

Focal Point Pricing: A Challenge to the Successful Implementation of section 10A (introduced by the Competition Amendment Act)

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Abstract

Section 10A, introduced by the Competition Amendment Act, will provide the Competition Commission with powers to investigate complex monopoly conduct in a market and, allow the Competition Tribunal under certain conditions, to prohibit such behaviour. The aim of section 10A is to discourage or prohibit coordinated or consciously parallel conduct by firms that occurs without communication or agreement but which leads to a prevention or substantial lessening of competition. Examples of horizontal tacit coordination practices include price leadership, and facilitating practices such as information exchanges and price signaling. The successful implementation of the amendment poses problems for the competition authorities in assessing the competitive effects of complex monopoly conduct and in providing effective remedies. A key reason is in oligopoly markets there is mutual interdependent decision-making by firms. Consequently, independent action by firms can lead to market outcomes similar to explicit collusion.

In implementing section 10A, competition authorities can reduce the ability of firms to reach cooperative outcomes in a market by making facilitating practices difficult to achieve and curbing the ability of firms to exchange information.

However, a further and little noticed issue is in oligopolistic markets there are opportunities for firms to use focal points to determine coordinated strategies. In this paper we explore the nature and role of focal point pricing that can lead to prices above competitive levels, with specific reference to the South African banking industry. We find that focal point pricing is extremely hard to control, making successful implementation of section 10A even more difficult.

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INTRODUCTION

This paper analyses potential problems for firms and the competition authorities arising from an amendment to South African competition law, introduced by the Competition Amendment Act 1 of 2009 ("Amendment Act"),¹ which extends liability for prohibited horizontal practices beyond an agreement or concerted practice to include tacit coordination in certain concentrated market structures and circumstances. One consequence of this amendment will be an increased scrutiny of pricing practices in oligopolistic markets. It is well-known that oligopolists are 'interdependent' in their pricing decisions: the prices they charge are in part based on their competitors' anticipated responses. A recognition of their common interest often leads to price competition being less vigorous and prices elevated substantially above competitive levels. Examples of these kinds of pricing practices are: price leadership; meeting competition clauses such as matching competitors' prices; most favoured customer clauses in contracts; uniform delivered pricing policies; and facilitating practices such as exchanges of price information and price signalling.

Another pricing policy that will be affected by the amendment is the use of focal points to set and adjust prices. A focal point price is a coordinated price set by two or more sellers without communication that can generate supracompetitive profits. The price coordination arises from a convergence of expectations, a 'meeting of minds' or mutual understanding of what the appropriate market price should be and it is chosen by its salience, prominence or uniqueness in the market. The sources of focal point prices are market institutions. They include formal institutions such as laws and regulations, for example price ceilings (credit card and loan interest rates or fees charged at maximum rates set by law) and price floors (minimum wages). In addition, focal point prices are determined by informal institutions such as market conventions, norms, customs and traditions. Examples include price lining (certain 'round' or 'odd' numbers), standard or 'fair' mark-ups on costs, standard discount structures, recommended resale prices, import parity prices, and norms such as the South African banks' prime overdraft rate fixed at 3.5 percentage points above the South African Reserve Bank's ("SARB") repo rate.

The Amendment Act introduces to South African competition law² the concept of complex monopoly conduct (this will be section 10A of the Competition Act 89 of 1998 ("Act") when the amendment comes into effect). In terms of the Amendment Act, complex monopoly conduct will exist in a market if:³

- at least 75% of the goods or services in that market are supplied to, or by, five or fewer firms;
- two or more of these conduct their respective business affairs in a conscious parallel or co-ordinated manner (without agreement between or amongst themselves); and
- this conduct has the effect of substantially preventing or lessening competition in that market,

unless a firm engaging in the conduct can prove that any technological, efficiency or other pro-competitive gain resulting from the conduct, outweighs any such effect.

The introduction of section 10A represents a significant shift in the scope of prohibited horizontal restrictive practices under the Act. It brings South African legislation closer to the economic approach of punishing collusive conduct advocated by antitrust scholars such as Richard Posner⁴ and Louis Kaplow⁵ where liability is determined by its effects or market outcomes, whether explicit or tacit, rather than an approach which is based on proof of the existence of an 'agreement.' Economists argue that the decision of a rational, profit-seeking firm to coordinate its activities with its competitors, whether expressly or tacitly, is essentially the same: the firm decides by balancing the benefits from colluding against the costs, including the risk of punishment by competition authorities. As Kaplow points out in regard to explicit or tacit collusive attempts to elevate prices

¹ Although the amendment has been promulgated it has not yet been signed into law.

² Section 4 of the Amendment Act.

³ Section 10A(1).

⁴ RA Posner *Antitrust Law*, 2 ed,(2001).

⁵ L Kaplow *Competition Policy and Price Fixing* (2013).

above competitive levels, '[t]he harm from price coordination depends most directly on the extent and duration of supracompetitive pricing, not on the means of reaching or maintaining the heightened price.'⁶

The widening of the scope of collusive practices to include 'conscious parallel conduct' is soundly based in economic theory and may act as a deterrent to firms charging supracompetitive prices in highly concentrated markets. However, there are a number of problems and difficulties in the introduction of section 10A, both in principle and in implementation. First, the criteria chosen for establishing which markets and firms are affected by complex monopoly conduct are arbitrary and discriminatory. There is no economic rationale to the market concentration level chosen to define complex monopoly conduct because tacit coordination that harms competition is likely to exist in less concentrated markets. It is shown in this paper that focal point pricing strategies are pervasive and certainly exist in markets less concentrated than those falling within the scope of section 10A. Secondly, assessing the effects of the alleged tacit collusion is likely to be far more complex than a more legal approach that concentrates on whether an agreement exists.⁷ Thirdly, and most importantly, is the problem of deciding on suitable remedies when oligopolistic interdependence leading to anti-competitive effects is occurring in a market. Posner, while supporting the need to punish tacit coordination, recognises these difficulties by quoting Donald Turner's counter-arguments:⁸

'Turner's decisive argument, however, is that there is no effective judicial remedy against oligopolistic interdependence. An injunction that merely "prohibited each defendant from taking into account the probable price decisions of his competitors in determining his own price or output" would "demand such irrational behaviour that full compliance would be virtually impossible." To be effective, the injunction would have to require the defendants to reduce their prices to their costs, and the enforcement of such a decree would involve the courts in a public utility type of rate regulation for which they are ill-equipped.'

Posner also states that:

'[d]issolution of the guilty firms would also be inappropriate ... Turner argues: if effective and workable relief requires a radical structural reformation of the industry, this indicates it was the structural situation, not the behavior of the industry members, which was fundamentally responsible for the unsatisfactory results.'⁹

This paper explores and discusses the role of focal point prices as a form of tacit price coordination. It adds to the available domestic literature, as focal points as a pricing strategy have received little attention in South Africa, other than in a paper by Demertzis and Viegi¹⁰ which considers inflation targets as focal points for inflation expectations and pricing behaviour.

There are five sections to this paper. Section one provides a discussion of the changes introduced by section 10A. Section two outlines some of the economic principles of tacit collusion and focal points that are used in a discussion of the effects of the new legislation. Section three provides a case study of focal point pricing in South Africa (banking). Section four analyses in more detail the likely problems arising from the introduction of section 10A. Section five provides a brief conclusion.

⁶ L Kaplow 'Direct versus Communication-Based Prohibitions on Price Fixing' 2011 *Discussion Paper No.703 (Harvard Law School)* at 2.

⁷ M Motta *Competition Policy, Theory and Practice*. (2004)185-190.

⁸ Posner op cit note 4 at 56 – 57. Turner's conclusion is to exclude tacit collusion from liability under the Sherman Antitrust Act (1890) ("Sherman Act"): 'I conclude, then, that oligopolists who take into account the probable reactions of competitors in setting their basic prices, without more in the way of "agreement" than is found in "conscious parallelism" should not be held unlawful conspirators under the Sherman Act even though, as in American Tobacco, they refrain from competing in price' (DF Turner 'The Definition of Agreement under the Sherman Act: Conscious Parallelism and Refusals to Deal' (1962) 75(4) *Harvard Law Review* 655-706 at 671).

