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SERIAL OFFENDERS: A DISCUSSION ON WHY SOME INDUSTRIES SEEM PRONE TO ENDEMIC COLLUSION

-- Summary of Discussion --

29-30 October 2015

This document prepared by the OECD Secretariat is a detailed summary of the discussion held during Session III of the 14th meeting of the Global Forum on Competition on 29-30 October 2015.

More documents related to this discussion can be found at: http://www.oecd.org/competition/globalforum/competition-industries-endemic-collusion.htm

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SUMMARY OF DISCUSSION

By the Secretariat

1. The **Chair** of the Global Forum, **Mr. Francis Kariuki**, opened the discussion on *"Serial offenders: Why do some industries seem prone to endemic collusion?"* and welcomed the participants. He noted that the session received 17 written contributions and that a few more delegations would make oral contributions in the plenary and the break-out sessions.

2. The Chair introduced the topic, by outlining the objectives of the session as follows: a) to discuss the extent of endemic collusion in some sectors of the economy; b) to explain this observation in the light of the economic characteristics of these sectors; and c) to draw policy conclusions. He added that the session would focus on four sectors where a number of competition authorities have significant cartel enforcement experience: chemicals, cement and concrete, food products and construction services including public tenders.

3. The Chair noted that the economic theory has developed guidelines on the factors that are considered conducive to collusion. However, factors are not identical across sectors and collusive behaviour is not a result of a standard list of economic characteristics. Moreover, the empirical literature has not reached robust conclusions on the determinants of cartel prevalence by industry. It is also important to note that the factors identified in the economic literature concern the facilitation of tacit and not necessarily explicit collusion.

4. Before opening the floor for discussion, the Chair welcomed the four expert panellists: Professor Joseph Harrington from the Wharton School, University of Pennsylvania; Professor Robert Marshall from Penn State University; Professor Valerie Suslow from the Johns Hopkins Carey Business School; and Mr. Robert Wilson, from the Webber Wentzel law firm in South Africa.

5. The Chair explained that the session would be organised in three parts. First, panellists and participants would provide an overview of the extent of repeated collusion; second, they would identify the factors associated with repeated collusion; and, third, the discussion would focus on policy implications. Three break-out sessions would take place between the morning and afternoon sessions: one break-out session on cement and concrete moderated by Mr. Ashok Chawla, Chairman of the Competition Committee of India; one break-out session on construction, moderated by Mr. Kamser Lumbarandja, Commissioner KKPU Indonesia; and one break-out session on food and chemicals, moderated by Mr. Paolo Burnier de Silveira, Commissioner, CADE Brazil.

1. Extent of repeated collusion

6. The **Chair** invited the **EU delegation** to provide an overview of the sectors prone to repeated collusion based on the Commission's enforcement practice. The EU delegate provided some descriptive statistics on the cartel cases investigated by the European Commission. The delegate explained that this evidence included only cases pursued by the European Commission, and not by national competition authorities, and that any evidence can only be partial since it necessarily concerns purely cartels which have been uncovered.

7. The delegate noted the high frequency of cartels in the chemicals sector. Out of 100 cases run by the European Commission during the period from 1998 to 2015, more than 25% affected the chemicals sector. The food sector accounted for 8% of cases. Cement and construction did not appear in the sample because such cases were investigated by national competition authorities. However, the delegate noted that despite the high percentage of cases in the chemicals sector, there was significant variation over time. If the overall time period was broken down into three periods, one would observe significant cartel activity in the first two periods (1998 - 2003 and 2003 - 2009) but only two cartel cases in the last period.

8. The EU delegation concluded that there are sectors that have been historically characterised by a high level of collusion and one of these is the chemicals industry. However, one should be careful when drawing conclusions from the past to the future. The delegate finally noted that the variation of cartel activity among sectors could be explained either by waves of cartel formation in the sector (e.g. some sectors develop more collusive activity during specific periods) or by waves in detection activity.

9. The Chair thanked the EU delegation and gave the floor to **Japan** to describe their analysis on repeated collusion in the chemicals sector during the period from 1985 to 2014. The analysis identified 18 companies repeatedly involved in collusive behaviour. Even if collusion did not appear exactly on the same products, the delegation explained that it could be considered as repeated collusion. Based on these results, the delegation concluded on three possible factors that could facilitate collusion in the sector. First, significant investments are required to start a business in the sector, resulting in barriers to entry. Second, the delegate noted that two or more of the 18 repeaters were involved in 13 of the18 collusion cases. Due to barriers to entry, firms can co-operate and strengthen their collusion more easily. Third, most raw materials are imported and therefore the cost of materials is very similar across firms.

