I Introduction

1. The Business and Advisory Committee ("BIAC") to the OECD welcomes the opportunity to provide its views to the OECD Competition Committee for the roundtable on ex officio cartel investigations and the use of screens to detect cartels. Indeed, the use of empirical methods to analyse economic data, such as price developments, bidding patterns and market share fluctuations to detect suspicious instances of cartel behaviour has over the past few years gained significant practical importance.

2. BIAC appreciates the efforts that national competition authorities ("NCAs") put into prosecuting hard core cartels. Indeed, the international business community stands to gain from effective cartel enforcement, competitive markets and a level playing field. BIAC also appreciates that in the vast majority of jurisdictions, NCAs enjoy discretion in designing their cartel detection policy. However, when considering the broad trends in international cartel enforcement across the world today, many agencies appear to display a preference for reactive cartel detection tools, relying predominantly on leniency applications and complaints.

3. In BIAC’s view, the question should not be whether preference should be given to either proactive or reactive detecting tools, but which techniques and approaches are best suited to detect cartels in specific settings. Proactive enforcement tools, including a careful and informed use of economic methodologies, such as tailored detection screens may in some specific cases be efficient and may even be desirable, provided adequate procedural safeguards for the companies under scrutiny are in place. BIAC appreciates the opportunity for a substantive discussion on the use of cartel detection screens and other structural and behavioural indicators and respectfully submits the following general observations.

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1 See for instance, Nicolas Petit, "How much discretion do, and should, competition authorities enjoy in the course of their enforcement activities? A multi-jurisdictional assessment", Concurrences no. 1-2010, p. 46.
4. First, BIAC observes that reactive cartel detection based on leniency / amnesty regimes that seek to incentivize cartel participants to provide relevant information to the agencies have in certain jurisdictions been proven to contribute significantly to the detection of illegal conduct. However, much more can and should be done to further refine and align these regimes internationally. In this respect BIAC notes that a number of more established and newer agencies have to date not been able to set up credible leniency programmes. While there may be many legitimate obstacles to establishing these programs, BIAC believes it would be worthwhile for competition enforcement agencies to continue to devote considerable resources to the creation and improvement of leniency programs and to devote resources to compliance education and encouragement of genuine and effective antitrust compliance programmes within businesses, instead of, or at least as a priority before, diverting those resources away to the development of pro-active detection methods. This is particularly so because there is still significant debate on the methodologies that should form the basis of reliable pro-active detection techniques. In contrast, while the functioning of leniency programs may in many cases be improved upon, BIAC believes that these programs are on balance more likely to lead to the successful detection and prosecution of cartels. Indeed, although difficult to quantify, the gains of leniency regimes are well-recognised. In contrast, much less is known about the actual enforcement benefits, compared to the undoubted up-front costs, of screening mechanisms and ex-officio investigations.

5. Second, BIAC notes that the methodology underlying a variety of the structural screening methods is criticised. The thrust of this criticism is that the methodologies applied may not reliably indicate the presence of cartel behaviour and may give rise to both false positives and negatives. In this respect BIAC is particularly concerned that pro-active detection techniques may give rise to false positives, which in turn may inflict significant cost on business.

6. Third, agencies should be particularly mindful that launching ex-officio investigations may have very serious negative repercussions for companies because these types of investigations tend to become publicly known, sometimes even as a result of the agency’s own actions. While agencies may stress that the ex-officio investigation at issue is of a preliminary nature only and that the companies that are targeted or are being screened are not under any specific suspicion, in many cases “the damage is already done,” in particular since claims for damages may be brought based on the mere announcement of an investigation and one agency’s interest can lead to a cascade of investigations around the globe. Obviously, this is particularly worrying if it turns out that the company at issue was not involved in any illegal conduct. Indeed, law suits, particularly in the US, inflict significant cost on business and may cause considerable disruption and distraction, even if they are ultimately unsuccessful.

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2 See also BIAC’s discussion points on Improving International Co-operation in Cartel Investigations submitted to the OECD Global Forum February 2012 and on Leniency for Subsequent Applicants submitted to the WP3 October 2012.