⁹ Ibid.

¹⁰ M Demertzis and N Viegi 'Inflation Targets as Focal Points' (2008) 4(1) *International Journal of Central Banking* at 55 – 87. Viegi was at the time at the University of Cape Town and is currently Professor of monetary theory at the University of Pretoria.

SECTION ONE: EXPRESS AND TACIT COLLUSION - THE CHANGES INTRODUCED BY SECTION 10A

Currently, in South African competition law, section 4(1)(b) of the Act prohibits cartel conduct that arises from ‘an agreement between, or concerted practice by firms or a decision by an association of firms’ in a horizontal relationship. Although the scope of the prohibition is clearly circumscribed, ‘agreement’ is given a broad interpretation that extends beyond enforceable legal agreements.¹¹ Furthermore, the scope of the prohibition clearly extends to co-operative or co-ordinated conduct between firms that falls short of an agreement – the only prerequisite is that the co-ordinated conduct must be achieved through some form of direct or indirect contact.¹² In *Pioneer Foods*, the Tribunal recognised that this contact could take a number of guises including secret meetings and signalling to competitors in an effort to disguise the true nature of the conduct in the ‘guise of normal commercial practices.’¹³

It has also been accepted in South African competition law that where firms exchange competitively sensitive information this may constitute a facilitating practice for conduct that falls within the scope of section 4(1)(b) of the Act. The method through which information is exchanged is not important - even if the exchange is facilitated by a third party, this may not assist parties involved in avoiding liability. A recent example of information exchange that has resulted in the participants being prosecuted for cartel conduct, is the investigation initiated by the Competition Commission (“Commission”) against a number of petroleum companies.¹⁴ The Commission found that the South African Bitumen Association (“SABITA”), on a monthly basis, had been circulating bitumen price adjusted factor percentages and escalation figures to oil companies, enabling them to determine what the market was likely to do in terms of prices over the next month.¹⁵ The Commission has also recently (October 2012) referred a case to the Competition Tribunal (“Tribunal”) against several major oil companies for the exchange of commercially sensitive information.¹⁶

However, a problem that the Commission frequently encounters is that even if the market conditions suggest the existence of collusive conduct, the Commission cannot prosecute this conduct unless there is some form of agreement or contact between competitors, which serves as a facilitating mechanism for the collusive conduct.

¹¹ In *The Competition Commission v Pioneer Foods (Pty) Ltd*, the Competition Tribunal (“Tribunal”) referred with approval to the European Commission’s decision in the *British Sugar* case (*British Sugar PLC* (1999) OJ L76/1 para 66), which indicated (as paraphrased by the Tribunal) that ‘an agreement does not have to be made formally or in writing, and no expressed sanction or enforcement measures need be involved, it is enough that the undertakings in question should have expressed their joint intention to conduct themselves in the market in a specific way’ (*The Competition Commission v Pioneer Foods (Pty) Ltd* [2009] 2 CPLR 323 (CT) para 35).

¹² Section 1(1)(vi) of the Act.

¹³ *Pioneer Foods* supra note 11 paras 32 and 34.

¹⁴ Namely Chevron, Engen, Shell, Total, Masana, Sasol, Tosas and SABITA.

¹⁵ Most of the petroleum companies involved have since settled. In August 2011, the Tribunal confirmed a settlement agreement with SABITA in terms of which it agreed to pay an administrative penalty of R500 000 (*Competition Commission v South African Bitumen Association* (06/CR/Mar10)). Sasol (including its subsidiary Tosas) was the leniency applicant. In June 2012, the Tribunal confirmed a settlement agreement in terms of which Masana Petroleum Solutions (Pty) Limited agreed to pay an administrative penalty of R13 million (*Competition Commission v Masana Petroleum Solutions (Pty) Limited* (06/CR/Mar10)). In February 2012, the Tribunal confirmed a settlement agreement in terms of which Shell and Engen agreed to pay administrative penalties of R26.2 million and R26.8 million respectively (*Competition Commission v Shell Marketing Company* (06/CR/Mar10)) and *Competition Commission v Engen Petroleum Limited* (06/CR/Mar10)).

¹⁶ On 24 October 2012, the Commission referred a case of price fixing and market division regarding the supply of diesel, against Chevron SA (Pty) Ltd, Engen Limited, Shell SA (Pty) Ltd, Total SA (Pty) Ltd, Sasol Limited, BP SA Limited and South African Petroleum Industry Association (“SAPIA”) for the exchange of commercially sensitive information that facilitated price fixing and market allocation. The information exchanged was monthly sales volumes of each oil company, per product category, to defined groups of customers in each magisterial district. The various product categories included petrol, diesel, illuminating kerosene, heavy furnace oil, bitumen, liquid petroleum gas and lubricants, and specific grades within these categories. The information at this level of detail allowed the oil companies to track closely each other’s sales and to align their strategies in the market, eliminating competition between themselves. This also enabled them to divide or allocate markets by deciding not to enter, or compete for, certain geographic markets or customer groupings given the activity of other oil companies in such markets. See Competition Commission press release ‘Competition Commission refers case of collusion against oil companies’ (24 October 2012) available at <http://www.compcom.co.za/assets/Uploads/AttachedFiles/MyDocuments/Competition-Commission-refers-a-case-of-collusion-against-oil-companies.pdf> (accessed 8 July 2013).

The Department of Trade and Industry (“DTI”) expressed the view that the requirement under the Act that a prerequisite for cartel conduct is the existence of an agreement or some form of contact or facilitating practice between competitors, inhibits the Commission’s ability to prevent and seek redress for multiple firm co-ordinated conduct.¹⁷ The DTI supported the introduction of an amendment to the Act to prohibit multi-firm conduct with uncompetitive outcomes as it viewed such conduct as restricting competition to the disadvantage of consumers.

On a plain reading of the section 10A amendment, this will allow the Commission to investigate tacit collusion in situations where, in a concentrated industry, the interdependence of major firms leads to co-ordinated outcomes, even if there is no agreement or reciprocal understanding between these firms.¹⁸ Section 10A applies specifically to firms that conduct their business affairs ‘in a conscious parallel’ manner. The Amendment Act defines ‘conscious parallel conduct’ as occurring when ‘two or more firms in a concentrated market, being aware of each other’s actions, conduct their business affairs in a cooperative manner without discussion or agreement.’¹⁹

Interestingly, internationally there is little precedent for competition legislation (such as section 10A) that explicitly regulates conscious parallel conduct:

- In the United States of America (“US”), the US courts have indicated that ‘conscious parallelism’ is not, on its own, unlawful.²⁰ In order to establish collusive conduct, evidence is required that supports the existence of collusive conduct more strongly than the possibility that the firms acted independently.²¹ The courts²² rely on various ‘plus factors’ to determine if a pattern of parallel conduct results from an agreement or independent decision-making.²³
- In the European Union (“EU”), the Treaty for the European Union (“TEFU”) does not contain a ‘complex monopoly’ prohibition – co-ordinated conduct, however, falls to be assessed under article 101 (which prohibits agreements or concerted practices between undertakings with the object or effect of an

¹⁷ Department of Trade and Industry *Presentation to the Select Committee of Foreign and Economic Affairs* (28 August 2008) at slides 4 and 7 available at <http://www.google.co.za/url?sa=t&rct=j&q=&esrc=s&frm=1&source=web&cd=1&cad=rja&ved=0CCsQFjAA&url=http%3A%2F%2Fdzm2x6mlqh7g3a.cloudfront.net%2Fcdn%2Ffarfuture%2FJJoychT9WFrPMYTQAZC7CkWjeKSK8kJDgmvywUBSWsq%2Fmtime%3A1220343789%2Ffiles%2Fdocs%2F080828dti.ppt&ei=5E3cUaHeHqaY1AXgroGoCq&usq=AFQjCNHXMHOw98TuIP7ZoD2Wq8rHICHzUQ&sig2=JRV88u5EathOoedqUjlg5q&bvm=bv.48705608.d.d2k> (accessed 8 July 2013).