10. The Chair invited the **US delegation** to comment on the clustering of discovered cartels in some industries. The US delegation noted that there were waves of prosecution in several sectors, such as in road-building, ready-mix concrete and school milk programmes. The sectors exhibited characteristics that facilitated cartels, such as few players in the market and frequent contact through legitimate activities like joint ventures and sub-contracting. However, the delegation also noted that the firms in question tend to appear in separate cartels or in different geographic areas and are not considered as repeat offenders. Some clusters of cartel activity appeared recently in the auto-parts sector and the real estate auctions; for the latter, cases were uncovered in different parts of the country but did not involve the same firms.

11. The delegation explained the difference between multiple and serial offenders. A serial offender is a company convicted for cartel participation which starts a new offense after that conviction. There are no serial offenders in the US experience, unlike simultaneous cartels with offenders involved in different cases in various geographic areas and products. The US authority provides incentives through amnesty programmes, so the defendant is encouraged to bring attention to another cartel activity. These cases are not qualified as serial offenders in the US.

2. Factors associated with repeated collusion

12. The Chair thanked the US delegation and introduced the second part of the session.

13. **Professor Suslow** explained that she would present an ongoing analysis of data from the US and the EU, with the most interesting findings on cartel prevalence and occurrence. She noted that different considerations are relevant when examining recidivism, depending on whether it appears at an industry or at a firm level. If recidivism appears at an industry level, particular determinants should be examined, such as technology characteristics, high-fixed costs, and high transportation costs relative to the value of the product. If recidivism occurs at firm level, organisational culture might play a role. Professor Suslow explained that repeated collusion is mostly a mix between industry and firm prevalence, for instance when

multi-market, international and multinational firms selling different products in different geographical areas, get involved in collusive activity.

14. For industries that are prone to collusion, Professor Suslow pointed out that the US and EU data showed that the construction and the chemicals sectors were frequently cartelised, both before and after leniency programmes were introduced. She stressed that the effort by companies to reduce the intensity of competition, in conjunction with an uncertain economic environment, is a factor that might lead to collusion.

15. Professor Suslow presented several examples from the EU and US experience and emphasised that an industry could be prone to collusion for many reasons, but this does not necessarily mean that the same firms are involved. In the EU sample, 23 cartels were investigated with 106 firms involved, and there are no strong indications of repeated collusion. In the US, despite the significant number of cases in chemicals and construction, and even if these industries appeared prone to collusion, the firms involved appeared to collude over a large geographical area and were not the same. At a firm level, Professor Suslow pointed out that there are firms with a history of collusion, but they did not always collude on the same product or the same geographical area and this was the case for a number of firms convicted both in the US and the EU.

16. Professor Suslow noted that, while some economic factors facilitate collusion, this does not necessarily lead to conclusions about causality. Increased concentration for example, is a factor that facilitates collusion, but there is no established empirical relationship with collusion; markets with lower levels of concentration will eventually find other tools to collude. Another characteristic of markets prone to collusion, which is more predictable but not always sufficient, is elasticity of demand, especially under challenging economic circumstances.

17. Turning to recidivism, Professor Suslow highlighted that it is very important to define recidivism in a meaningful way. She presented data from various studies about recidivism, which follow different definitions. For example, a study by Connor concluded that 389 out of 2,000 firms participated in more than one cartel. However, this number falls dramatically when the definition includes only cases in which the new cartel started after the first investigation was launched. For the EU competition cases studied by Marvão, the number of recidivists goes down from 89 to 10 when moving from a broader to a narrower definition. Professor Suslow concluded that, if recidivism is calculated on the appropriate narrow definition, less than 1% of cartel members are recidivists.

18. The Chair turned to Professor Harrington and asked him to present an overview of situations when firms collude, theoretically and empirically.

19. **Professor Harrington** noted that a cartel tries to achieve three conditions: the stability condition, the participation condition and the co-ordination condition. Assuming that the stability condition is satisfied, there is a question of when this is desirable for firms. Collusion is attractive when the incremental profit from colluding is high. For example, in a market with homogeneous products and excess capacity, price competition can be very intense, so firms can gain a lot if they can co-ordinate a price increase. The speaker added that there are also cases where collusion is desirable when profits are low in relation to certain benchmarks, such as recent performance. This is likely to occur, for instance, when there is a demand decline in the presence of excess capacity. As a result, prices drop and profits are low relative to recent history. The speaker also drew attention to cultural conditions, which are present at three levels: a) at organisation level, as corporate culture and performance-driven behaviour; b) at market level, where a history of collusion might lead managers to consider it as a viable option; and c) at country level, where competition rules did not exist before and collusion was more common.

