

INTERPRETATION OF MARKET SHARES, COUNTERVAILING POWER, BARRIERS TO ENTRY AND INNOVATION IN A DIFFERENTIATED PRODUCTS MARKET

Thabelo Ravhugoni (Competition Commission SA)¹

Fifth Annual Competition Law, Economics and Policy Conference: 4 & 5 October 2011

ABSTRACT

Product differentiation, which section 12A (2) of the Competition Act no. 89 of 1998 (“Act”) identifies as the dynamic characteristic of the market, is generally considered to assess the closeness of competition between brands of the merging parties. However, as I intend to show in this paper², product differentiation has a huge impact on the interpretation of other factors identified under section 12A (2) of the Act, namely, market shares, countervailing power, barriers to entry and innovation. For example, a market that is characterised by recent entrants, whose entry was quick and at a sufficient scale, can on the one hand be considered to have low barriers to entry. On the other hand, in a market characterised by high product differentiation it can be argued that entry of such firms is not sufficient if the products of new entrants are not close enough competitors to render price increases on the products of the merged firm unprofitable.³ Further, a merger created market power may be short lived if firms innovate constantly because innovation would introduce improved substitutes which would destabilise long run market power. On the other hand, a merger created market power would raise significant competition concerns if the merging parties’ products are closest competitors in a highly differentiated products market as it would reduce innovation efforts, since firms that closely compete with each are likely to be the most innovative as they seek to differentiate themselves from each other and thus creating sustainable market power.

¹ I write this paper in my personal capacity and the views expressed herein are mine, and where I expressly state those of the authors/institutions referred to.

² The paper is largely based on competition authorities’ previous cases, merger guidelines and relevant literature.

³ 2010 US Horizontal merger guideline, paragraph 9.3.

1. INTRODUCTION

Nearly all the products and services involve some product differentiation between competing firms (Clark: 1961). Unsurprisingly, section 12A (2) of the Competition Act no. 89 of 1998 (“Act”) requires competition authorities to consider product differentiation when assessing the effects of merger transactions on competition in the market. One may therefore expect to see a majority of merger reports in South Africa reflecting the assessment of the extent of product differentiation in the market. On contrary, competition authorities have in very few merger cases assessed the extent of product differentiation in the market. There may be sound reasons for this. One of these may arise from the argument that not any product differentiation that sellers make mention of competition authorities should be concerned with.

Paragraph 47 of the Competition Tribunal (“Tribunal”) ruling in the *Multichoice / Tiscali merger*⁴ puts very clearly the kind of product differentiation competition authorities should be interested in. The Tribunal stated that –

“Of course in developing a lower cost service the firms risked having their clients on the more expensive packages migrate downwards. To avoid this scenario their second strategy was to differentiate their offerings between premium and non-premium. The premium offering contains more features than the non-premium product and these range from access to free content such as educational material news sites and dating services, to additional e-mail addresses, larger data storage capacity and greater safety features. Whether this distinctiveness is sufficient to justify the price premium is not something we are called upon to decide. What is of interest to us is whether the product differentiation has been successful enough to justify segmenting the relevant market between premium and non-premium.” (My emphasis added)

In this, the Tribunal implies that product differentiation intended by suppliers would not necessarily be accepted by customers, implying that product differentiation accepted in the market (i.e. by customers) should be considered by competition authorities for purposes of identifying competitive relevant products in the market. This is the kind of product differentiation I talk of in this paper.

Product differentiation consideration in merger transactions is important to determine whether or not it is justifiable to assess the strength of competition in the market in terms of the closeness of competition between brands in the market. This is because any finding of closeness of competition between the merging parties’ brands may raise competition concerns even if the merging parties’ combined post merger market share remained low, particularly if other competitors’ brands do not pose effective competition on the merging parties’ products. The establishment of whether the market is characterised by product differentiation does not only help in assessing the closeness of competition between the merging parties’ brands but also for purposes of correctly interpreting other factors relevant in assessing the effects of a merger on competition, namely market shares, countervailing power, barriers to entry and innovation. In this paper, I show that product differentiation has a huge impact on the interpretation of facts on these factors. The paper is structured as follows. Section 2 deals with the interpretation of market shares in markets characterised by differentiated products. This will be followed by

⁴ Case No: 72/LM/Sep04.

section 3 which shows how to interpret facts on countervailing power arguments. Section 4 shows how to interpret facts on barriers to entry arguments in differentiated products market. In section 5, I show how to interpret facts on innovation arguments when markets are characterised by product differentiation. I conclude the paper under section 6.