¹⁸ N MacKenzie ‘Unravelling complex monopoly conduct’ *Without Prejudice* (October 2009) 19 at 20.

¹⁹ Section 10A(2).

²⁰ *Brooke Group Ltd v Brown & Williamson Tobacco Corp* 509 US 209 227 (1993); WE Kovacic et al ‘Plus factors and agreement in antitrust law’ (2011) 110 *Michigan Law Review* 393 at 395.

²¹ *Williamson Oil Co v Philip Morris USA* 346 F3d 1297 (11th cir 2003) at 1300.

²² Kovacic *op cit* note 20 at 405-406. Key plus factors that have been applied by the US courts include (i) actions contrary to each defendant’s self-interest, unless pursued as part of a collective plan; (ii) conduct that can be explained rationally only as the result of concerted action; (iii) evidence that the defendants created the opportunity for regular communication; (iv) industry performance data, such as extraordinary profits, that suggest successful co-ordination; and (v) the absence of plausible, legitimate business rationale for suspicious conduct. Showing one or more of the above plus factors establishes a rebuttable presumption of conspiracy that the defendant can defeat by leading evidence in support of its case (*Williamson supra* note 21 at 1301).

²³ Harrington summarises the current approach to collusion in the US in this context: ‘To establish the presence of an agreement - and thereby a violation of Section 1 of the Sherman Act - it must be shown that firms “had a conscious commitment to a common scheme designed to achieve an unlawful objective”, that they had a “unity of purpose or a common design and understanding, or a meeting of minds.” Thus, the law focuses on what mutual understanding exists among firms and how that mutual understanding was achieved. From this perspective, U.S. antitrust law has identified three types of collusion. Explicit collusion is when supracompetitive prices are achieved via express communication about an agreement; there has been a direct exchange of assurances regarding the coordination of their conduct. Mutual understanding is significant and is acquired through express communication. Explicit collusion is illegal. Conscious parallelism is when supracompetitive prices are achieved without express communication ... Conscious parallelism is legal. Concerted action resides between these two extremes and refers to when supracompetitive prices are achieved with some form of direct communication - such as about intentions - but firms do not expressly propose and reach an agreement ... The extent of mutual understanding is more than conscious parallelism but does not reach the level of explicit collusion. Concerted action lies in the gray area of what is legal and what is not. Conscious parallelism and concerted action are both forms of tacit collusion in that a substantive part of the collusive arrangement is achieved without express communication’ (J Harrington ‘A Theory of Tacit Collusion’ 2012 *John Hopkins University Working Paper* (footnotes excluded)).

appreciable restriction of competition). In the *Woodpulp* case, the European Court of Justice held that parallel conduct cannot be regarded as proof of concertation (or co-ordinated conduct) unless concertation is the only plausible explanation for the conduct.²⁴ Thus, although parallel conduct may in appropriate circumstances be sufficient to establish co-ordinated conduct, this will only be the case if the conduct cannot be explained by market conditions.²⁵

- United Kingdom (“UK”) competition law previously included the concept of a complex monopoly.²⁶ This has since been repealed and replaced by the Competition Act, 1998 (which is very similar to articles 101 and 102 of TEFU) and the Enterprise Act, 2002 (“Enterprise Act”). Although the Enterprise Act does not explicitly provide for complex monopolies, its market investigation provisions provide a mechanism for the investigation of oligopolistic markets.²⁷

SECTION TWO: ECONOMICS OF TACIT COLLUSION AND FOCAL POINTS

(a) Tacit collusion

The economic theory of collusion focuses on what outcomes are sustainable and the strategy profiles that sustain them (Harrington).²⁸ Economists have long known (Chamberlain 1929, 1933,²⁹ Stigler 1947³⁰) that in oligopolistic markets, firms recognise their mutual interdependence and might be able to elevate prices substantially above competitive levels without explicit collusion. With the development of game theory economists now use the theory of non-cooperative games to study coordinated behaviour by firms in oligopolistic markets. In single period or static, simultaneous games coordinated action such as price fixing by rational, profit maximising firms is not a Nash equilibrium:³¹ the dominant strategy for all players is to defect from any cooperation. This ‘prisoner’s dilemma’ arises because although all players benefit from coordinating their prices to levels above the non-cooperative level, each firm can increase its profits by cheating on the agreement, lowering its price and obtaining higher sales at the expense of its rivals. Since it is rational for every player to follow a strategy of cheating, all firms will charge prices at the competitive level and be worse off. The outcome of the game is Pareto inferior: all players would have been better off with a cooperative price.

In dynamic or repeated games under certain assumptions³² the prisoner’s dilemma can be overcome. Consequently, cooperative outcomes such as elevated price levels above competitive levels, including prices at a monopoly level, result in a Nash equilibrium³³. These outcomes occur for both games of explicit and tacit coordination: economists make no distinction between the types of collusion, whether it arises from an explicit cartel agreement or tacit collusion where a mutual understanding or meeting of minds exists even though there is no communication.

²⁴ A. Ahlstrom *Osakeyhtio e.a. (Woodpulp II)* (1993) ECR I-1307 para 71.

²⁵ R Allendesalazar et al ‘Oligopolies, conscious parallelism and concertation’ 2006 *EU Competition Law and Policy Workshop/Proceedings* at 5. Also see R Whish and D Bailey *Competition Law* 7ed (2012) 582. In *British Sugar*, the European Commission held that a concerted practice within the meaning of article 85(1) (now article 101(1)) could exist ‘where the parties have not agreed or decided in advance among themselves what each will do in the market, but knowingly adopt or adhere to some collusive device which encourages or facilitates the coordination of their commercial behaviour’ (*British Sugar supra* note 11 para 69). The General Court upheld the Commission’s finding on appeal.

²⁶ Most recently, under the Fair Trading Act, 1973 (now repealed).

²⁷ Whish *supra* note 25 at 582.

²⁸ Harrington, *op cit* note 23.

²⁹ E Chamberlin ‘Duopoly: Value Where Sellers are Few’ (1929) 43 *Quarterly Journal of Economics* 63-100. Also, E Chamberlin *The Theory of Monopolistic Competition* (1933). Chamberlin (1929) argues that in an oligopolistic market of identical firms and homogenous products the firms in the industry would charge the monopoly price, the price that maximises industry profits. Quoted by Tirole (J Tirole *The Theory of Industrial Organization* (1933) 240).

³⁰ GJ Stigler ‘The Kinky Oligopoly Demand Curve and Rigid Prices’ (1933) LV *The Journal of Political Economy* 432-449.

³¹ A Nash equilibrium is a solution to a game. It is a set of actions (strategies) by players in the game if none of the players have an incentive to deviate from their choices given the actions of all other players. Therefore, for each player the choice is the best response to the actions of other players and there is no action with a better pay-off.

³² The assumptions are games with an infinite horizon or uncertain horizon. Repeated games with fixed periods still yield a non-cooperative Nash equilibrium.

³³ Tirole *op cit* note 29 at 239-276.