20. Professor Harrington noted that firms know that, in order to attract demand, they should set lower prices compared to their rivals' and this strategy is often limited by their costs. So, in order to avoid this type of price competition, they invest on differentiation and advertising or offer auxiliary services to influence buyers' decisions. But this is not feasible in some markets where buyers' decisions are based exclusively on price.

21. The Chair thanked Professor Harrington and turned to Professor Marshall to talk about the reasons underlying the propensity to collude in the chemicals sector and the role of association management companies.

22. **Professor Marshall** explained that the five forces identified by Michael Porter provide the basis for understanding why firms collude. These are as follows: the threat of new entrants, the bargaining power of buyers, the bargaining power of suppliers, the threat of substitute products or services and the rivalry among existing firms. As an example of the threat of entry, he noted that, at the time of the vitamins cartel, new entry into the market for vitamin A was difficult because of *learning by doing*. Production involved a chemical synthesis process which incumbents had developed over many years, becoming more efficient over time.

23. He assumed the case of an industry where there is very little threat of entry and there are no good substitutes for the product. In addition, competition is mostly on price grounds. The speaker explained that suppressing inter-firm rivalry can produce relatively quick improvements in profits. This might lead to explicit collusion if, for example, all competitors agree to increase prices from USD10 to USD25. However, if a buyer asks for USD20 and promises a significant volume of purchases, colluding firms might think to deviate. This would lead to a self-enforcing agreement to suppress rivalry and control the cartel. Consequently, firms will look at structures to allocate the collusive gain and monitor its enforcement.

24. At this point, association management companies will be needed and Professor Marshall explained how these companies work, providing the example of AC Treuhand. The company was involved in eight cartels investigated by the European Commission. AC Treuhand was an active participant in these cartels by providing monitoring mechanisms and benchmarking services. Professor Marshall noted that these businesses usually help associations only by providing logistics for meeting purposes. The problem starts when these firms start benchmarking and collecting information, so there is a fine line between getting aggregated information and detailed information.

25. The Chair thanked Professor Marshall and highlighted that a number of contributions mentioned the role of trade association in formulating collusive agreements. He turned to the Greek delegation to present the role of trade associations in facilitating cartels.

26. The **Greek delegation** noted that the authority has observed that trade associations and protectionist regulations facilitate collusion in various industries. The delegation explained that repeated collusion occurs in markets where protectionist regulation existed before: as the legal barrier is withdrawn, market players tend to replace the previous environment with equivalent collusive schemes. The Hellenic Competition Commission, in addressing such issues, has focused on collusive practices by trade associations or professional bodies in parallel with the competition assessment of potentially distortive laws and regulatory restrictions, by means of infringement decisions, formal recommendations, and advocacy actions. Many examples of collusion were identified in the food and construction sectors. These included, for instance, the infant formula case, where pharmacists' associations along with pharmaceutical warehouses boycotted producers of baby milk choosing to supply retail channels other than pharmacies. In the poultry meat cartel, many regular meetings were held at the premises of the trade association. In the canned peaches and pears cartel the associations tried to replace the price support provisions of the EU Common Agricultural Policy with an equivalent agreement. In the supermarkets cartel, the association tried to compel suppliers not to supply discount stores. In the real-estate agents cartel the main associations set the minimum brokerage fees at 2% of the sale's value, following the

abolition of a price-fixing regulation. In another case, the Hellenic Competition Commission found that the Technical Chamber of Greece adopted a presumed minimum cost for construction projects to calculate the fees for architects and engineers and also monitored compliance through an electronic system.

27. After listing all these examples, the Greek delegation explained how advocacy coupled with enforcement action and the collaboration of trade associations could effectively lead to competition compliance and help the authorities address collusion. The delegation noted that the Hellenic Competition Commission has systematically realigned its strategy, with emphasis on enforcement priorities (cases of repeated offenses are prioritised), leniency applications, fining policies with aggravating factors for recidivists and advocacy actions.

28. The Chair thanked the Greek delegation and gave the floor to South Africa to provide examples of similar situations where protectionist provisions have facilitated cartelisation in some sectors.

29. The **South African delegation** discussed two examples on how previous regulations facilitated collusion. In the first example, old legislation allowed the cement industry to fix prices and share markets. After the withdrawal of the exemption from competition law in 1995, cement producers continued colluding by allocating markets in the same way as under the exemption regime. After eight years of efforts, the South African Competition Commission conducted a dawn raid on the cement industry and, shortly after, one of the biggest producers applied for leniency. In the second example, the bread and baking industry was regulated since the 1930s, enabling price-fixing and market allocation. After de-regulation in 1996, the companies started meeting and agreed to continue the prior legal collusive behaviour. The cartel was discovered in 2007, again through a leniency application. The South African delegation concluded that prior regulation created a culture of collusion which was difficult to reverse just by de-regulating.