2. MARKET SHARES

According to the Structure-Conduct-Performance (“the SCP”) paradigm, which has long been used as a theoretical framework for competition policy, the structure of the market is the most important determinant of the market conduct, which in turn determines market performance (Ferguson and Ferguson, 1994). This market performance structural based analysis requires the measurement of the market structure. 2006 ICN Merger Guidelines state that indicators used in assessing market structure include market shares, concentration ratios and the Herfindahl-Hirschman Index (HHI). Merger Guidelines guide that mergers with HHI under 1800 points are unlikely to raise competition concerns. These guidelines are used around the globe not only in predicting the effects of the merger on competition but also in allocating resources needed to investigate the effects of a merger on competition. The thinking in applying market share figures to predict the effects of a merger on competition is that the size of market share of a firm reflects the magnitude of its competitive strength in the relevant market. That is, if other firms in the market after the merger continue to be significant in terms of their market shares it would be argued that the merged firm would not have the ability to significantly increase prices as customers would switch to rivals.

The conclusion that rivals with high market shares will continue to compete with the merged firm after the merger is based on the assumption that a significant number of customers do not see any difference between competitors’ products in the market. This assumption does not necessarily hold in a market characterised by products differentiation. For example, Coscelli and Baker (1999) stated that “the assumption that a brand’s lost sales will be lost to rival brands in proportion to their existing market shares is a very strong one, and one which is typically not satisfied in markets where products are differentiated.” Coscelli and Baker position is also confirmed in the 1998 Harvard Law Review, which suggests that the traditional structural approach to merger analysis is not best suited for predicting unilateral effects as unilateral effects are a primary danger in differentiated products markets. To explain this clearly, Shapiro (1996) gave the following extreme example:

“Suppose that Brands A and B propose to merge, but Brand X is situated between them. Suppose further that a merger between Brands A and X would lead to at least a 5 percent price increase, and likewise for a merger between Brands B and X. Defense counsel might be tempted to argue that A and X form a market, and that B and X form a market, but that A and B are not in the same market. Still, if the Diversion Ratio between A and B is significant (albeit smaller than between A and X or between B and X), the merger of A and B could well harm consumers.”

Product differentiation means that customers are not able to switch easily between any of the products offered in the market (Davidson, 1983). Therefore, in differentiated product markets,

customers may see two or none of the other products in the market as substitutes of the product in question. Thus, product differentiation may even go to an extent of affording all firms in the market some degree of market power. The possibility of all firms in the market to have market power is confirmed by Bertrand pricing assumption, which treats a firm as having market power as a result of the product differentiation. Further, according to the OFT Competition Law Guideline (2004), the relevant market may be characterised by products that are differentiated, in which case undertakings with relatively low market shares might have a degree of market power because other products in the market are not very close substitutes. Therefore, market shares of other competitors in differentiated products do not necessarily reflect the strength of competition they would pose on the merged entity even if the merged entity would have low market shares.

In differentiated products markets, a reliable qualitative examination of merger effects on competition can be done by investigating a fraction of customers purchasing a product sold by one of the merging firms which considers the product sold by the other firm as their next-best choice. This approach was also suggested by Coscelli and Baker, who stated that a merger between brand A and brand B will have a more significant impact on prices if brand B is the second choice for a significant number of brand A customers and if those customers regard their third choice as significantly inferior to brands A and B. The same approach is also supported by the US Horizontal Merger Guidelines (2010), which state that “Substantial unilateral price elevation post-merger for a product formerly sold by one of the merging firms normally requires that a significant fraction of the customers purchasing that product view products formerly sold by the other merging firm as their next-best choice.”⁵

To establish the extent of customer brands switching, Coscelli and Baker submit that the following information can be reliable, and if obtained, market definition and market shares calculation can in their view be bypassed altogether:

- Sales data by value and volume for all of the brands of all suppliers of a type that is routinely collected in any merger investigation;
- Marketing studies of the parties and their rivals;
- Surveys of customers’ attitude and consumption patterns; and
- Quantitative information over time on the process, promotions and sales volumes of each of the brands that are likely to have the most significant influence on competition in the market.