There are a number of weaknesses in the current state of game theory analysis of collusion that reduces significantly its usefulness for competition policy. First, while a coordinated outcome is a Nash equilibrium in a repeated game, the 'Folk Theorem' states that if discount rates are sufficiently low *any* equilibrium is possible, from a monopoly outcome with 'perfect' levels of collusion to a non-cooperative, competitive situation (Friedman).³⁴ A second major weakness is the possibility of multiple Nash equilibria in a game. Classical game theory provides little guidance to the explanation of the choice of action firms will take in these circumstances.³⁵ Consequently, given this indeterminacy, the theory of repeated non-cooperative games provides little *a priori* guidance on horizontal practices such as price fixing to policy makers and competition authorities.³⁶

Focal point theory can provide insights lacking in classical game theory and lead to a clearer understanding of how firms choose particular coordinated strategies such as charging prices that are above competitive levels. Although the idea of focal points is not new (Hume, 1740)³⁷, focal point theory is based largely on the seminal contribution of Thomas Schelling in his book *The Strategy of Conflict* (1960).³⁸ Schelling developed an analytical framework to explain how people can coordinate their actions with each other for mutual benefit without communication if they know others are trying to do the same. Schelling argued that many real problems of coordination and bargaining are resolved by the use of focal points which are points of convergence for expectations. Finding focal points is a coordination game of strategy in which the interests of the players are convergent: 'It is a behavior situation in which each player's best choice of action depends on the action he expects the other to take, which he knows depends, in turn, on the other's expectation of his own,'³⁹ and 'one is trying to guess what the other will guess one's self to guess the other to guess and so on ad infinitum.'⁴⁰

In a series of informal experiments Schelling demonstrated that people successfully coordinate their actions beyond what would be expected by random behaviour. For example, in one of his experiments he asked people in Connecticut where they would meet another person in New York City on a specific day under the following conditions:

'You are to meet somebody in New York City. You have not been instructed where to meet; you have no prior understanding with the person on where to meet; and you cannot communicate with each other. You are simply told that you will have to guess where to meet and that he is being told the same thing and that you will just have to try to make your guesses coincide.'⁴¹

The many thousands of meeting places in New York City did not prevent a majority of respondents from managing to meet each other at the Information Booth in Grand Central Station at 12:00. The reason why the respondents chose this location is because it had a strong salience or prominence that led to a meeting of minds or mutual understanding of where to meet in the city. Based on his analysis and results Schelling concluded:⁴²

³⁴ In a seminal contribution to the theory of repeated games, Friedman described the folk theorem as '[s]uppose that an infinitely repeated game has a set of payoffs that exceed the one-shot Nash equilibrium payoffs for each and every firm. Then any set of feasible payoffs that are preferred to the Nash equilibrium payoffs can be supported as subgame perfect equilibria for the repeated game for some sufficient discount rate sufficiently close to unity' (J Friedman 'A Non-Cooperative Equilibrium for Supergames' (1971) 78 *Review of Economic Studies* 1-12).

³⁵ Mixed games in which firms play random strategies can yield a unique Nash equilibrium.

³⁶ Whinston summarises the issue, 'it is in some sense paradoxical that the least controversial area of antitrust is perhaps the one in which the basis of policy in economic theory is weakest' (MD Whinston *Lectures on Antitrust* (2006) 26).

³⁷ D Hume *A Treatise of Human Nature* (1740) Book 3 part 2 section 1-3. Quoted in R Sugden 'Spontaneous Order' (1989) 3(4) *Journal of Economic Perspectives* 85-97.

³⁸ TC Schelling *The Strategy of Conflict* (1960).

³⁹ *Ibid* at 86.

⁴⁰ *Ibid* at 93.

⁴¹ *Ibid* at 56. Other games included coin tossing and choosing heads or tails, choosing numbers, military occupation and voting games.

⁴² *Ibid* at 57 and 70.

'People *can* often concert their intentions or expectations with others if each knows that the other is trying to do the same. Most situations – perhaps every situation for people who are practiced at this kind of game – provide some clue for coordinating behavior, some focal point for each person's expectation of what the other expects him to expect to be expected to do. Finding the key, or rather finding a key – any key that is mutually recognized as the key becomes *the* key - may depend on imagination more than on logic; it may depend on analogy, precedent, accidental arrangement, symmetry, aesthetic or geometric configuration, casuistic reasoning, and who the parties are and what they know about each other;' '[a] prime characteristic of most of these solutions' to the problems, that is, of the clues or coordinators or focal points, is some kind of prominence or conspicuousness' and '[i]f we then ask what it is that can bring their expectations into convergence and bring the negotiation to a close, we might propose that it is the intrinsic magnetism of particular outcomes, especially those that enjoy prominence, uniqueness, simplicity, precedent, or some rationale that makes them qualitatively differentiable from the continuum of possible alternatives.'

Schelling's findings from his experiments have been confirmed by many other researchers⁴³ including Mehta *et al* (1994a)⁴⁴ and (1994b),⁴⁵ Bacharach and Bernasconi (1997),⁴⁶ Crawford *et al* (2008),⁴⁷ Bardsley *et al* (2010)⁴⁸ and Isoni *et al* (2013).⁴⁹

Economists and other game theorists have tried to formalise Schelling's analytical framework but it sits uneasily within conventional game theory models. Bacharach and Bernasconi⁵⁰ state:

'It has become apparent that for many important classes of games traditional game theory is indeterminate, since tightening traditional solution concepts to the limit still leaves multiple solutions. Explaining players' behaviour therefore requires an addition to game theory, a theory of how players select one solution from several that are equally eligible as far as game theory is concerned.'

Focal point theory is an attempt to solve some of these problems using a single period pure coordination game or 'matching game'.⁵¹ The game is distinctive to classical game theory because it overcomes the prisoner's dilemma that precludes coordination in a single period simultaneous game.⁵² In the pure coordination game there are two players with the same set of strategies - both get a reward 'if and only if both choose the same strategy and the reward is the same whatever this strategy may be.'⁵³ In the game players reach focal points through the 'labeling' of their possible strategies which distinguishes each strategy, allows recognition of each strategy and describes the game to each player.⁵⁴ Labels which have prominence, salience or uniqueness

⁴³ In an informal experiment by one of the authors people were asked where they would meet in Sandton City, Johannesburg on a specific day when they could not communicate with that person to arrange a place to meet. A majority chose the Nelson Mandela Statue in Sandton Square.

⁴⁴ J Mehta, C Starmer and R Sugden 'The nature of salience: an experimental investigation' (1994a) 84(3) *American Economic Review* 658-73.

⁴⁵ J Mehta, C Starmer and R Sugden 'Focal points in pure coordination games: an experimental investigation of pure coordination games' (1994b) 36(2) *Theory and Decision* 163-185.

⁴⁶ M Bacharach and M Bernasconi 'The variable frame theory of focal points: An experimental study' (1997) 19(1) *Games and Economic Behavior* 1-45.

⁴⁷ VP Crawford, U Gneezy and Y Rottenstreich 'The Power of Focal Points Is Limited: Even Minute Payoff Asymmetry May Yield Large Coordination Failures' (2008) 98(4) *American Economic Review* 1443-58.

⁴⁸ N Bardsley, J Mehta, C Starmer and R Sugden 'Explaining focal points: cognitive hierarchy theory *versus* team reasoning' (2010) 120 (543) *Economic Journal* 40-79.

⁴⁹ A Isoni, A Poulsen, R Sugden and K Tsutsui 'Focal points in tacit bargaining: Experimental evidence' (2013) 59 *European Economic Review* 167-188.

⁵⁰ Bacharach and Bernasconi op cit note 46 at 2.

⁵¹ Ibid.

⁵² Although he uses a one-period game Schelling allows the players of the game some awareness of how similar games have been played in the past by themselves or others. R Sugden and IE Zamarrón 'Finding the key: The riddle of focal points' (2006) 27(5) *Journal of Economic Psychology* 609-21.

⁵³ Bacharach and Bernasconi op cit note 46 at 1-45.

⁵⁴ R Sugden 'A theory of focal points' (1995) 105 (430) *Economic Journal* 533-50.

provide Schelling's 'rule of selection' of a strategy chosen by both players based on what each player thinks the other player will choose.