7. Fourth, competition enforcement agencies should resist the temptation to rely excessively on ex-officio investigation or to devote disproportionate resources to the development and use of economic detection screens to avoid the risk that colluding companies may doubt their capacity to prosecute.4

8. Fifth, BIAC takes the position that there is a risk that the use of screens may result in disproportionate and excessively wide-ranging ex officio investigations. If screening mechanisms generate credible and sufficiently robust indications of potential cartel conduct based on which the agency decides to launch a follow-up investigation, that investigation should be limited to the scope necessary to confirm the preliminary findings of the agency.

9. Sixth, despite its reservations, BIAC is of the opinion that the prudent use of screening mechanisms may not only bring direct benefits in the form of more effective cartel enforcement but may also lead to indirect benefits. In particular, (i) firms may be less likely to engage in collusive conduct if they perceive that the probability of being caught is higher5 and (ii) credible, balanced ex-officio investigations may contribute to more frequent use by companies of agencies’ leniency programs.6 Indeed, these investigations may add credibility to an agency as an effective, reliable and fair enforcement agency but since the indirect benefits depend on publicising the screening activity, they also involve risks. Firms may attempt to adjust their cartel behaviour so as to remain undetected by a particular screen. More seriously, firms that are not involved in any illegal activity, but have come under scrutiny could be severely damaged by the negative publicity the screening may generate.

10. Imprudent, over-inclusive, or unnecessary ex-officio investigations (“fishing expeditions”) may detract from the legitimacy of the agency and may, as a result, have negative repercussion’s on the utilisation of the agency’s reactive enforcement tools, in particular on its leniency programs.

II Recalibration of cartel detection tools - a better balance between proactive and reactive techniques?

11. In general terms and subject to the points made above, BIAC supports the use of proactive detection methods towards uncovering collusive conduct. In this regard, BIAC believes that information received from other agencies, or through the monitoring of companies' press releases, tracking companies’ behaviour, or from complaints may all contain indications of potential collusive behaviour that may warrant further consideration. BIAC believes that any follow-up investigations should be restricted to what is necessary to assess the initial signals.


5 Rosa M. Abrantes-Metz, “Design and Implementation of Screens and Their Use by Defendants”, page 5.

6 It is argued that screens may also provide valuable circumstantial evidence for both sides in a litigation, i.e., for defendants to establish the non-existence of a conspiracy and for plaintiffs in estimating damages. See Rosa M. Abrantes-Metz and Patrick Bajari, “Screens for Conspiracies and Their Multiple Applications”, American Bar Association, vol. 24, no. 1, 2009, pages 66, 70.
12. BIAC believes that agencies’ generally have the required investigative tools to adequately follow-up on any signals of collusive conduct, in particular by requesting additional information from market participants, conducting dawn raids where there is a sufficiently strong indication of wrongdoing, or other means. BIAC acknowledges that the use of econometric screening methods as a means of strengthening an agency’s suspicion of the existence of cartel conduct in a market may be warranted. However, for the reasons explained in more detail below, BIAC is not in favour of a wide use of economic screening methods, the outcomes of which would in and of themselves be relied upon to justify the launch of an ex-officio investigation.

13. Although officials of competition agencies have advocated an increase in the number of ex officio investigations for some time,\(^7\) BIAC notes that, for example in the EU, in 2010, only a quarter of the cartel proceedings were initiated without reverting to reactive tools,\(^8\) such as complaints submitted by customers, individual whistle-blowers or leniency applications lodged by cartel participants. However, despite their contribution to competition enforcement, leniency programs are not all optimally designed\(^9\) In order for a leniency programme to be most effective, it has to be predictable and transparent and it has to entail certainty, clear incentives