Some agencies may want to also quantify the extent of direct competition between the merging parties’ brands. The diversion ratios will then be used to estimate the possible price rise post merger.⁶ The higher the diversion ratios, the greater the likelihood of merger effects post merger (US 2010 Horizontal Merger Guidelines).

⁵ However, the US 2010 Horizontal Merger Guidelines (2010:20-21) argue that a number of customers that prefer brand A and B to other brands need not approach a majority unless pre-merger margins between price and incremental cost are low .

⁶ 2010 US Horizontal Merger Guidelines (2010:21) define the diversion ratio as the fraction of unit sales lost by the first product due to an increase in its price that would be diverted to the second product.

I conclude therefore that unless a proper market definition concluded enables market shares to be seen as a reliable guide on the next best alternative, market shares can provide little, if not meaningless, guide to the effects of mergers in differentiated product markets. The assessment of the closeness of competition between brands is best indicative of possible merger effects for differentiated product markets.

3. COUNTERVAILING POWER

Existing competitors and potential new entrants (regardless of how big they are) would remain ineffective competitors if customers do not have the ability and incentive to exercise their countervailing power. For example, all firms operating in a market that is characterised by asymmetries in information between them and customers have an opportunity to charge monopoly prices since it would not be prohibitively costly for able to search for better alternatives. Further, if customers are able to pass on higher prices to final consumers, their incentives to exercise the countervailing power by, say, switching to alternative suppliers would be limited. The ability and incentive of customers to exercise their countervailing power is therefore crucial to deliver competitive outcomes in any markets.

According to the ICN Merger Guidelines (2006), customers' countervailing power derives from their size, their commercial significance to the seller, their ability to switch to alternative suppliers, and their ability to produce the supplied product themselves (through vertically integrating). In general, the size of a customer is the main source of its ability to counteract sellers' attempts to exercise market power since as a result of its size a customer becomes commercially significant to sellers and therefore its switching to alternative suppliers or its potential to vertically integrate to internally supply the relevant product becomes a credible threat to the seller's business. The ability of a buyer to exercise countervailing power on suppliers can be beneficial to consumers, hence competition authorities would not be concerned of a merger that give rise to significant market shares if buyers have significant countervailing power. The OFT Competition Law Guideline (2004), "Assessment of Market Power", explains the benefits of buyer power as follows: "In general, buyer power is beneficial in two circumstances: when there are large efficiency gains that result from the factors (e.g. size) that give the buyer its power and these are passed to the final consumer (e.g. through downstream competition), and when it exerts downward pressure on a supplier's prices and the lower prices are passed on to the final consumer."

However, under certain circumstances, the size of a customer would not necessarily translate to it having countervailing power. For example, in their paper entitled "Countervailing Power in Wholesale Pharmaceuticals", Ellison and Snyder (2010) submit that "A growing theoretical literature has offered a variety of models of buyer-size effects. Much of this literature provides a nuanced view that large-buyer discounts do not emerge under all circumstances but depend on other factors in the economic environment." Further, the U.S. Department of Justice and the Federal Trade Commission horizontal merger guidelines (Issued: August 19, 2010) ("US Horizontal Merger Guidelines") advise that "...the Agencies do not presume that the presence of powerful buyers alone forestalls adverse competitive effects flowing from the merger. Even

buyers that can negotiate favourable terms may be harmed by an increase in market power. The Agencies examine the choices available to powerful buyers and how those choices likely would change due to the merger. Normally, a merger that eliminates a supplier whose presence contributed significantly to a buyer's negotiating leverage will harm that buyer."⁷

*The large size of a customer and ability to switch suppliers.*⁸ I now turn to investigate the most likely situations under which the size of a customer would not translate to its ability to negotiate with suppliers. To simplify the understanding, I first provide an example on how competition authorities normally would interpret the size of customers together with the size of competitors (in terms of market shares) to come to a conclusion of whether or not customers would have countervailing power. This example analyses the facts of two merger proposals considered by the Tribunal, which I name "Merger A" and "Merger B".

Example 1: Analysis of Merger A and Merger B

Facts: Merger A (considered in 2010) was in the market for the supply of more than 150 deodorants brands⁹ and Merger B (considered in 2009) was in the market for the wholesale supply of grocery products.¹⁰ The main customers of the parties in the deodorants market are big grocery retailers in South Africa. In respect of the wholesale grocery market the main customers of grocery products are independent retailers and/or buying groups¹¹. The following table provides market shares in Merger A and Merger B.