There is no generally-accepted explanation of how people actually manage to coordinate their actions through focal points. Two alternative approaches have been developed. The first, cognitive hierarchy theory⁵⁵ or level-n theory⁵⁶ assumes focal points are reached on the basis of psychological factors that shape people's preferences to play particular strategies by default, when there are no other reasons for choice. Another approach is 'team reasoning' which assumes each player chooses the decision rule which, if used by all players, would be optimal for each of them (Sugden 1993,⁵⁷ 1995,⁵⁸ Bacharach 1997⁵⁹). Empirical evidence is mixed, suggesting there is no single explanation, confirming Schelling's opinion that people find focal points in a wide variety of ways. Schelling rejects views that these methods can be explained by a single formal theory.⁶⁰

Using focal points to coordinate actions does not always work or work well. Schelling points out that a prominent or conspicuous action required for successful coordination may not exist or 'depends on time and place and who the people are.'⁶¹ Although evidence from laboratory experiments generally confirms Schelling's models, the degree of successful coordination varies significantly depending on context, the incentives to players and the structure of payoffs. Crawford et al find solid evidence that given symmetric payoffs salient or conspicuous labels result in frequent successful coordination.⁶² However, 'given even minutely asymmetric payoffs, labels lose much of their effectiveness and miscoordination abounds. This raises questions about the extent to which the effectiveness of focal points based on label salience persists beyond the special case of symmetric games.' Certain types of focal points are also weaker than others. For example, Engelmann and Muller⁶³ conclude that their laboratory experiments (as well as other researchers' experiments) failed to find evidence to support a collusive focal point effect of price ceilings (although empirical field evidence produces contrary results).

(b) Focal Point Pricing

Focal point theory can be used to explain how firms coordinate their strategies to set and adjust their prices in a wide variety of markets. Certain prices can have a salience, prominence or obviousness that allow a meeting of minds to establish prices that are higher than would be obtained through independent pricing strategies. Specific strategies include price lining, standard mark-ups on costs, suggested or recommended resale prices, import parity prices, and price ceilings and floors.

The choice of focal point business strategies for pricing is largely influenced by market institutions. Institutions are 'the rules of the game in a society, or more formally the humanly devised constraints that shape human interaction'.⁶⁴ Institutions can be formal such as laws, regulations and other rules or informal such as conventions, norms, customs, and codes of behaviour. By reducing uncertainty in the economic, social and political environment they provide a guide to human interaction and promote human coordination and cooperation. Institutions can apply to the economy and society as a whole or to specific markets. Our argument is that market institutions can yield focal points for firms to coordinate their pricing behaviour. These focal points may be generated by the market norms, conventions, and culture that are embedded in the behaviour of

⁵⁵ CF Camerer, TH Ho and JK Chong 'A Cognitive Hierarchy Model of Games' (2004) 119(3) *Quarterly Journal of Economics* 861-98.

⁵⁶ M Bacharach and DO Stahl 'Variable-frame level-n theory' (2000) 33(2) *Games and Economic Behavior* 220-46.

⁵⁷ R Sugden 'Thinking as a Team: Towards an Explanation of Nonselfish Behavior' (1993) 10(1) *Social Philosophy and Policy* 69-89.

⁵⁸ Sugden op cit note 54.

⁵⁹ M Bacharach 'Interactive team reasoning: A contribution to the theory of cooperation' (1999) 53(2) *Research in Economics* 117-47.

⁶⁰ Bardsley et al op cit note 48.

⁶¹ Schelling op cit note 38 at 58.

⁶² Crawford et al op cit note 47 at 1443 - 58.

⁶³ D Engelmann and W Muller 'Collusion through price ceilings? In search of a focal-point effect' (2011) 79 *Journal of Economic Behavior & Organization* 291-302.

⁶⁴ DC North *Institutions, Institutional Change and Economic Performance* (1990).

firms in an industry. Laws and regulations in specific markets that determine price ceilings or floors, rules that shape regulated prices and bidding for public sector contracts can also provide opportunities for coordinated conduct that reduce competition in a market.

Price lining is pervasive in business, not just in highly concentrated markets. Focal point prices such as round numbers, for example, of R20 or R500 and odd numbers such as R199.95 can keep prices and profit margins at supracompetitive levels. Scherer describes the process and outcome:⁶⁵

‘Several specific ways by which focal points enter into oligopolistic price determination can be identified. First is the practice of ‘price lining’ especially widespread at the retail level. Even dollar amounts serve as one focal point for pricing decisions. More frequent in retailing is the use of odd “pricing points” such as \$199.95, which owe their acceptance to tradition. By setting its product price at some focal point, a firm tacitly encourages its rivals to follow suit without undercutting.’

The concept also applies to discounts off list prices. A common practice is to set discounts rates at round numbers separated fairly wide apart, for instance 10% and 20%. By setting discounts in this way firms discourage each other from granting deeper discounts or chiseling discounts from industry standard levels.

Another major source of focal point prices arises from cost plus pricing strategies, the most common form of price behaviour by firms.⁶⁶ Over time conventions or norms develop in industries where firms recognise the most ‘appropriate’ mark-up over cost (‘rule of thumb’) pricing policies to sustain profitability at ‘satisfactory’ levels. These pricing practices are particularly applicable in industries producing standard prices or where unit costs vary little between firms. Of particular interest is the practice of banks in South Africa to adopt the market norm of pricing their prime overdraft rate at 3.5 percentage points above the SARB’s repo rate.

Dierynck and Roodhooft⁶⁷ studied the role of internal cost information as a focal point for setting prices ‘for initiating and sustaining tacit collusion.’ Specifically, the authors tested whether the influence of costing systems as collusion-facilitating factors (focal points) on firms’ profits will be higher if all firms have access to accurate cost information. Dierynck and Roodhooft found from a laboratory experiment that accurate cost information in an industry did lead to higher levels of coordination in setting prices through focal points than more dispersed cost information between firms where the accuracy of cost systems varied.

Recommended or suggested prices provide focal points for setting prices. Firms using these practices are providing a salient price to their distributors or retailers as to what the appropriate price should be and the prices can be set to yield supracompetitive returns for both the firm and its resellers. The downstream firms will recognise the appropriate price and also can have the meeting of minds of understanding that other firms expect others including themselves to charge this price. No communication is needed for the recommended resale price to be perceived as the ‘correct’ price to be charged in the downstream market. Similar thinking applies to firms in oligopoly markets where imports are competitors. A meeting of minds without communication can occur where firms recognise that the ‘best’ price for each domestic producer to deter imports is to price at the import parity price, in doing so coordinating its own prices with domestic competitors. This price can lead to supracompetitive profits in many markets. These kinds of focal points can be used in combination with other tacit collusive practices to elevate prices above competitive levels. Examples are price matching guarantees, most favoured customer clauses in contracts, uniform delivered pricing policies and price leadership.

⁶⁵ FM Scherer ‘Focal Point Pricing and Conscious Parallelism’ (1967) 12 (Summer) *Antitrust Bulletin* 495-503.

⁶⁶ There is widespread evidence. For example in the UK (JV Greenslade and M Parker ‘New Insights into Price-Setting Behaviour in the U.K: Introduction and Survey Results’ (2012) 122 (February) *The Economic Journal* 1-14) and in South Africa (N Govender ‘Price setting behaviour of manufacturing firms in South Africa’ (2012) *MBA Research Report, Gordon Institute of Business Science, University of Pretoria*).

⁶⁷ B Dierynck and F Roodhooft ‘Cost information alters “Competitive” Pricing: An Experimental Investigation about the Role of Dispersion of Accurate Cost Information’ (2012) *Vlerick Leuven Gent Management School Working Paper D/2011/6482/12*.

Government laws and regulations can also act as focal points for price setting. In some cases price ceilings are used by firms as a form of 'regulatory capture' to charge prices above levels they would otherwise set independently in the market. For example maximum interest rates and fees for loans or credit cards have a natural salience for banks and other institutions pricing their loans and other charges to customers, as do maximum prices for petrol in countries which have regulated petroleum prices. These focal points exist outside of product markets, for example minimum wages can act as focal point for employers, sometimes to the detriment of employees.

