would occur, Firm A would lose customers to Firm B. Post-merger, should Firm A and Firm B merge, the merged entity would own both Brand A and Brand B and therefore would not lose any customers following a price increase to Brand A as consumers would be diverted to Brand B.

Given this, the price increase would be profitable to the merged firm. Pre-merger, Firm B constrains Firm A's incentive to raise prices through the fear of losing customers to Firm B. Post-merger should the merged entity increase its prices for Brand A lost sales would still be recaptured by the merged entity and the greater the recapture, the more profitable the price increase would be. Therefore, a horizontal merger gives rise to incentives for the merged entity to unilaterally increase prices post-merger.

In this context, alternative tools to assessing unilateral effects focus on assessing the changes of pricing incentives as a result of merger transactions. These approaches are known as pricing pressure models which seek to assess the conflict among the two opposing forces of upward and downward pricing pressure (Salop & O'Brien, 2000).

Pricing pressure models are based on the underlying economics of pricing and assess whether a merger leads to a net upward pricing pressure by comparing a firm's incentive to increase prices as a result of a loss of a close competitor against its incentives of decreasing prices as a result of efficiencies gains (Farrell & Shapiro, 2010). Below we discuss two pricing pressure models, that being, the Upward Pricing Pressure (UPP) model and the Gross Upward Pricing Pressure Index (GUPPI).

3.1.2 Upward pricing pressure (UPP)²²

The UPP methodology was introduced by Farrell and Shapiro (2010) and is based on the Bertrand model of price competition among suppliers of differentiated products.²³ This methodology signals whether a merged entity will have the incentive to increase its prices post-merger. This is achieved by assessing the net effect between the upward pricing pressure that results from a loss of a close competitor and downward pricing pressure that is achieved through merger efficiencies (Farrell & Shapiro, 2010).

²² The UPP has been used in a number of merger assessments.

- i) **South African Cases:** In the intermediate merger between Greif International Holding B.V. and Rheem South Africa (Pty) Ltd reviewed by the Tribunal under an application for consideration, the Commission's expert used the UPP and GUPPI pricing pressure models to complement the market definition and to provide empirical evidence on unilateral effects, post-merger. Under this case, we note that this may have been the first time in which such models had been used in a litigation setting for a merger matter. The Commission's expert stated that pricing pressure models was an additional empirical analysis performed "[r]ather than focusing on market definition, the GUPPI [aims] to directly answer the question of whether the merged firm is likely to increase prices post-merger.". The Commission's expert showed that the findings under the UPP and GUPPI models successfully confirmed the Commission's delineation of the market. The Commission expert's findings also showed that the models indicated the ability for the merging parties, post-merger, had the ability to increase prices. However, the Tribunal stated that it had "simply [noted] its findings but do not place any weight on this analysis...". See Competition Tribunal, Reasons for Decision dated 21 May 2019 in regards the intermediate merger between Greif International Holdings B.V. and Rheem South Africa (Pty) Ltd, Tribunal case no.: IM094Jul17, paras 111 and 135.
- ii) **International case precedent:** the Competition and Markets Authority (CMA) which assessed mergers such as Somerfield/Morrison (2005), Waterston/Ottaker (2006) and CGL/Somerfield (2008); the Swedish competition authority, Konkurrensverket, assessed the Office Depot/Svanströms (2011) phase I merger; European Commission (EC) first use of the UPP-methodology in a Phase II merger assessment of Hutchison 3G Austria/Orange Austria (2012); and the Federal Trade Commission (FTC) used this approach on AT&T/T-Mobile (2011).

²³ The UPP can also be applied under Cournot competition where supply quantities determine prices.

A high diversion ratio between the merging parties will typically lead to greater upward pricing pressure if any one of the firms merging increases its prices, a proportion of the sales that the firm loses will be diverted and recaptured to the other merging firm. Therefore, the greater the diversion ratio among the merging parties or the greater the profit margin of one of the merged firm's products, the greater the incentive to raise prices (Moresi, 2010).