⁷ U.S. Department of Justice and the Federal Trade Commission horizontal merger guidelines (Issued: August 19, 2010), paragraph 8.

⁸ Under this section, "Countervailing Power", I will only focus on the size of a customer and therefore its ability to switch suppliers as a constraint to the exercise of market power of sellers and circumstances under it does not apply. I will deal with the possibility of vertical integration as a countervailing constraint under the barriers to entry section, as analysis of this factor is no significantly different from the analysis of the ability of players in adjacent markets to reposition or expand their existing portfolio into the relevant market. The only difference is that customers vertically integrate to eliminate the harm to their profit whereas suppliers reposition into the relevant market due to the opportunity created by the merged firm of offering better prices in the market. The similarity derives from the fact that both players (customers and players in adjacent markets) have to enter the supply of the relevant products.

⁹ Tribunal Case No: 14/LM/MAR10.

¹⁰ Tribunal Case NO: 04/LM/Jan09.

¹¹ The interpretation of paragraph 170 of the Tribunal report of Merger B is that independent retailers (large, medium and small) make use of buying groups. Therefore, during a negotiation process between an independent retailer and a rational wholesaler, it is expected that the ability of independent retailers to use buying groups plays a role.

Table 1: Market Shares in Merger A and Merger B¹

MERGER A		MERGER B	
Firms	Market Share	Firm	Market Share
A	<9%	A	30%
B	<6%	B	15%
Merged Firm	15% ²	Merged Firm	45%
C	10%	C	20%
D	10%	D	10%
E	5%	E	10%
Other	60%	Other ³	15%

Note:

1. Although not captured as they are in the Tribunal merger reports, the market shares in this table would be interpreted equally as the market shares in the merger reports.
2. Since the finding in Merger A was that the effect of the merger would arise from the elimination of competition between two brands, (“Axe” and “Status”), of the merging parties, I estimate reasonable market shares of two brands only bearing in mind that the market is characterised by more than 150 brands.¹²
3. Other includes suppliers that supply directly to retailers and small wholesalers with less than 10% market share.

Traditional interpretation of the Size of Customers and Market Shares: In terms of the market share information in Table 1, competition authorities normally would allocate more resources to Merger B investigation and little resources Merger A investigation. Competition authorities would allocate little resources to Merger A investigation as there are many other players in the market, between whom customers (large grocery retailers) would switch if prices rose above competitive levels.¹³ In respect of Merger B, more resources would be allocated based on the initial interpretation that a bigger size of the merged firm (in terms of market share) relative to its competitors may make it unrealistic for customers to be catered for effectively by other competitors in the event the merged firm raised prices significantly. More resources would therefore be allocated to investigate this issue and whether any effective entry would be possible in the near future to destabilise higher prices.

Supplier-Switching Customer Countervailing Power in Merger A: Tribunal Finding: While the initial interpretation of market shares in Merger A normally would translate to effective competition faced by the merged brands, the Tribunal, in confirmation of the Competition Commission’s (“Commission”) findings, found that “the two brands do compete closely with each other and do not face meaningful nor effective competition from the other brands in the category.”¹⁴ This, translated to supplier-switching customer countervailing power, means that a

¹² The example which considers the market shares of the affected B brands only provides a useful analysis that can be applicable in most merger transactions as it is not always the case that a firm would be proposing to buy all brands. Further, there can also be mergers between firms who control no more than one brand.

¹³ I indicated in section 2 above that if firms in the market after the merger continue to be significant in terms of their market shares it would be argued that the merged firm would not have the ability to significantly increase prices as customers would switch to rivals.

¹⁴ See Paragraph 15 of the Tribunal report.

merger between brand A and B would have (if approved) reduced the negotiating power of a big customer because brand A and B. To explain, before the merger, any attempt to increase product A's price significantly would lead to big customers negotiating discounts for brand A or switching to brand B, and thus ultimately a decrease in price of brand A or an increase in demand for product B respectively. Before the merger a powerful buyer can use this switching possibility to negotiate lower prices with suppliers.

Much literature is in support of limited countervailing power of larger buyers in differentiated products market. Ellison and Snyder (2010) found that "large buyers receive no discount relative to small buyers (independent drugstores) on antibiotics with unexpired patents."¹⁵ Smith and Thanassoulis (2011) submit that "what matters is the combination of buyer size and a choice of suppliers, rather than buyer size alone... buyer power is found to be absent for branded products, where there is single supplier, but present for private label products, where suppliers compete."