2.1 Focus on the construction sector

30. The Chair thanked the South African delegation and turned to **Mr. Robert Wilson** to present the reasons for endemic collusion in the construction industry in South Africa. Mr. Wilson started his presentation by describing the legal framework in South Africa. He moved on to focus on the two types of leniency procedures introduced by the Competition Commission: (a) a standard immunity policy when firms assist the Commission up to successful prosecution; and (b) a fast-track procedure applied in the construction sector, available to firms who did not otherwise qualify for immunity, to inform the Commission and benefit from a reduced fine.

31. Mr. Wilson focused on the construction industry in South Africa and noted the rapid growth of the sector during the FIFA World Cup in 2010. The industry has low profit margins but presents a high degree of concentration. The sector is vertically integrated, as firms supply one another, there is a number of joint ventures and high barriers to entry. Another important factor is the scarcity of human resources which leads to a high level of employee mobility. As people move around firms, they know each other and have developed good relationshipswhich eventually creates more opportunities for collusion.

32. In 2007, the Commission prioritised the industry and several immunity applications were submitted. The Commission first investigated the cement sector and then extended the investigation to the construction of soccer stadiums for the World Cup. Given the extent of collusion, the Commission decided to follow a fast-track settlement process and 15 firms settled at 1.46 billion rand. Those firms implicated 25 other firms and the Commission entered a settlement agreement with five of them and is prosecuting others before the Tribunal. The fast-track settlement worked by determining the number of instances of collusion and then imposing fines equal to a percentage of turnover which depended on the number of admitted violations.

33. The speaker reported that out of 230 cases dealt with by the competition authority, 192 related to cartel behaviour, 51 were in the construction sector, which represents approximately one quarter of the total number of cartel cases since the introduction of the Competition Act. The speaker summarised the reasons for endemic collusion in the sector: the legacy of Apartheid towards a heavily regulated environment; economic characteristics, such as barriers to entry, concentration and vertical integration; poor industry performance; tender requirements, as sometimes firms were encouraged by contracting authorities to bid for tenders in order to avoid being black-listed and this may have created incentives for cover pricing; commercial inter-relations and personal relations among managers; culture of non-compliance following the Apartheid years, where competition and consumer interests were less important than the so-called national interest. The speaker concluded by noting that enforcement contributed as well. The competition authority's priorities were primarily in the area of merger control and immunity policy was introduced only in 2004. In addition, he noted that the law does not allow for personal liability and the civil damages regime is underdeveloped; reputational harm is reduced, as fast-track settlements help firms to hide their anti-competitive behaviour under the general industry's misconduct.

34. The Chair thanked the speaker and turned to the **South African delegation** to comment and explain how the Commission prioritised the construction industry and succeeded to detect these cartels. The South African delegation explained that one of the reasons for the success of the fast-track process was that it acted quickly, involving also other regulators. The low penalties reflect the Commission's effort to find a balance between deterrence and the incentive to participate in the fast-track settlement process. The process was designed so that firms, by providing evidence, could achieve a one-off penalty for all infringements instead of a penalty for each and every violation. The South African delegation also highlighted that the investigation revealed several breakdowns in terms of corporate governance and unethical behaviour by firms. In conclusion, the delegation stressed that it is necessary to put more pressure on firms' compliance not only from a competition perspective but also form a company law perspective.

35. The Chair thanked the South African delegation and turned to Indonesia to present their experience from a bid rigging case in the construction industry.

36. The **Indonesian delegation** highlighted the strong commitment by the government towards infrastructure development. At the same time, the industry faces challenges, such as continuous price increases on construction materials, limited availability of skills and rapid increase of minimum salaries. The delegation noted that these are the reasons for the extent of collusion in the construction industry, which, from the Indonesian experience, represents 60% of the total number of cases. There are two types of collusion: horizontal collusion, among contractors, and vertical collusion, occurring between project owners and contractors. Collusion was also facilitated by the association of contractors, e.g. for road and electricity, colluding among them or with project owners. The Indonesian delegation also pointed out the recent effort to develop an electronic procurement system. In this way, according to the delegation, procurement will become more transparent by helping each participant and especially the competition authority to get much more information and documents from the system.