There is substantial empirical evidence of the use of focal point prices by firms. Scherer⁶⁸ found price lining is widespread at the retail level in the US and 'most consumer goods manufacturers are well aware that adherence to accepted pricing points facilitates coordination and discourages price warfare.' Empirical studies have confirmed price ceilings determined by government legislation and regulations can act as focal points. Sheahan⁶⁹ analysed price control in France after the Second World War and found 'the establishment of official ceilings provides a focus for individual quotations which might otherwise have differed.'

In the US credit card market Knittel and Stango⁷⁰ concluded, '[t]acit collusion at non-binding state-level ceilings was prevalent during the early 1980s but that national integration of the market reduced the sustainability of tacit collusion by the end of the decade. The results highlight a perverse effect of price regulation.' Another study of loan markets in the United States by DeYoung and Phillips⁷¹ established that 'over time, payday loan prices have gravitated towards the legislated price ceiling.' Also in North America, Sen *et al*⁷² indicate that in Canada petroleum price regulation involving price ceilings in some states has led to higher gasoline prices compared to states without the regulations. The authors suggest that a 'potential explanation for these results is that price ceilings act as "focal points" enabling firms to set higher prices, thus suggesting the possibility of regulatory capture.'

In Europe, Eriksson⁷³ studied the effects of deregulation in the Swedish dental market and stated the 'Swedish government was worried that the ceiling was serving as a focal point for implicit price collusion' and 'a removal of the price ceiling could lead to increased competition and lower prices.' In the Netherlands, Faber and Janssen⁷⁴ investigated the effects of oil companies suggested petrol and diesel prices to their retailers and whether they created focal points for the coordination of actual prices charged by retailers. Faber and Janssen concluded that suggested prices reduced uncertainty for retailers concerning competitors' price changes and helped firms to form mutually consistent expectations concerning their pricing strategies.

Elsewhere, Ma⁷⁵ investigated price ceilings in the flour market in Taiwan, and discovered evidence that firms in the market set prices 'above competitive equilibrium levels during most of the regulation period' and that 'observations on prices also show that all flour firms set their prices equal to ceilings, without exception.'

An interesting example of how a market convention has become a focal point is the practice of the South African banks setting interest rates according to the repo rate. This case study is explained very briefly in the next section.

⁶⁸ FM Scherer *Industrial market structure and performance* 2 ed (1980) 190-193.

⁶⁹ J Sheahan 'Problems and Possibilities of Industrial Price Control: Postwar French experience' (1961) 51 *American Economic Review* 345-359.

⁷⁰ RK Knittel and V Stango 'Price Ceilings as Focal points for Tacit Collusion: Evidence from Credit Cards' (2003) 93 *American Economic Review* 1703-1729.

⁷¹ R DeYoung and RJ Phillips 'Strategic Pricing of Payday Loans: evidence from Colorado, 2000-2005' (2006) *Indiana State University Working paper No. 2006-WP-05*.

⁷² A Sen, A Clemente, and L Jonker 'Retail Gasoline Price Ceilings and Regulatory Capture: Evidence from Canada' (2011) 13(2) *American Law and Economics Review* 532-564.

⁷³ R Eriksson 'Testing for price leadership and for reputation goods effects: Swedish dental services' (2004) Swedish Institute for Social Research (SOFI), Stockholm University, Working Paper 5/2004.

⁷⁴ RP Faber and MCW Janssen 'On the Effects of Suggested Prices in Gasoline Markets' (2011) *Working Paper*, CPB Netherlands Bureau for Economic Policy Analysis, Department of Competition and Regulation.

⁷⁵ T-C Ma 'Import quotas, price ceilings, and pricing behavior in Taiwan's flour industry' (2007) 23 *Agribusiness* 1-15.

SECTION THREE: PRICING PRACTICES OF SOUTH AFRICAN COMMERCIAL BANKS IN SETTING THE PRIME OVERDRAFT RATE

The five largest South African banking groups account for 92.7% of the banking sector assets.⁷⁶ This concentration of assets implies that the conduct of these institutions might fall within the scope of section 10A, when this comes into force.

However, possible difficulties for the banking sector might extend beyond the degree of concentration in the domestic banking landscape. South African banks may fall within the scope of section 10A in that two or more firms (in this instance the commercial banks) conduct their business affairs in a conscious parallel or co-ordinated manner, without agreement between or among themselves, in as much as they adjust interest rates in a concerted fashion.

South Africa has a long history of banks acting in unison on interest rate decisions. This can in the main be explained by (i) short-dated and long-dated interest rates following broadly the same trend (albeit at different levels, dependent on the yield curve), and (ii) the link between the refinancing rate of the central bank and the prime overdraft interest rate. In essence, this link dates back to 1921, when the central bank was established, albeit with occasional changes to this practice.⁷⁷ Commercial banks all link their prime overdraft rates at the same margin to the refinancing (repo) rate of the central bank. Currently, this margin is 3.5 percentage points.

This convention serves three functions. First, it ensures the immediate operationalisation⁷⁸ of interest rate decisions by the SARB (upwards or downwards) in the financial markets, implying that the central bank knows beforehand what the effect of an interest rate policy decision will be on market rates. Secondly, it ensures that rates move in a concerted way with the movement in the repo rate, therefore reflecting the term structure of rates according to liquidity preference. Thirdly, as South Africa follows a classical approach of a liquidity shortage to operationalise interest rate decisions (commercial banks have a liquidity shortage and have to refinance this shortage at the repo rate at the central bank), the repo rate is the marginal cost of funding of commercial banks.

This is not the only margin based on the repo rate of the central bank. In the Regulations promulgated under the National Credit Act⁷⁹ all prescribed maximum interest rate charges are linked to the repo rate of the central bank. As a case in point, the maximum permissible rate on mortgage agreements is stated as (repo rate x 2.2) + 5% per year.⁸⁰

This analysis shows the prevalence of focal point pricing by means of a case study from the South African banking industry. These market conventions may be considered to be conscious parallel conduct and bring the banking industry under scrutiny in terms of the amendment.

SECTION FOUR: ANTICIPATED IMPACT OF THE SECTION 10A AMENDMENT

There is general agreement among competition policymakers and economists that complex monopoly conduct or tacit coordination in highly concentrated markets can harm economic welfare by preventing or reducing competition. There is also a broad consensus among economists that tacit collusion can have the same or similar effects on competition as explicit collusion. Yet despite these concerns, competition law has in many jurisdictions distinguished, for the purposes of establishing liability, between explicit collusion which is based on an 'agreement' and tacit collusion. The decision to extend liability to tacit collusion in highly concentrated

⁷⁶ Bank Supervision Department *Annual Report 2012* (2012) South African Reserve Bank 28.

⁷⁷ De Kock Commission *Final report of the Commission of Inquiry into the monetary system and monetary policy in South Africa* (De Kock Commission) (1985) RP70/1984 106.

⁷⁸ 'Operationalise' in this sense means the actual implementation of policy decisions by market participants.

⁷⁹ Regulations promulgated in terms of the National Credit Act 34 of 2005 *Government Gazette* No 28664 31 May 2006 at section 42.

⁸⁰ *Ibid.*

markets therefore represents a significant shift in competition policy and one that separates South African competition law from many other jurisdictions.