Customer Countervailing Power in Merger B: Tribunal Finding: Despite their high market shares after the merger and, presumably, more resources allocated to the investigation, the Tribunal found in Merger B that "It is reasonable to expect that the merging parties would post merger be cognisant of the seemingly real threat of direct supply when setting prices regarding the competing lines being supplied directly by manufacturers." This means that customers would be able to switch to direct supply by suppliers. The possibility of independent retailers switching their demand from wholesalers to suppliers can also be facilitated by the fact that even though suppliers might be reluctant to deal with small independent retailers, independents are able to make use of buying groups to buy directly from suppliers. In this case the size of the buyer provides some indication of its ability to negotiate with wholesalers.

Eventually, the stickiness in brand switching by the ultimate consumer (the user of the product) affects the ability of a customer (retailer/wholesaler) to switch and the latter's countervailing power since the retailer's demand is for all intent and purposes derived demand. This is because even if an individual retailer can respond to a price increase of product A by for example starting to stock more of the other products, consumers can still switch to brand B, which post merger belongs to the one entity together with brand A.

4. BARRIERS TO ENTRY

This section looks at three possible entries into the relevant market. These are entries by (i) customers, (ii) new players, and (iii) players in adjacent markets. For any kind of entry, it is required that for entry to deter anticompetitive behaviour of the merged firm it must be established that it is likely, timely and sufficient.

¹⁵ See page 3 of the paper.

Entry Likelihood

The question asked here is whether any significant increase in price (a short hand for other anticompetitive effects such as a decrease in quality, output, and variety) of the merged firm's products would lead to (i) customers vertically integrating to supply the product themselves; (ii) players in adjacent market repositioning their products; and/or (iii) new entrants attracted to the market. Any potential entrant would normally assess how profitable it would be for it to enter into the affected market. It is important to note however that entry does not have to first take place in order for the merged entity to behave competitively. On its own, the merged entity's awareness that entry is possible acts as a constraint to its behaviour in the market. For example, Baker (1988) states that "In a market without entry barriers, any price rise undertaken by a firm or group of firms would immediately be competed away by a new entrant into the industry. Even if limited entry difficulties exist, the threat of entry may nevertheless be sufficient to create an effective deterrent to anticompetitive behaviour" (My emphasis). Therefore, assertions by potential entrants (players in adjacent markets in particular) that they for example do not have plans to enter the market may not necessarily mean that they do not pose any competitive constraints on the merged firm, particularly if those plans are not known to the merger firm.¹⁶ Competition authorities need only establish that the merged firm recognises that entry by such firms is likely, can be timely and sufficient. Internal documents in which firms discuss market environment are crucial in this aspect.

Generally, factors considered in establishing the likelihood of entry are the costs incurred in entering the market. However, even if costs are high entry may still be likely if it is profitable. In addition to those that are incurred in homogeneous products markets (e.g. manufacturing plants, warehouses, manufacturing equipment), entry into differentiated product markets is faced with costs on for example advertisement and marketing. These entry costs are unrecoverable on exit and are therefore called sunk costs. However, the existence of sunk costs in the market does not necessarily mean that entry into the market is unlikely - According to the OFT Competition Law Guideline (2004) ("OFT Guideline"), entry will still occur, as long as the expected profit from being in the market exceeds any sunk costs of entry.

The OFT Guideline argues however that entry may not occur in cases where sunk costs give an incumbent a strategic advantage over potential entrants.¹⁷ Ross and Cabral (2008) argue against the view that strategic sunk costs raise entry barriers to entry. They suggest in fact that high levels of sunk investment may actually facilitate entry.¹⁸ To support this view Ross and Cabral gave an example, in which an entrant invested in sunk costs to persuade rivals to enter

¹⁶ The danger of relying solely on this evidence in concluding that players in adjacent market do not pose any competitive constraint exists because when players in adjacent markets are against the acquisition; they would unlikely reveal their true plans about entering the affected market.

¹⁷ According the OFT guideline "Sunk costs might give an incumbent a strategic advantage over potential entrants. Suppose an incumbent has already made sunk investments necessary to produce in a market while an otherwise identical new entrant has not. In this case, even if the incumbent charges a price at which entry would be profitable (if the price remained the same following entry), entry may not occur."