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\(^7\) See: In particular former EU Commissioner for Competition Policy, N. Kroes, *Key developments in European competition policy over the past two years:* “[...] I set out three strategic objectives for my mandate: [...] promoting a proactive competition policy to complement traditional - reactive - case based approach.” (European American Press Club, speech 07/2, 8 January 2007, available at [http://europa.eu/rapid/press-release_SPEECH-07-2_en.htm](http://europa.eu/rapid/press-release_SPEECH-07-2_en.htm)); current EU Commissioner for Competition Policy, J. Almunia, in *Recent Developments and future priorities in EU competition policy:* “[a]s to our policy for the future, I intend to initiate more cases ex officio, because it is important to target markets that we know from experience are prone to cartel behavior.” (International Competition Law Forum St. Gallen, speech 11/243, 8 April 2011, available at [http://europa.eu/rapid/press-release_SPEECH-11-243_en.htm](http://europa.eu/rapid/press-release_SPEECH-11-243_en.htm)) and DG COMP’S Management Plan for 2012: “Our leniency policy is another major success and we will draw on its merits, but in the coming months we will also pursue more cases ex officio whenever the opportunity presents itself” (available at [http://ec.europa.eu/atwork/synthesis/amp/doc/comp_mp.pdf](http://ec.europa.eu/atwork/synthesis/amp/doc/comp_mp.pdf), page 4 and Director General for DG Competition, EU Commission, A. Italianer, in *Zero tolerance for international cartels:* “[t]he Commission has also invested important resources into market monitoring as well as ex-officio work. There have been numerous cases that have started ex officio [...] and you will see more such cases in the future. [...] we are fully determined to start own initiative inquiries [...] my message today is that we are not complacent, we do not merely rely on leniency, we are not just reactive. We are vigilant and will pro-actively pursue the ex officio route. [...] better detection continues to be a priority.” (ICN cartel workshop, 10-13 October 2011, speech available at [http://ec.europa.eu/competition/speeches/text/sp2011_11_en.pdf](http://ec.europa.eu/competition/speeches/text/sp2011_11_en.pdf)).


and an emphasis on priority. However, based on the absence of some of these features in current leniency systems, blowing the whistle may not be effectively encouraged in practice.

14. BIAC is concerned about the difficulties companies face due to the lack of a “one-stop leniency shop” and lack of harmonisation among competition agencies in leniency and marker policies. As cartels often take place in a global setting, undertakings file concomitantly leniency applications in various jurisdictions. This exercise is onerous, difficult to coordinate and expensive, without applicants being able to predict in a timely manner if they will qualify for leniency. In this respect, BIAC has advocated a “one-stop shop” mechanism for markers and would support other initiatives which would contribute to streamlining the information required from cartel participants.

15. Moreover, BIAC notes that the guidance provided by NCAs with regard to leniency filings is often suboptimal; in most cases, the information required is not predictable from the outset. Hence, for example in the EU, companies may find themselves engaged in races for data of “significant added value”, uncertain when to sacrifice completeness to timeliness or vice versa. The EU Commission will determine whether the provided evidence meets the “significant added value” threshold only later on in the proceedings, which creates uncertainty.

16. The pitfalls mentioned above coupled with potential exposure to criminal sanctions, the increasing trend of private enforcement and the risks arising in relation to the disclosure of incriminating documents, the broad discretion that NCAs have in granting markers and the increasing recognition of the importance of human rights in competition law may create disincentives for companies to self-report collusive conduct. In BIAC’s view, the most cost-effective way for many agencies to improve their enforcement effectiveness would be to update the design of their leniency programs to remove these current shortcomings and to enhance international convergence, including by the introduction of a one-stop-shop for leniency markers, as well as to actively promote and stimulate compliance efforts by businesses.

III Screening as an effective proactive way to detect cartels?

17. BIAC acknowledges that leniency programs, despite their positive results and even with the improvements suggested, may still fail to uncover all successful and durable cartels.

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Indeed theory may suggest that leniency programs tend to be a more attractive option when the cartel is breaking down or is inefficient. In this light, BIAC supports initiatives of antitrust agencies that seek to adopt complementary methods to detect undiscovered anticompetitive conspiracies. One such an alternative is the use of screens.

18. A screen is a statistical test based on an econometric model and a theory of alleged illegal behaviour, which is aimed at identifying collusion (or any other type of cheating such as manipulation or fraud) in a particular market. Screens may also serve to detect which companies have been involved in the anti-competitive practice and for how long collusion has been in place. Screens are generally based on commonly available data, including: prices, bids, costs or market shares to identify patterns in the information that are highly improbable or anomalous. Screening can also be based on a “behavioural” or an “outcome” approach, whereby economists look at observable data which reflects the markets’ and the market participants’ behaviour. Following the identification of the relevant data, economists apply screens in order to observe whether the observed behaviour is likely the result of an anti-competitive agreement.

19. More specifically, empirical screens are designed to identify either: (i) events that are improbable to occur unless firms in the industry are coordinating their behaviour or (ii) anomalous patterns in comparison with other markets. For a screen to be as effective as possible, (i) it needs to be designed for the situation at hand, i.e., it needs to be custom-made or targeted to the case under examination; and (ii) the data utilized should be accurate and of high-quality.