This section discusses some of the likely consequences of the amendment based on our analysis in previous sections. We briefly outline the process of determining liability under section 10A; we then cover some general considerations of the likely consequences and finally discuss the implications of focal point pricing for the successful implementation of section 10A.

a) Requirements for a finding under section 10A

A determination of whether complex monopoly conduct exists in a market under section 10A will begin with a decision by the Commission to investigate a market, where it has reason to believe complex monopoly conduct exists.⁸¹ Once its investigation is complete, the Commission may apply to the Tribunal for a declaratory order. In order to obtain this order, the Commission will need to satisfy the Tribunal that:

- at least one of the firms has a minimum of 20% of the market and has engaged in complex monopoly conduct (as defined above); and
- the conduct of the firms has resulted in: (i) high entry barriers to that market; (ii) exclusion of other firms from the market; (iii) excessive pricing within that market; (iv) refusal to supply other firms within that market; or (v) other market characteristics that indicate co-ordinated conduct.⁸²

If the Tribunal is satisfied that the Commission has established the above requirements, the Tribunal may make an order that either prohibits the conduct or imposes conditions to mitigate or ameliorate the effect of the complex monopoly conduct on the market. If the firm contravenes this order, its conduct in doing so will constitute a prohibited practice that contravenes the Act.⁸³

(b) Enforcement of section 10A

Unlike cartel conduct, which is *per se* prohibited by section 4(1)(b) of the Act, complex monopoly conduct is not *per se* prohibited. As a result, the threshold that the Commission needs to establish to prove tacit collusion or complex monopoly conduct is substantially higher than that it is required to meet in an investigation of express collusion. In order to establish complex monopoly conduct, the Commission has to prove that the conduct will have an anti-competitive outcome that cannot be justified on efficiency, technology or pro-competitive gains. Furthermore, the Commission must show that the conduct will result in:

- high entry barriers to that market;
- exclusion of other firms from the market;
- excessive pricing within that market;
- refusal to supply other firms within that market; or
- other market characteristics that indicate co-ordinated conduct.

The competition authorities' task in establishing that conduct meets the requirements of section 10A is consequently daunting. This will require an assessment of the relevant market; a detailed calculation of the market shares of all firms in the defined market; a determination that the conduct is conscious parallel conduct rather than independent decision-making in a market where firms recognise their mutual interdependence; and a detailed assessment of whether market outcomes are uncompetitive based on an investigation of market structure, conduct and performance.

⁸¹ Section 10A(3). Section 10A provides that the Commission may investigate conduct that it believes to be complex monopoly conduct without initiating or receiving a complaint in terms of chapter 5 of the Act.

⁸² Section 10A(4).

⁸³ Section 10A(5) and section 10A(6).

Even if the Commission succeeds in discharging its burden of proof and establishes the requirements for satisfying the Tribunal that it should make an order confirming that one or more firms have engaged in complex monopoly conduct, the Tribunal is only empowered to address this conduct by making an order that deals with the effect of the complex monopoly conduct on the market. The Tribunal is not empowered to impose any sort of penalty on the firms for engaging in this conduct. Only if the firms subsequently contravene this order, is the conduct considered to be a prohibited practice for which a firm would be liable for an administrative penalty.

(c) Challenges in the application of section 10A

The broad scope of the Commission's investigation mandate under section 10A (as described above) appears to be equivalent to a market inquiry except that the investigation is directed against the conduct of specific firms and, if the Commission succeeds in establishing complex monopoly conduct, there is the possibility that the firms will be held accountable for this conduct (if a firm subsequently contravenes a declaratory order by the Tribunal in relation to the conduct). As such, the scope of section 10A is arguably incomplete, arbitrary, and discriminatory. The limitation of complex monopoly conduct based on arbitrary market shares and the number of firms in the market is not supported by economic theory and ignores the fact that tacit collusion can be a harmful feature of many less concentrated markets. As outlined in an earlier section, the economic theory of repeated games concludes that any outcome in an industry can occur in oligopolistic markets from joint monopoly to a non-cooperative, competitive result. Jacquemin and Slade⁸⁴ point out that this implies that tacit collusion can exist in any market: 'the multiplicity of equilibria is one of the problems associated with the repeated-game approach. Instead of providing us with a theory of oligopoly, it can explain all possible behaviors. Moreover, it even suggests that almost all industries will be collusive almost all of the time.'

It can be argued that limiting the scope of section 10A to highly concentrated markets based on the criteria in section 10A(1) will cover most of the serious cases of tacit collusion. However, this ignores both the fact that less concentrated markets may harm welfare to the same extent as those defined in the Act and also the practical issues arising from such an arbitrary distinction. For example, defining relevant markets and market shares is likely to prove difficult, complex and highly contentious given that firms will have strong incentives and will make extraordinary efforts to show that the conditions of section 10A(1) do not apply to their industry.

A general problem for the successful implementation of section 10A is whether the conduct of affected firms will fall within the wide scope of the anti-competitive outcomes set out in section 10A(4)(b). Some of the criteria appear excessively broad and ill-defined. For example, what is considered a 'high' barrier to entry in the market and how can it be remedied in practice? Many barriers to entry in an industry are structural rather than arising from the conduct of firms in the market.

In particular, section 10A(4)(b)(iii), which refers to excessive pricing as an indicator of an anti-competitive effect of complex monopoly conduct, is likely to create considerable uncertainty among affected firms. The Commission and Tribunal will be required to determine what a competitive price is in the market and what elevation above those prices is considered an 'excessive' price.⁸⁵ The result is that all firms' pricing policies will now become vulnerable to the uncertainty of being considered anti-competitive. The issue is made more complicated because in intermediate goods industries, some of which are highly concentrated, many firms have prices that apply for extended periods, for example tender prices in bidding markets or those charged in long-term contracts with customers. This aspect of the amendment poses particular challenges in the South African banking industry, as is explained above. Actions by the competition authorities in respect of banks can increase uncertainty and therefore financial instability in domestic financial markets.

⁸⁴ A Jacquemin and ME Slade 'Cartels, Collusion and Horizontal Mergers' in R Schmalensee and R Willig (editors) *Handbook of Industrial Organization* (1988) 1.

⁸⁵ The difficulties in determining an excessive price under section 8(a) of the Act in recent cases before the Tribunal are a guide to the likely future problems of assessment.

Furthermore, if the Tribunal were to impose a behavioural remedy to reduce prices, in essence, the Tribunal would be acting as a price regulator, a function which it is ill-suited to perform. If a structural remedy is prescribed, the Tribunal is open to Turner's criticism, mentioned above, that the problem is the structure of the industry (perhaps from formal market institutions such as regulations), not the pricing conduct of firms in the market. The risk in this case is that the Tribunal becomes an instrument of industrial or trade policy rather than an adjudicator of competitiveness in a market.

A further issue of concern is the broad criterion to establish an anti-competitive effect in section 10A(4)(b)(v) that states 'other market characteristics that indicate co-ordinated conduct.' In principle this implies any form of conduct in a market is open to scrutiny, restriction or prohibition. This is likely to create high levels of uncertainty for affected firms and may, for example, possibly lead to lower levels of investment and employment in the industry.

An additional challenge is determining whether 'conscious parallel conduct' exists in a market. There is general agreement that in highly concentrated markets firms recognise their mutual interdependence in their decision-making. There are incentives to coordinate actions to reduce competitive pressures in their market and parallel conduct may indicate cooperative interdependent strategies in the market. However, that same market outcome can arise not through interdependent but by independent actions. If prices go up in a market in a parallel way and there is no explicit collusion the increase could be attributed to coordinated decisions by firms. However, it may occur because one firm raises its price independently, hoping or expecting that its competitors also raise their prices. The competitors independently realise that their best response to the rise in prices of the firm is to raise their own prices. The result is a non-cooperative Nash equilibrium where each firm's strategy is the independently determined best response to the actions of other firms.

The danger of perceiving parallel behaviour as being the result of coordinated action is overcome to some extent by some competition authorities requiring a 'parallelism plus' rule where tacit collusive conduct is discerned by some facilitating practice that cannot be explained except as a coordinating device. Section 10A does not require a 'plus' factor for the establishment of conscious parallel conduct (although the authorities will need to establish more than this for conduct to constitute complex monopoly conduct). It is therefore unclear how the authorities will determine conscious parallel conduct given that the same market outcomes (including the outcomes of section 10A(4)(b)) can arise from non-cooperative strategies whilst recognising mutual interdependence.⁸⁶

The difficulties inherent in the application of section 10A can be shown by considering price leadership strategies. Economists classify price leadership into three types: dominant firm, barometric and collusive, all of which can lead to prices elevated above competitive levels. In a dominant firm leadership model with standardised products the dominant firm sets its price and output based on its own interests and expects the other small firms to meet residual demand in the market at its price. If the dominant firm's objective is short-term profit maximisation⁸⁷ market prices will be above competitive levels but below monopoly levels. Prices will also change in a parallel fashion, when the dominant firm changes its prices the smaller firms as price takers will also adjust their prices. The concern of competition authorities that result from this market behaviour is the market power of the dominant firm, not collusion. In this example there is no price coordination; the dominant firm is setting prices in the market and the smaller firms are acting independently in their own best interests with no influence over prices.