The upward pricing pressure can also be offset by downward pricing pressure as a result of merger-induced efficiencies in the form of variable cost savings (Moresi, 2010). The UPP considers the two opposing forces that a merger brings, that is, the incentive to increase post-merger prices and merger-induced efficiency gains. If the UPP estimate is positive, it can be concluded that the merged entity has an incentive to raise prices post-merger. Similarly, if the UPP estimate is negative, the merged entity would have an incentive to lower prices or keep them as they are due to the merger-induced efficiencies gained.

It is important to note that the UPP alone should not be used as evidence that a merger will lead to a substantial lessening of competition but should be used in conjunction with other tools, as the UPP on its own is not a complete analysis (Moresi, 2010). The UPP does not consider other factors such as responses from competitors, the possibility of new entrants into the market and other dynamic effects such as network effects (Moresi, 2010). However, the UPP can be used as a screening tool and as supporting (complementary) evidence of possible anticompetitive unilateral effects.

3.1.3 Gross upward pricing pressure index (GUPPI)

Since the UPP can only be used to signal whether the merged entity has the incentive to raise prices post-merger and cannot quantify the price increases, to quantify the potential price increases, Salop and Moresi (2009) and Moresi (2010) extend the framework and propose the GUPPI model. The GUPPI is a price index which builds upon the UPP by incorporating market dynamics. It measures only the upward pricing component and does not consider merger-induced efficiencies. It expresses any potential price change as a percentage of pre-merger prices by associating the lost sales of the one merging firm to the increase in revenues of the other (Moresi, 2010).

The GUPPI can also be used for purposes of market definition as it can be related to market definition methodology and the SSNIP test (Moresi, 2010). For example, consider a relevant market that may consist of product A and product B. These products would belong to the same

relevant market if it would be unprofitable to impose a SSNIP of between 5-10%. Under the GUPPI, these two products would belong to the same relevant market if:

$$GUPPI_i \geq 2s \quad (1)$$

Product A and product B would constitute the same relevant market if the GUPPI would be found to be greater than two times the SSNIP (which is represented by s above). This is so, if we assume linear demand (of products A and B) and equal constant marginal costs such that there exists a link between the SSNIP and the GUPPI (Moresi, 2010).

Furthermore, like the UPP, the GUPPI cannot be considered a complete analysis on its own but could be used as a screening tool and as an additional piece of evidence which would support circumstantial evidence (Moresi, 2010). Hence, we propose that these additional tools be used in conjunction with the general merger assessment tools, such as: barriers to entry assessments, countervailing power assessments, assessments of concentration, and general evidence from market participants (customer and competitor evidence).

3.2 Applications to the Market for Ostrich Meat

3.2.1 Background on ostrich meat from the ostrich merger

The most contested aspect of the ostrich merger relates to the delineation of the market for ostrich meat as well as the resulting assessment on competitive effects. The Commission found that ostrich meat is considered a niche product and primarily consumed by higher living standard measure (LSM) customers.²⁴ The merging parties opposed the Commission's delineation, contending that "*it is too narrow and disregards genuine competitive constraints on ostrich meat products in South Africa*".²⁵

The merging parties' expert asserted that the supply of ostrich meat would face constraints from alternative meat categories, such as the broader market for red meat insofar as ostrich meat being very similar in taste and texture, and healthy meat options such as fish and chicken insofar as ostrich meat is regarded as a healthy meat option. In addition, the merging parties' expert further asserted that ostrich meat should be viewed separately by category, that is: fillet,

²⁴ See the Tribunal's reasons for decision on the intermediate mergers between Cape Karoo (Pty) Ltd, and Klein Karoo International (Pty) Ltd and Mosstrich (Pty) Ltd, para. 91, p. 20.

²⁵ See the Tribunal's reasons for decision on the intermediate mergers between Cape Karoo (Pty) Ltd, and Klein Karoo International (Pty) Ltd and Mosstrich (Pty) Ltd, para. 93, p. 21.

steak, and trimmings. Although the Commission's expert accepted that ostrich meat can be delineated by its three main sale categories of fillet, steak and trimmings, the Commission's expert did not agree that ostrich meat (per category) can be significantly constrained by other types of meat.