¹⁸ They submit that "If an entrant, who would otherwise anticipate an aggressive response by the incumbent (in an effort to chase the entrant from the market), can commit itself irreversibly to that entry, it can defeat the purpose of the incumbent's retaliation."

into price fixing agreement - “Archer Daniels Midland (ADM) decided to enter the lysine market in July 1989, it invested heavily in the construction of the world’s largest manufacturing facility in Decatur, Illinois - a plant three times the size of the next largest facility in the world. ADM used the excess capacity (a largely irreversible investment) to influence its rivals, specifically persuading them to enter into a price-fixing agreement.” It would be surprising to the whole world for a particular competition authority to provide this example in support of the view that sunk costs do not raise barriers to entry.¹⁹ Further, Ross and Cabral view appears to be associated with high risks and requires that the potential entrant expects the post-entry price to be high enough to justify incurring of entry sunk costs. Where sunk costs have given the incumbent a strategic advantage over potential entrants, it is likely that the incumbent would continue to charge high prices post entry. Therefore, the incentive for the potential entrant to incur sunk costs is likely to be low.

Timeous Entry

In a homogeneous products market, factors that are considered in trying to answer the question of how long it would take a new entrant to provide the relevant products normally include the operations set-up time periods, which in general are shorter since final customers would not find it difficult to accept the product. In differentiated products markets additional factors need to be considered as they impact heavily on the length it would take for a firm to provide the product to consumers. Brand development is one of these factors. In a bread merger, the U.S. Department of Justice concluded that brand names were very important (Shapiro, 1996). It was also found that brands that achieved success in one region might not meet the same acceptance in other regions. This means that a closer look is required to determine whether it would take longer to establish a new brand to substitute an established brand. In Merger A referred to above, brand development challenges were also identified as challenges that would delay entry into the deodorants market.

Sufficient Entry

While sufficiency test in homogeneous products markets can end with the establishment of a sufficient scope, in differentiated products markets it goes further to require that the entering brand needs to be targeted at customers targeted by the merging brands. For example, In the US Horizontal Merger Guidelines highlight that entry is not sufficient to deter the merged firm’s higher prices if the products of new entrants do not compete closely to those of the merged firms. The element of closeness of competition between the entering brand and the merged firm’s brands was also introduced by the ICN Merger Guidelines which clearly spells out the following question as one of those relevant when analysing the sufficiency of new entry: “In a merger between sellers of differentiated products would the new entrant provide a product that competes directly with those of the merging parties such that a sufficient number of customers

¹⁹ Any merger that creates incentives for the entrants to enter the market based on the possibility of engaging in price fixing conducts post entry would be anticompetitive on its own.

would switch to the entrant product in response to an attempt by the merging firms to raise prices by switching away?”²⁰

5. INNOVATION

This section looks at the interpretation of market innovation in merger cases. Innovation in merger cases can be viewed in two ways, positive and negative. It is viewed as a positive factor when it is a variable that is relevant to the behaviour of the merged firm post merger. That is, innovation can be identified as a market factor that destabilises higher prices in the market. It becomes a negative factor when a merger reduces the merging parties' efforts to innovate.

5.1. *A Merger that Impedes Innovation*

According to the 2006 ICN Merger Guidelines,

“When effective, the competitive process compels firms to win customers by offering a better deal than their rivals, which enhances consumer welfare. Consumer welfare depends on a range of factors, including price, output, quality, variety and innovation.”

These merger guidelines teach that consumer welfare can also derive from market innovation. The importance of the existence of innovation in the market is twofold. In a case of a new product innovation, for example, innovation would likely bring better products while at the same time introducing competition to existing products. As a result, consumers may benefit from innovation in two ways, better products/services and competitive prices. There is therefore no question why everyone seems to agree that innovation is dynamic in nature. The dynamic nature of innovation has been advocated by many in competition law and economics field. For example, section 12A (2) of the Act, like product differentiation, identifies it as a dynamic factor of the market: “the dynamic characteristics of the market, including growth, innovation and product differentiation. It appears therefore, as Shepherd (1999) indicates, that putting an end to innovation can sadly be harmful for consumers - “Innovation is dynamic and often spectacular; retarding it is deadening” (Shepherd, 1999).