3. Implications for enforcement – Part 1

37. The Chair thanked Indonesia and gave the floor to the UK, to discuss how economic factors can sometimes be used in cartel detection.

38. The **UK delegation** explained that the UK authorities had broad experience in the construction sector, with 104 decisions issued by the Office of Fair Trading (OFT) during the last ten years. Despite the absence of some of the factors mentioned by Mr. Wilson in his presentation, collusion had been widespread in the sector. The delegation noted some of the characteristics identified by the OFT, such as the structure of public procurement and the culture of the industry. The delegation also commented on

Professor Suslow's observation about cartels being triggered by stress in the market. Market demand in the UK cement industry had fallen by approximately one third over a period of 4 - 5 years while cement manufacturers' returns continued to exceed their cost of capital. The UK authority had found tacit, rather than explicit, collusion in this market in response to difficult market conditions.

39. The UK delegation also explained that the use of screens and analysis to identify initial leads has not proved easy. First, publicly available data seldom relates to economic markets, though in some cases suitable datasets are available to sector regulator. Second, it is difficult for the competition authority to obtain company level data; companies are not usually keen to release it. Third, data may be of poor quality or unreliable. This leads to a question on the marginal value of heavy analytical work over conventional intelligence gathering. The UK delegation concluded that a combination of screens and the so-called traditional intelligence gathering, using each to validate the conclusions of the other could be of great value. This approach would also mitigate the risk of false positives.

40. The Chair thanked the UK delegation and turned to Professor Suslow. Professor Suslow started the second part of her presentation by noting that it is very important to disentangle firm and individual behaviour from the industry behaviour. According to the speaker, evidence on recidivism indicated collusion at firm level and not so much at sector or industry level. Therefore, Professor Suslow emphasised that competition policy should not focus only at an industry level, but also at the level of individual firms.

41. **Professor Suslow** then presented an overview of different policy tools. Leniency programmes have been very effective in revealing cartels, but there is a concern that leniency works better in cartels that are about to fail. Competition authorities should be creative and think of what other tools are available and can be applied to individual firms with a culture of collusion. Fines and prison terms have increased dramatically in the US in the last 20 – 25 years. According to the speaker, they have been useful but it is not clear if the reputation effect on companies is strong enough. Another useful tool is follow-on damages, sought by individual customers or in class-action lawsuits. Private enforcement is quite effective in the US and many countries are also considering it. Professor Suslow also argued that structural remedies should be taken into account when cartel members turn to merger as an alternative strategy. She quoted Davies and Ormosi who found that 85 mergers occurred from former co-conspirators post cartel. Only a small percentage of these mergers was reviewed and only one case received structural remedies. Therefore, the speaker argued that there is room for more attention on this type of tools.

42. The Chair thanked Professor Suslow and turned to the **Turkish delegation** to discuss how sector characteristics lead to different policy responses, as discussed in their contribution. The Turkish delegation explained that in the bakery market, a market with more than 20,000 bakeries, the authority tried to increase awareness on competition by sending letters to bakeries and highlighting that price-fixing and market allocation are illegal anticompetitive practices. In the cement industry, where there were only 15 - 20 cement producers, the authority initiated a sector inquiry in order to better understand the structure and the offenders' behaviour in the long run. Therefore, the Turkish delegation concluded that there is a strong need to follow different approaches that fit better the needs of the specific industry.

43. The Chair thanked the Turkish delegation and gave the floor to Professor Harrington to share his policy recommendations, especially with regards to structural screening and the development of specific industry screens. Professor Harrington started his presentation by highlighting that the ultimate goal of competition policy is to deter and prevent cartels, not to detect and penalise them. But it is quite difficult to conclude if deterrence is strong enough, as cartels continue to form and collusion is still profitable despite the penalties. In addition, there are no strong indications on whether senior management makes substantial efforts to prevent or discourage employees from colluding. Professor Harrington made the point that if deterrence is not strong, detection and prosecution should be enhanced.

44. **Professor Harrington** stated that screening for cartels can be difficult and data availability remains a challenge. However, if there are certain markets that seem more prone to collusion, the development of market specific behavioural screens would be a good approach. He proposed adopting a so-called inductive approach to structural screens. This approach would consist in three steps: (i) the identification of a market with a high rate of cartel formation; (ii) the description of the economic characteristics of the market; and (iii) the identification of markets with similar characteristics. According to Professor Harrington, this exercise could feed into a global database to help assess if there were common findings deriving from this methodology. In addition, Professor Harrington pointed out that incentivising whistle-blowers by using rewards would be a useful tool. Many employees - even those not involved in cartels - might have crucial information but do not feel in a position to reveal it. Finally, Professor Harrington made a point on penalties for serial offenders. He explained that the increase of fines for serial offenders works as a reduction of fines for first-time offenders. Therefore, he argued for a maximum fine for all offenders, which is then reduced based on mitigating factors that contribute social value such as the immediate shut down of the cartel upon detection and providing assistance to the prosecution.