Under this contested narrow market definition, the Commission stated that KKI and Mosstrich, post-merger, would be the two largest players in South Africa with an estimated combined market share of 86%,²⁶ constituting a merger to near-monopoly and would give rise to significant unilateral effects. As such, the Commission stated that the merged entity would have *"the incentive and ability to reduce local ostrich meat volumes and/or increase prices to the detriment of South African consumers...nothing would prevent or restrict the merged entity from deciding not to sell ostrich meat to the [local] market. This is exacerbated by the fact that the ostrich industry as whole...is characterised by high barriers to entry"*²⁷.

According to the Tribunal, the Commission further asserted that the proposed transaction *"would not only remove an effective competitor to KKI, but would remove the more reliable supplier to the local market in times of no export bans when there is a greater incentive to short the local market...the merging parties [could] divert ostrich meat sales to the export market irrespective of whether an export ban was in place and increase the price of local ostrich meat post-merger"*.²⁸ The merging parties contended that retail and wholesale customers would be able to switch to alternative suppliers and further suggested that the merged entity would be constrained by beef prices and in some instance chicken prices. Furthermore, the merging parties stated that it had become their strategy to develop and maintain its sales in the local market given the persistence of export bans on fresh ostrich meat.

The Tribunal ultimately did not conclude on the market definition for ostrich meat, nor conclude on whether ostrich meat prices in South Africa will post-merger be constrained by

²⁶ See the Tribunal's reasons for decision on the intermediate mergers between Cape Karoo (Pty) Ltd, and Klein Karoo International (Pty) Ltd and Mosstrich (Pty) Ltd, para. 108, p. 24. The Commission further noted that the two competitors of the merging parties for the supply of ostrich meat is Ostriland and Gondwana, both of which are relatively small in the market and would not be able to constrain the merged entity post-merger. In fact, it was further revealed that Ostriland relies on the merging parties for contract slaughter (abattoir) services for its own supply operations.

²⁷ See the Tribunal's reasons for decision on the intermediate mergers between Cape Karoo (Pty) Ltd, and Klein Karoo International (Pty) Ltd and Mosstrich (Pty) Ltd, para. 107, p. 24.

²⁸ Ibid. paras 109-110, p. 25.

prices of other meat products.²⁹ Apart from other remedies attached to the other markets and/or potential competitive effects assessed in this proposed transaction, the Tribunal concluded a behavioural remedy³⁰ which it viewed as “*proportional to the competition harm contemplated*”.³¹

In the context of the Tribunal’s decision, we assess an alternative methodology to assess the potential likelihood of unilateral effects arising stemming from the merged entity’s ostrich meat supply operations. That is, the use of the UPP and GUPPI models (as discussed above) to ascertain whether the Commission had basis for its views. This assessment is detailed in the subsections that follow.

3.2.2 Methodology

This section outlines the pricing pressure methodologies proposed by Farrell and Shapiro (2010) and Moresi (2010). We applied these methodologies in the context of merger review in regard to the ostrich merger. These tools could have been used by the Commission as supporting evidence in order to make its case for prohibition stronger. We first outline the UPP before moving on to the GUPPI.

UPP

As proposed by Farrell and Shapiro (2010), the UPP seeks to assesses the net effect of two opposing forces, that being, the upward pricing pressure caused by the elimination of close competitors and the downward pricing pressure which result from potential efficiencies gained by the merger. Indeed, the UPP is a useful tool which can be used to signal whether the merging parties have an incentive to raise prices post-merger. The following formula can be used to calculate the UPP:

$$UPP_i = DR_{ij} \times (p_j - c_j) - eff \times c_i \quad (2)$$

²⁹ The Tribunal states that it could not conclude that ostrich meat prices would not be constrained by the prices of other meat products based on the evidence of the two retailers who testified. We assume that the Tribunal did not have sufficient evidence to provide a concrete view of the ostrich meat market.

³⁰ The Tribunal conclude a volume-based commitment on ostrich meat sales to the local market following a specific formula to be applied on fillet, steak, and trimmings sales, respectively.

³¹ See the Tribunal’s reasons for decision on the intermediate mergers between Cape Karoo (Pty) Ltd, and Klein Karoo International (Pty) Ltd and Mosstrich (Pty) Ltd, para. 136, p. 31.

Where DR_{ij} denotes the diversion ratio of firm i to firm j , c_j and c_i illustrate the costs of firm j and firm i respectively, p_j denotes the prices charged by firm j and eff reflects the merger-induced cost-saving percentage.