In general, competitors would begin to distinguish their products from one another when there is intense competition in the market. This differentiation of products is likely to be accompanied by new features on the products, which may appear to consumers as distinct. However, given that all competitors would be striving to differentiate products that serve the same purpose, product differentiation tends to be in terms of features that would attract specific customers' preferences and standard of living. For example, product differentiation in the deodorants market can be in terms of brand, price, efficacy, gender, fragrance and format.²¹ In terms of gender differentiation for example, some competitors may be successful in providing attractive features for male gender (thereby creating a strong male deodorant brand) whereas others may be successful in providing better features for female gender (thereby creating a strong female deodorant brand).

²⁰ ICN 2006 Merger Guidelines, page 58.

²¹ Competition Tribunal Case No: 14/LM/Mar10, paragraph 7.

As a result, consumers that prefer gender targeted brands would begin to prefer only those brands that have been successful in providing gender specific features.²² In some cases, product differentiation can even afford a firm some market power, which even if such a firm is charging excessive price competition authorities should in my view not be worried of as it derives from competitive efforts. What should justify competition authorities' intervention is when a merger threatens to weaken efforts to innovate significantly, as a stop to innovation in differentiated product markets can lengthen the exercise of market power.

Indeed, a merger can reduce innovation efforts of the merging parties. A simple example is Merger A referred to in section 3 above, in which it was found that Axe and Status (deodorant brands), which have historically been known as male targeted brands, competed very closely and faced little competition from other brands. Given the extent of competition between the two brands, the merging parties competed not only by undercutting each other's prices, but also by constantly introducing better features to these brands, as confirmed by customers during the investigation of a merger - "Third parties interviewed held a view that this merger will remove an effective competitor in deodorant category, in particular Status. They also state that the merger will lead to reduced efforts to innovate..."²³

The investigation of the above merger is just one example that shows that a merger in differentiated products market can reduce efforts to innovate if it is between brands that compete closely. A number of papers confirm this finding. By way of an example, Ornaghi (2006), in an empirical study of the effects of mergers on innovation, found a "causal effect of mergers on the overall innovation activity." Therefore, a merger which substantially prevents or lessens competition in a differentiated product market may have the effect of reducing innovation efforts.

5.2. *Innovation as a Variable to Competition*

Innovation is often induced by competition, as firms innovate so to differentiate their products by trying to introduce unique features in the products they offer. As I said above customers will see these products as distinct from others depending on suppliers' success. A successful firm (if only one) would have some market power. This market power would however be short lived if competitors introduced similar or even better features to their brands. Innovation can play the same role even in merger created market power. Therefore, under certain circumstances product differentiation may be an indication that players are operating in a competitive market. Thus, a merger in a differentiated products market may not raise competition concerns even if the merging parties supply closest competing brands – "effective competition in innovation might mean that, in order to stay ahead of its rivals, the market leader must improve its products and processes on a regular basis."²⁴ This is why economists still argue that dominant firms can have incentives to innovate. Empirical studies by various authors show that dominant firms can

²² In some cases, product differentiation may even afford a firm some market power, which even if such a firm is charging excessive price competition authorities should in my view not be worried of as it derives from competitive efforts.

²³ Paragraph 13 of the Tribunal merger report (Case No: 14/LM/Mar10).

²⁴ OFT Competition Law Guideline, Understanding Competition Law (2004)

engage in innovation activities. Figueiredo and Kyle (2004) provide a good summary of mixed views on the relationship between dominance and innovation:

“One view of this question in the economics and innovation literature is that of Reinganum (1989), who considers a model in which a new innovation completely displaces the existing product. In this case, the incumbent has less incentive than an entrant to invest in R&D because doing so hastens the end of its existing market. Entrants are therefore likely to displace the incumbent in markets with technology races of this type. In contrast, Gilbert and Newbery (1982) treat innovations as incremental improvements to existing products. Under their assumptions, no technology race occurs at all, and the incumbent is never displaced. Empirical work finds support for both approaches, depending upon the market. For example, Lerner (1997) finds that disk drive makers, who compete in a “winner-take-all” market, behave in a way consistent with Reinganum’s model. Henderson (1993) shows that incumbents successfully incorporate incremental innovations into their products in photolithography equipment, but are overtaken by newcomers to the industry when the innovation is radical. However, others find that incumbents may be unwilling to extend their product line or brand because even incremental innovations may dilute brand equity or result in a loss of share in core markets (Randall et al 1998). Thus, even within the incremental innovation literature in economics and marketing, predictions about the dominant firm’s incentive to innovate and willingness to launch new products is [are] mixed.”