45. The Chair thanked all participants and closed the morning session.

4. Report by the moderators of the break-out sessions

46. The Chair welcomed the participants to the afternoon session and invited the moderators of the break-out sessions to report back to the plenary. The Chair gave the floor to Mr. Chawla, moderator of the break-out session on cement and concrete.

47. **Mr. Chawla** noted that participants in the break-out session had reached some consensus that endemic collusion is very likely in core industries with a fundamental role in the economy. This leads to a generally inelastic demand at a macroeconomic level.

48. As summarised by Mr. Chawla, based on the discussion in the break-out session, the main characteristics of the cement and concrete industry are strictly related to the nature of the product: a) homogeneous product; b) mature technology and little innovation; c) operation at a regional level, especially for the concrete market mostly due to the high costs of transportation and logistics; d) high capital expenditure which leads to entry barriers; and e) high level of concentration, especially in cement industries but with variation across countries. Mr. Chawla indicated that in the last 15 years there have been at least 21 enforcement proceedings in the cement and concrete industry. In addition, Mr. Chawla explained that participants in the break-out session agreed that collusion in the cement and concrete industry mostly tends to appear in periods of economic downturn.

49. Mr. Chawla described the most common collusion practices in the cement and concrete industry. Market allocation is relatively frequent since the cement and concrete markets operate at a local level due to transportation and logistics costs. The moderator also explained that in the cement industry, which is rather mature with a high degree of concentration, many players are involved in trade associations. This facilitates the exchange of sensitive information and therefore collusive practices in the industry. The moderator noted that there is no evidence for repeated collusion and made the point that the high fines imposed over time might have led companies acting “below the radars” in a way that potential collusive behaviour cannot be easily detected.

50. With respect to policy recommendations, Mr. Chawla reported four points that competition authorities could consider: a) constant monitoring and screening of the industry since the sector appears endemic to collusion; b) a strong signal by competition authorities that the risk and cost of participating in cartels is higher than the gain of collusion, e.g. effective compliance programmes; c) attention in merger control, since there are instances where companies use mergers as alternatives to collusive behaviour; d)

focus on trade associations to educate them and dissuade them from participating in anti-competitive practices. In addition, the moderator of the break-out session noted that it is better to treat recidivism as an aggravating factor and impose structural remedies when possible instead of imposing a maximum fine for all offenders to deter them from colluding again. Mr. Chawla also noted that whistle-blower rewards could be a useful instrument and that effective enforcement should be combined with advocacy.

51. The Chair thanked Mr. Clawla and gave the floor to **Mr. Lumbanradja**, moderator of the break-out session on construction, to report what was discussed in this group. Mr. Lumbanradja presented the characteristics of the construction industry, based on the discussion in the break-out session and on the delegations' submissions: a) barriers to entry as reported by almost all countries, especially the Russian Federation; b) trade associations involved in collusive practices, as reported by Switzerland, Canada and Indonesia; c) public procurement in local markets with few players; and d) sub-contracting. The moderator noted that the most frequent practice, as reported by all countries and especially by the Russian Federation and Hungary, was bid rigging, which is a priority for competition authorities. Mr. Lumbanradja highlighted that all countries highlighted the importance of advocacy and that examples of various policy initiatives, from Korea, Canada and Romania, were discussed in the session.

52. The Chair thanked Mr. Lumbanradja and turned to **Mr. Burnier de Silveira**, moderator of the break-out session on food and chemicals to summarise the discussion in the group. Mr. Burnier de Silveira noted that the break-out session confirmed the views expressed in the plenary session. Three presentations concerned the food sector and two presentations focused on the chemicals sector. Turkey presented its extensive experience in the bakery sector with 16 investigations in the last ten years. South Africa pointed out the culture of collusion in the milling and baking industry where regulation also played an important role. Singapore described the effort to combine market studies with the experience from other jurisdictions in order to anticipate potential anticompetitive conduct. The Japanese delegation presented the broad experience on the chemical industry; after carrying out an empirical study the authority identified 18 companies participating in different cartels in the chemicals sector. Finally, the Russian Federation, presenting also on chemicals, confirmed that high levels of concentration increase the risk of collusion. Mr. Burnier de Silveira concluded that the discussion in the break-out session highlighted two main messages: a) learning experience from comparative analysis, combined with sharing experience on ongoing or past investigations with other competition authorities, helps to anticipate misconduct; and b) advocacy can greatly contribute to raise awareness of competition law and anti-cartel legislation.