According to Farrell and Shapiro (2010), if the UPP is found to be positive, it can be asserted that the merging parties have an incentive to increase prices post-merger. In contrast, if the UPP is found to be negative, it is believed that the merger will lead to cost efficiencies that create downward pricing pressure which provides an incentive to reduce prices.

As indicated above, the UPP has a weakness, such that, it is only able to communicate whether the merging parties possess the incentive raise prices post-merger but fails to account for the magnitude of the potential price increases. In addressing this limitation, Salop and Moresi (2009) extended the framework by proposing the GUPPI.

GUPPI

The GUPPI is an extension of the UPP which aims at measuring only the upward pricing component and does not account for any merger synergies nor any responses from competitors. Indeed, the GUPPI offers a bit more structure to the analysis as it expresses the upward pricing pressure as a percentage of pre-merger prices. The following formula is used in order to calculate the GUPPI:

$$GUPPI_i = DR_{ij} \times \frac{p_j - c_j}{p_i} \quad (3)$$

Where DR_{ij} denotes the diversion ratio of firm i to firm j , p_j and p_i illustrate the prices of firm j and firm i respectively and c_j denotes the costs of firm j .

For both the UPP and GUPPI, the diversion ratio is calculated using the following formula:

$$DR_{ij} = \frac{MS_j}{1 - MS_i}$$

Where MS_j refers to the estimated market share of firm j and MS_i refers to the estimated market share of firm i . Under the logit specification, the diversion ration is easily calculated using the estimated market shares of the two firms in question.³²

To further note, we also calculate the estimated marginal costs of the firm for producing the particular product in question. This is based on using the firm's gross profit margin as a proxy to determine the estimated costs involved in supplying the product in question. This is done for both the UPP and GUPPI model calculations.

3.2.3 Results of the pricing pressure models³³

We assume two different sets of scenarios for the relevant product market for ostrich meat: (i) the market for ostrich meat; and (ii) the market for ostrich meat separated by the main cut of meat, that is: fillet, steak, and trimmings. We received monthly data available from 1 January 2015 to 31 May 2018 from the Commission which has been used to calculate the UPP and GUPPI.³⁴ In terms of competitors, we also have data from two of the competitors of ostrich meat in the market.³⁵

Market for all ostrich meat

We estimated the UPP using different values for the efficiency parameter. Table 1 below reflects a summary of these results. For each value of the efficiency parameter (0% -10%), we show the corresponding average and standard deviation of the resulting UPP estimate.

³² In terms of the diversion ratio, we assume that there is a representative consumer in the market and the estimated market shares therefore represent the probability that this consumer will choose a certain firm. In addition, it assumed that this consumer's preference can be approximated by a "logit-type" model.

³³ It should be noted that we used gross profit margins as a proxy to determine the average marginal cost of the two formulas. In addition. The management accounts provided by the merging parties were cleaned to exclude export sales, the cost of sales attributed to export sales as well as the sales of game meat which does not fall part of our candidate market for assessment, to determine the gross profit and gross profit margin. As such, the results may vary due to the limitation of not having precise cost financials for the sale of ostrich meat to the local market. In addition, we also used the same margins for the UPP and GUPPI estimates for each ostrich meat category.

³⁴ The Commission's case submissions which include submissions from: the merging parties, and two competitors.

³⁵ The one competitor is mainly an export-orientated company and is generally able to supply ostrich meat during export ban times if no avian influenza is found in their ostriches. It is able to do so based on a closed compartment business model that it operates. The other competitor only supplies the local market at the time of the proposed transaction.

Table 1: UPP summary statistics for the market for all ostrich meat products

		<i>Efficiency Parameter</i>										
		0%	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
KKI	Mean	13.18	12.90	12.61	12.33	12.05	11.76	11.48	11.19	10.91	10.63	10.34
	Std. Dev.	4.01	4.02	4.04	4.06	4.08	4.11	4.14	4.17	4.20	4.24	4.28
Mosstrich	Mean	20.08	19.87	19.66	19.45	19.25	19.04	18.83	18.62	18.41	18.20	17.99
	Std. Dev.	12.12	12.09	12.06	12.04	12.01	11.99	11.96	11.93	11.91	11.89	11.86

Source: Data provided by the Commission.