However, to conclude that the merged entity would continue to innovate even if it does not face close competition from rivals should be supported by overwhelmingly convincing evidence. The evidence is required to show whether innovation has in the past led to competition across all brands in the market. Again, this evidence should not be viewed in isolation as the strength of the merging brands (as viewed by customers) in the current time may be too high to be defeated by any rival’s brand innovation post merger. Further, Motta argues that although there may be circumstances under which monopolists would have incentives to innovate, for practical policy purposes, the only sound and robust conclusion we can derive from analyses is that a monopoly is worse than competitive market structures because it fails to stimulate dynamic efficiency.²⁵

6. CONCLUSION

The paper finds that when the merging parties compete closely in differentiated products markets, the interpretation of market shares, countervailing power, barriers to entry and innovation in differentiated products market is different from when the market is characterised by homogeneous products.

In terms of market shares and countervailing power, the existence of product differentiation in the market may mean that market share analysis provides little value in the analysis of the competitive effects of a merger, as, even if buyers are large, it is unlikely that they would possess any significant countervailing power. The paper also finds that an isolated use of market shares

²⁵ While I am not certain how Motta defines monopoly in this instance, it is with no doubts that any firm that does not face any effective competitive constraints from other firms, potential new entrants and customers would be regarded as a monopolist from a real world point of view.

in differentiated product markets as a reflector of customers' supplier-switching countervailing power can be misleading.

As regards, the interpretation of facts on barriers to entry, I find that facts on barriers to entry cannot be interpreted the same way in all circumstances. The following questions seem specific to differentiated products market:

- Would any entrants be able to position its product close to the merged brands?
- Is the sunk cost associated with brand development (advertisement and promotion) not too high to discourage any new entrant to challenge the merged firms' brands?
- Will brand development process not delay entry into the market?

Lastly, the paper finds that mergers in differentiated products markets are likely to reduce efforts to innovate in the market, particularly if they are between competitors with brands that competitor closely.

REFERENCES

BURTON, T. (1999) "Unilateral Effects Analysis In Assessing Anticompetitive Mergers: The Judicially Approved New Approach To Challenging Mergers", *Saint Louis University Law Journal*, 43 St. Louis U. L.J. 1481

CLARK, J. (1961) *Competition As A Dynamic Process*: Washington, D.C.: The Brookings Institutions

COMPETITION TRIBUNAL CASE NO: 04/LM/Jan09

COMPETITION TRIBUNAL CASE NO: 14/LM/Mar10

COSCELLI, A. AND S. BAKER (1999) "The Role of Market Shares in Differentiated Product Markets", *European Competition Law Review*, E.C.L.R. 1999, 20(80), 412-419

DAVIDSON, K. (1983) "The Competitive Significance of Segmented Markets", *California Law Review*, 71 Cal. L. Rev. 445

ELLISON, S. AND C SNYDER, (2010) "Countervailing Power in Wholesale Pharmaceuticals", *Journal of Industrial Economics*, 58, 32-53

FERGUSON, P. AND G. FERGUSON (1994) *Industrial Economics: Issues and Perspectives*, second edition, New York: New York University Press

FIGUEIREDO, J. AND M. KYLE (2004) "product launch decisions by dominant and fringe firms"

HARVARD LAW REVIEW (1998) "Analyzing Differentiated-Products Mergers: The Relevance of Structural Analysis", *Harvard Law Review Association*, 111 Har. L. Rev. 2420

MOTTA, M. (2004) *Competition Policy: Theory and Practice*, New York: Cambridge University Press

OFT COMPETITION LAW GUIDELINE (2004), 'Assessment of Market Power: Understanding Competition Law', United Kingdom, Office of Fair Trading

ORNAGHI, C. (2006) "Mergers and Innovation: The Case of the Pharmaceutical Industry"

ROSS, T. AND L. CABRAL (2008) "Are Sunk Costs a Barrier to Entry?" *Journal of Economics & Management Strategy*, Volume 17, Number 1, Spring 2008, 97–112

SHAPIRO, C. (1996) "Mergers with Differentiated Products", Spring, 1996

SHEPHERD, W. (1999) *The Economics of Industrial Organization*, fourth edition, Illinois: Waveland Press, Inc.

SMITH, H. AND J. THANASSOULIS (2011) *Upstream Uncertainty and Countervailing Power*