5. Implications for enforcement – Part 2

53. The Chair, gave the floor to **Professor Marshall** to discuss policy implications. Professor Marshall raised and discussed some concerns about leniency policies. He explained that his research on multiproduct firms involved in 22 cartel cases showed that one of the firms was an amnesty applicant in 11 cartels. The observations showed for example that two companies applied for amnesty in different cartel cases for different products. This raises the question of whether leniency has an effect on multi-product firms or whether it is being used strategically. He argued that amnesty or leniency policies most certainly are effective on small producers in local and regional markets. However, this does not seem to be the case with multi-product firms. Professor Marshall made the example of a large firm that is involved in cartels in more than one product market. He assumed that the company applied for leniency in one of these product markets. The co-conspirators of the firm in other markets would realise that, unless they abode by the cartel agreement, the large multi-product firm would apply for leniency and they would be penalised.

54. Professor Marshall also explained super-plus factors, as defined in his work with co-authors. He explained that these factors are almost surely associated with explicit co-ordination. One of these factors is dominant-firm conduct by non-dominant firms. For example, the so called "blenders" in the vitamins industry are companies producing pre-mixes of vitamins. They purchase vitamins and produce such

cocktails. Blenders compete with major manufacturers, not only in pre-mixes, but also because they resell vitamins when demand for pre-mixes falls. The speaker explained that, if the major manufacturers were to start a cartel, it would make sense for them to eliminate the blenders from the marketplace. They would achieve this result by not supplying blenders with vitamins. When there is no dominant firm in the industry, but dominant-firm conduct is observed, one could infer that firms in the industry are colluding. Other factors that might be strongly connected to collusive conduct require some more analysis of the cartel record, for instance to verify if there are inter-firm transactions that do not seem to have non-collusive motivations.

55. The speaker went on to comment on trade associations. He stressed that it is common for trade associations to advocate for good social practices, such as transparency or environmental standards. Usually such practices facilitate monitoring (e.g. greater transparency) or lead to entry barriers (e.g. tougher environmental standards for new entrants).

56. Professor Marshall concluded his presentation by arguing that there should be more focus on whistle blowers' policies. He used an example of a whistle blower in the Netherlands who revealed the whole record of the construction cartel to the Dutch authorities, but was the only one who ended up in jail. Professor Marshall also emphasised that the legislation on whistle blowers has not worked well in competition cases in the US. This legislation is used, for instance, to prosecute Medicare fraud, but very rarely for cartels. The speaker argued for the use of whistle blowers in a successful way in competition cases.

57. The Chair turned to Mr. Wilson and asked him to comment on Professor Marshall's concerns regarding leniency policies.

58. **Mr. Wilson** explained that leniency had a significant positive effect in South Africa, but questioned its impact on deterrence. He pointed out that there is a strong opportunity for authorities to conduct *ex-post* analyses to measure the consequences of the different detection mechanisms. Turning to policy implications, the speaker noted that, in developing countries where competition policy should be combined with the development agenda, enforcement processes should be carefully balanced with advocacy. The speaker argued that advocacy should have a clear content and should be well designed. In the case of the construction sector, this would require two main components. First, engaging the relevant key authorities on the public procurement mechanism and tender design to fight bid rigging. Second, interventions at a firm level, focussing on specific firms and their characteristics and build their advocacy efforts on these characteristics. Mr. Wilson concluded by arguing that, in order to achieve the right balance between enforcement and advocacy, authorities should assess quantitatively the costs and benefits of alternative options. These quantitative assessments should encompass both an *ex-ante* and *ex-post* analysis to quantify the impact of policy enforcement tools towards detection.

59. The Chair thanked Mr. Wilson and turned to the **EU delegation** to further discuss the fining guidelines for recidivists, in light of the points made by the speaker. The EU delegate explained that, in order to increase deterrence, there are two approaches: either to increase the rate of detection or to increase the cost of being discovered. The European Commission follows the approach of a fine increase in the case of recidivism. The 2006 fining guidelines increased the maximum threshold for fines against recidivists to up to 100%. They also stipulated that both decisions by the European Commission and by national competition authorities are considered previous instances of cartel participation. The maximum multiplier of 100% of the fine has not been applied so far. The EU delegation noted that, in the period from 2006 to 2010, there was a large number of leniency applications and a number of applicants were found to be recidivists. The delegation confirmed that this would raise some concerns, as explained by Professor Marshall. However, during the period 2011 - 2015 there have been only two instances of recidivism and a reduced use of leniency instruments by firms that previously participated in cartel infringements.