From the table above, we find that the average UPP estimate is positive for all our efficiency parameter provisions in terms of our calculation for KKI. As indicated previously, a positive UPP estimate suggests that the firm will have an incentive to raise prices post-merger. An average efficiency gain above 10% would be needed to countervail the incentive to raise prices. Similarly, in regard to Mosstrich, the average UPP estimate is positive for all our efficiency parameter provisions suggesting that average efficiency gains would have to be above 10% in order to countervail the incentives to raise prices post-merger. Table 2 below displays the GUPPI summary statistics for KKI and Mosstrich.

Table 2: GUPPI summary statistics for the market for all ostrich meat products

	Mean	Std. Dev.	Min	Max
KKI	27%	0.10	6%	47%
Mosstrich	52%	0.28	-10%	109%

Source: Data provided by the Commission.

The average GUPPI estimates for both KKI and Mosstrich are 27% and 52% respectively. This suggests that the merging parties have strong incentives to raise prices post-merger as they will find it profitable to do so. Further, it appears that for certain months the GUPPI estimate is above 10% which signals that the merged entity will find it profitable to impose a SSNIP of 5%.

Market for ostrich meat cuts

In addition to estimating the UPP and GUPPI for the relevant market of all ostrich meat, we also conducted the analysis based on the market for ostrich meat separated by the main cuts of meat, that being, fillet, steak, and trimmings. To this score, Table 3 below reflect our results.

Table 3: UPP summary statistics for the market of ostrich fillet, steak, and trimmings

Fillet		<i>Efficiency Parameter</i>										
		0%	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
KKI	Mean	22.94	22.26	21.57	20.88	20.19	19.51	18.82	18.13	17.44	16.76	16.07
	Std. Dev.	9.29	9.32	9.36	9.40	9.46	9.52	9.59	9.66	9.74	9.83	9.93
Mosstrich	Mean	39.72	39.18	38.65	38.11	37.58	37.04	36.50	35.97	35.43	34.90	34.36
	Std. Dev.	21.93	21.89	21.84	21.80	21.76	21.72	21.68	21.64	21.60	21.57	21.53
Steak		<i>Efficiency Parameter</i>										
		0%	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
KKI	Mean	15.52	15.08	14.65	14.21	13.78	13.34	12.91	12.47	12.04	11.60	11.17
	Std. Dev.	5.46	5.45	5.45	5.45	5.46	5.48	5.51	5.54	5.57	5.61	5.66
Mosstrich	Mean	26.72	26.42	26.12	25.82	25.52	25.22	24.92	24.61	24.31	24.01	23.71
	Std. Dev.	14.65	14.63	14.60	14.58	14.56	14.54	14.52	14.50	14.48	14.46	14.44
Trimmings		<i>Efficiency Parameter</i>										
		0%	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
KKI	Mean	11.94	11.68	11.42	11.16	10.90	10.64	10.38	10.12	9.86	9.60	9.34
	Std. Dev.	3.62	3.63	3.64	3.65	3.67	3.69	3.72	3.74	3.77	3.80	3.83
Mosstrich	Mean	19.46	19.29	19.12	18.95	18.78	18.61	18.44	18.27	18.10	17.93	17.76
	Std. Dev.	11.77	11.75	11.74	11.73	0.00	11.70	11.69	11.68	11.67	11.66	11.65

Source: Data provided by the Commission.

In regard to ostrich fillet, we find that the average UPP estimate is again positive for all our efficiency parameter provisions indicating that an average efficiency gain above 10% would be needed to countervail the incentive to raise ostrich fillet prices. Mosstrich on the other hand also requires a marginal cost decrease by more than 10% in order to countervail the incentive to raise prices.

In terms of ostrich steak, in regard to KKI, we find that the average UPP estimate is positive for all levels of efficiency gains suggesting that KKI does have an incentive to raise ostrich steak prices post-merger. However, the same case is found for Mosstrich as we find that the average UPP estimate is positive for all levels of efficiency gains suggesting that Mosstrich will have an incentive to raise ostrich steak prices post-merger.

Further, in terms of ostrich trimmings, we find that the average UPP estimates for KKI and Mosstrich are positive for all our efficiency parameter provisions suggesting that average efficiencies gains above 10% would be needed to countervail the incentive to raise the price of ostrich trimmings post-merger for both merging parties.