20. Economic theory has long identified the conditions that facilitate the emergence of cartels. These conditions are summarized below:  

- structural – low number of competitors, high entry barriers, frequent firm interaction, high market transparency;

- demand side – market growth, absence of fluctuations and business cycles, low demand elasticity, absence of buying power, absence of network effects;

- supply side – mature industries with stabilized technology, symmetric costs, symmetric capacities, product homogeneity, multi-market contact, structural links between firms; and

- the presence of cooperation and other contractual agreements between competitors.

21. These conditions can be monitored relatively easily in theory but the cost of such monitoring across an economy at a useful level of detail would be prohibitive and even then the

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16 See for example Rey (2006).
conditions do not indicate whether a cartel in fact exists; they merely help one assess whether market characteristics are likely to facilitate or hinder collusion. At best, they can therefore only provide a preliminary screen, useful to exclude unlikely candidates at an early stage of the analysis. They cannot be used to provide evidence that collusion in a particular industry is actually likely. Put differently: the general principles mentioned above are helpful, but not sufficient. Moreover, if the above criteria are used, it is important to avoid a simplistic checklist approach but rather develop in each case a theory of collusion grounded in the reality of the industry.

22. One advantage of the criteria set out above is that they focus specifically on the circumstances in which any cartels that may exist are most likely to cause significant consumer harm. For instance, in a market with a relatively large number of suppliers facing powerful buyers, a cartel may still arise, but is less likely to cause substantial consumer harm.

23. Some of the tools routinely used in merger control to assess whether competition is intense can be used to screen out markets that are unlikely to be cartelised: fast pace of innovation, strong market share volatility, etc. Even if cartels exist in these cases (which is unlikely), they are probably ineffective and therefore not causing significant consumer harm. In any event, these indicators are not sufficient in any situation to strongly suggest, let alone conclude on the existence of collusion. Markets may have all the above characteristics and still not be cartelized. To suggest otherwise would be to presume guilt from circumstances over which market players have no control. It is important to recognize, as Abrantes-Metz (2011), that there is no one-size fits-all approach and that screens have to be customised to the characteristics of each market and to a specific alleged conduct.

24. Thus, even a properly designed and implemented screen based on general indicators will lead to incorrect outcomes: it may indicate that there was collusion when there was none (false positive or type I error) or it may indicate that there was no collusion when there was (false negative or type II error). Also, as mentioned above, it should be noted that screens in themselves do not constitute proof of collusion. They may be useful for flagging issues that are improbable under effective competition within a particular industry, but they will not constitute sufficient evidence to prove or disprove a potential cartel.

25. To enhance the likelihood of reliable outcomes, there will be a need for tailored screens that look beyond general indicators. A tailored screen can be seen as a second step in the cartel screening process. If general indicators point indicate that the market characteristics are conducive to coordination, further detailed industry-specific analysis should be undertaken before any conclusions can be drawn. The nature of competition in the market at hand must be taken into account in order to form a theory of collusion consistent with the facts. This theory should clearly state the market consequences of collusion and what differentiates these from competitive market outcomes. Once the theory is clear, it may be possible to identify specific
tests to assess whether the market was likely to be cartelised. Several authors have proposed tests based on econometric models or using market statistics.  

26. Bid-rigging is the area where screens could potentially be most effective. Tenders are usually organised in controlled environments with clear rules, which facilitate understanding the nature of competition and of the possible collusive behaviour. Moreover, the transparency of the process generates clean and usable data. Screens can be relatively easy to apply due to the data availability and to the relative simplicity of the underlying collusive theory. Screens can be based on improbable patterns generated by the collusive behaviour: bids should be independent once public information is controlled for; if firms collude bids are no longer independent and correlation between them is too large. Alternatively, screens may also be based on control groups: how well do bids reflect costs? How does the price/cost relation compare to other neighbouring markets? Examples of situations where these screens were applied include the school milk distribution market in Ohio between 1980 and 1990 and the procurement for generic drugs in Mexico.  

27. In the case of price-fixing, applying screens presents additional difficulties due to the infinitely varied nature of the competitive process. Contrary to bid-rigging in tenders, this type of collusion arises in markets where competition develops in a much less controlled environment with no clearly defined rules. Detailed data is less likely to be available, external factors exert a greater influence on market outcomes and it is more difficult to identify a clear counterfactual.  