6. General discussion

60. The Chair opened the floor for general discussion and invited the delegations to contribute.

61. The Chair asked the **Russian Federation** to discuss their guidelines and the use of aggravating factors in the case of repeated violations. The Russian Federation explained that a list of aggravating and mitigating circumstances was directly included into the Article 14.31 of the Code of Administrative Offences of the Russian Federation for calculation of fines. Aggravating and mitigating circumstances are taken into account in the authority's decisions on cartels and among these, the continuation of the anti-competitive conduct or the repeated violation, is considered as an aggravating factor. However, the Russian Federation pointed out that their authority usually detects repeated violations in the same sector but by different companies, and therefore the application of aggravating factors is relatively rare at the moment.

62. The Chair thanked the Russian Federation and turned to **Korea** to comment on the legislation which bars repeat offenders from procurement and how this has affected recidivism. The Korean delegation pointed out that, according to their legislation, if companies violate competition rules they are prevented from bidding in public procurement. However, this resulted in a small number of firms being eligible for public tenders, raising concerns of reduced competition. The delegation noted that there are considerations for improvements on this regime.

63. The Chair asked the **Canadian delegation** to present their targeted approach to the construction industry and their initiatives. The Canadian delegation explained that the construction industry accounts for 25% of the Bureau's investigations between 2010 and 2014. In addition, 16% of all cartel fines in Canada over that period were related to the construction industry. The delegation stressed that the Bureau follows a holistic enforcement approach which includes a variety of tools, such as the education of market participants with the intention of preventing further breaches of Canada's competition act. A specific section of the Bureau's website – based on an idea by New Zealand – is entirely devoted to the construction industry. It also includes a section with practical tips for complying with the law, what constitutes a cartel, how to access the immunity and leniency programmes, and how procurement officials can detect bid-rigging. The delegation pointed out that they intend to continue their compliance efforts, especially on industries like construction, also with a focus on small and medium sized businesses.

64. The delegation also stressed the importance of corporate compliance programmes. The Bureau has provided extensive guidance in this area, being confident that they are effective and credible and can also assist businesses in avoiding anti-competitive practices. It is noteworthy that these programmes were amended in order to include an incentive-based approach for companies to request fine reductions if they had such programmes in place.

7. Concluding remarks

65. The Chair closed the discussion and invited panellists to make some concluding remarks.

66. Professor Marshall highlighted that the cartels which are known and studied are only the ones discovered and that there are undetected cartels. He therefore reminded participants that there is room for improving the understanding of cartels and to improve policy responses. Professor Suslow highlighted some of the points of the discussion, such as the role of trade associations. In this respect, she noted that there were fewer and fewer instances of trade associations facilitating cartels in the US. She concluded that the US experience could be studied to learn what has worked well. The other stylised fact Professor Suslow mentioned was the existence of regulation which creates a culture of collusion. Professor Harrington highlighted that the extent of undiscovered cartels remains unknown. He added that we see a diversity of patterns among sectors and that there is an opportunity to combine the authorities' experience with data to further investigate these patterns. He concluded that the OECD would be a great forum for these efforts. Mr. Wilson commented that the study of these characteristics and overall the analysis of data should be properly combined with a developed institutional framework in order to be used effectively.

67. The Chair thanked the experts and the participants for their contributions and summarised the main points of the discussion. He noted that the presentations and the discussion indicated the prevalence of uncovered cartels in some sectors. This prevalence may be associated with waves of detection activity over time. But there are no predictable determinants of this behaviour which could be easily relied on for detecting cartels. He referred to the inductive approach to screening advocated by Professor Harrington. Based on this approach, one would identify a cartelised sector and its characteristics. Markets with similar characteristics could then be analysed. The Chair commented that trade associations and a history of prior, often legal, collusion were discussed in many contributions and interventions as key facilitating factors. Corporate culture and industry culture also featured prominently in the session's presentations. Advocacy activities, such as awareness campaigns, can be effective to start changing a culture of collusion.

68. The Chair noted that the discussion about enforcement encompassed a variety of tools. These included fining guidelines, with some suggestions that recidivism should not be an aggravating factor. Some of the panelists commented on the limitations of leniency, specifically the potential strategic use of leniency, and advocated relying on whistle-blowers. Apart from traditional tools for dealing with explicit collusion, experts warned that merger control is also relevant in dealing with cartels since uncovered cartels sometimes resort to mergers as an alternative to co-ordination.