Table 4 below displays the GUPPI summary statistics for both KKI and Mosstrich as per cut of ostrich meat.

Table 4: GUPPI summary statistics for the market of ostrich fillet, steak, and trimmings

Fillet	Mean	Std. Dev.	Min	Max
KKI	19%	0.09	3%	48%
Mosstrich	42%	0.25	-16%	101%
Steak	Mean	Std. Dev.	Min	Max
KKI	21%	0.09	4%	40%
Mosstrich	50%	0.30	-14%	124%
Trimmings	Mean	Std. Dev.	Min	Max
KKI	26%	0.09	6%	48%
Mosstrich	61%	0.34	-12%	139%

Source: Data provided by the Commission.

In terms of ostrich fillet, the average GUPPI estimates for both KKI and Mosstrich are 19% and 42% respectively. This suggests that the merging parties have strong incentives to raise ostrich fillet prices post-merger as they will find it profitable to do so.

For ostrich steak we find that the average GUPPI estimates for KKI and Mosstrich are 21% and 50% respectively suggesting that KKI does have an incentive to raise ostrich steak prices post-merger. Similarly, Mosstrich also has an incentive to raise ostrich steak prices post-merger as they will find it profitable to do so.

Furthermore, in regard to ostrich trimmings we find that the merging parties will find it profitable to raise prices post-merger as reflected by the average GUPPI estimates of 26% and 61% for KKI and Mosstrich, respectively.

4 CONCLUSION

In this paper, we argue that competition authorities will now more than ever be faced with merger filings that rely on the failing firm and/or industry defence. This is mainly due to the economic effects of the Covid19 pandemic where in most firms and industries are in financial distress. We note from case precedence that there is a possibility of competition authorities to loosely accept the failing firm defence when applied in failing/distressed industries, i.e. even where the EU test conditions were not met, the fact that a party to the merger was failing in the broad sense may still be sufficient to justify the approval of an otherwise anti-competitive merger.

We contend that competition authorities should not be applying the failing firm defence loosely and thus accepting the declining industry argument. Such an argument should be used in the context of assessing the relevant counterfactual through the inquiry of the failing firm defence.

In our view merger control may not be the best tool to sympathise with merging parties in declining industries – but rather that competition authorities should prohibit such transactions and use alternative tools such as *exemptions*³⁶ to relieve industries from temporary stress and stimulate industry growth through any claimed efficiencies that may arise from consolidation/collaboration/coordination.

In this paper, we have also looked at the unilateral effects of a merger in the South African ostrich industry. Using a simple differentiated-products oligopoly model, we estimate the diversion ratios from lost sales following an increase in prices. The diversion ratios allow us to measure the incentives to raise prices that the merged firm would face. The incentives to raise prices are assessed using the UPP and GUPPI. We show that the prices post-merger of KKI and Mosstrich products would be significantly higher than pre-merger. This finding is robust to different delineations of the market.

While we cannot know for certain if the Tribunal would have changed its decision to conditionally approve this proposed transaction given the application of the UPP and GUPPI, that this assessment could have provided further justifications that significant competition harm could arise particularly in the ostrich meat market. This is mainly due to its reasoning that the remedies imposed: *“adequately address the competition concerns resulting from the proposed transaction and...the proposed transaction has the potential of benefitting the ostrich industry in South Africa that is in significant decline, if the merged entity could successfully increase export prices over the longer term”*³⁷. We note given that the Tribunal was unable to conclude on its assessment of the market definition and thus the potential pricing constraints (if any) faced on the sale of ostrich meat products by other meat products, it is still worth exploring whether further empirical approaches as evidence could have swayed its decision.

Overall, there are a number of empirical approaches that can assist competition authorities in assessing the competitive effects of mergers. In addition, proposed mergers with significant competitive effects should not simply dismissed and approved on the basis of a failing industry.

³⁶ Competition Act No. 98 of 1998, as amended, section 10.

³⁷ See the Tribunal’s reasons for decision on the intermediate mergers between Cape Karoo (Pty) Ltd, and Klein Karoo International (Pty) Ltd and Mosstrich (Pty) Ltd, para. 172, p. 39.

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