28. In these cases screens may look for improbable patterns such as identical prices across firms especially if (i) prices remain identical for long periods of time; (ii) prices previously were different (and start becoming identical) (iii) price increases do not appear to be explainable by increased costs; (iv) discounts are eliminated, especially in a market where discounts historically were given, or (v) vendors are charging higher prices to local customers than to distant customers. Similarly, screens may compare collusive and competitive regimes by showing that (i) there was a structural break when the cartel collapsed, marked by a sudden drop in prices; (ii) the average price was higher during collusion than during competition; (iii) prices were more stable under collusion than under competition; and (iv) prices followed costs movements more closely under competition than under collusion. These criteria have been used in several cartel investigations, including gasoline stations.  

29. These screens for price-fixing conduct however have a number of weaknesses.

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19 See Mena-Labarthe, 2012.

• First, the initial selection of industries to which screens may be applied in a second step may necessarily give rise to Type 1 and 2 errors.

• Second, the use of adequate screens require substantial amount of data that are often not available.

• Third, all the patterns described above may occur in competitive markets, and therefore do not constitute sufficient evidence of collusion. For example, in relatively static markets for homogenous products, prices may vary little over time and across suppliers, even in the absence of any coordination. Similarly, sudden price changes can be caused by changes in input costs, entry or exit of suppliers, changes in production capacity, changes in demand, changes in regulation, etc.

• Fourth, most of these criteria rely on the existence of structural breaks (e.g. sudden changes in pricing patterns) and would therefore only detect new cartels, and not the ones that have been around for some time. Finally, colluding firms may seek to avoid raising attention by increasing prices progressively and in small steps, therefore failing to be identified by screens focusing on structural breaks.

30. In light of the above, BIAC notes certain negative aspects of screens. Whereas they can call attention to a particular market for further consideration, they cannot serve as firm evidence of potential anti-competitive behaviour. It also remains uncertain whether screens can differentiate between the various possible causes for anomalous behaviour or whether they can indicate the intention behind it. Moreover, as mentioned above, screens need to be individualised to the market at hand (i.e., there is not a catch-all-type of screen) and their performance is highly dependent on the availability and the quality of the data. Thus, screens will likely be unsuccessful in circumstances where it is difficult to gather observable data. Even when a screen has been designed for a particular market, based on reliable data, it may still generate erroneous conclusions, most often false positives which can be hugely and unfairly costly to businesses caught up in unnecessary investigations.

31. Despite the limitations of empirical screens, BIAC is aware that screens have been successfully implemented in certain economic sectors, sometimes with the benefit of hindsight.21 Empirical screens applied by the Wall Street Journal successfully flagged the possibility of a conspiracy to manipulate the LIBOR by several major banks, as well as the LIBOR denominated in other currencies, and similar benchmarks including EURIBOR in Europe.

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21 The Italian NCA tested the power of the variance screen for prices to detect previously known illegal conspiracies. The outcome was positive in the sense that the screen would have correctly detected the two cartels in the markets for fuel (gasoline and diesel), on the one hand, and personal care and baby milk sold in pharmacies, on the other hand, before the Italian NCA did. (see Rosa M. Abrantes-Metz, Proactive vs Reactive Anti-Cartel Policy: The Role of Empirical Screens (June 2013), page 15; and presentation before ABA, December 2011, slide 11).
and TIBOR in Japan. Similarly, the Mexican NCA was able to detect a conspiracy in the pharmaceutical sector following the implementation of a big-rigging screen. On the other hand, BIAC is also aware that screens have failed to achieve their objective in other occasions. For example, the use of a variance screen by the Austrian NCA in its investigation of the petrol and diesel markets proved highly unreliable.

32. BIAC does not support the view of those who categorically claim that “screens do not work” and that, as a consequence, antitrust agencies should categorically refrain from using such mechanisms in their fight against cartels. However, BIAC is concerned that competition authorities that decide to spend significant resources on the development of empirical screens may vest an excessive degree of trust in such instruments and divert valuable resources away from more cost-effective enforcement tools, particularly, at this point, away from improving leniency regimes and efforts aimed preventative measures such as the effective use of compliance programmes by business.

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