⁸⁶ Turner's view is clear: 'The point is that conscious parallelism is never meaningful by itself, but always assumes whatever significance it might have from additional facts. Thus, conscious parallelism is not even evidence of agreement unless there are some other facts indicating that the decisions of the alleged conspirators were *interdependent*, that the decisions were consistent with the individual self-interest of those concerned only if they all decided the same way' (Turner op cit note 8 at 655).

⁸⁷ A dominant firm that believes its short-term profit maximisation will lead to an expansion of output by fringe firms may prefer a strategy of *limit pricing* to maximise long-term profits.

In barometric price leadership a firm which is not necessarily the largest firm is considered well-informed regarding market conditions and sets and changes prices in the market to meet its own interests. Other firms independently recognise the ability of the firm and follow its prices.

However, a different form of price leadership can occur in concentrated markets with a few large firms where the recognition of mutual interdependence and common interest induces firms to choose coordinated rather than independent price behaviour in setting and adjusting their prices. In this collusive price leadership model one firm, either the largest, dominant firm or a 'barometric' firm, is regarded as being 'the best informed' about market conditions and is delegated as the price decision-maker or 'leader'. This firm sets prices in the market by announcing them in the market, expecting other firms to follow its prices. The existence of a meeting of minds and mutual understanding of reliance on the 'leader' results in the other firms in the market also raising their prices. Rotemberg and Saloner describe this kind of collusive behaviour as simple to implement with low adherence costs and 'no overt collusion either through information transfer or price-fixing'⁸⁸ and which results in largely parallel changes in prices in the market similar to dominant firm price leadership. The problem, of course, for the competition authorities under section 10A is to distinguish between these strategies that yield the same or very similar outcomes of prices above competitive levels.

(d) Section 10A and Focal Point Pricing

The difficulties for firms and competition authorities in applying section 10A are particularly applicable to focal point pricing. Pricing strategies using focal points is coordinated pricing by firms in a market without communication. As such it is conscious parallel conduct as defined in section 10A. Focal point prices in many market circumstances can result in prices being set at elevated levels compared to prices determined by independent decisions by firms.

Competition authorities and policymakers have identified the issue. The European Commission in its Guidelines on Vertical Restraints⁸⁹ states: '[t]he possible competition risk of maximum and recommended prices is that they will work as a focal point for the resellers and might be followed by most or all of them and/or that maximum or recommended prices may soften competition or facilitate collusion between suppliers' and '[a]n important factor for assessing possible anti-competitive effects of maximum or recommended resale prices is the market position of the supplier. The stronger the market position of the supplier, the higher the risk that a maximum resale price or a recommended resale price leads to a more or less uniform application of that price level by the resellers, because they may use it as a focal point. They may find it difficult to deviate from what they perceive to be the preferred resale price proposed by such an important supplier on the market.' The OECD in its publication *Roundtable on Vertical Restraints for On-Line Sales* takes a similar view: 'In downstream markets similar price arrangements, even if [these] do not impose the retail price, may provide focal points to retailers and therefore increase their ability to coordinate on higher more profitable prices and maximum or recommended resale prices are generally considered to raise weak competition concerns. In principle they could create focal points that might facilitate coordination among retailers.'⁹⁰

The general criticisms of section 10A outlined above also apply to focal point prices. A price set by focal point reasoning can occur in a wide range of markets, certainly in markets less concentrated than those affected by section 10A. Consequently it is arbitrary and discriminatory to assign liability to one set of markets and not others where the harm may be equivalent.

The authorities also have to identify whether firms' pricing policies involve focal points. Are products in a highly concentrated market priced at a round or odd number (say R500 or R199.95), or based on a standard mark-up in an industry of (say) 50%, or set at a maximum regulated level, focal point prices or independently determined? Are suggested or recommended resale prices or import parity prices focal point prices or also

⁸⁸ JJ Rotemberg and G Saloner 'Collusive Price Leadership' (1990) 39(1) *The Journal of Industrial Economics* 93-111.

⁸⁹ European Commission *Guidelines on Vertical Restraints* (2010) *Commission Notice* C(2010)2365.

⁹⁰ Organisation for Economic Co-operation and Development, Directorate for Financial and Enterprise Affairs, Competition Committee *Report on Roundtable in Vertical Restraints for On-Line Sales* (2013) DAF/COMP(2013)1.

independently determined by competitive pressures in a market? Likewise, is focal point pricing in the South African banking industry the result of operationalising the monetary system or co-ordinated conduct? These are probably intractable practical problems for the Commission and Tribunal to overcome.

Equally important is the issue of suitable remedies to restrict or prohibit focal point prices in highly concentrated markets. Ordering firms to change their pricing practices such as price lining and cost plus pricing that are deeply entrenched in an industry's informal institutions is probably an impossible task. To do so will be asking firms to act irrationally, i.e. not taking into account their competitors' prices when setting their own prices. Such orders by the Tribunal are probably incapable of being implemented effectively and also lead to inefficiencies in their markets. Another way is price regulation by setting prices at competitive levels (at marginal cost) below their focal points. This is unlikely to be a viable solution given the problems of estimating the competitive price and the lack of inclination of competition authorities to act as price regulators. Ordering structural remedies such as a break-up of firms into smaller units is also unlikely to succeed since focal point price reasoning will probably continue in the now less concentrated market. The problems inherent in these approaches can make the implementation of section 10A extremely difficult and hazardous in terms of economic welfare.

SECTION FIVE: CONCLUSIONS

The Amendment Act introduces a mechanism for the competition authorities to investigate, and in certain circumstances, prohibit conscious parallel conduct. This paper explores the consequences of the section 10A amendment, in the context of pricing practices in oligopolistic markets, particularly in relation to focal point pricing.

In its analysis of focal point prices, this paper expands the available domestic literature of an aspect of pricing in oligopolistic markets that has received scant attention in South Africa. Focal point theory can be used to explain how firms coordinate their strategies to set and adjust their prices in a wide variety of markets. The choice of focal points for pricing strategies is largely influenced by market institutions (these can be formal, such as laws or regulations, or informal, such as conventions and norms) as these institutions dictate 'the rules of the game' in business conduct and social behaviour. Laws and regulations pertaining to price ceilings or floors, rules that shape regulated prices and bidding for public sector contracts can also provide opportunities for coordinated conduct that reduce price competition in a market. One such example is the South African banking industry where focal point pricing practices are commonly used.

At present, the establishment of a collusive practice requires an agreement or evidence of some sort of direct or indirect contact or facilitating practice between firms. The section 10A amendment extends the scope of restrictions on horizontal practices in South Africa, to co-ordinated conduct where there has been no communication between competitors.

An analysis of the application of the section 10A amendment in relation to tacitly co-ordinated practices and focal point pricing, reveals that a number of difficulties are likely to arise in relation to the Commission establishing the type of conduct described under section 10A and in relation to the broad scope of the amendment. The amendment also provides scope for the imposition of structural remedies by the Tribunal - if the Tribunal were to impose a behavioural remedy to reduce prices, it would be acting as a price regulator, a function which it is ill-suited to perform in that it would be acting as an instrument of industrial or trade policy, rather than an adjudicator of competitiveness in a market.

The challenges outlined above, for both firms and the competition authorities, in applying the section 10A amendment, are particularly applicable to focal point pricing. Focal point prices in many market circumstances can result in prices being set at elevated levels compared to prices determined by independent decisions by firms and as such, may be under scrutiny when the section 10A amendment comes into effect.